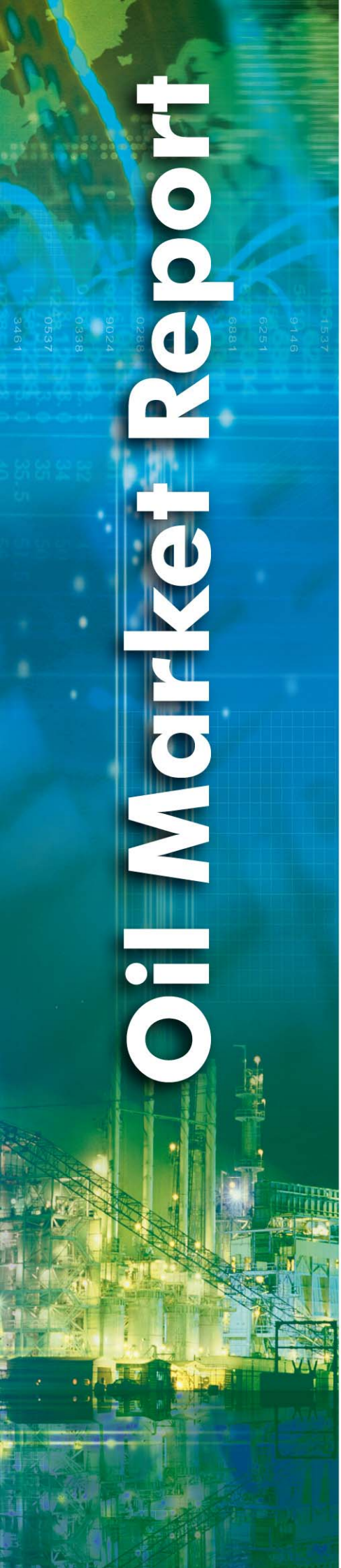

International Energy Agency

18 January 2012

HIGHLIGHTS

- **Oil markets began the New Year confronting a host of supply issues,** not least a pending EU ban on Iranian oil imports and retaliatory threats from Tehran to close the Strait of Hormuz, through which flows roughly one-third of world oil exports. Oil prices jumped $4-5/bbl on the reports, but eased on mounting euro zone debt issues. Brent was last trading near $112/bbl and WTI at $100.50/bbl.

- **Clear signs of economic weakness tipped global oil demand into a declining year-on-year trend at the end of 2011**, down 0.3 mb/d in 4Q11, its first such drop since the tail-end of the credit crunch. The significantly lower starting point has accordingly trimmed global oil demand growth to 1.1 mb/d for 2012 (from 1.3 mb/d previously).

- **Non-OPEC supply fell by 140 kb/d to 53.2mb/d in December,** as rising North Sea output only partially offset a seasonal decline in biofuels and lacklustre supply from the FSU. Middle East unrest and other unplanned outages limited annual growth in 2011 to only 45 kb/d. A rebound to 340 kb/d growth is expected for 1Q12, and 1.0 mb/d for 2012 overall, as non-OPEC output averages 53.7 mb/d.

- **December OPEC crude output rose by 240 kb/d to 30.89 mb/d, the highest in more than three years,** on a rapid recovery in supplies from Libya, and lesser increases from Saudi Arabia and the UAE. OPEC in December raised its output target to 30 mb/d for 2012, close to OMR projections for the 'call on OPEC crude and stock change'.

- **OECD industry oil inventories rose by 4.1 mb to 2 647 mb,** or 57.5 days of forward cover, in November, led by North American and European gasoline. Stock levels nonetheless remained below the five-year average for a fifth consecutive month. December preliminary data show a seasonal 23.6 mb draw in OECD industry stocks.

- **Global refinery crude runs are revised down by 250 kb/d and 170 kb/d for 4Q11 and 1Q12, to 74.8 mb/d and 74.9 mb/d,** respectively. Weak economic growth and mild weather led to global demand contraction in 4Q11. A weakening economic outlook and recent refinery shutdowns in Europe curb early-2012 activity levels.

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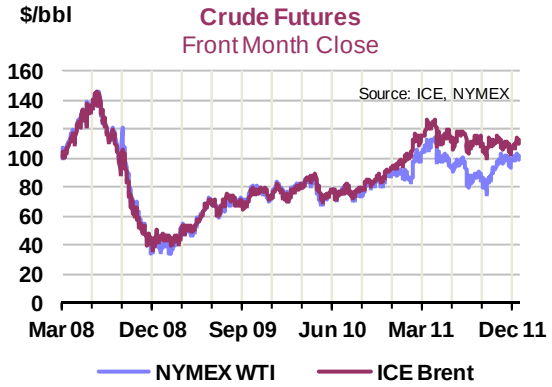
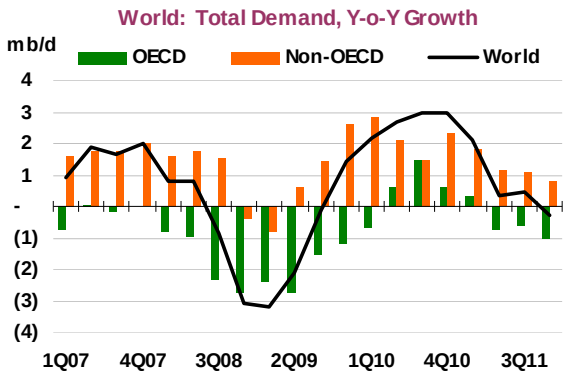
BETWEEN A ROCK AND A HARD PLACE

OPEC Ministers came away from a mid-December meeting having agreed to a new production target, close to both recent output levels and expected 2012 demand for their crude of around 30 mb/d. Indeed, both our own and OPEC's oil market reports converge on a likely 'call' for 2012 near such levels, even if our analysis suggests the 'call' was rather higher in 2011 (hence the continued tightening in OECD inventory evident last year). Consensus on the market outlook may be a force for greater stability, so long as it does not generate a false sense of security. And prices for major crude benchmarks have shown remarkable stability (WTI aside) since springtime last year, oscillating within a $100-$120/bbl range.





However, two inherently destabilising factors are interacting to give an impression of price stability that is more apparent than real. These factors are influencing futures market perceptions as much as they are driving sentiment in physical markets. The first is a rising likelihood of sharp economic slow-down, if not outright recession, in 2012. Although media coverage has subsided from the levels of early-December, euro-zone indebtedness has not gone away, as downgrades to the credit ratings of a number of major economies testify. Private sector credit is also in short supply, as the travails of refiner Petroplus show. Slowing oil demand growth has outpaced downgrades to economic forecasts for 2012. We persist with a 'business as usual' base case for GDP and oil demand, but have scaled back expectations for 2012 oil demand growth to nearer 1 mb/d. We also acknowledge that upcoming revisions to the GDP forecasts of the IMF and other institutions might result in much weaker growth still, even if not to the zero growth implied by our lower GDP variant. As usual, identifying a single smoking gun, for prices or oil demand, remains difficult. Mild 4Q11 weather on the one hand, and incremental Japanese oil demand for power generation on the other, blur the picture. That said, economic concerns and slowing demand growth have so far placed a ceiling over prices since their peak back in spring 2011.

The second factor, which is counteracting bearish pressures, is the physical market tightening evident since mid-2009, and notably since mid-2010. In contrast to 2010, tightening in 2011 derived from supply-side shortfalls. Last year saw non-OPEC supply hit by 600-700 kb/d of unscheduled disruptions between 2Q11 and 4Q11. The Libyan crisis has to date cut supplies to the market by nearly 425 mb, and only 75% of this has been made up by higher other OPEC supplies and the IEA Libya Collective Action. Now, the focus for geopolitical risks has shifted to Nigeria, Iraq and most pressingly, Iran. At least a portion of Iran's 2.5 mb/d of crude exports will likely be denied to OECD refiners during second-half 2012, although more apocalyptic scenarios for sustained disruption to Strait of Hormuz transits look less likely.

A sustained spell of oil price stability is often seen as a good thing. But if it derives from the 'rock' of potential economic slump on the one hand, and the 'hard place' of possible geopolitical turmoil on the other, that is scarcely a source of comfort.

DEMAND

Summary

- **The outlook for global oil demand in 2012 is for a more conservative 1.1 mb/d of additional consumption (1.3 mb/d previously), as heavy baseline data revisions feed through.** The key contributor is the reduction of 0.3 mb/d made to the 4Q11 demand estimate which, along with additional seasonal curtailments and early indicators of January demand, prompted a further cut of 0.5 mb/d for 1Q12. Growth will nonetheless accelerate from 2011's 0.7 mb/d trajectory.

- **The two-speed market will endure, with non-OECD economies providing relatively strong growth that more than absorbs the absolute declines foreseen in the OECD.** Developing economies saw consumption rise by 1.3 mb/d in 2011 (or 3%), to 43.4 mb/d, and are seen accelerating very modestly to an increase of 1.4 mb/d (3.2%) in 2012. The comparable metrics for the OECD are declines of 0.6 mb/d (or -1.2%) in 2011, to 45.6 mb/d, and 0.3 mb/d (-0.7%) in 2012. Non-OECD Asia dominates the growth trajectory throughout, providing gains of 0.7 mb/d in 2011 and 0.8 mb/d in 2012.

Global Oil Demand (2010-2012)

(million barrels per day)

	1Q10	2Q10	3Q10	4Q10	2010	1Q11	2Q11	3Q11	4Q11	2011	1Q12	2Q12	3Q12	4Q12	2012
Africa	3.3	3.4	3.4	3.4	3.4	3.4	3.3	3.3	3.4	3.3	3.4	3.5	3.5	3.5	3.5
Americas	29.5	30.0	30.5	30.2	30.1	30.0	29.8	30.2	29.6	29.9	29.8	29.7	30.3	30.0	30.0
Asia/Pacific	27.2	26.9	26.7	28.3	27.3	28.6	27.3	27.4	28.7	28.0	29.2	28.3	28.1	29.5	28.8
Europe	15.0	14.9	15.6	15.5	15.3	14.9	14.8	15.4	15.0	15.0	14.5	14.5	15.2	15.0	14.8
FSU	4.4	4.3	4.6	4.6	4.5	4.4	4.6	4.8	4.9	4.7	4.6	4.6	4.8	4.9	4.7
Middle East	7.4	7.8	8.3	7.7	7.8	7.6	8.0	8.5	7.9	8.0	7.9	8.3	8.7	8.1	8.3
World	**86.8**	**87.5**	**89.1**	**89.8**	**88.3**	**89.0**	**87.9**	**89.5**	**89.5**	**89.0**	**89.5**	**89.0**	**90.7**	**91.1**	**90.0**
Annual Chg (%)	2.6	3.2	3.4	3.5	3.2	2.5	0.5	0.5	-0.3	0.8	0.6	1.2	1.3	1.7	1.2
Annual Chg (mb/d)	2.2	2.7	3.0	3.0	2.7	2.2	0.4	0.5	-0.3	0.7	0.5	1.1	1.2	1.5	1.1
Changes from last OMR (mb/d)	0.01	0.01	0.01	0.01	0.01	0.02	0.05	0.11	-0.31	-0.03	-0.51	-0.26	-0.06	-0.06	-0.22

- **An economic sensitivity analysis, with global GDP growth one-third lower than in our base case (2.6% in 2012 as opposed to 3.9%), would effectively leave 2012 global oil consumption unchanged at 2011 levels.** This alternative scenario is based upon the very real possibility that Europe's current financial and economic woes – with many nations already bogged down in the early stages of recession – remain unsolved, spilling over into significantly lower growth elsewhere.

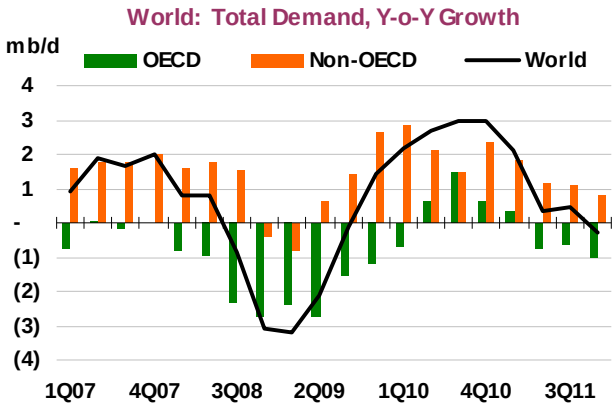
- **A three-pronged attack – of mild winter weather, European economic malaise and elevated oil prices – combined to curtail 0.3 mb/d from the global 4Q11 demand estimate,** to 89.5 mb/d, pushing demand back towards a clearly declining year-on-year trend for the first time since the global credit crunch. The US felt the brunt of the downward adjustment, as early signs of a slightly more optimistic economic picture there failed to filter through into oil demand.

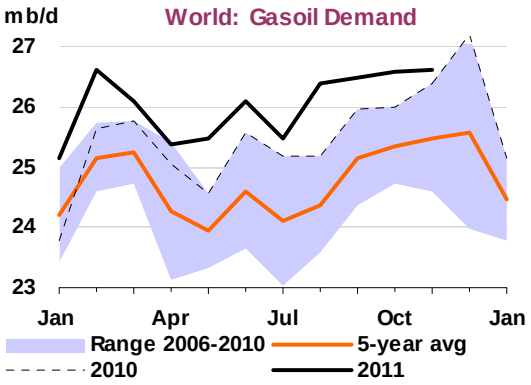
Global Overview

An exceptionally precarious economic backdrop in the fourth quarter of 2011 saw oil consumption globally return to a declining trend. Global oil demand fell by 0.3 mb/d (or -0.3%) year-on-year, to 89.5 mb/d, as much of Europe struggled with the early stages of recession. Elevated oil prices, partly a consequence of the standoff with Iran, further dampened prospects, as did mild northern hemisphere weather. Oil demand will likely confront this growth-impeding combination of a weakening economy and high crude prices through the early stages of 2012. It remains to be seen how this combination works going forward, and the extent to which high prices beget weaker economic and oil demand growth, leading eventually to a looser market.

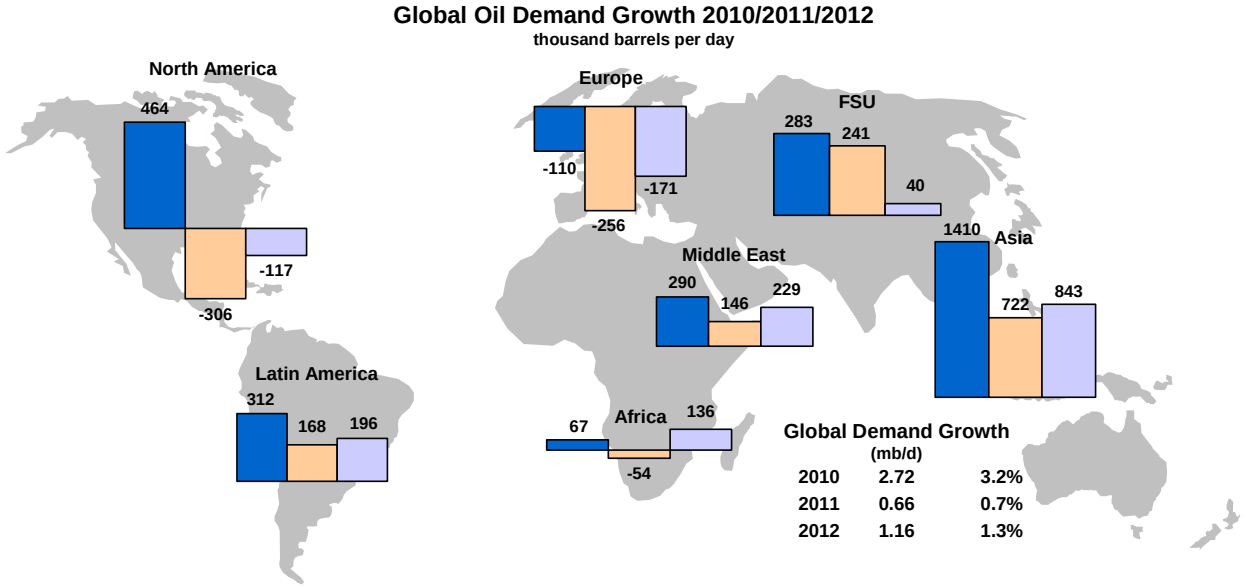
The lower fourth-quarter demand number not only cemented an anaemic annual growth rate for the year as a whole – now 0.7 mb/d for 2011 – but it also undermined prospects for 2012, as world demand

is now starting from a lower base. Global oil product demand growth of 1.1 mb/d is now foreseen in 2012, 0.2 mb/d less than the expansion assumed previously. The underlying model generates global oil demand averaging 90.0 mb/d in 2012, 0.2 mb/d less than assumed last month. Leading 2012 demand growth is a strong non-OECD increase of 1.4 mb/d, which more than offsets the predicted OECD decline of 0.3 mb/d.





Despite maintaining the annual growth rate assumed in last month's report (+0.7 mb/d), global oil demand in 2011 nonetheless suffered from a 0.3 mb/d fourth quarter reduction, to 89.5 mb/d. The reduction failed to dent 2011 growth due to a combination of rounding through the year and upside revisions to the third quarter data. The US faced the brunt of this fourth quarter curtailment, as early indications for November US demand remained weak despite the notable upturn in the recent economic newsfeed from the US.



Having led the global upside since 2010, gasoil will once again dominate in 2012, with a projected annual expansion of 1.9%. Specifically, diesel demand will benefit from the relative strength foreseen in the industrial complex, garnering additional support from the continued dieselisation of the global vehicle fleet. The persistent volatility of global energy supplies has also tended to support diesel demand, thanks largely to the presence of diesel-power back-up generating capacity. The non-OECD region will maintain its dominant underpinning of the gasoil market in 2012, with growth of 3.5% foreseen, compared to only 0.2% in the OECD. The last five years have seen an average annual expansion of 4.7% for gasoil in the non-OECD and -0.9% for the OECD, with consumption in emerging markets overtaking that for the OECD in mid-2009.

The forecast outlined thus far is dependent upon the most recent complete *IMF* global data series published in September, which is understandably showing signs of age. The economic backdrop has since deteriorated, certainly in Europe, with likely feed-through effects elsewhere. Next month's OMR will benefit from the *IMF's* updated data series, but until then the downside risks are emphasised through a low-case scenario, which arguably overstates the likelihood of full-blown global recession in 2012. That said, under this low-case scenario, the underlying economic growth of 2.6% in 2012 is one-third lower, potentially eliminating global oil demand growth altogether for 2012.

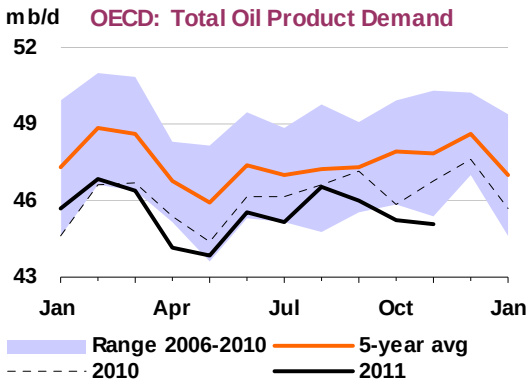
Oil Demand Sensitivity

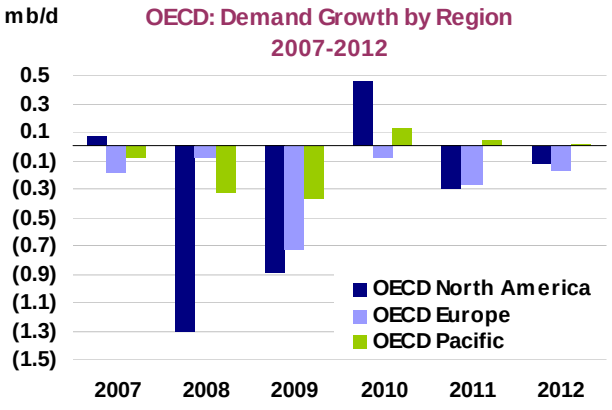
(million barrels per day)

	2010	2011	2012	2011 vs. 2010		2012 vs. 2011	
				%	mb/d	%	mb/d
Base GDP							
Global GDP (y-o-y chg)	5.0%	3.8%	3.9%				
OECD	46.2	45.6	45.3	-1.2%	-0.56	-0.7%	-0.30
Non-OECD	42.1	43.4	44.8	3.0%	1.25	3.2%	1.37
World	88.3	89.0	90.0	0.8%	0.69	1.2%	1.07
Lower GDP							
Global GDP (y-o-y chg)	5.0%	2.6%	2.6%				
OECD	46.2	45.6	45.0	-1.3%	-0.58	-1.3%	-0.59
Non-OECD	42.1	43.3	43.8	2.7%	1.13	1.3%	0.57
World	88.3	88.8	88.8	0.6%	0.55	0.0%	-0.02

OECD

Strongly falling demand in the OECD caused the global fourth quarter demand decline, with demand down by 1.1 mb/d year-on-year (or 2.3%). Not only has the OECD seen a falling demand trend since the second quarter of 2011, but also it is now enduring its weakest relative performance since 2009. Within the OECD, North America and Europe are likely to be the worst performing sub-regions, with respective year-on-year 4Q11 contractions of 0.7 mb/d and 0.6 mb/d envisaged. Fourth quarter demand in the Pacific region, however, was up 2.6%, as the post-tsunami surge in oil product demand in Japan, used as a replacement for closed nuclear reactors, continued.





Underlying the dire 4Q11 OECD demand estimates are early indicators for November, derived from inland deliveries (oil products supplied by refineries, pipelines and terminals), which fell by 1.7 mb/d (or 3.7%) on the corresponding month in 2010. Roughly, 60% of this decline is attributable to North America, down 1.1 mb/d on the same period a year earlier, with the rest of the decline from Europe. A continuation of comparatively weak OECD economic growth going forward, notably for Europe, sustains OECD 2012 demand contraction, with a decline of 0.3 mb/d foreseen. OECD European demand will fall by 0.2 mb/d (-1.4%) in 2012, North American consumption is forecast to slip by a more modest 0.1 mb/d (-0.5%) while the Pacific region essentially flat-lines.

A seasonal northern hemisphere fourth quarter demand fillip was missing in 2011, as both North America and Europe saw noticeably warmer-than-average temperatures. Heating degree days (HDDs) in December, in the US and Europe, were respectively 9% and 12% lower than the 10-year average. Assuming a return to more normal 4Q12 temperatures, this should accordingly provide some support for otherwise weak OECD demand in our forecast.

OECD Demand based on Adjusted Preliminary Submissions - November 2011
(million barrels per day)

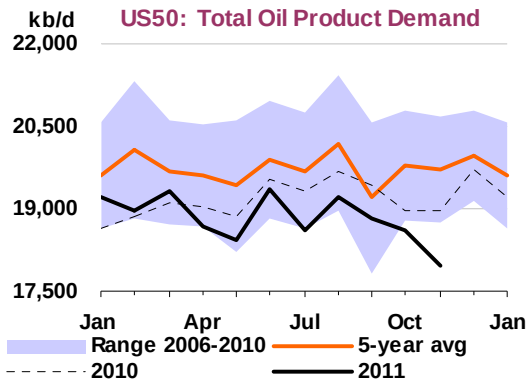
	Gasoline		Jet/Kerosene		Diesel		Other Gasoil		RFO		Other		Total Products	
	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa
OECD North America*	**10.04**	**-3.3**	**1.62**	**-1.6**	**4.05**	**1.9**	**0.82**	**-16.1**	**0.86**	**-9.4**	**5.18**	**-9.16**	**22.56**	**-4.5**
US50	8.46	-4.0	1.43	-1.0	3.45	1.8	0.31	-36.1	0.51	-7.8	3.81	-11.2	17.97	-5.3
Canada	0.72	0.8	0.10	-14.3	0.22	-3.7	0.34	2.1	0.11	-0.3	0.71	-5.9	2.20	-2.5
Mexico	0.79	0.1	0.05	7.2	0.33	7.5	0.14	7.5	0.15	-23.6	0.61	0.7	2.07	-0.2
OECD Europe	**2.08**	**-3.9**	**1.18**	**-5.2**	**4.49**	**-0.4**	**1.77**	**-8.6**	**1.18**	**-6.9**	**3.59**	**-6.9**	**14.29**	**-4.6**
Germany	0.48	4.1	0.18	1.3	0.75	1.0	0.43	-4.3	0.15	-6.8	0.50	-19.2	2.49	-4.6
United Kingdom	0.33	-2.2	0.31	-11.3	0.47	2.7	0.11	-6.1	0.07	7.1	0.30	-4.7	1.59	-3.2
France	0.16	-8.0	0.14	1.2	0.69	2.3	0.23	-22.7	0.06	-24.0	0.43	-5.6	1.71	-6.0
Italy	0.22	-8.1	0.08	-2.4	0.48	-4.2	0.13	-0.5	0.09	-13.6	0.46	-3.7	1.48	-4.9
Spain	0.11	-8.3	0.10	-5.9	0.46	-5.0	0.17	-26.1	0.19	0.0	0.33	-2.4	1.36	-7.4
OECD Pacific	**1.55**	**-3.0**	**0.84**	**-13.5**	**1.15**	**-0.9**	**0.55**	**-7.0**	**0.89**	**22.8**	**3.22**	**2.3**	**8.19**	**0.1**
Japan	0.97	-2.7	0.50	-17.1	0.42	-4.8	0.41	-7.9	0.59	51.3	1.85	6.4	4.74	2.7
Korea	0.20	0.9	0.19	-14.7	0.28	-4.9	0.13	-3.8	0.25	-17.8	1.20	-1.6	2.25	-5.3
Australia	0.32	-4.2	0.13	1.5	0.39	5.0	0.00	0.0	0.02	13.5	0.17	-5.6	1.03	-0.1
OECD Total	**13.67**	**-3.4**	**3.64**	**-5.8**	**9.69**	**0.5**	**3.13**	**-10.4**	**2.92**	**-0.4**	**12.00**	**-5.6**	**45.05**	**-3.7**

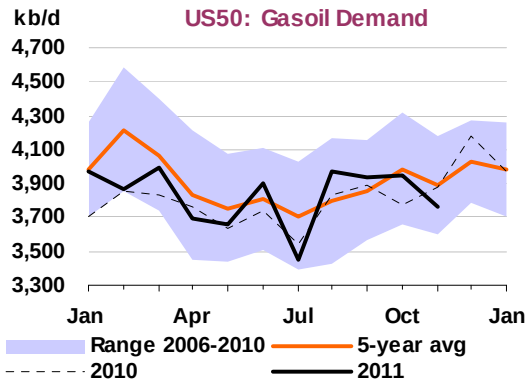
* Including US territories

North America

The fourth quarter demand estimate for North America was the dominant contributor to the global revision, accounting for almost all of the total 4Q11 reduction compared to last month's report. Stark preliminary US oil demand figures for November defied the recent spate of more positive economic news. North American consumption of oil products therefore looks likely to have fallen by 3.1%, on a year-on-year basis, in 4Q11, with the residual fuel oil, LPG and motor gasoline markets notable laggards, posting respective year-on-year declines of 8.0%, 4.0% and 3.4%. The decline is most pronounced in the **US** (excluding territories), as 4Q11 consumption shed 3.8% on its corresponding value in 2010. Particularly stark declines were seen in the heating oil (-18.9%), residual fuel oil (-10.9%) and LPG (-5.6%) markets, all suffering on the unseasonably mild early winter temperatures.

US November demand fell despite the wave of surprisingly resilient US economic news (notably the rising employment trend and the ISM's upbeat industrial sentiment indicator). The US heating oil market bore the brunt of November's downgrade, with demand off by 36.1%, as substitution by gas for home heating (see '*The Winter That Cries Wolf for Heating Oil*', *OMR* dated 10 November 2011) was augmented by the impact of significantly warmer-than-normal temperatures. Nor does the combination of weakening demand amid stronger economic indicators suggest much oil demand upside for 2012.

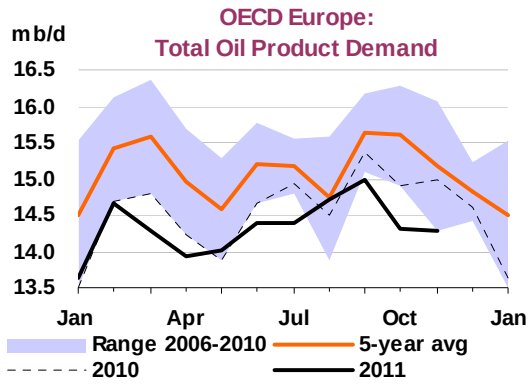


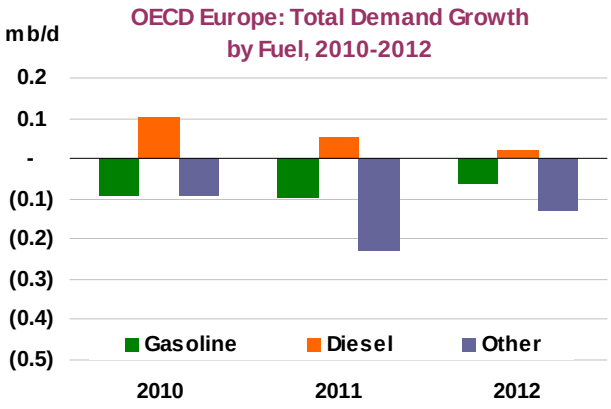


Mexican oil demand stagnated in November, down by 0.2% on the corresponding month a year earlier, continuing a declining trend started in September. The flat behaviour during the month masked divergent growth rates across product categories. The fuels that weakened versus a year ago were naphtha (-26 kb/d) and residual fuel oil (-46 kb/d). On the other hand, gasoil/diesels, jet/kerosene and other products grew by a combined 67 kb/d. Industrial activity during 2H11 gave support to oil demand, although gasoline consumption showed less dynamism due to monthly end-user price hikes. Anecdotal evidence regarding low water levels at hydroelectric dams implies higher fuel oil demand in 4Q11. Total product demand fell by an estimated 0.6% in 2011, to 2.06 mb/d, before declining by 0.3% in 2012 to 2.05 mb/d.

Europe

Against a backdrop of weakening economic performance, regional oil demand looks particularly sluggish in Europe. According to preliminary data for November, European consumption fell by 4.6% on a year-on-year basis, with similarly sized declines right across the continent. None of the major European product categories bucked this trend, with the worst performances seen for naphtha (-17.1%), heating oil (-8.6%) and residual fuel oil (-6.9%).

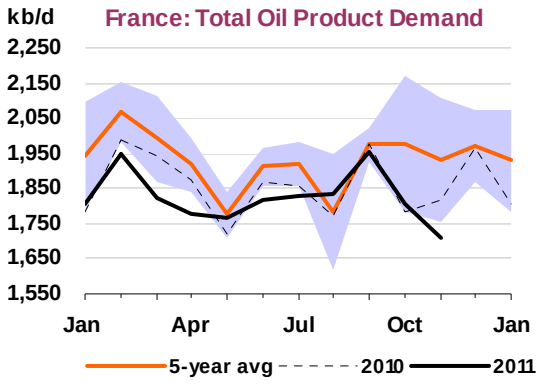


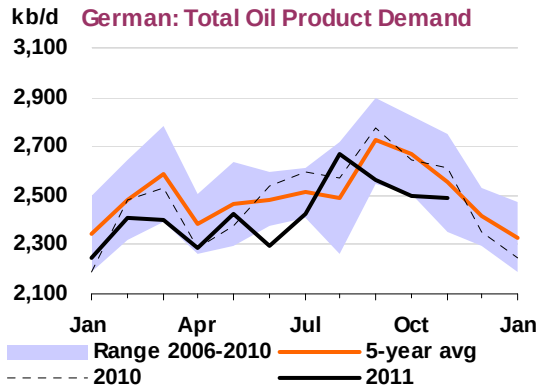


European consumption of oil products fell by 3.8%, on a year-on-year basis in 4Q11, led by naphtha, heating oil and residual fuel oil. An ailing European petrochemical market, a warmer-than-normal winter and continued fuel substitution, respectively, influenced these declines. Only the diesel market offered a semblance of growth for 4Q11, up 0.1%, although this is well down on its recent trend (+2.4% in 1Q11) as the economic backdrop deteriorates.

Little room for optimism is apparent in 2012, with European demand forecast to fall by 0.2 mb/d (or 1.4%). Despite the gloomy economic backdrop, the forecast demand contraction is less severe than 2011's 1.9% correction as Europe is coming from such a low base that a slackening pace of decline seems inevitable, particularly as a degree of economic recovery is expected in the second half of the year. The relative demand decline will also ease if, as seems likely, the 4Q12 winter turns out to be colder than 4Q11.

Preliminary data for **France** show oil consumption fell by 6.0% on a year-on-year basis in November, with residual fuel oil (-24.0%), LPG (-22.8%) and heating oil (-22.7%) performing particularly poorly. In contrast, the industrially significant naphtha (+2.5%) and diesel (+2.3%) markets posted absolute gains in November, along with jet/kerosene (+1.2%). The French manufacturing PMI rose to a four-month high of 48.7 in November (although still below the key 50-level, signalling contraction).



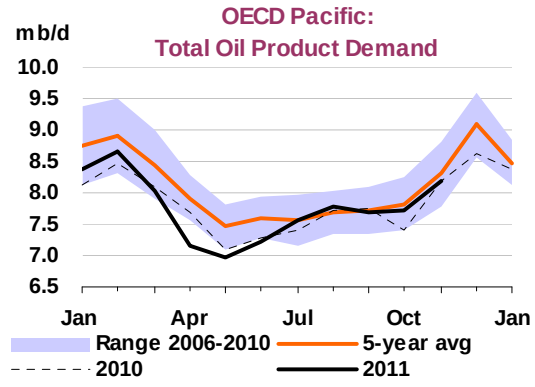


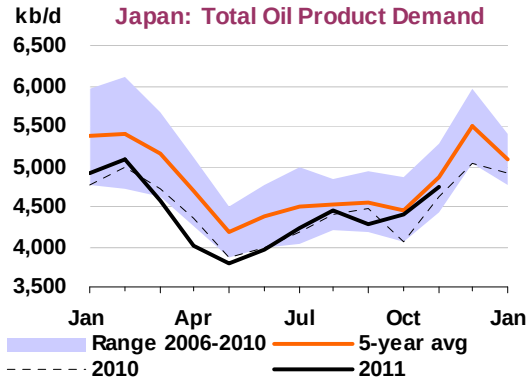
German consumption of oil products fell by 4.6% in November, according to preliminary estimates, with naphtha (-32.2%), residual fuel oil (-6.8%) and heating oil (-4.3%) key downside contributors. The modest gains in the major German transportation fuel markets, with motor gasoline consumption up 4.1%, jet/kerosene 1.3% higher and diesel gaining 1.0%, suggest slightly more robust potential for German oil demand running through 2012 than is the case for some other European markets.

UK demand fell by 3.2%, on a year-on-year basis in November 2011, with jet/kerosene (-11.3%), naphtha (-6.3%) and heating oil (-6.1%) faring particularly badly. These were only partly offset by absolute gains in residual fuel oil (+7.1%), diesel (+2.7%) and LPG (+0.2%). Economic indicators remain mixed, with the CIPS Business Activity Index rising to a five-month high of 54.0 in December (whereby a reading above 50 signals an improvement in sentiment). Plenty of less favourable economic stories continue to flow regarding the UK economy, however, as industrial output fell by 3.1% on a year-on-year basis in November. The *National Institute of Economic and Social Research* forecast UK GDP barely up at all (+0.1%) for 4Q11 versus 3Q11, and a dramatic slowdown from the third quarter's 0.6% gain.

Pacific

Preliminary demand data for the OECD Pacific region show a sharp deceleration in November, to a year-on-year growth rate of 0.1%, well down on October's 4.6% expansion. **Japanese** consumption growth fell to 2.7% in November from the heady heights of 8.6% seen in October. The Japanese market nonetheless is still seeing additional power sector demand for fossil fuels in the face of nuclear generating capacity closures (see August's *OMR* for a more detailed explanation) although big declines for other products drove the overall slowdown in demand growth. Diesel (-4.8%) and gasoline (-2.7%) saw sharp reversals, having posted absolute gains in October, as weakening economic sentiment curbed driving and augmented the impact of expiry of a ceiling on highway tolls earlier this year. The *Markit/Japan Materials Management Association* Manufacturing PMI fell to a seven-month low of 49.1 in November. This has since reversed, rising to 50.2 in December, potentially lending some support to end-year demand.

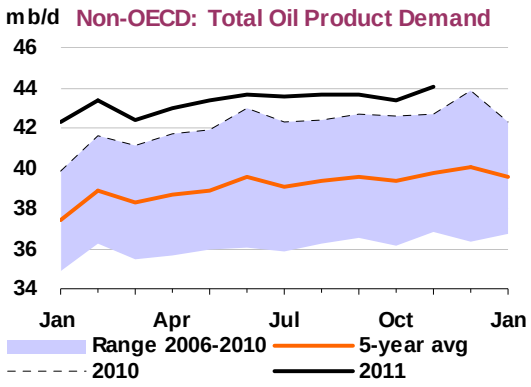


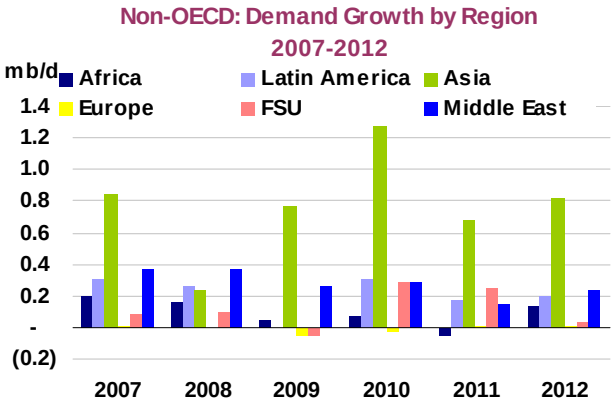


Reports of warmer-than-normal temperatures further undermined the November demand series, notably trimming jet/kerosene demand (down 17.1% versus an, albeit inflated, November 2010 level).

Non-OECD

Bucking the global downside trend, the non-OECD region provided a welcome fillip, with the preliminary series for November posting a 3.1% year-on-year gain. Not only was this more than a percentage point higher than October's 2.0% growth rate, but it was also significantly higher than the growth assumed in last month's report (2.2%). The still relatively robust economic backdrop for the non-OECD countries supports this stronger growth trend, and for 2012 we assume non-OECD GDP growth averages 6.2%, after 6.4% growth in 2011.





Total non-OECD demand averaged 44.1 mb/d in November, according to preliminary data, nearly 0.4 mb/d higher than assumed in last month's report. The largest upgrades were seen in China (+210 kb/d), Russia (+180 kb/d) and India (+60 kb/d), as these economies for now seem to be shrugging off concerns about another global economic slowdown, amid relative cost advantages compared to the developed economies.

Transportation fuels continue to drive demand momentum, with jet/kerosene particularly strong, showing growth of 8.3% on a year-on-year basis in November. The preliminary data series imply strong expansions in gas/diesel oil (+4.1%), motor gasoline (+3.8%) and LPG/ethane (+3.7%). Only residual fuel oil (-0.4%) saw a year-on-year decline.

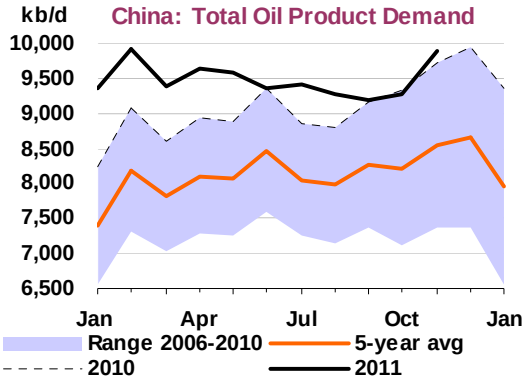
Non-OECD: Demand by Product
(thousand barrels per day)

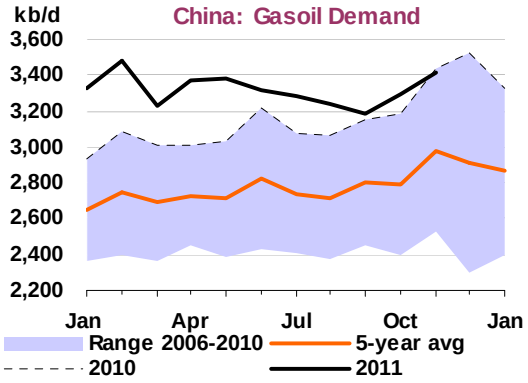
	Demand			Annual Chg (kb/d)		Annual Chg (%)	
	Sep-11	Oct-11	Nov-11	Oct-11	Nov-11	Oct-11	Nov-11
LPG & Ethane	5,018	4,951	5,007	252	177	5.4	3.7
Naphtha	2,490	2,583	2,708	-31	30	-1.2	1.1
Motor Gasoline	8,519	8,396	8,537	213	314	2.6	3.8
Jet Fuel & Kerosene	2,813	2,780	2,916	71	225	2.6	8.3
Gas/Diesel Oil	13,440	13,578	13,780	463	542	3.5	4.1
Residual Fuel Oil	5,430	5,549	5,532	19	-24	0.3	-0.4
Other Products	5,931	5,578	5,574	-128	70	-2.2	1.3
Total Products	**43,641**	**43,413**	**44,054**	**859**	**1,333**	**2.0**	**3.1**

The non-OECD countries will continue to dominate growth looking forward, with 1.4 mb/d of additional demand expected for 2012 (+3.2%). This is 130 kb/d less than assumed in last month's report, following a modest downward adjustment for growth prospects in China.

China

Apparent **Chinese** demand for oil products (calculated as refinery output plus net product imports) rose by a relatively modest 1.7% in November, although this still amounts to its sharpest growth rate since August. Strongest year-on-year growth derived from jet/kerosene (+38.7%), motor gasoline (+5.7%) and LPG (+5.5%). The industrially significant residual fuel oil (-10.4%), naphtha (-1.6%) and diesel (-0.7%) lagged behind, and may reflect November's dip in manufacturing sentiment, with the official PMI of purchasing managers' activity falling to a 32-month low of 49.





Despite concerns of a slowing Chinese economy, November's demand level is still 0.2 mb/d more than forecast in last month's report, and the subdued 1.7% year-on-year growth rate needs to be considered in the context of strong 4Q10 Chinese demand amid restrictions on power sector and industrial coal-burn.

Chinese demand is expected to have bottomed out in 4Q11, remaining flat versus 4Q10, before embarking on a gentle acceleration through 2012. Consumption is expected to expand by 4.3% in the year as a whole – nearly one whole percentage point down on our month earlier forecast. This reflects a lower 1Q12 baseline, and an easing of economic growth from 9.5% to 9.0% this year. Growth nonetheless amounts to 0.4 mb/d of extra Chinese consumption in 2012, nearly 40% of the total global expansion in demand. Any moves by China to expand strategic crude stocks during 2012 would come over and above this product-derived measure of growth for the year.

China: Demand by Product
(thousand barrels per day)

	Demand			Annual Chg (kb/d)		Annual Chg (%)	
	2010	2011	2012	2011	2012	2011	2012
LPG & Ethane	668	691	707	24	16	3.5	2.4
Naphtha	1,129	1,159	1,205	31	45	2.7	3.9
Motor Gasoline	1,546	1,658	1,728	112	70	7.3	4.2
Jet Fuel & Kerosene	368	406	417	38	11	10.3	2.7
Gas/Diesel Oil	3,143	3,330	3,453	187	123	6.0	3.7
Residual Fuel Oil	531	538	541	7	3	1.3	0.6
Other Products	1,685	1,721	1,862	36	141	2.2	8.2
Total Products	**9,069**	**9,504**	**9,913**	**435**	**410**	**4.8**	**4.3**

Other Non-OECD

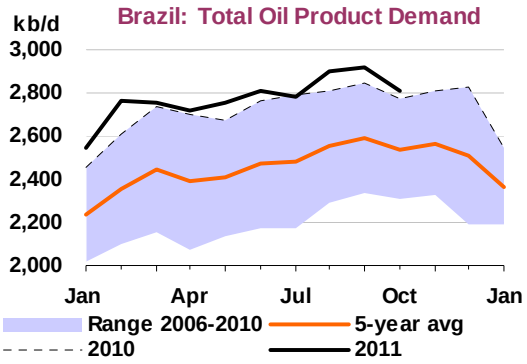
According to preliminary November estimates, **Indian** demand growth accelerated to 5.8%, its fastest year-on-year clip since the end of 2010. Strong gains were seen in the industrially important gas/diesel (+10.4%) and naphtha (+7.9%) categories. *HSBC's* Manufacturing PMI for November, at 51.0, remained above its 50 expansionary threshold, and alongside a 32nd successive monthly gain in new manufacturing business orders during November, further underpinned expectations for demand growth looking forward.

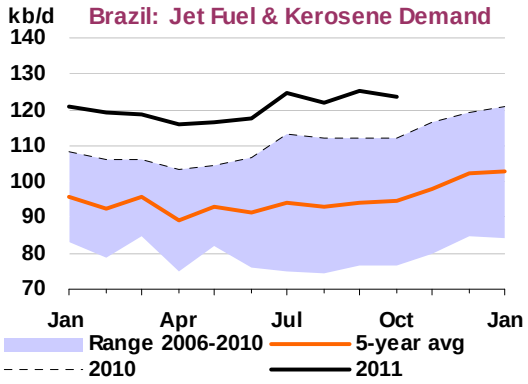
India: Demand by Product

(thousand barrels per day)

	Demand			Annual Chg (kb/d)		Annual Chg (%)	
	2010	2011	2012	2011	2012	2011	2012
LPG & Ethane	455	491	517	36	26	7.8	5.3
Naphtha	201	210	201	9	-9	4.2	-4.3
Motor Gasoline	338	358	374	20	16	6.0	4.6
Jet Fuel & Kerosene	299	300	300	1	0	0.2	0.1
Gas/Diesel Oil	1,290	1,372	1,438	81	66	6.3	4.8
Residual Fuel Oil	194	171	178	-23	7	-11.9	4.2
Other Products	559	563	566	5	2	0.8	0.4
Total Products	**3,337**	**3,465**	**3,574**	**128**	**110**	**3.8**	**3.2**

Gasoline demand posted a 6.2% year-on-year gain in November, as consumer sentiment rebounded in India's dominant service sector. The *HSBC Markit* Business Activity Index rose sharply in November, to 53.2, having fallen into contracting territory in October (49.1), despite inflationary pressures. Despite this strong late-year performance, demand growth is expected to fall back in 2012 as a whole to nearer 3%, dominated by gas/diesel oil and LPG.





Brazilian product demand grew by 1.2% year-on-year in October, boosted by jet/kerosene (10.2%), gasoil/diesel (2.8%) and other products (1.7%). In contrast, residual fuel and motor gasoline posted respective decreases of 6.4% and 0.3%. During 2011, jet/kerosene demand has been buoyant, supported by strong domestic airline activity. Passenger transport grew year-on-year by 8.8% and 16.6%, respectively in October and November. Industrial activity is showing less dynamism since June, when the Manufacturing PMI dropped below the 50 points benchmark. Economic activity during 4Q11 gave a mixed set of signals, supporting a cautious outlook for 2012. Brazilian demand totals 2.79 mb/d for 2011, up 2% on 2010, before rising by 2.3% in 2012 to 2.86 mb/d.

Nigerian oil demand rose by 5% on a year-on-year basis in October, on the back of the relatively steady economic growth trend seen this past year. Absolute gains were seen in most of the main categories bar motor gasoline which dropped by 14%, or 30 kb/d. Total product demand is seen averaging 280 kb/d in 2011 (down 3.8% on a year-on-year basis or -10 kb/d) and remaining flat during 2012.

Goodluck Removing Subsidies

While the 2011 Nigerian demand forecast is based on nine months of reported data, an additional factor that could lower the 2012 forecast is the government's new policy of eradicating the subsidy on the preferred transport fuel, premium motor spirit (PMS). In December 2010, the average price for PMS (or gasoline), diesel and kerosene was $0.41/litre, $0.69/litre and $0.56/litre, respectively, thanks to heavy fossil fuel subsidies. During 2Q11, the government cut diesel and kerosene subsidies, allowing diesel and kerosene prices to increase to $1.01/litre and $1.0/litre, respectively. Manufacturers that rely on small gasoil power generators felt the brunt of this change, with most households only noticing the change through kerosene used for cooking.

Goodluck Removing Subsidies (continued)

At the beginning of January, the government removed gasoline subsidies, effectively raising gasoline prices to $0.90/litre. This bold decision hit a predictable roadblock mid-January, as workers opposed to the inevitable price hikes went on a nationwide strike and brought the country to a virtual standstill. The Nigerian government instigated the new-year subsidy removal programme as it revealed that the subsidy cost the economy $8bn in 2011, more than double the estimate for 2010.

In a country where two-thirds of the population live on less than $1.25 a day it is blatantly unaffordable to support a subsidy that costs nearly $50 per person last year. Fuel subsidies are not only enormously wasteful but they also greatly distort the efficient distribution of resources, whilst often fuelling corruption. However, gasoline prices more than doubled on the subsidy removal, causing great political unrest. This suggests that, in hindsight, a more gradual process might have been advisable. Nor do the measures seem to have been accompanied by much in the way of public consultation or targeted assistance for the poorest members of society.

The nationwide strike ended on 16 January, as the government agreed to partially back track on its subsidy removal programme. A gasoline price of $0.60/litre has now been set, still 50% higher than pre-removal levels but one-third down on the initial price hike. Plans remain to reduce the subsidy further, although the government may have learned to adopt a more co-operative approach next time.

Nigeria is on the watch list for 2012, with oil product demand likely to fall, at least in 1Q12. Persistent industrial disputes, of the kind seen in January, could further reduce forecasts, not just for oil demand but also for economic growth in general.

SUPPLY

Summary

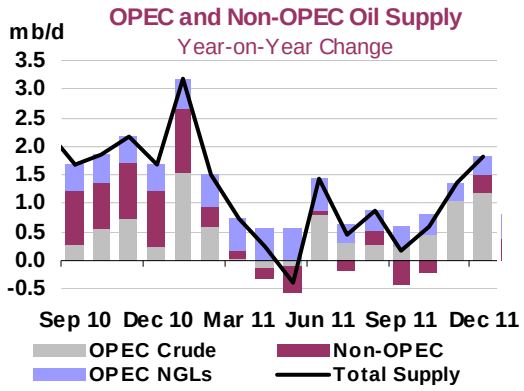
- **Global oil supply rose by 100 kb/d to 90.0 mb/d in December, with rebounding output from Libya and Saudi Arabia partially offset by declines in non-OPEC countries.** Compared to December 2010, global oil production stood 1.8 mb/d higher, 80% of which stemmed from increasing output of OPEC crude and NGLs.

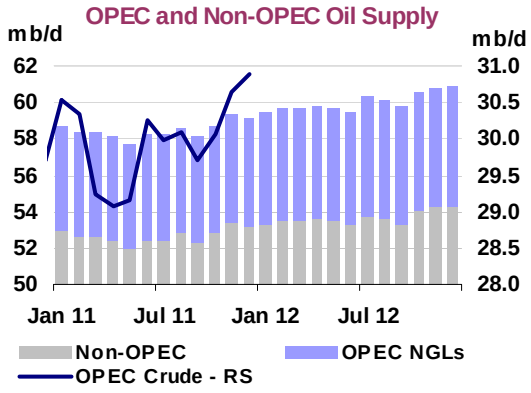
- **Non-OPEC supply fell by 140 kb/d to 53.2mb/d in December, as rising production in the North Sea only partially offsetting a steep seasonal decline in biofuels production and lacklustre output from the Former Soviet Union.** On a quarterly basis, unrest in the Middle East and other unplanned outages meant 4Q11 output grew by 610 kb/d from the prior quarter (but only 25 kb/d compared to last year) and should grow further by 340 kb/d in 1Q12 to 53.5 mb/d.

- **OPEC crude oil supply rose by 240 kb/d, to an average of 30.89 mb/d in December. The rapid recovery in supplies from Libya,** and to a lesser extent increases from Saudi Arabia and the UAE, combined to push year-end output to the highest level in more than three years.

- **A looming escalation in economic sanctions imposed on Iran by the US and proposed by the EU has sparked market concerns** in Europe and Asia over potential crude availability, as well as raising alarm over the possibility of military action in the Gulf.

- **OPEC ministers agreed a higher collective production target of 30 mb/d for 2012 at their 14 December meeting in Vienna.** It is the first new output agreement in three years and the first to include Iraq in the group's target system in more than two decades. OPEC's new target is broadly in line with our own estimates for the underlying 'call on OPEC crude and stock change' of 30 mb/d for 2012.





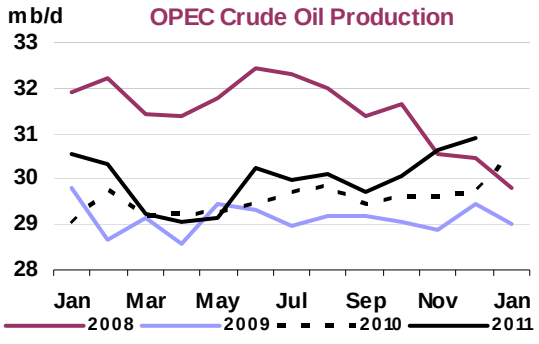
All world oil supply figures for December discussed in this report are IEA estimates. Estimates for OPEC countries, Alaska, and Russia are supported by preliminary December supply data.

Note: Random events present downside risk to the non-OPEC production forecast contained in this report. These events can include accidents, unplanned or unannounced maintenance, technical problems, labour strikes, political unrest, guerrilla activity, wars and weather-related supply losses. Specific allowance has been made in the forecast for scheduled maintenance in all regions and for typical seasonal supply outages (including hurricane-related stoppages) in North America. In addition, from July 2007, a nationally allocated (but not field-specific) reliability adjustment has also been applied for the non-OPEC forecast to reflect a historical tendency for unexpected events to reduce actual supply compared with the initial forecast. This totals -200 kb/d for non-OPEC as a whole, with downward adjustments focused in the OECD.

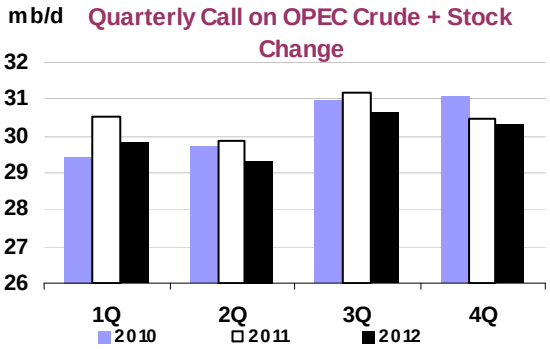
OPEC Crude Oil Supply

OPEC crude oil supply averaged 30.89 mb/d in December, up by 240 kb/d over November levels. Increased supplies from Libya, and to a lesser extent Saudi Arabia and the UAE, combined to push year-end output to the highest level in more than three years. The higher output levels are behind a decline in OPEC's 'effective' spare capacity, to 2.85 mb/d from 3.18 mb/d in November. Saudi Arabia accounts for 75% of effective spare capacity at 2.15 mb/d.

Preliminary tanker data suggest OPEC supply is on course to rise further in January. Iran is under siege from new US sanctions on the country's central bank, which are expected to come into effect over the next several months, and the proposed EU embargo on all purchases of Iranian oil (*see 'International Sanctions Tighten Chokehold On Iran'*). As a result, customers have been aggressively seeking alternative supplies from other OPEC members, especially Saudi Arabia. UK-based *Oil Movements* forecasts that sailings from the Middle East may rise 300 kb/d above December levels.



Entire series based on OPEC Composition as of January 2009 onwards (including Angola & Ecuador & excluding Indonesia)

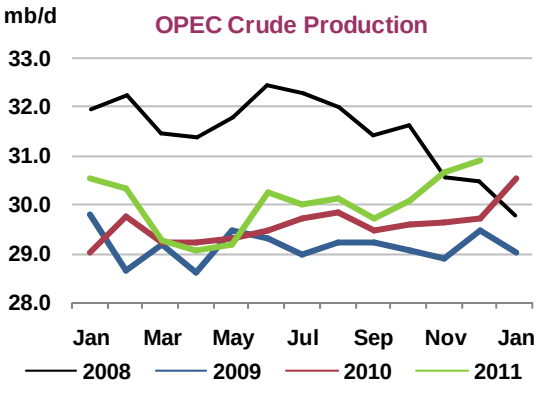


Entire series based on OPEC Composition as of January 2009 onwards (including Angola & Ecuador & excluding Indonesia)

OPEC ministers agreed a higher collective production target of 30 mb/d for 2012 at their 14 December meeting in Vienna. It is the first new output agreement in three years and the first to include Iraq in the group's target system in more than two decades. In stark contrast to last June's divisive gathering that ended without a communiqué, the mid-December meeting produced a consensus agreement, albeit somewhat vague and short on detail. No individual country quotas were allocated as part of the agreement; instead the 30 mb/d was reportedly arrived at based on the OPEC Secretariat's anticipated "call" on its crude for 2012. The communiqué left ample room for interpretation and suggested there would be scope for voluntary downward production adjustments as necessary and subject to prevailing economic and oil demand uncertainty. OPEC set its next ministerial meeting for 14 June in Vienna.

OPEC's new 30 mb/d target is in line with our own estimates for the underlying 'call on OPEC crude and stock change' for 2012. Downward revisions in global oil demand in this month's report see the 2012 'call' reduced by an average 200 kb/d, to 30 mb/d. 1Q12 see the largest revision to the 'call', lowered by 400 kb/d to 29.8 mb/d.

The group's 30 mb/d target also mirrors average 2011 output levels. OPEC 2011 production averaged 29.97 mb/d, which is 500 kb/d up on 2010 levels. War-torn Libya saw production decline an average 1.09 mb/d to 460 kb/d in 2011. Saudi Arabia posted the largest increase at 950 kb/d to 9.34 mb/d, followed by Iraq, rising by 310 kb/d to 2.67 mb/d. Fellow Gulf producers also posted substantial increases in 2011, with Kuwait up by 210 kb/d to 2.5 mb/d and the UAE up by 190 kb/d to



2.5 mb/d. Nigeria also saw a rise in production, up by 100 kb/d to 2.18 mb/d. While the ceasefire agreement enabled the country's IOCs to carry out repairs and restart long shut-in production, a fresh wave of militant activity in the later part of 2011 reduced volumes.

By contrast, year-on-year, Iranian production fell by 130 kb/d to an average 3.58 mb/d last year, its lowest levels since 2002. Angola also posted a decline, down by 90 kb/d to 1.64 mb/d on average in 2011, due almost entirely to chronic technical problems at the BP-operated Greater Plutonio complex.

December **Saudi Arabian** crude oil output was pegged at 9.85 mb/d, up 100 kb/d from November levels. Latest tanker data suggest production may be closer to the 10 mb/d mark in January, with an increase in shipments expected, especially westbound cargoes.

OPEC Crude Production

(million barrels per day)

	Oct 2011 Supply	Nov 2011 Supply	Dec 2011 Supply	Sustainable Production Capacity[1]	Spare Capacity vs Dec 2011 Supply	2011 Annual Average	Vol Chg 2011 vs 2010
Algeria	1.29	1.29	1.29	1.30	0.01	1.28	0.02
Angola	1.72	1.69	1.75	1.90	0.15	1.64	(0.09)
Ecuador	0.50	0.50	0.48	0.51	0.03	0.50	0.03
Iran	3.53	3.55	3.45	3.51	0.06	3.58	(0.13)
Kuwait[2]	2.65	2.67	2.62	2.84	0.22	2.50	0.21
Libya	0.35	0.55	0.80	0.75	(0.05)	0.46	(1.09)
Nigeria[3]	2.02	2.10	2.06	2.48	0.42	2.18	0.10
Qatar	0.81	0.82	0.82	0.90	0.08	0.80	0.02
Saudi Arabia[2]	9.45	9.75	9.85	12.00	2.15	9.34	0.95
UAE	2.51	2.52	2.58	2.74	0.16	2.50	0.19
Venezuela[4]	2.55	2.53	2.50	2.55	0.05	2.52	(0.01)
OPEC-11	**27.38**	**27.97**	**28.20**	**31.47**	**3.27**	**27.30**	**0.20**
Iraq	2.69	2.68	2.69	3.21	0.53	2.67	0.31
Total OPEC	**30.07**	**30.64**	**30.89**	**34.68**	**3.80**	**29.98**	**0.51**
(excluding Iraq, Nigeria, Venezuela and Libya					*2.85)*		

1 Capacity levels can be reached within 30 days and sustained for 90 days.
2 Includes half of Neutral Zone production.
3 Nigeria's current capacity estimate excludes some 200 kb/d of shut-in capacity.
4 Includes upgraded Orinoco extra-heavy oil assumed at 430 kb/d in December.

Iraqi supply averaged 2.69 mb/d in December, up 10 kb/d from the previous month. November levels were revised down by 40 kb/d, to 2.68 mb/d from 2.72 mb/d, on reduced domestic use. Crude exports averaged 2.15 mb/d last month, up 10 kb/d month-on-month. Exports of Basrah crude from the southern terminals rose by 25 kb/d to 1.74 mb/d. Exports of Kirkuk crude from the Turkish port of Ceyhan on the Mediterranean were off by around 15 kb/d, to 410 kb/d.

For 2011, Iraqi crude exports averaged 2.17 mb/d, an increase of 275 kb/d over 2010 levels, with shipments from the southern ports accounting for almost 85% of the increase. Basrah exports averaged 1.71 mb/d, up around 230 kb/d, while Northern volumes of Kirkuk rose by 50 kb/d to 450 kb/d.

Iraqi crude export growth in 2012 is likely to be constrained by a number of issues, including delays with infrastructure projects. The Oil Ministry has forecast crude exports to reach 2.6 mb/d in 2012 but analysts project volumes to fall short of that target. The planned expansion of southern export facilities on the Gulf is behind schedule, and now the first of the three new single-point moorings (SPMs) is not expected to be operational by end March, compared with the original 1 January start date. Though nameplate capacity for each SBM is 900 kb/d, industry experts say operational capacity may only be 500 kb/d. The full plan calls for the installation of three 48-inch land pipelines between the production hubs of Zubair and Rumaila to the Fao onshore terminal, the construction of storage tanks to raise capacity by around 16 mb and new pumping, power and metering facilities. So far, only one pipeline is

under construction, with completion also slated for the end of first quarter 2012. Three tanks at Fao have been completed, but work on the critical gas supply pipeline has not begun, and contracts for the main electrical generators have been only just awarded. Temporary generators and booster pumps may be installed, which would enable an increase in flow rates to offshore terminals by an estimated 250 kb/d by mid 2012.

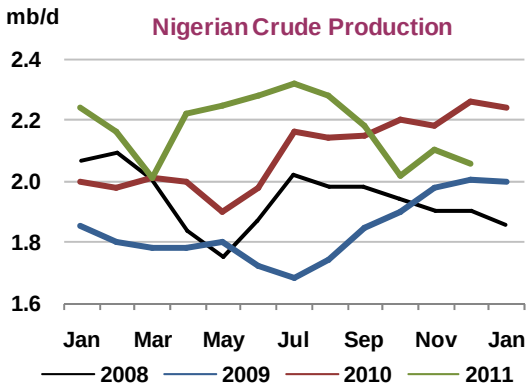
Iranian supplies declined by 100 kb/d to 3.45 mb/d in December, with increasing volumes going into floating storage. EA Gibson shipbrokers report Iranian storage increased by 4.3 mb to 32.3 mb at end-December.

After rising for six straight months, **Kuwaiti** output declined by 50 kb/d to 2.62 mb/d in December. **UAE** production, by contrast, rose by 60 kb/d to 2.58 mb/d last month.

Libya posted the single largest monthly increase, up 250 kb/d to 800 kb/d on average in December. Total's 40 kb/d Mabruk oil field was the latest to restart production. Officials reported production breached the 1 mb/d mark in December but output reportedly has been throttled back so engineers can conduct tests on wells and pipelines, where numerous leaks have been reported.

Angolan output in December was around 1.75 mb/d, about 60 kb/d more than November. The new Total-operated Pazflor field has now ramped up to capacity of around 160 kb/d.

Nigeria's supply fell 40 kb/d to 2.06 mb/d in December. Shell was forced to shut down the massive 200 kb/d offshore Bonga facility after a leak during a tanker loading operation on 20 December. Production was restarted on 5 January. Shell's offshore 115 kb/d EA oil field was also undergoing maintenance work through much of December, with production restarted on 27 December. In early January, Shell declared force majeure on its benchmark Bonny Light crude exports following a leak caused by theft incidents on the Nembe Creek trunk line in the Niger Delta.

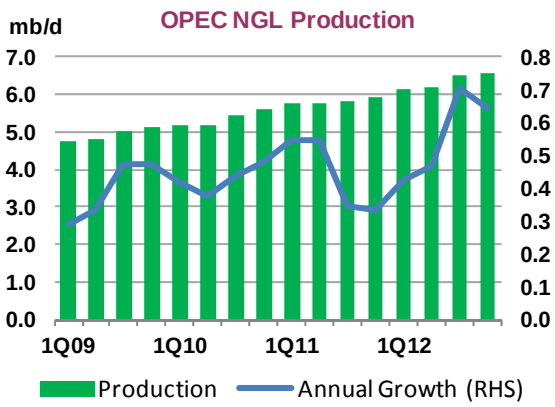


A nationwide strike against the ending of fuel subsidies that more than doubled gasoline prices threatened to shutdown the country's oil production and exports this month but the labour action was averted following an eleventh hour agreement (*see Demand*, '*Goodluck Removing Subsidies*').

Venezuelan output was down 30 kb/d to 2.5 mb/d in December, largely due to maintenance at the Petroanzoategui heavy crude upgrader. Total Orinoco output was estimated at 450 kb/d in December.

OPEC NGLs

OPEC NGLs are on course to average 6.2 mb/d in 1Q12, up 200 kb/d from 4Q11. Qatar is slated to provide around 40% of the increase, with incremental supplies expected from LNG Trains 6 & 7 and Pearl NGLs. Kuwait, the UAE, Algeria, Nigeria and Angola will see smaller increases. For full-year 2011 OPEC NGLs rose by 400 kb/d to an average 5.8 mb/d. The UAE accounted for 250 kb/d of the increase with the ramp-up in output from the Habshan condensate and NGL complex providing the bulk of the increase. OPEC NGLs are forecast in 2012 to increase by a further 600 kb/d to 6.4 mb/d.



International Sanctions Tighten Chokehold On Iran

A looming sharp escalation in economic sanctions imposed on Iran by the US and EU has sparked concerns in Europe and Asia over potential crude availability, as well as raising alarms over the possibility of military action in the Middle East Gulf. A new law was signed by President Obama on 31 December 2011 imposing sanctions on financial institutions that deal with Iran's central bank after a certain time, the main clearinghouse through which Iran deals with trading partners around the world. Meanwhile the EU is moving at a brisk pace to finalise a ban on oil imports from Iran by member states. Though neither measure is likely to take meaningful physical effect until mid-year, they have already set in motion a flurry of diplomatic activity, with leaders from Japan, China, South Korea, among others, visiting top Middle East producers in recent weeks to secure assurances that supply will be forthcoming to replace Iranian barrels.

The new US sanctions will force foreign banks and other institutions to terminate financial transactions with Iran in order to avoid being precluded from dealings on the US financial markets. The measures target both private and government-controlled banks, including central banks. The law, however, enables a great deal of latitude for the US Administration on how to implement it and, crucially, allows waivers for countries that demonstrate they are taking measures to significantly reduce their imports of Iranian crude. The US President may also grant waivers deemed to be in the US national security interest or otherwise necessary for energy market stability. The timeframe for implementing the law via-à-vis the petroleum sector is:

- After 60 days (end February), and every 60 days thereafter, the US Energy Information Administration (EIA) has to submit a report on the availability and price of oil from suppliers other than Iran.
- After 90 days (end March), after 180 days thereafter, the US President has to make a finding (based on the EIA report) whether there is sufficient oil supply from countries excluding Iran in order to permit other countries to significantly reduce their purchases from Iran.
- After 180 days (end June): if the US President established that there is sufficient oil available outside Iran, the sanctions shall be applied to financial institutions; the sanctions shall not apply to financial institutions of countries that have significantly reduced their oil purchase from Iran.
- At any time the President may waive the sanctions altogether for up to 120 days, if that is considered to be in the national security interest of the US.
- In addition, the President has to undertake diplomatic initiatives with other countries to:
    - Limit Iran’s imports of non-luxury consumer goods and exclude purchases destined for military/nuclear purposes and ;
    - Encourage other producer countries to produce more oil.

In Brussels, the EU has agreed in principle to impose an oil import ban on Iranian oil but details such as timing and implementation are still being discussed. A decision could be taken at the next EU Foreign Ministers’ meeting on 23 January. If the ministers agree on the new regulation (which would be directly applicable, with no transposition into national law needed), it would take about two weeks to formalise. One critical issue for the market is the date for implementation of the import ban, with current proposals ranging anywhere from three months to a year. However, a target of six months is gaining traction, since it would dovetail with the US law. This would tend to suggest a measure that would have a material impact on physical supplies from Iran from mid-summer onwards, similar in timing to the US measures. Italy has asked for, and is considered likely to receive, a full exemption for the oil that ENI receives as payment of their share in upstream production in Iran (some 10 kb/d). Greece, Italy and Spain may receive an exemption for a limited amount of time after the implementation, to be able to find alternative supplies.

Iran meanwhile has upped its brinkmanship with the west as well as with its fellow OPEC members and regional neighbours. In recent weeks it has conducted major naval exercises close to the Strait of Hormuz, and claimed to have successfully tested anti-ship missiles and a new mid-range missile, comparable to the cruise missiles of Western forces. Iran claimed also to have practiced for an effective closure of the Strait of Hormuz, although the waterway was not actually blocked at any moment. Secondly, Iran announced it would close the Strait of Hormuz, if confronted with an embargo on its oil exports. This would not only physically prevent significant additional exports by Saudi Arabia and other Gulf producers, but could

International Sanctions Tighten Chokehold On Iran (continued)

potentially hinder the majority of oil exports from the Gulf, albeit for a short period. The Strait of Hormuz in recent months has seen the transit of some 17 mb/d of crude oil and refined product. Most military analysts believe any closure would be short term, especially as the US and UK said they would never allow the Strait to be closed given its vital importance to global energy markets. In the event of temporary or partial closure of the Strait, Saudi Arabia has the capacity to ship a further 2.5 mb/d via the East-West pipeline to the Red Sea.

The long-awaited 1.5 mb/d Abu Dhabi pipeline, which offers a further bypass route of the Strait of Hormuz, will be operational by June. The pipeline will move crude to the port of Fujairah, on the UAE's eastern coast, facing the Gulf of Oman.

By mid-January, Iran was warning its fellow OPEC members, threatening serious consequences if other producers stepped in to replace banned Iranian crude supplies. Iranian OPEC Governor Mohammad Ali Khatibi said 16 January that there would be serious consequences for regional producers, alluding to blockage of the Straits. Much to the anger of Iran, high-level diplomatic efforts are under way to secure alternative supplies, with the leaders from Iran's biggest customers – China, Japan and South Korea – visiting Saudi Arabia and other Middle East producers to receive assurances that alternative supplies will be available.

Destination of Exports Passing Through the Straits of Hormuz - January to October 2011

(million barrels per day)

OECD Europe	**0.83**	**Middle East**	**0.05**
Crude	0.70	Crude	0.00
Products	0.14	Products	0.05
OECD N America	**1.74**	**Other Asia**	**5.45**
Crude	1.74	Crude	4.83
Products	0.00	Products	0.62
OECD Pacific	**5.42**	**Other Europe**	**0.01**
Crude	5.02	Crude	0.00
Products	0.40	Products	0.01
Africa	**0.32**	**SUMED Pipeline**	**0.63**
Crude	0.27	Crude	0.63
Products	0.05	Products	0.00
China	**2.14**	**Unknown**	**0.02**
Crude	2.13	Crude	0.01
Products	0.01	Products	0.00
Latin America	**0.14**	**S Arabia (Red Sea)**	**0.10**
Crude	0.12	Crude	0.09
Products	0.02	Products	0.02
Grand Total	**16.85**		
Total Crude	15.54		
Total Products	1.31		

Source: Lloyds Marine Intelligence

IEA import data for January-October 2011 and preliminary estimates for other destinations suggest Iranian crude exports averaging 2.5 mb/d (including over 200 kb/d of condensates). Around one-third of these were destined for IEA European destinations, with Italy, Turkey, Spain and Greece accounting for about 80% of these sales into Europe. Both Turkey and Greece have so far met around 30% of their oil demand with Iranian imports. These data imply EU imports of around 600 kb/d.

Japan and South Korea imported a collective 550 kb/d of Iranian crude, with deliveries into China and India estimated at 550 kb/d and 310 kb/d respectively (including at least 90 kb/d of condensate into China). South Africa purchased around 80 kb/d. All told, eastbound exports accounted for 65% of total Iranian exports.

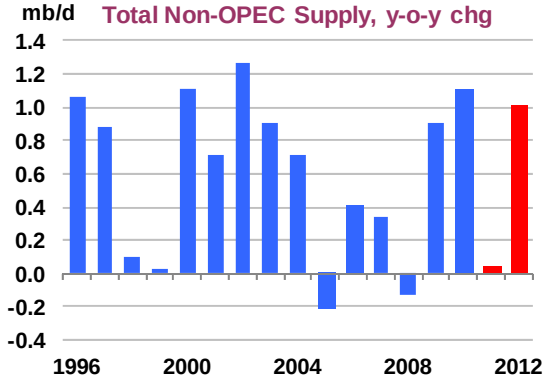
Japan has not yet committed to the US Administration to reduce imports of Iranian crude, with the country's foreign minister visiting Saudi Arabia and the UAE to gain assurances that substitute crude for Iranian barrels will be available. China has not implemented any sanctions, with Iran its second largest supplier after Saudi Arabia. Chinese Premier Wen Jiabao, though openly opposed to sanctions on Iran, recently travelled to Saudi Arabia, the UAE and Qatar in a bid to secure assurances over crude supplies. Separately, China, whose 2011 purchases from Iran were up by around 20% from 2010, this month cut in half its Iranian term contract volumes over a pricing dispute.

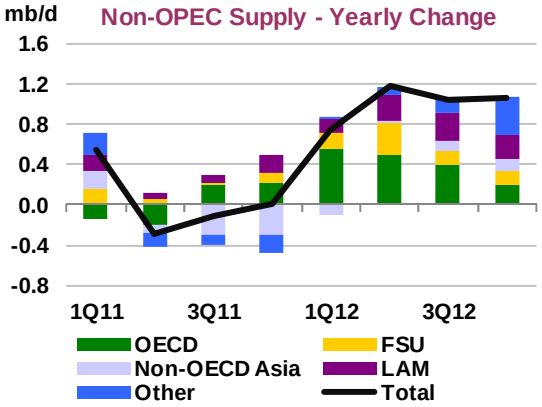
For European refiners the new EU sanctions will force them into the difficult task of finding alternative comparable crudes, especially for Iran's heavy crudes. Iran's two main export grades, produced from onshore fields, are Iranian Heavy (29.5° API and 1.99% sulphur) and Iranian Light (33.4°API and 1.36% sulphur). Historically, Iranian Heavy has accounted for around one half of Iranian exports, and Iranian Light for a further one third. In 2011, IEA European importers' purchases have comprised around 30% Iranian Light and 70% Iranian Heavy or sourer (higher sulphur) grades. For 2011 sales so far into the IEA Pacific, less than 10% comprised Iranian Light, the remainder comprising Iranian Heavy and sourer grades. Both the main export grades are shipped from the terminal of Kharg Island, towards the northern end of the Middle East Gulf. Kharg accounts for around 85% of total Iranian exports, with shipments of Iran Light and Iran Heavy and offshore Foroozan. Other offshore crudes such as Sirri, Lavan and Soroosh are exported from Sirri and Lavan Islands and from floating facilities, respectively. Crude is also made available into the Mediterranean 'free on board' from Sidi Kerir in Egypt, the northern end of the Sumed pipeline.

Non-OPEC Overview

Non-OPEC oil production is estimated to have fallen by 0.1 mb/d to 53.2 mb/d in December, largely due to seasonally lower biofuels output and reduced production in Latin America and the Former Soviet Union. Preliminary data show North Sea volumes increased by 140 kb/d from November levels. Non-OPEC supply in 4Q11 is estimated to have risen by 0.6 mb/d from the third quarter, but grew by only 25 kb/d year-on-year.

The major source of a 110 kb/d downward revision to our estimate for 4Q11 non-OPEC supply is centred in China and is offset by 50 kb/d upwards revisions based on new historical data in Malaysia and the US light tight oil production totalled 740 kb/d in 4Q11, and exponential growth rates continue to exceed initial expectations, especially in Texas and in North Dakota. All told, non-OPEC supply grew on an annual basis by only 50 kb/d in 2011, the third-lowest performance in the last decade.





Overall, we have not altered our outlook for non-OPEC oil production in 2012, when production is expected to rebound by around 1.0 mb/d to average 53.7 mb/d. Since last month, more pessimistic expectations for the return to production of the Peng-Lai 19-3 field in China (-110 kb/d), continued violence in Yemen (-10 kb/d), and weather-related shut-ins and project delays in Australia (-20 kb/d) reduced non-OPEC supply growth. These downward revisions are equally offset by earlier than expected field start-ups in the Gulf of Mexico and higher production estimates for light tight oil in Texas.

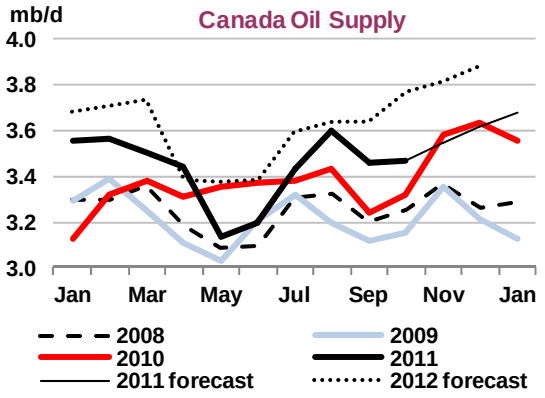
OECD

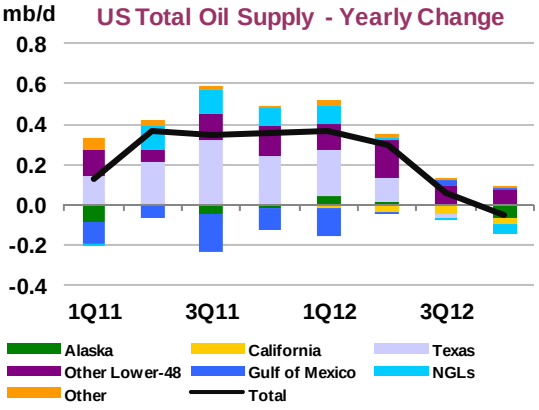
North America

US – December, Alaska actual, other states estimated: Gulf of Mexico and Alaskan production, as well as light tight oil output from Texas, and North Dakota, led to an increase in total US liquids output of around 60 kb/d to 8.3 mb/d in November. North Dakota's crude and condensate production reached almost 510 kb/d in December according to preliminary state estimates, only 50 kb/d shy of Alaskan production in 2011. After a light hurricane season, Gulf of Mexico production should stay at 2011 levels with additions from the Petrobras-led Cascade and Chinook development in 1Q12 (+40 kb/d on average for 2012), Anadarko's Caesar and Tonga (+20 kb/d), and LLOG's Mandy and Who Dat (+30 kb/d) offsetting declining production elsewhere. We have increased our expectations for Texas oil production by 25 kb/d to 1.5 mb/d in 2012 in this outlook to reflect a higher production baseline from the second half of 2011. NGL output in 4Q11 also exceeded our expectations by 20 kb/d. We estimate that the US will produce 8.2 mb/d in 2012, which is around 170 kb/d higher than preliminary 2011 output estimates and around 30 kb/d higher than last month's forecast.

Canada – October actual: Rising output from the oil sands brought Canadian oil production to 3.5 mb/d in October, a slight increase from the prior month. Planned maintenance kept the Terra Nova field producing 10 kb/d lower than 1H11 average levels at 30 kb/d, while maintenance and a fire at the

Syncrude project kept production around 60 kb/d lower than average at 250 kb/d in 4Q11. As discussed last month, the operator has warned that it may bring the unit down for a turnaround if full production rates cannot be achieved. The Canadian outlook for 2012 has been increased by 20 kb/d from last month to take into account additional output from CNRL's Primrose project. In sum, total liquids output should grow by around 180 kb/d to average 3.6 mb/d.

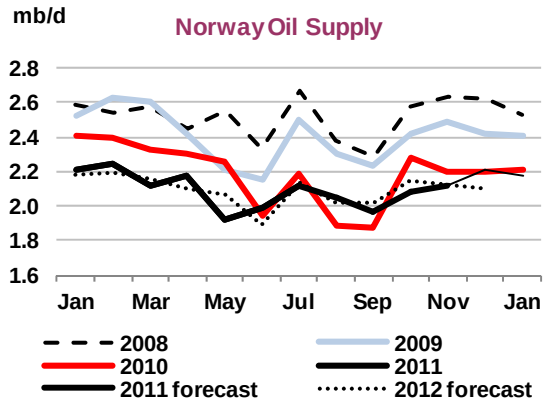


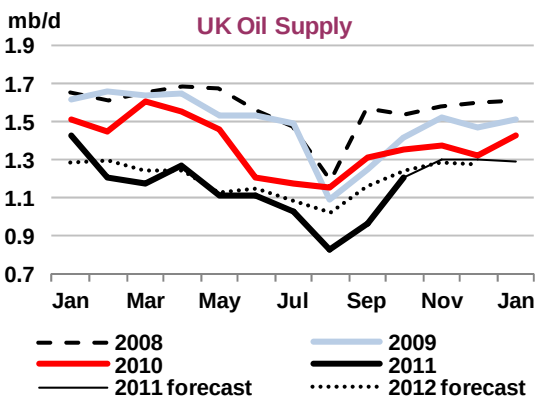


North Sea

Production from the North Sea returned to around 3.2 mb/d in 4Q11, 240 kb/d lower than last year's levels. We estimate that on a monthly basis, North Sea production rebounded by 140 kb/d in December to 3.3 mb/d, mainly due to rising production from the UK's Buzzard field. Pending further unplanned outages, it should remain at these levels through 1Q12. Overall, rebounding production from unplanned outages should keep North Sea production in 2012 close to the 2011 levels of 3.1 mb/d.

UK—September actual, October preliminary: UK offshore crude production increased from a record low of 0.7 mb/d in August to around 1.0 mb/d in October with the completion of summer maintenance and other unplanned outages. With the benefit of field level detail for the majority of the maintenance season, it is worth observing that oil production fell by 225 kb/d in 3Q11 from 2Q11 and around 80 kb/d less than during the 2010 maintenance season. Offshore loaded production fell by 35 kb/d during this period, Brent and Ninian systems' output fell by 10 kb/d each, Teal area production fell by 25 kb/d, and Forties production fell by almost 50 kb/d. Notably, production problems at the Buzzard field did not cause any of the 3Q11 decline in the Forties area, but we have tempered our expectations for output from the field in 4Q11, which should average around 160 kb/d, or 40 kb/d less than capacity. Other revisions for 2012 this month stem from one-year delays at the Alder and Athena field. Also, the 25-30 kb/d Gryphon FPSO, which came loose from its moorings in February 2011 after a storm, will not be returning to production until 3Q12, or one quarter later than planned, according to Maersk Oil. The FPSO aggregates production from the Tullich, Maclure, and Gryphon fields. Downwards revisions are offset by slightly higher 4Q11 baseline production in the Forties and Ninian systems, leaving 2012 production estimates of 1.2 mb/d (+40 kb/d from 2011), unchanged from last month.





Norway—October actual, November preliminary: Norwegian production also increased by 100 kb/d in October to 2.0 mb/d and is expected to average 2.1 mb/d in 4Q11. The Grane field remained at around 100 kb/d in October, in line with expectations, and around 50 kb/d below normal levels due to post-maintenance problems. Preliminary data from the Norwegian Petroleum Directorate suggest crude, condensate and NGL output increased by around 30 kb/d in November, meaning that 4Q11 production is on track to average around 2.1 mb/d.

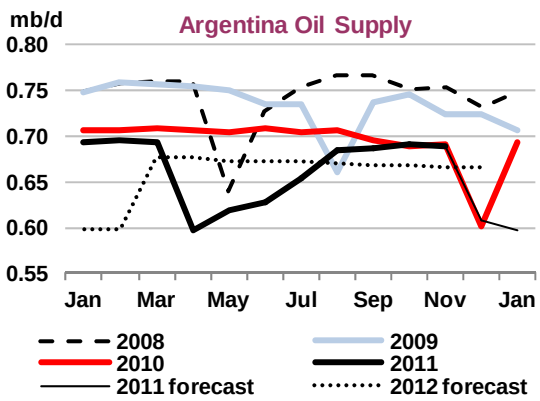
OECD Asia

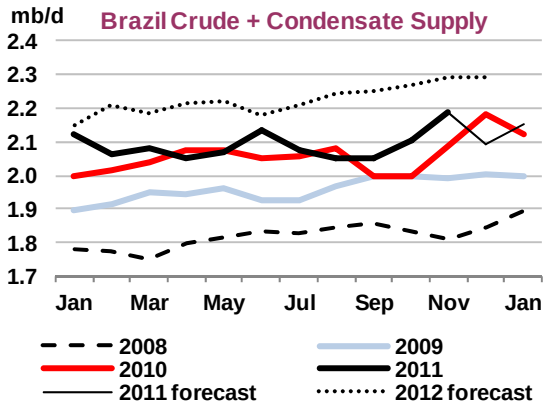
Australia—September actual, October preliminary: Australian oil production increased by around 10 kb/d in October to 430 kb/d. We expect that production in January will fall by around 60 kb/d from December's estimate to 490 kb/d on the impact of Cyclone Heidi that reduced production at the Waenea/Cossack, Stybarrow, and Vincent fields as well as at the Mutineer/Exeter FPSO. 2012 production estimates have been reduced by 20 kb/d on this weather-related impact, and due to continued delays at the PTTEP-led Skua and Montara project, that was expected to add 35 kb/d in 2012. We estimate that the project has been delayed six times since October 2008. However, other field additions should raise total Australian oil output by 130 kb/d y-o-y to 570 kb/d in 2012.

Non-OECD

Latin America

Brazil – November actual: Brazilian crude and condensate production reached a new record of 2.2 mb/d in November 2011, despite leaks at the Frade field and the Marlim Sul P-40 platform. Even though news articles reported that output had been reduced by 75% at the P-40 platform from a gas reinjection line, November output from the field remained near average levels of 260 kb/d, although we now forecast that December's output will be around 100 kb/d lower than the prior month. Notably, in January the pre-salt Guara field in the Santos basin was declared commercial after a five-month extended well test and will officially begin the production phase under the name Sapinhoa. Based on field level data, production in the Santos basin has reached around 120 kb/d in November, with the addition of oil from the Carioca Nordeste extended well test and a new well at the Lula field. OGX's Waimea project received a green light for production to begin in late January, yet we remain cautious about the ultimate production rates for 2012. We expect further increases from the Santos basin to sustain Brazilian crude and condensate production at levels of 2.2 mb/d in 2012, an increase of 140 kb/d over 2011 levels.



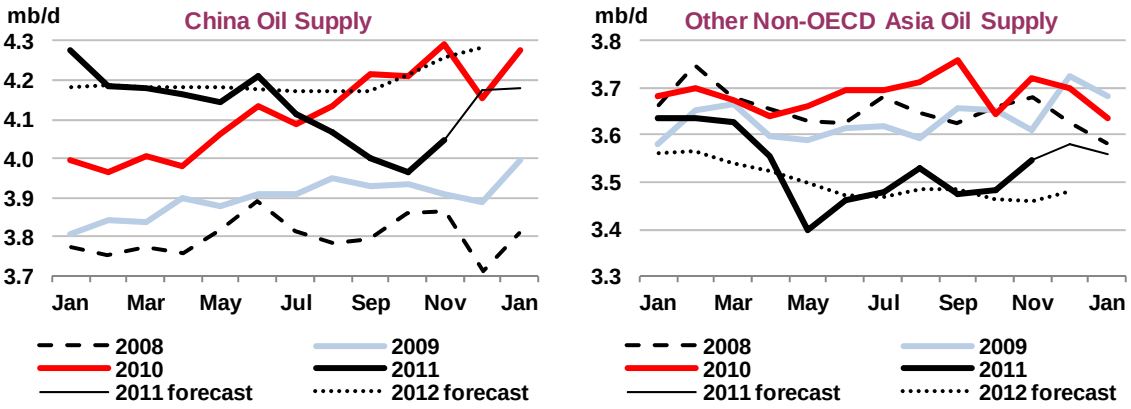


Argentina—November actual: Argentina produced around 580 kb/d of crude oil in November, slightly higher than the 3Q11 average. Earlier, strikes had dented output by 70-100 kb/d in March-June and by 90 kb/d in December 2010. At that time an oil worker strike and teacher protests in the Santa Cruz province kept production from attaining normal levels. Recently, news reports surfaced that strikes were again reducing output at Pan America Energy's 90 kb/d Cerro Dragon oil and natural gas field in the

Chubut province. Workers blocked access to the field due to dissatisfaction with their salaries and because they are seeking compensation pay for days lost during a previous strike. Output from the field represents 80% of the company's output, and shares are held 60/40 by BP and Bridas respectively. We have reduced our outlook for 2012 by 20 kb/d (and -60 kb/d in 1Q12) based on the likely continuation of these labour issues in the neighbouring Santa Cruz and Chubut provinces. These contingencies will restrain production close to 2011 levels of 660 kb/d in 2012.

Asia

China—November actual: Chinese production is estimated to have fallen to 4.1 mb/d in 4Q11, around 160 kb/d lower than the same quarter in 2010 and at the same rate as 3Q11. November's production increased to 4.0 mb/d. Offshore production averaged over 100 kb/d lower than year-ago levels in October and November, well below our expectations from last month, and onshore production also fell. For example, output stayed at 380 kb/d in October and November or 30 kb/d below August levels at the Changqing complex, and 20 kb/d below August at the Jilin field. The unexpected onshore decline and the more widespread-than-anticipated offshore production decline from leaks at other platforms resulted in a 160 kb/d downward revision to 4Q11 production. Also, we now do not expect production from the 150 kb/d offshore Peng-Lai field to return until late in 2012 amid government caution over re-start. The revised outlook also takes into account the Yangkuang group's new 20 kb/d CTL plant in the Shaanxi province. The first phase of the CTL project will produce 76% diesel, 20% naptha, and 3% LPG. The Peng Lai and CTL adjustments mean that total Chinese oil production should still grow by 1.7% to 4.2 mb/d in 2012, but the growth rate is around 110 kb/d less than last month's estimate.

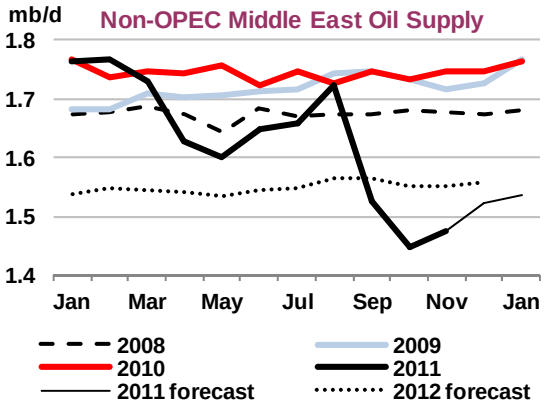


Other Non-OECD Asia: Production in **India** fell below 880 kb/d in October, a level not seen since August 2010, due to poor output performance from the Bombay High offshore platform. But, production from the field rebounded in November, bringing Indian oil production back above 900 kb/d. Production in **Thailand** fell victim to the widespread flooding in October, especially at the Sirikit oil field near the Sirikit hydroelectric dam, where production decreased to 15 kb/d from 25 kb/d. **Malaysian** oil production increased to 660 kb/d in November due to continued workover drilling at the Kikeh project, where operator Murphy Oil has brought three new wells online. The operator expects gross output to reach 100 kb/d from 3Q11 levels of around 60 kb/d. Recent 4Q11 data have exceeded expectations by around 20 kb/d, which we have carried through the outlook for 2012. We currently expect overall production to decline in Malaysia by 20 kb/d to 630 kb/d in 2012, but further upward revisions based on Kikeh's performance may be required in upcoming months.

Middle East

Unrest in the Middle East continued to reduce non-OPEC supply in December 2011 and in January 2012. In **Yemen,** an explosion at a Hunt Oil subsidiary's well reportedly shut in around 10 kb/d. The field is located in the Jannah Block, where the company produced around 42 kb/d in 2010 according to the

Yemeni government. A number of attacks have occurred in Yemen in the last several months, reducing output to around 150 kb/d in 4Q11. News reports indicated this month that OMV's pipeline from Block S2 have also been attacked 13 times since October. The 400 kb/d pipeline from the Block 18 Marib fields to the Ras Isa port is still offline, meaning Yemen's Aden refinery has been shut in due to lack of feedstock. We expect violence will continue to impact production in Yemen, keeping output in 2012 at around 150 kb/d.



Syria is also suffering from attacks on its energy infrastructure that have led to power and petroleum product shortages. Violence between government military forces and the opposition has escalated in the last month and shows no signs of abating. To add fuel to the fire, reports indicate petroleum product prices have doubled, and cooking gas prices have tripled. The head of the Arab League, which sent a mission to Syria in January, recently indicated he feared a civil war was in the making, which could also have wider implications for neighbouring countries. Numerous foreign companies have suspended operations, and skilled personnel are bound to be departing the country. Economic sanctions and these factors mean that production should average only 270 kb/d in 2012, down from 330 kb/d in 2011.

Former Soviet Union

Russia—December actual: Data for December show production fell slightly from 10.0 to 9.9 mb/d, with notable 10 kb/d monthly declines from TNK-BP's Samotlor oil field and from LUKoil and ConocoPhillips' Yuzhnoye Khylchuyu field. With the benefit of a full year of Ministry of Energy data, it is useful to take stock of major Russian companies' performance over the last year in the table below. In 2011, oil output hit a new post-Soviet record and increased in the second half of the year. All companies except for LUKoil exceeded their initial guidance on brownfield and greenfield production. Overall crude and condensate output rose by 1.2% in 2011 led by Surgutneftegaz, other private companies, and Rosneft, offset by a 5.3% decline from LUKoil. In 2012, crude and condensate output in Russia will receive strong support from associated natural gas liquids production from Gazprom and Novatek. Gazprom's liquids output reached over 300 kb/d in 2011, or an increase of 8% y-o-y, and we expect this growth to continue in 2012 with added condensates from the Zapolyarnoye gas field and the start of production from the offshore Prirazlomnoye field. Increasing production in East Siberia from Surgutneftegaz's Talakan group of fields and at Rosneft's Vankor oil field will offset mature field declines at these companies, raising Russian oil production by 1.4% to 10.7 mb/d in 2012.

Russian Oil Output by Company
(million barrels per day)

	2010	2011	y-o-y	*2012E*	y-o-y
Rosneft	2.46	2.51	1.8%	2.61	3.9%
LUKOil	1.81	1.71	-5.3%	1.66	-3.1%
TNK-BP	1.45	1.46	0.9%	1.45	-0.5%
Surgutneftegaz	1.20	1.22	2.1%	1.24	1.4%
Other Private Companies	0.81	0.89	9.4%	0.93	3.9%
Gazprom Neft	0.60	0.61	1.1%	0.64	5.7%
Tatneft	0.52	0.53	0.3%	0.52	-1.1%
Slavneft	0.37	0.36	-2.1%	0.35	-2.8%
Gazprom (NGLs)	0.31	0.34	8.1%	0.36	6.0%
JVs and PSAs	0.30	0.31	4.6%	0.32	3.9%
Bashneft	0.28	0.30	6.8%	0.30	-0.1%
Total Russian Oil	**10.45**	**10.58**	**1.2%**	**10.72**	**1.4%**

Kazakhstan Government Reacts Swiftly to Recent Labour Unrest

In both the summer and December 2011, oil workers' strikes at national oil company Kazmunaigas (KMG) facilities halted operations at the Uzen field in Zhanaozen near the Caspian Sea. In December 2011, over 15 people were killed in clashes between police and protesters. With proven oil reserves of 30 billion barrels, Kazakhstan has attracted over $100 billion in foreign investment since the discovery of the giant Tengiz oil deposit in the 1980s and the Kashagan field in the 1990s. Although the potential for a serious disruption from Kazakhstan is relatively small, unrest near the Caspian producing areas might set a precedent for future strike movements. Kazakhstan's leadership will likely continue to contain the unrest at the cost of economic expediency. The unrest compromises KMG's role in the three major consortia because it must now employ the fired workers, not to mention the additional threat the unrest poses to KMG's legacy production output. In addition to threatening domestic investment, strikes and labour issues will complicate and continue to slow the pace of billions of dollars of existing and planned foreign investments that should make Kazakhstan a key potential source of non-OPEC supply.

Violence at Zhanaozen exposes Kazakhstani labour tensions. This summer, an eight-month-long strike began when workers demanded higher wages and a stronger union. KMG's exports plummeted by 37% in 3Q11 due to the strike, but output was normalised after August. Despite normalisation, nearly 2 000 workers were fired, planting the seeds for further unrest. The workers continued to occupy Zhanaozen's main square, and violence erupted during Independence Day commemorations. Local/foreign wage discrepancy and labour union restrictions contributed to the Mangistau unrest and other instances of violence over the last several years. But, the government and especially foreign operators have moved quickly to contain these problems to prevent them from spiralling out of control. To insure against further problems, President Nursultan Nazarbayev had the head of KMG replaced with a veteran deputy energy minister and Mangistau native Lyazzat Kiinov, and he put the old KMG head in Kiinov's old position. President Nazarbayev also removed Timur Kulibayev, his son-in-law and a very influential energy player, from his position at the head of Samruk-Kazyna, the sovereign wealth fund and government holding company. Now that the unemployed KMG workers will be given temporary jobs in newly created KMG subsidiaries, it is less likely that the unrest will continue there. President Nazarbayev also reinstated the region's right to vote in parliamentary elections after a state of emergency had been imposed. Although difficult to verify, foreign operators may also have increased the amount they are spending on local workers and on local sustainability projects.

Despite the immediate threat to output from KMG's Mangistau fields, KMG also holds shares in all major additions to Kazakhstani oil production. KMG's waxy and salty Uzen field, situated in the Mangistau region close to the Caspian Sea, once produced more than 300 kb/d in the mid-1970s, but declined to around 110 kb/d in 1H10. Around 50% of KMG's Mangistau region oil flows via the Atryrau-Samara pipeline to Russia, 30% goes via the Tengiz-Novorossiysk line to the Black Sea, and the remainder is used domestically. With the agreement last month for KMG to take a 10 percent share in the 280 kb/d Karachaganak gas and gas condensate field, KMG represents the Kazakh state's stake in the country's major fields. However, KMG's workers will play a key role in new production additions in Kazakhstan, and local content restrictions will make project execution and negotiations more complicated for foreign investors.

Complex geology and rising capital costs have hindered Kazakhstan's near-term contribution to non-OPEC supply. Kazakhstan produced around 1.6 mb/d in 2011, and is forecast to reach 1.8 mb/d by 2016 and 4 mb/d by 2035. With government approval, around 200 kb/d of new production will be added to TengizChevroil's current 520 kb/d output but not until after 2016. With the inclusion of KMG as a 10% shareholder and the settlement of other disputes, Karachaganak (KPO B.V.) shareholders will begin to reconsider the sanctioning of additional phases of the gas and gas condensate project that would add around 80 kb/d to production. Also, ConocoPhilips and UAE-based Mubadala have begun exploratory drilling

Kazakhstan Government Reacts Swiftly to Recent Labour Unrest (continued)

in the highly prospective offshore Nursultan block. Last but not least, Phase 1 of the oft-delayed Kashagan project should come online by the end of 2013, adding as much as 370 kb/d to the country's output.

In sum, although labour unrest could flare up in upcoming months, it is unlikely to spread to the Atryau region where foreign operators have ensured local workers are satisfied. President Nazarbayev will inevitably ensure that further unrest is contained so that it does not damage the country's investment standing or further rattle oil markets. This comes at a cost to KMG and to foreign companies operating in Kazakhstan. The creation of new KMG subsidiaries inevitably raises the cost of production and could hinder KMG's ability to fulfil its shareholder obligations.

FSU Net Exports of Crude & Petroleum Products

(million barrels per day)

	2009	2010	4Q2010	1Q2011	2Q2011	3Q2011	Sep 11	Oct 11	Nov 11	Latest month vs. Oct 11	Latest month vs. Nov 10
Crude											
Black Sea	2.28	2.10	2.02	2.06	1.87	1.87	1.97	1.85	2.05	0.20	0.15
Baltic	1.60	1.60	1.60	1.48	1.57	1.37	1.45	1.52	1.68	0.15	0.20
Arctic/FarEast	0.46	0.74	0.78	0.70	0.69	0.65	0.65	0.72	0.60	-0.12	-0.18
BTC	0.80	0.77	0.80	0.72	0.76	0.69	0.69	0.68	0.61	-0.06	-0.15
Crude Seaborne	**5.15**	**5.22**	**5.19**	**4.96**	**4.89**	**4.58**	**4.76**	**4.77**	**4.94**	**0.17**	**0.02**
Druzhba Pipeline	1.11	1.13	1.14	1.14	1.12	1.18	1.22	1.20	1.24	0.04	0.08
Other Routes	0.40	0.42	0.43	0.53	0.54	0.54	0.54	0.48	0.49	0.01	0.02
Total Crude Exports	**6.66**	**6.76**	**6.76**	**6.63**	**6.55**	**6.30**	**6.51**	**6.45**	**6.68**	**0.22**	**0.12**
Of Which: Transneft[1]	3.93	4.00	4.02	4.15	4.16	4.09	4.22	4.22	4.48	0.26	0.59
Products											
Fuel oil[2]	1.41	1.54	1.51	1.43	1.82	1.59	1.54	1.45	1.50	0.05	0.04
Gasoil	0.95	0.88	0.81	0.90	0.79	0.72	0.67	0.70	0.69	0.00	-0.09
Other Products	0.53	0.43	0.37	0.48	0.53	0.36	0.32	0.36	0.27	-0.08	-0.12
Total Product	**2.89**	**2.85**	**2.69**	**2.81**	**3.14**	**2.66**	**2.53**	**2.51**	**2.47**	**-0.03**	**-0.18**
Total Exports	**9.54**	**9.61**	**9.45**	**9.44**	**9.68**	**8.96**	**9.04**	**8.96**	**9.15**	**0.19**	**-0.06**
Imports	0.06	0.06	0.08	0.06	0.06	0.08	0.09	0.05	0.09	0.04	0.00
Net Exports	**9.49**	**9.55**	**9.37**	**9.39**	**9.62**	**8.88**	**8.95**	**8.91**	**9.06**	**0.15**	**-0.06**

Sources: Argus Media Ltd, IEA estimates

[1]Transneft data exclude Russian CPC volumes.

[2]Includes Vacuum Gas Oil

FSU net oil exports increased by 150 kb/d to 9.1 mb/d in November, the first time since June that net exports have exceeded 9 mb/d. The rise was propelled by increasing Transneft crude shipments which rose strongly by 260 kb/d on the month and offset falling volumes of BTC blend and non-Transneft cargoes shipped via the Arctic port of Varandey. Black Sea cargoes rose by 200 kb/d, and Primorsk exports rebounded by 200 kb/d to 1.5 mb/d upon the conclusion of maintenance on the Baltic Pipeline System. In the East, deliveries of ESPO blend shipped through Kozmino remained below 300 kb/d at 270 kb/d for a second consecutive month, which was their lowest level since February 2010. It is likely that newly restarted Russian crude exports via the Kazakhstan-China pipeline were diverted from ESPO exports. Exports of products from FSU countries fell for the seventh consecutive month, contracting by 30 kb/d to 2.5 mb/d. Total exports are now 180 kb/d below a year ago, with 'Other Products' (-120 kb/d y-o-y) (including gasoline and naphtha) leading the yearly fall due to the introduction of the 90% light product export duty.

The start-up of the much heralded BPS-2 pipeline and its outlet of Ust Luga on the Gulf of Finland has been delayed to 1Q12 from November 2011. The first crude cargo was initially held over until December, but reports suggest that the terminal will now not commence operations until later than planned due to subsidence at a number of tanker berths. However, even the 1Q12 assessment looks to be optimistic due to the reported complexity of the required repairs and the onset of ice. Related to increasing Baltic and Arctic exports, reports indicate that Russia has begun to modernise its ice-breaker fleet with state controlled shipyards engaged to build a number of new ice-breakers to operate in the Gulf of Finland and along the Northern Sea Route, where Russia hopes to establish a major trade route. Additionally, the Russian government plans to construct ten emergency centres by 2016 with the capability to deal with any accidents occurring along Russia's arctic coast.

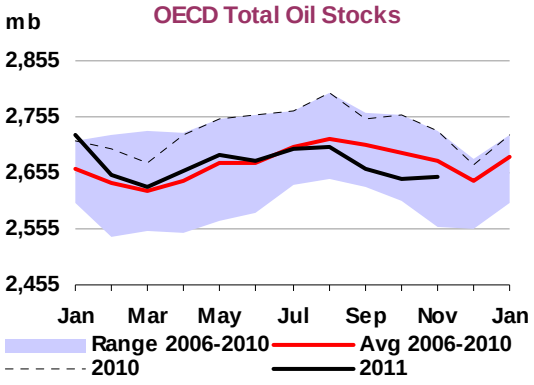
OECD STOCKS

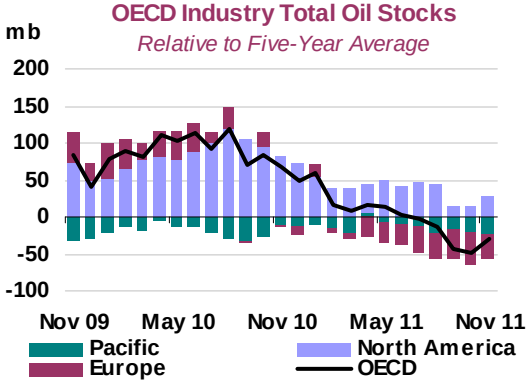
Summary

- **OECD industry oil holdings rose by 4.1 mb in November, to 2 647 mb,** in contrast with a five-year average 14.9 mb draw. Even though the deficit of inventories versus the five-year average narrowed to 30.3 mb, from 49.2 mb in October, stock levels nonetheless remained below the five-year average for a fifth consecutive month.

- **Preliminary data indicate a seasonal 23.6 mb draw in December OECD industry inventories**, compared with the five-year average drop of 37.4 mb. Crude oil stocks led the decline by falling 16.1 mb, most of which stemmed from Europe. Product holdings fell by 2.7 mb, driven by sharp drops in 'other products' in the US and kerosene stocks in Japan.

- **Short-term oil floating storage fell by 5.2 mb, from 39.7 mb in November to 34.5 mb in December.** Despite an increase in Iranian crude oil floating storage in the Middle East, reductions in Asia Pacific and the US Gulf due to a persistently backwardated pricing structure outweighed the increase





OECD Inventories at End-November and Revisions to Preliminary Data

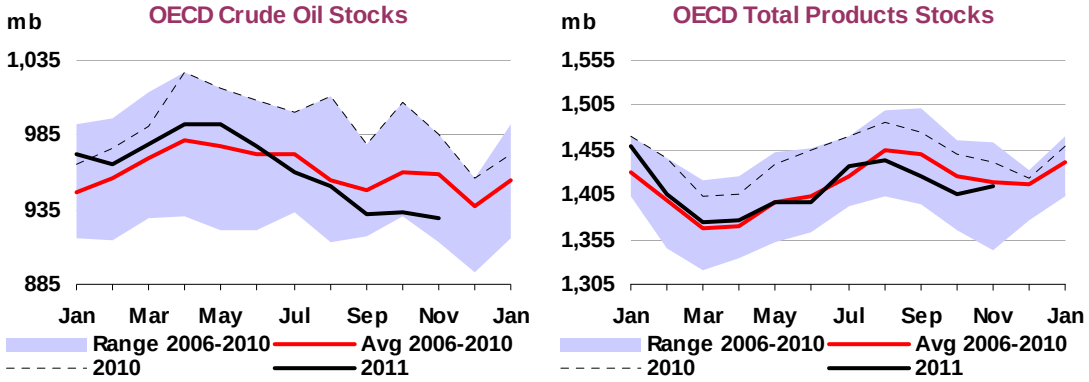
OECD industry oil holdings rose by 4.1 mb in November, to 2 647 mb, in contrast with a five-year average 14.9 mb draw. Even though the deficit of inventories versus the five-year average narrowed to 30.3 mb, from 49.2 mb in October, stock levels nonetheless remained below the five-year average for a fifth consecutive month. North America was the only region with stocks above the five-year average, both for crude and products. OECD forward demand cover fell to 57.5 days from 58.0 days in October, but continued to stand 1.5 days above the five-year average of 56.0 days.

Preliminary Industry Stock Change in November and Third Quarter 2011

	Nove (preliminary) (million barrels)				Nove (preliminary) (million barrels per day)				Third Quarter 2011 (million barrels per day)			
	N. Am	Europe	Pacific	Total	N. Am	Europe	Pacific	Total	N. Am	Europe	Pacific	Total
Crude Oil	**-3.5**	**5.8**	**-5.9**	**-3.6**	**-0.12**	**0.19**	**-0.20**	**-0.12**	**-0.36**	**-0.11**	**-0.03**	**-0.49**
Gasoline	8.0	4.4	-0.8	11.6	0.27	0.15	-0.03	0.39	0.02	-0.03	-0.01	-0.02
Middle Distillates	0.2	1.9	0.9	2.9	0.01	0.06	0.03	0.10	0.16	-0.09	0.01	0.07
Residual Fuel Oil	2.5	1.6	-0.1	4.0	0.08	0.05	0.00	0.13	-0.02	0.00	-0.01	-0.03
Other Products	-6.1	0.3	-3.2	-8.9	-0.20	0.01	-0.11	-0.30	0.13	0.06	0.11	0.30
Total Products	**4.7**	**8.1**	**-3.2**	**9.6**	**0.16**	**0.27**	**-0.11**	**0.32**	**0.30**	**-0.08**	**0.10**	**0.32**
Other Oils[1]	-4.8	1.3	1.6	-1.9	-0.16	0.04	0.05	-0.06	0.08	-0.04	-0.01	0.03
Total Oil	**-3.7**	**15.3**	**-7.5**	**4.1**	**-0.12**	**0.51**	**-0.25**	**0.14**	**0.02**	**-0.23**	**0.07**	**-0.14**

1 Other oils includes NGLs, feedstocks and other hydrocarbons.

Crude stocks declined seasonally by 3.6 mb to 929 mb, with the deficit of inventories versus the five-year average widening to 28.9 mb, marking a fifth straight month of below average readings. While crude holdings in OECD Pacific and North America fell by 5.9 mb and 3.5 mb, respectively, Europe saw a 5.8 mb build, following the return of a significant amount of Libyan crude production. In the meantime, product inventories rose by 9.6 mb in November, narrowing their deficit against the five-year average to 4.9 mb, from 20.3 mb in October. Gasoline stocks led the increase by gaining 11.6 mb on higher production in the midst of low seasonal demand. Middle distillates rose in all three regions thanks to warmer-than-normal weather. 'Other products', by contrast, decreased significantly by 8.9 mb, mostly in North America.



OECD stocks were revised 12.7 mb higher in October, upon receipt of more complete monthly submissions from member countries. This implies a 21.0 mb draw in October inventory levels, a lesser decline than the preliminary drop of 36.3 mb. Upward adjustments were centred on North American crude oil and middle distillate stocks, which were revised higher by 9.0 mb and 7.0 mb, respectively.

Revisions versus 13 December 2011 Oil Market Report

(million barrels)

	North America		*Europe*		*Pacific*		*OECD*	
	Sep-11	Oct-11	Sep-11	Oct-11	Sep-11	Oct-11	Sep-11	Oct-11
Crude Oil	**-2.2**	**9.0**	**0.4**	**2.6**	**0.0**	**-0.7**	**-1.8**	**10.8**
Gasoline	-0.6	-0.8	-0.2	1.2	0.0	-0.8	-0.7	-0.4
Middle Distillates	-1.1	7.0	0.6	0.3	0.0	-0.1	-0.4	7.2
Residual Fuel Oil	-0.1	-0.7	-0.1	-0.3	0.0	0.2	-0.2	-0.8
Other Products	-0.6	-3.7	-0.1	2.1	0.0	0.3	-0.6	-1.3
Total Products	**-2.3**	**1.9**	**0.3**	**3.2**	**0.0**	**-0.4**	**-2.0**	**4.6**
Other Oils[1]	0.7	-3.1	0.4	0.8	0.0	-0.5	1.1	-2.8
Total Oil	**-3.8**	**7.8**	**1.1**	**6.6**	**0.0**	**-1.6**	**-2.7**	**12.7**

1 Other oils includes NGLs, feedstocks and other hydrocarbons.

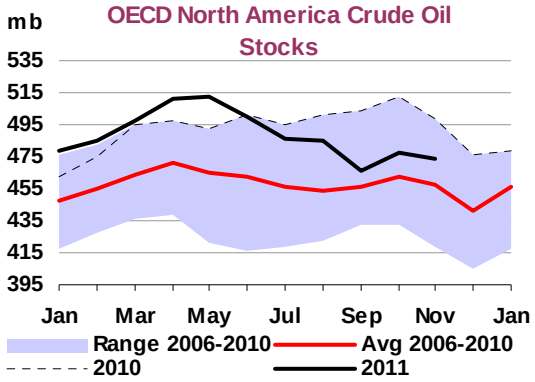
Preliminary data indicate a seasonal 23.6 mb draw in December OECD industry inventories, compared with a five-year average 37.4 mb drop. Crude oil stocks led the decline, falling by 16.1 mb, most of which stemmed from Europe. Product holdings fell by 2.7 mb, driven by sharp draws in 'other products' in the US and for kerosene stocks in Japan, while builds in gasoline and middle distillate holdings in the US provided a partial offset.

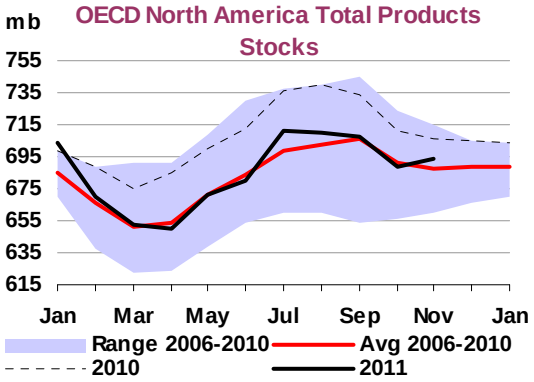
Analysis of Recent OECD Industry Stock Changes

OECD North America

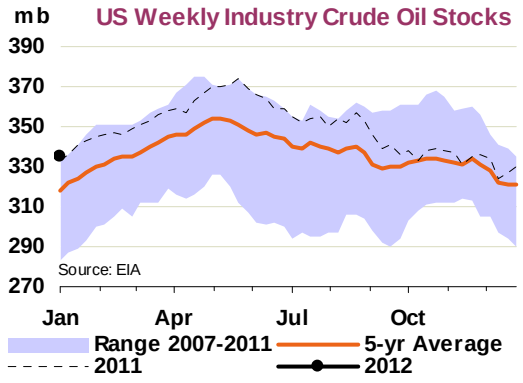
North American industry oil inventories fell seasonally by 3.7 mb to 1 330 mb in November, nonetheless a milder fall than the five-year average 16.3 mb. Crude oil holdings declined by 3.5 mb, mostly on lower imports into the US for end-year tax reasons. 'Other oils' stocks including feedstocks also decreased

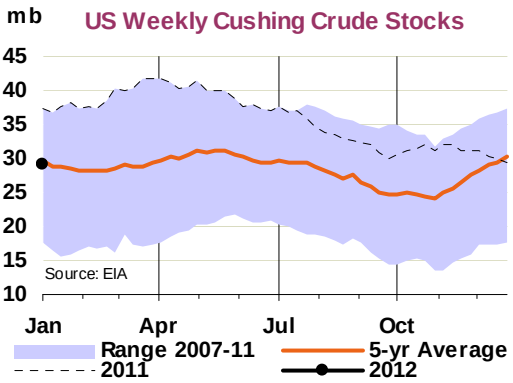
significantly by 4.8 mb, mostly affected by rising refinery throughput. Meanwhile, product inventories rose by 4.7 mb in contrast with a five-year average 4.0 mb draw. Gasoline and fuel oil stocks took the lead, rising by 8.0 mb and 2.5 mb, respectively. Motor gasoline holdings gained on higher production and imports in the midst of low seasonal demand. 'Other products' was the only category that showed a draw, declining sharply by 6.1 mb, due to the increased use of naphtha for gasoline blending.





US weekly data point to a 5.6 mb decline in US industry stocks in December. Crude holdings fell by 4.8 mb, affected by the last-in-first-out tax system. In the meantime, crude levels at Cushing, Oklahoma showed a further drop of 1.9 mb to 29.2 mb in December, marking the lowest monthly level since November 2009. The storage utilisation rate at Cushing has been on a downward trend since April, when it was over 80%, reaching an estimated 50%, amid rising PADD 2 refinery runs, onward crude shipments from Cushing and significant storage capacity expansion (see *'Storage Expansion at Cushing')*.





US product inventories rose by 2.6 mb in December, driven by gains in gasoline and middle distillate stocks, which rose by 7.0 mb and 3.4 mb, respectively on higher production. Meanwhile, 'other products' and fuel oil inventories fell by 5.5 mb and 2.3 mb, respectively, offsetting much of the gasoline and distillates gains.

Storage Expansion at Cushing

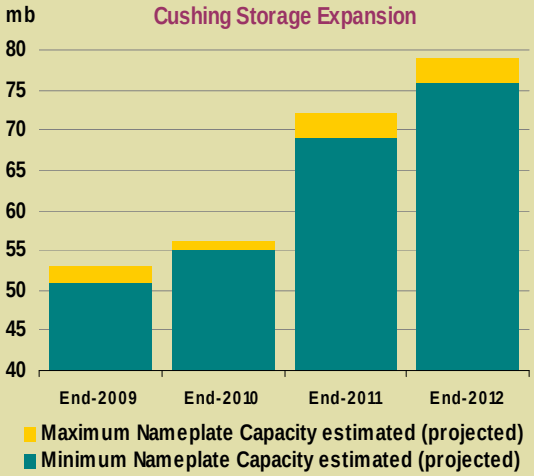
Crude storage capacity at Cushing, Oklahoma – the delivery point for the NYMEX light sweet crude oil (WTI) futures - has been increasing dramatically over the last year and seems likely to continue this trend in the near future.

While precise capacity levels at Cushing remain difficult to gauge, the build-up of crude in storage there, and resultant sharp relative weakening in WTI prices (to discounts exceeding $25/bbl versus Brent at times) has seen capacity expansion accelerate. Storage capacity at Cushing is estimated to have expanded by

Storage Expansion at Cushing (continued)

approximately 5 mb or less annually during 2005-2010. However, according to most sources, including the EIA, there was an 11-14 mb storage build in 2011. Moreover, at least another 7-8 mb of capacity will likely be added in 2012.

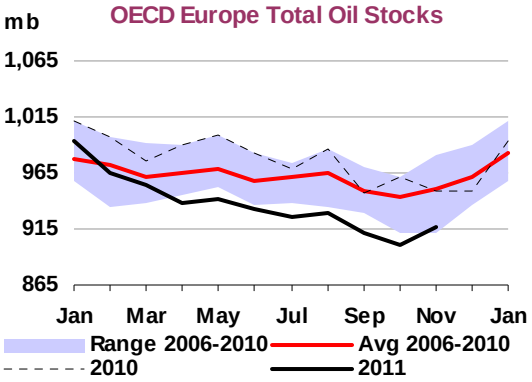
There are a couple of reasons behind this rush. Thanks to technologies such as hydraulic fracturing, output of light, tight oil from locations such as North Dakota and Texas has surged, while output from the Alberta oil sands also continues to ramp up. For pipeline companies confronting the resultant influx of crude to Cushing, amid bottlenecks in the ability to ship crude onward to refining centres on the US Gulf and East coasts, storage build has become more of a necessity than an option. Moreover, with a proliferation of crude qualities now coming in to Cushing storage, the need for segregation has further boosted the pace of capacity expansion. Storage capacity expansion may continue at an accelerated pace until such time as pipeline capacity to evacuate crude to coastal refining centres catches up.

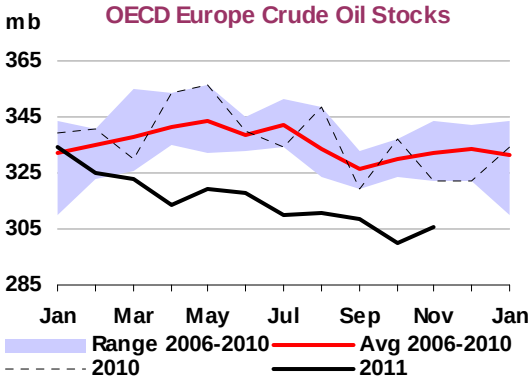


The other impetus has derived from price. In recent years (specifically from 2006 to October 2011), the contango in WTI futures prices has incentivised holding barrels in storage now to sell at a higher price in the future. With storage utilisation at Cushing occasionally breaching 80%, there has been every incentive for companies to expand tankage. Even though WTI flipped into backwardation again in late October 2011, and the utilisation rate fell back to around 50% at the end of 2011, price volatility continues to provide an incentive for Cushing storage expansion. If market players perceive there to be 'buy low, sell high' opportunities in future, further Cushing storage expansion is likely.

OECD Europe

Industry oil inventories in Europe rose seasonally by 15.3 mb to 917 mb in November, more than double the 7.0 mb five-year average build. Although they rebounded from eight-year lows in October, and thus returned to the five-year range, the deficit versus five-year average stock levels remained at 34.2 mb. Crude stocks increased by 5.8 mb, but were still at their lowest since February 2003, marking a ninth straight month under the five-year range. A more rapid–than-expected return of Libya's crude output, and recovering North Sea supplies helped to loosen some of the prevailing tightness in the regional crude oil market. Moreover, European refined product holdings also rose by 8.1 mb on healthier refinery runs. Gasoline and middle distillates led the increase, rising by 4.4 mb and 1.9 mb, respectively. Meanwhile, German end-user heating oil stocks rose to 59% fill at end-November.

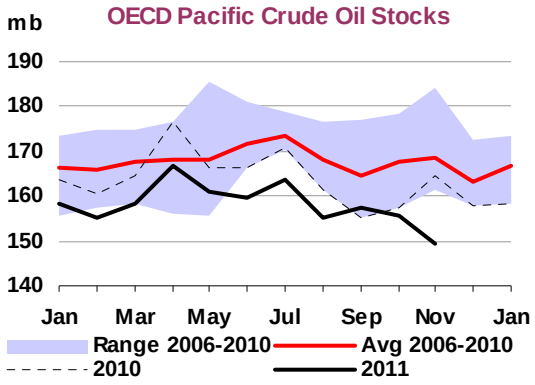


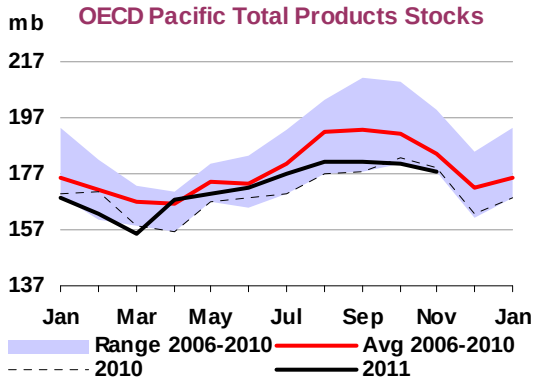


Preliminary data from Euroilstock point to a 13.7 mb draw in crude oil and product inventories combined in the EU-15 and Norway in December, in contrast with a five-year average 11.2 mb build. Crude stocks fell by 13.3 mb likely on weak demand (due to continuing high crude prices), and several refinery shut-downs from January. Products holdings edged up by 0.4 mb, as gains in gasoline and middle distillates outweighed declines in fuel oil and 'other products' stocks. Refined product stocks held in independent storage in Northwest Europe edged down due to mild winter weather and a backwardated price structure.

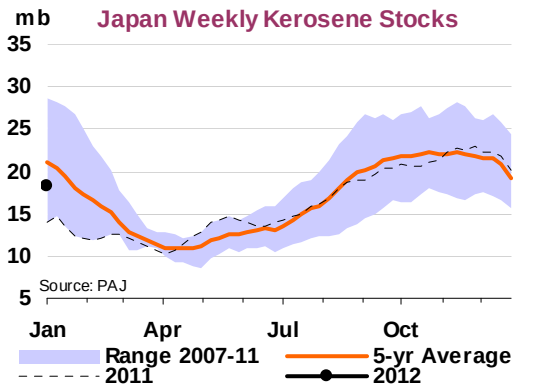
OECD Pacific

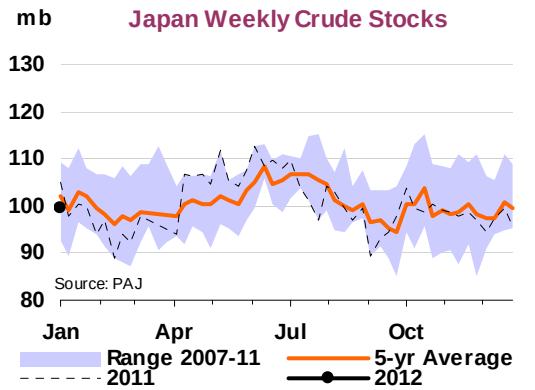
Commercial oil inventories in the OECD Pacific fell by 7.5 mb to 400 mb in November and stayed under the five-year range for a second consecutive month, widening the deficit versus the five-year average to 23.5 mb, from 21.5 mb in October. Crude stocks declined by 5.9 mb to 150 mb in contrast with a five-year average build of 1.1 mb, marking the lowest level on recent record. Moreover, crude holdings in Japan fell by 2.6 mb to 101 mb, again the lowest level in recorded history. Product stocks fell by 3.2 mb, staying barely within the five-year range. All products' inventories except middle distillates fell. 'Other products', gasoline and fuel oil holdings declined by 3.2 mb, 0.8 mb and 0.1 mb, respectively, while middle distillate stocks rose by 0.9 mb.





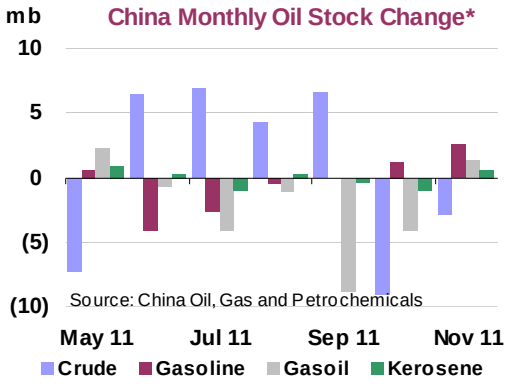
Weekly data from Petroleum Association of Japan (PAJ) suggest a seasonal draw of 4.4 mb in Japanese industry oil inventories in December. Product stocks fell by 5.0 mb, driven by a drop in kerosene holdings. Colder-than-normal weather drove kerosene stocks down by 4.5 mb, putting an end to a steadily rising trend that continued after the major earthquake and tsunami in March. Gasoline and fuel oil holdings also contributed to the decrease, falling by 0.9 mb and 1.2 mb, respectively, while middle distillate (excluding kerosene) and 'other products' stocks increased by 1.0 mb and 0.6 mb, each. In the meantime, crude oil inventories rose by 2.0 mb, likely on higher crude oil imports.

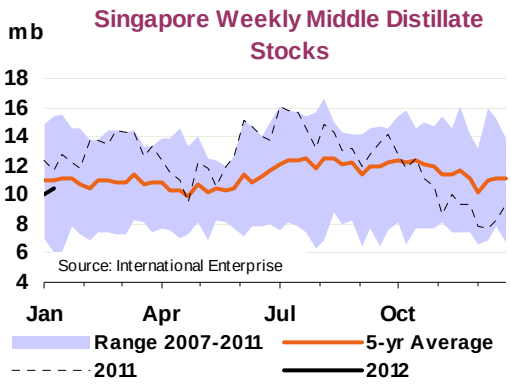




Recent Developments in Singapore and China Stocks

According to *China Oil, Gas and Petrochemicals (OGP)*, Chinese commercial oil inventories rose in November by an equivalent of 1.5 mb (data are reported in terms of percentage stock change). Although imports reached a new intra-year high in November, crude oil stocks fell by 1.3% (2.9 mb) as a result of a sharp increase in refinery throughput and a moderate fall in domestic crude production. Thanks to higher refinery throughput, aggregate product holdings climbed by 3.6% (4.4 mb), rising for the first time in six months. Gasoline, diesel and kerosene inventories increased by 4.9% (2.5 mb), 2.3% (1.3 mb) and 5.2% (0.5 mb), respectively.





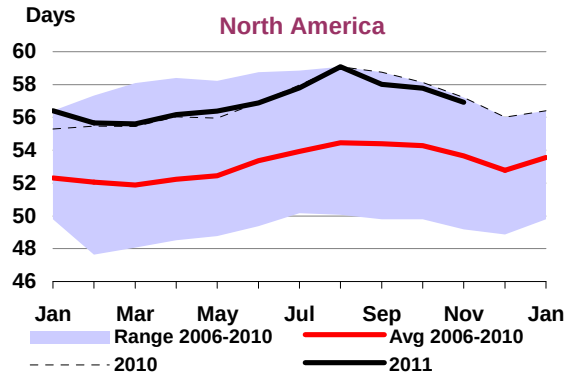
*Since August 2010, COGP only reports percentage stock change

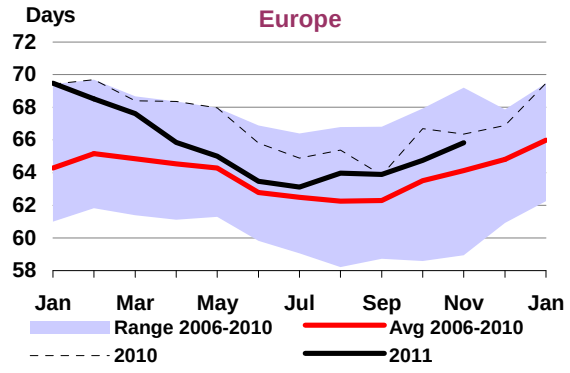
Singapore onshore inventories fell by 2.6 mb in December, led by draws in light distillate and fuel oil holdings. Light distillate stocks declined by 1.8 mb due to limited imports from North Asian countries. Fuel oil inventories decreased by 1.0 mb, plunging to an 11-month low as inflows from Europe were thin and regional bunker demand stayed strong. In the meantime, middle distillate holdings edged higher by 0.2 mb overall. However, this masked fluctuating trends through the month. In early December, distillate stocks plummeted to a 43-month low on limited output from Shell's 550 000 b/d refinery in Singapore, lower imports from Japan and South Korea and higher exports to China. However, distillate holdings rebounded to gain month–on-month in December, as arbitrage for jet fuel and diesel deliveries to Europe significantly narrowed in late December.

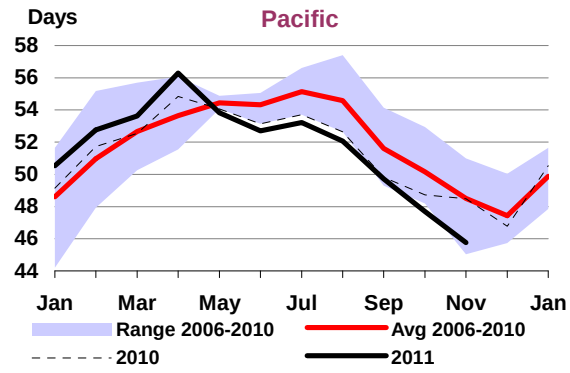
Regional OECD End-of-Month Industry Stocks

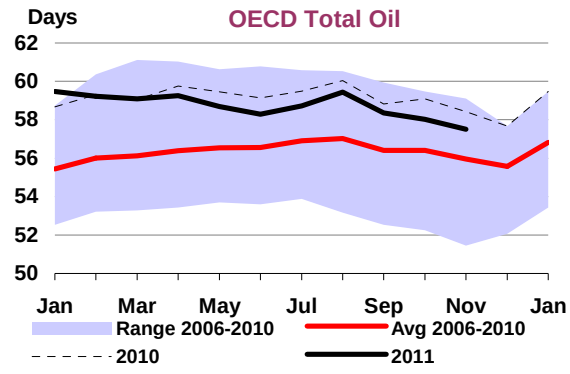
(in days of forward demand and millions barrels of total oil)

Days[1]

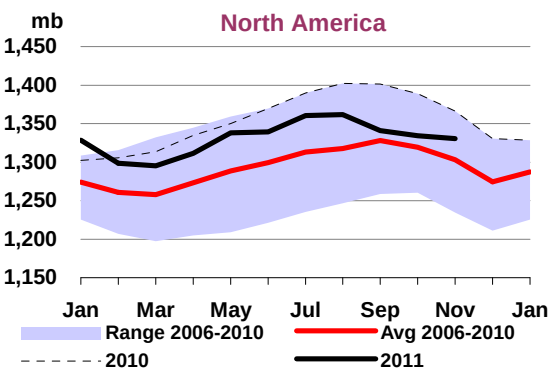


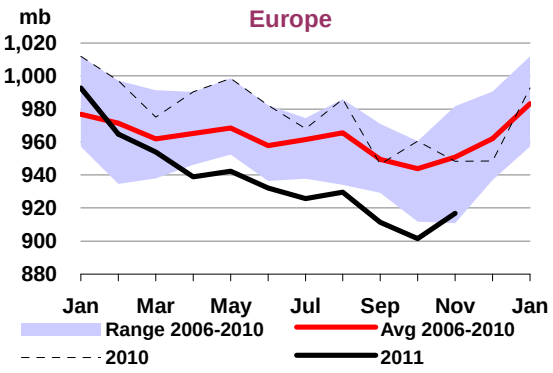


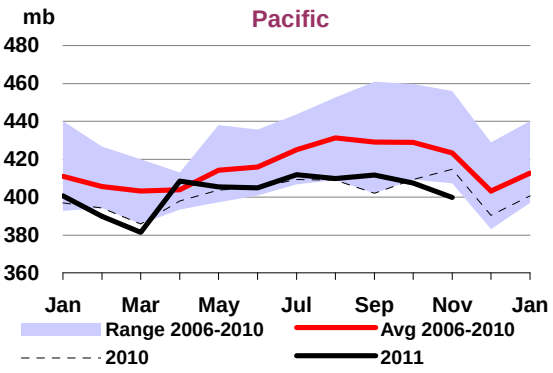


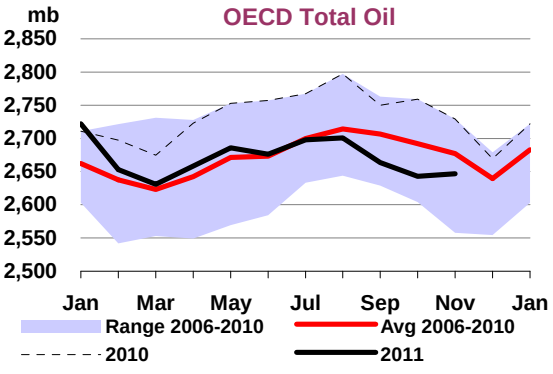


Million Barrels









1 Days of forward demand are based on average demand over the next three months

PRICES

Summary

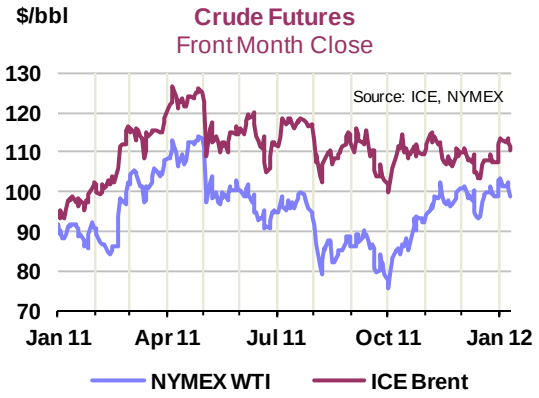
- **Oil markets began the New Year confronted with a host of supply issues, not least a looming EU ban on Iranian oil imports and retaliatory threats from Tehran to close the pivotal Strait of Hormuz,** through which flows roughly one-third of world oil exports. Oil prices initially jumped $4-5/bbl on the reports, but eased again, under stress from mounting euro zone debt issues. Brent was last trading at $112/bbl and WTI at $100.50/bbl.

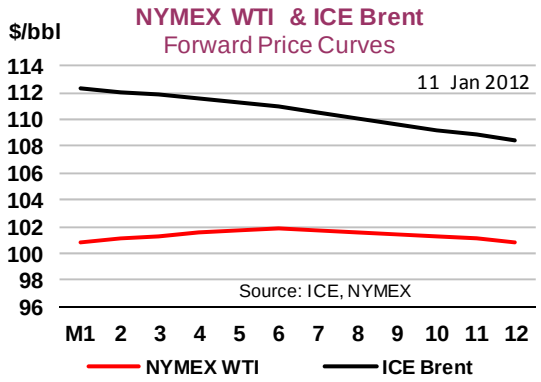
- **Regulatory bodies on both sides of the Atlantic will be busy in 2012 finalising rules for moving swaps onto electronic trading platforms with a view to pre-trade transparency** by ensuring prices are posted to a wide variety of market participants, not just among dealers. Some market players, however, argued that such a move actually reduces, rather than increases, transparency.

- **Spot crude oil markets were, understandably, propelled higher in December and early January by the convergence of geopolitical events threatening global oil supplies in Iran, Nigeria and Syria**. Month-on-month, however, spot prices were mixed, with ample supplies in Europe weighing on Dated Brent, while WTI strengthened on stronger demand and reduced stocks at Cushing.

- **Middle distillate cracks spreads fell in December as above-normal winter temperatures in the Northern Hemisphere pressured prices.** Gasoline crack spreads improved slightly, and naphtha markets recovered from the lows seen in November. Fuel oil crack spreads also continued to improve.

- **Tanker rates for all benchmark crude voyages strengthened over December and into early-January, finishing 2011 on an upward note and reversing their dire 3Q11 performance.** Despite a slow start, rates on the Middle East Gulf – Japan VLCC route firmed from mid-December onwards, buoyed by high Asian demand and charters hurrying to fix cargoes before the holidays.

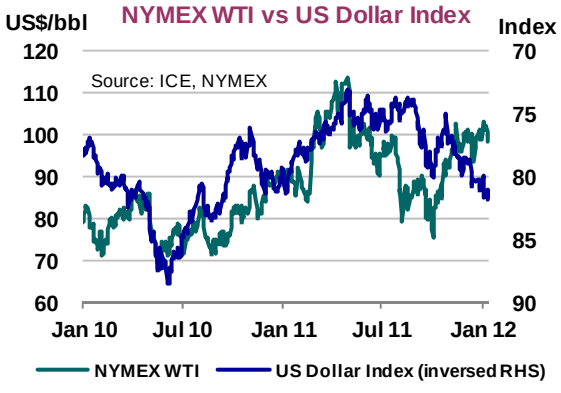




Market Overview

The new year saw oil markets again rattled by a series of long-standing geopolitical issues. The international community moved to further tighten its economic sanctions stranglehold on Iran over nuclear ambitions, but this time specifically targeted oil exports, which has raised alarm bells over the possibility of military action in the Gulf. Meanwhile, civil strife in Nigeria over the removal of fuel subsidies, threatened to shut-in the country's oil production. The euro zone crisis deepened further after Standard & Poors knocked down the credit rating of half a dozen European countries, including triple-A-rated France and Austria.

When markets re-opened on 3 January, oil futures spiked $4-5/bbl above end-2011 prices. Brent futures fell on average in December, by $2.77/bbl to $107.72/bbl. After reaching a two-month high of $113.70/bbl in early January, prices again eased under the weight of euro zone debt issues. For 2011, average annual futures prices for Brent were at record levels, up $30.57/bbl to $110.91/bbl. WTI futures prices rose by $1.41/bbl to $98.58/bbl in December. WTI closed the year up $15.50/bbl to an average $95.11/bbl in 2011. After peaking at $103.22/bbl in early January, prices retraced their gains and were last trading around $100.50/bbl.



Supply issues may once again drive oil price direction this year, as they did in 2011. The loss of Libyan crude oil production dominated last year, triggering a $22-24/bbl rise in prices above pre-crisis levels and shorting the market of light, sweet crude. Iranian supply prospects are now front and centre, including the ever-present, if unlikely, threat of closure of the Strait of Hormuz. European refiners have shifted their concern from a loss of light-sweet Libyan barrels to the availability of heavier Iranian crude for their refining systems. However, while some market dislocation is inevitable, the gradual phase-in of any EU import ban and the considerable latitude in implementation built in to the US sanctions will serve to minimise unwanted market disruptions.

The fragile economic outlook is already tempering fears of physical supply disruptions. Indeed, global oil demand for 1Q12 has been revised down by a sharp 0.5 mb/d, to 89.5 mb/d and full-year demand is lowered by 0.2 mb/d to 90 mb/d.

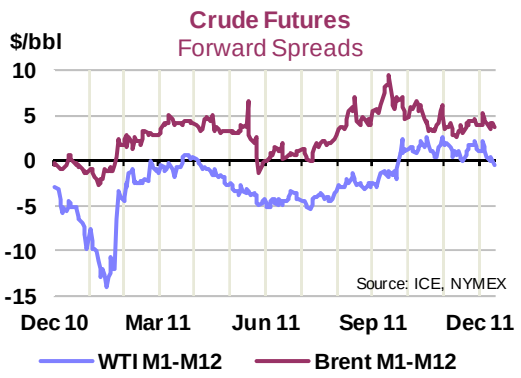
Prompt Month Oil Futures Prices

(monthly and weekly averages, $/bbl)

	Oct	Nov	Dec	Dec-Nov Avg Chg	% Chg	Week Commencing: 12 Dec	19 Dec	26 Dec	02 Jan	09 Jan
NYMEX										
Light Sweet Crude Oil	86.43	97.16	98.58	1.41	1.4	96.05	97.80	99.80	102.39	100.44
RBOB	112.61	108.50	109.14	0.64	0.6	106.41	109.32	112.42	115.73	115.59
No.2 Heating Oil	124.27	128.63	122.13	-6.50	-5.3	119.93	120.43	122.37	128.49	128.69
No.2 Heating Oil ($/mmbtu)	21.33	22.08	20.97	-1.12	-5.3	20.59	20.67	21.01	22.06	22.09
Henry Hub Natural Gas ($/mmbtu)	3.62	3.56	3.25	-0.31	-9.6	3.18	3.13	3.05	3.03	2.82
ICE										
Brent	108.79	110.49	107.72	-2.77	-2.6	106.04	106.79	108.06	112.91	111.93
Gasoil	123.84	129.27	124.05	-5.22	-4.2	122.41	121.82	123.66	129.18	130.17
Prompt Month Differentials										
NYMEX WTI - ICE Brent	-22.36	-13.33	-9.15	4.18		-9.99	-8.99	-8.26	-10.52	-11.49
NYMEX No.2 Heating Oil - WTI	37.84	31.47	23.56	-7.91		23.88	22.63	22.58	26.10	28.25
NYMEX RBOB - WTI	26.18	11.34	10.57	-0.77		10.35	11.53	12.62	13.34	15.15
NYMEX 3-2-1 Crack (RBOB)	30.07	18.05	14.90	-3.15		14.86	15.23	15.94	17.60	19.51
NYMEX No.2 - Natural Gas ($/mmbt	17.71	18.53	17.72	-0.80		17.40	17.54	17.95	19.03	19.27
ICE Gasoil - ICE Brent	15.05	18.78	16.32	-2.46		16.36	15.03	15.61	16.27	18.23

Source: ICE, NYMEX

Brent futures prices remained firmly backwardated in January, whereby prompt prices are stronger than further out. However, increased North Sea supplies were likely behind the Brent M1-M12 backwardation narrowing in December, to $3.70/bbl compared with $4.90/bbl in November. In early January, the differential deepened again to an average $4.15/bbl in the first two weeks of the month.



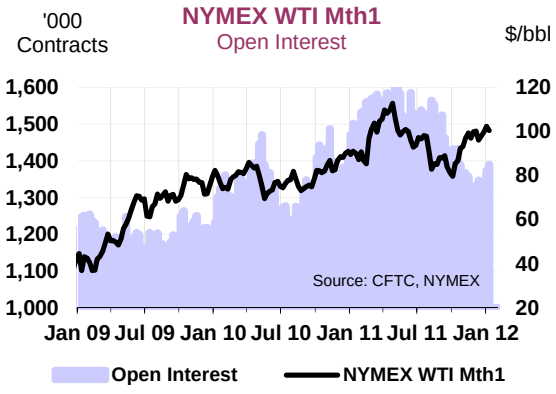
The WTI M1-M12 contract posted a similar easing, averaging just $0.55/bbl by mid-January compared with a monthly average of $1.13/bbl in December and $1.43/bbl in November.

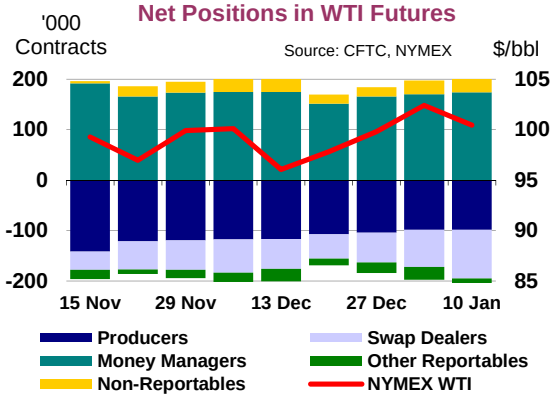
Futures Markets

Activity Levels

Despite a decline in trading volume and relatively stable prices on the New York CME WTI contract, open interest, the number of contracts that have not been closed or delivered, posted three consecutive weeks of increases, reaching a two-month peak, triggered by supply concerns. The ratio of Brent on London ICE to New York and London-based WTI combined futures contracts open interest climbed to 54%, an increase of almost 15% since July 2011.

Open interest in New York CME WTI futures and options contracts increased by 2.27% from 6 December 2011 to 10 January 2012, reaching 2.35 million contracts after plunging by 13.9% in November. Meanwhile, open interest in futures-only contracts increased by more than 4.22% during the same period, from 1.33 million to 1.39 million. Over the same period, open interest in London ICE WTI contracts dropped to 0.37 million and 0.43 million contracts in futures-only and combined contracts, respectively. Open interest in ICE Brent contracts increased to 0.95 million and 1.06 million contracts in futures-only and combined contracts, respectively.





Money managers reduced their bets on rising WTI crude oil prices in New York for the first two weeks of December, shrinking the number of net futures long holdings to 151 304 contracts from a high of 174 381 contracts in the week ending 20 December as a response to renewed concerns over the health of the Euro-area economy. However, concerns over possible European sanctions on Iranian oil imports subsequently induced a reversal in this position. Overall, in December, net futures long positions of managed money traders declined only by 238 from 174 323 to 174 085 contracts in New York and increasing from 12 127 to 15 775 contracts in London. Over the same period, money managers in London followed a similar pattern as New York—declining in the first two weeks and increasing thereafter. Overall, traders increased their Brent futures net long position in December by 5.89% from 85 516 to 90 551 contracts, due to concerns over Iranian and Syrian oil supply.

Producers also reduced their net futures short positions from 118 152 to 98 646 contracts in December; they held 20.46% of the short and 13.35% of the long contracts in CME WTI futures-only contracts. Swap dealers, who accounted for 28.3% and 35.3% of the open interest on the long side and short side, respectively, increased their net short position by 47.3% to hold 96 749 net short in December. Producers' trading activity in the London WTI contracts also followed a similar pattern as CME WTI contracts. Producers increased their net long positions in London ICE WTI contracts from 1 126 to 22 894 contracts over the same period. Swap dealers also increased their net short positions to 42 237 in the week ending 10 January 2012, from an earlier 22 413 contracts.

Index investors' long exposure in commodities in November 2011 declined by $0.7 billion. However, they added $9.9 billion to WTI Light Sweet Crude Oil, both on and off futures contracts. The number of futures equivalent contracts increased to an all-time high of 695 000 contracts since the CFTC started publishing its index investment data in December of 2007, equivalent to $69.4 billion in notional value.

Positions on NYMEX Light Sweet Crude Oil (WTI) Futures Contracts

Thousand Contracts

10 January 2012	Long	Short	Net	Long/Short	Δ Net from Prev. Week	Δ Net Vs Last Month
Producers' Positions	185.4	284.1	-98.6	*Short*	↑ 0.6	↑ 19.5
Swap Dealers' Positions	187.6	284.3	-96.7	*Short*	↓ -23.8	↓ -31.1
Money Managers' Positions	213.7	39.6	174.1	*Long*	↑ 4.1	↓ -0.2
Others' Positions	98.5	113.2	-14.7	*Short*	↑ 10.8	↑ 3.8
Non-Reportable Positions	94.7	58.7	36.0	*Long*	↑ 8.4	↑ 8.0
Open Interest			**1388.8**		↑ 15.8	↑ 56.3

Source: CFTC

Market Regulation

On 20 December 2011, the CFTC unanimously approved the final rule on real-time reporting of swap trades. The final rule calls for swaps subject to a clearing requirement to be made public within 30 minutes of execution of the transaction in the first year and narrowed to 15 minutes after the first year. End users will be required to report within 48 hours in the first year, 36 hours in the second year and finally 24 hours after the second year. The rule on block trades has been removed from final rulemaking and it is expected that the rule on appropriate block size will be redrafted in 2012. The final rule was welcomed by market participants who raised concern over the potential for shorter time delays for real time reporting to reduce market liquidity.

The CFTC also approved the extension of the effective date of the provisions in the swap regulatory regime that would have gone into effect on 16 July 2011 established by the Dodd-Frank Act. The approved amendment extends CFTC's temporary relief order, initially issued on 14 July 2011, until 16 July 2012 from 31 December 2011.

In a contentious 3-2 vote on 11 January 2012, CFTC Commissioners proposed limits on banks' proprietary trading and hedge fund investments in line with the restrictions proposed by the Federal Deposit Insurance Corporation, the Federal Reserve, the Securities Exchange Commission (SEC) and the Comptroller of the Currency in October, 2011. The proposed rule prohibits proprietary trading activities of banks and limits their investments in private-equity and hedge funds in order to reduce risk in the banking system.

As noted in the previous *OMR*, the International Swaps and Derivatives Association (ISDA) and the Securities Industry and Financial Markets Association (SIFAM) filed a lawsuit in the federal appeal court challenging the CFTC's position limits rule. The CFTC, on 4 January 2012, asked the federal court to dismiss the challenge, claiming it does not have jurisdiction to consider the lawsuit. The CFTC argued that the district court, rather than federal court, must first hear the challenge to the rule. In response, ISDA

and SIFAM asked the appeal court, on 12 January 2012, to delay the rule while the court considers their legal challenge against the position limit rule in order to prevent irreversible harms. Meanwhile the European Parliament and Council of Ministers, on 19 December 2011, failed to reach an agreement on a final text for the European Markets Infrastructure Regulation, further delaying regulation of swap markets in Europe.

Swap Execution Facilities

Regulatory bodies on both sides of the Atlantic will be busy in 2012 finalising rules on one of the most important requirements for bringing pre- and post-trade transparency to the over-the-counter derivatives markets by ensuring prices are posted to a wide variety of market participants, not just among dealers. Initially set by the G-20 leaders at their Pittsburgh Summit in September 2009 and later adopted in reform packages in the US and Europe, transparency would be achieved through the requirements that *"all standardised OTC derivatives contracts should be traded on exchanges or electronic trading platforms, where appropriate, and cleared through central counterparties by end-2012 at the latest."*

For this purpose, the Dodd-Frank Act in the US introduced a new trading venue called a swap execution facility (SEF), where only standardised swaps will be traded. The Dodd-Frank Act defines an SEF as "a facility, trading system or platform in which multiple participants have the ability to execute or trade swaps by accepting bids and offers made by other participants that are open to multiple participants in the facility or system, through any means of interstate commerce." SEFs are similar to multilateral trading facilities (MTFs) in European markets. In addition to MTFs, the European Commission also introduced a new trading venue category ("organised trading facility – OTF") to cover hybrid platforms run by firms which currently do not fall under the current MiFID categories for organised trading.

Although the general details of these facilities and how they are going to function have already been proposed, final rules will emerge later in 2012. However, there are certain differences between regulators in the interpretation of swap execution facilities. For example, as opposed to the strict CFTC proposal that swap execution facilities be either order-book or request-for-quotes (RFQs) from a minimum of five possible seller facilities, the SEC has proposed a looser definition of these platforms, which do not require order-books and would allow buyers to request a quote from a single seller.

Furthermore, the SEC proposal allows for voice broking, rather than stipulating electronic trading as the CFTC has. However, the US House Committee on Financial Services approved legislation (H.R. 2586) in late November 2011 which would prevent the CFTC from imposing a requirement that swap-buyers seek quotes from at least five participants before executing a trade. On 23 December 2011, the US House Committee Agriculture granted an extension for further consideration by 1 February 2012. We expect the CFTC final rule to be similar to one that SEC has already proposed, including keeping voice broking.

On 5 December 2011, the CFTC proposed further rules establishing a process for designated contract markets (DCMs) and SEFs to make swaps "available to trade" without a defining swap. The proposal calls for DCMs and SEFs to submit to the CFTC a determination that a swap is available to trade. To make a swap available for trading under the proposed rules, DCMs and SEFs must consider:

- The readiness and availability of buyers and sellers of the swap.
- The frequency and size of transactions in the swap on that DCM or SEF, or of bilateral transactions in the swap.
- The trading volume for the swap on that DCM or SEF, or of bilateral transactions in the swap.
- The bid/ask spread for the swap.
- The usual number of resting firm or indicative bids and offers that the DCM or SEF receives in the particular swap being considered.
- Whether the DCM's or SEF's trading facility or platform will support trading in the swap.
- Any other relevant factors.

A determination of which swaps would be made available to trade might be a challenging task both for regulators and trading facilities. As mentioned in previous *OMR*s, the OTC market is different from the futures markets. Instruments (swaps) in the OTC markets can trade infrequently, often in significant sizes,

Swap Execution Facilities (Continued)

between dealers and end-users or speculators. If activity in the futures markets is any evidence, a relatively small number of highly liquid instruments has been effectively traded on the exchange. The failure rate especially in less liquid instruments has been very high. However, a lighter SEC proposal might be the proper way to bring transparency, while ensuring continued liquidity in the swap markets.

Some market participants raised concern over excessive fragmentation of markets with the introduction of different trading venues. For example, the purpose of introduction of OTFs, which can be considered a subcategory of MTFs, in the European Union is not well understood, except as creating further market fragmentation. Opacity in terms of unknown counterparties attracted by a shift towards electronic trading, as well as excessive fragmentation of markets, is actually a source of less, and not more, transparency in the market.

Market participants also argue that OTC markets are for professionals; not for retail investors. The role of brokers is primary in providing transparency. A move to a platform-based trading systems with a view to pre-trade transparency, actually removes transparency for the professionals that are involved.

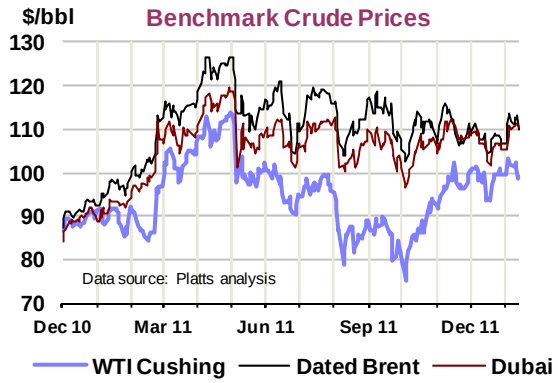
A final criticism of moving swaps onto platforms is related to the supporting claim that electronic trading is associated with higher volumes and volatility of trading. Critics argue that markets could be subject to the kind of volatility evident in the futures markets immediately after the introduction of electronic trading to the NYMEX and ICE exchanges. It is true that the volume of trading increased after moving from open outcry to electronic trading. However, there is no empirical evidence supporting the claim of increased volatility due to electronic trading.

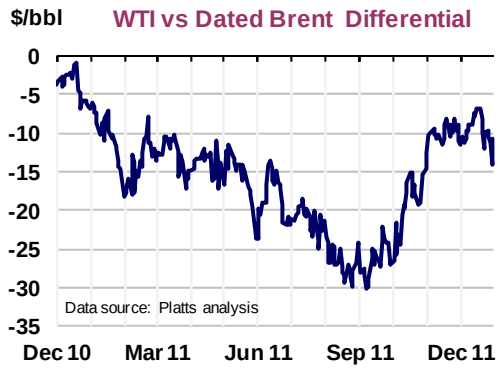
Spot Crude Oil Prices

Our usual summary tables of average spot crude oil and products prices, and Table 13, in the subscriber edition of this report have been removed pending further licensing discussions with the data provider.

Spot crude oil markets were, understandably, propelled higher in December and early January by the convergence of geopolitical events threatening oil supplies from Iran, Nigeria and Syria. Spot crude prices month-on-month, however, were mixed. December spot prices for Dated Brent declined by $2.85/bbl, to an average $107.83/bbl. Dubai crude was also down on the month, off around $2.55/bbl to an average $106.43/bbl. But the monthly declines masked the steady upward trend for both grades over the past six weeks.

By contrast, WTI rose by around $1.40/bbl in December, to average $98.60/bbl. WTI's relative strength partly reflected the recent drawdown in stocks at Cushing, where inventories are at their lowest level since autumn 2009 (*see Stocks, 'Cushing Storage Expansion'*). The WTI/Brent price spread continued to narrow in December, to -$9.25/bbl compared with -$13.50/bbl in November and -$23/bbl in October.

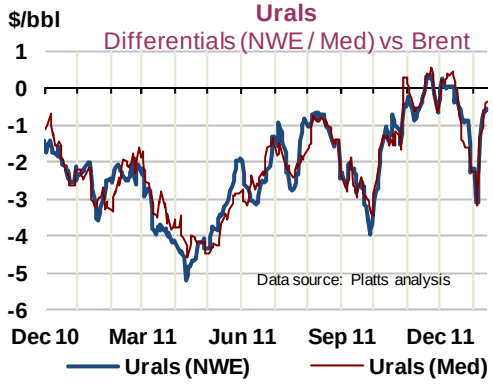


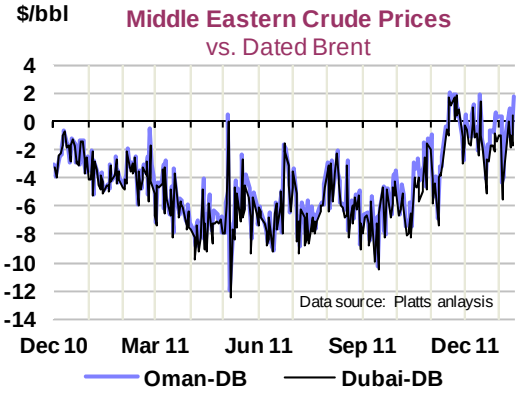


While announcement of a potential EU embargo on Iranian crude initially triggered a spike, prices fell off when details emerged that the time-line could be six months or more. In addition, the steady rise in Libyan exports, increased supplies of North Sea grades and continued euro zone fiscal issues weighed on markets. European crude markets were further pressured after credit problems at the region's largest independent refiner, Petroplus, forced the company to cut production as it teetered on the brink of bankruptcy (*see Refining, 'PetroPlus – Latest Victim of European Downstream Malaise'*).

Meanwhile stronger fuel oil markets in Europe at end-December and into January saw Brent-Urals price differentials narrow. Increased demand for Urals is also coming from European and Chinese buyers, who see the crude as a suitable alternative to Iranian barrels. China, which cut its Iranian imports in half while it renegotiates its 2012 term contracts, reportedly bought Urals as a replacement.

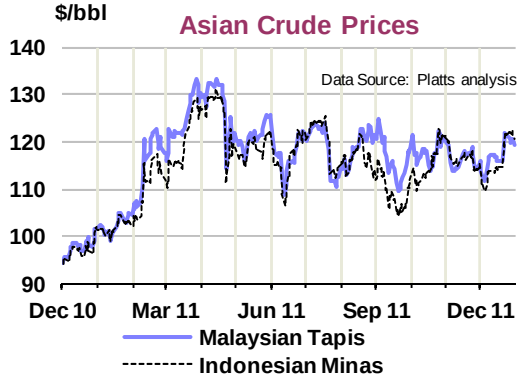
Although European spot crude markets look fairly well-supplied now, refiners are already aggressively searching for alternatives to Iranian grades. Depending on refinery complexity, individual refiners in these countries may have a specific need for relatively heavy, sour crude such as Iranian Heavy or asphalt-rich Doroud and Foroozan crudes. Some Mediterranean refiners are believed to have already approached Saudi Arabia to ascertain whether they would be willing to boost supplies to replace imports of Iranian Heavy crude in particular. Italian refiners, who produce bitumen, are likely to have the hardest time replacing the heavier Iranian crudes. Russian Urals, Iraqi Basrah and Kirkuk, Venezuelan and Mexican Maya may all be suitable substitutes.

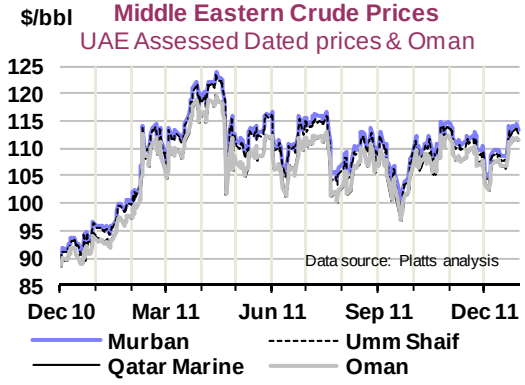




Brent crude's premium to Middle East marker Dubai, an indicator for the premium of light sweet grades over heavy sour supplies, narrowed to just $1.40/bbl in December compared to $1.65/bbl in November and $5.50/bbl in October. The narrowing of Brent's premium to Dubai has prompted traders to send more crude from the Atlantic Basin to Asia.

Spot prices for Middle East sour crudes were lower in December, in part due to milder than normal winter weather. However, heavy sweet crudes, such as Indonesia Minas and Angola Dalia were in demand due to increased direct burn at Japanese power plants.

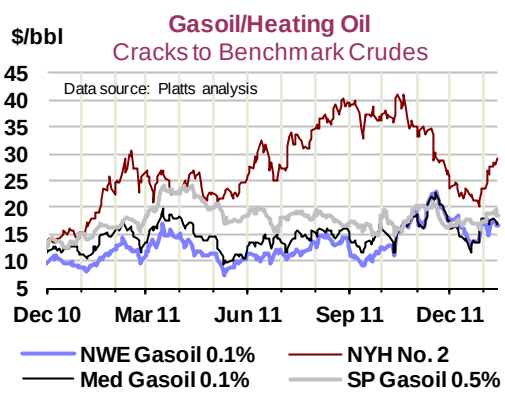


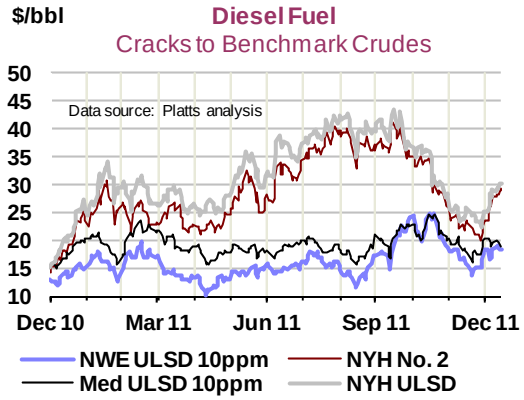


Spot Product Prices

After showing unusual strength in November, middle distillate cracks spreads fell in December as above-normal winter temperatures in the Northern Hemisphere pressured prices. Gasoline crack spreads improved slightly, and naphtha markets recovered from the lows seen in November. Fuel oil crack spreads continued to improve. Moving into January, markets were lifted by the news of Petroplus' closure of three European refineries, removing about 340 kb/d of refining capacity from the market.

After a very strong November, middle distillate cracks spreads fell month-on-month in December in all major regions as mild winter weather in the Northern Hemisphere pressured prices. In Europe, diesel crack spreads fell by $3.39 - 5.22/bbl, although markets are still tight. Middle distillate stock levels far below average continued to support robust average diesel crack spreads, which were $16.58/bbl and $18.63/bbl for the month in NW Europe and the Mediterranean, respectively. Although the backwardation (M1-M2) narrowed from $0.99/bbl in October and $0.93/bbl in November to $0.50/bbl in December, it is still undermining storage economics.





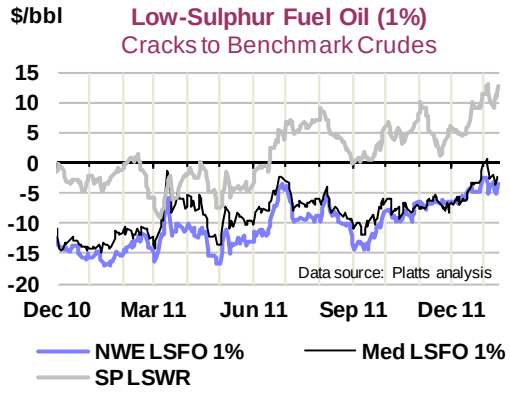
The main reason behind the drop in crack spreads was the mild weather in December. Supplies were increased further both as cargoes booked in the autumn from Asia arrived, and as export volumes from Russia increased. Russian export volumes are still lower than normal due to the new domestic regulations which ban domestic use of diesel containing above 500 ppm sulphur. However, the news of Petroplus closing three refineries in Europe, together with a slight draw in ARA gasoil stocks, lifted crack spreads in January.

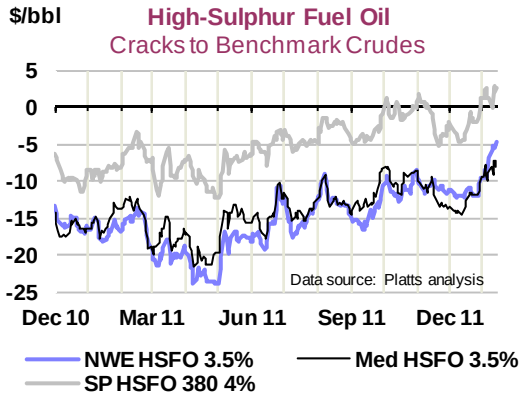
The US market was also affected by the mild weather, and heating oil crack spreads to WTI fell $8.69/bbl in New York Harbor and a lesser $4/bbl versus Mars in the US Gulf. Temperatures in the traditional US North East heating oil market were above normal, with PADD I heating degree days around 16% below the 10 year average in December. Weaker European prices limited arbitrage opportunities, although total middle distillate exports in December of 1 mb/d remained very high. Nevertheless, US middle distillate stocks built in December as strong prices in previous months have seen refiners maximise output.

The Asian markets were tighter than in the Atlantic basin, both due to stronger demand and heavy regional maintenance, and crack spreads fell a lesser $1.84/bbl on average in December. Fear of a Chinese diesel demand surge continued to be supportive, together with middle distillate stocks in Singapore being well below average.

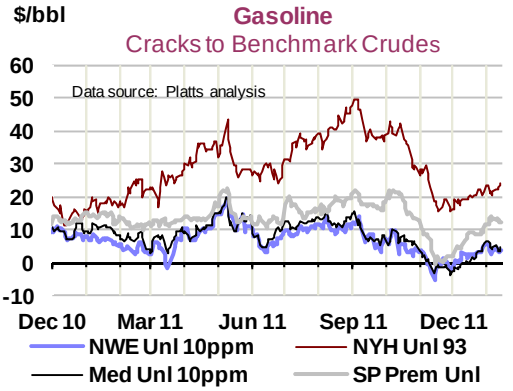
Fuel oil markets continued to improve in December. LSFO discounts narrowed by $1.46-2.11/bbl in Europe and Asia month-on-month, whereas HSFO discounts widened slightly by $0.55-1.20/bbl. The widening was more a result of stronger crude prices than weakening of fuel oil fundamentals and HSFO discounts narrowed considerably in the second half of the month. HSFO markets continue to be supported by tightness in the bunker fuel market, as new shipping regulations lowered the global

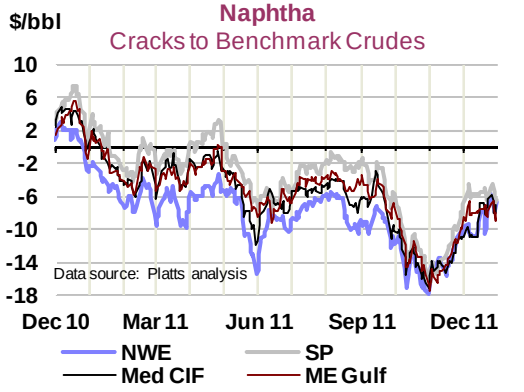
maximum sulphur content from 4.5% to 3.5%, taking effect from 1 January 2012, and refiners are still adjusting their production to the new regulation. LSFO markets were tight in Asia, partly due to strong Japanese demand. In Europe, the market was supported by utility demand particularly from the Mediterranean region.





Gasoline markets strengthened slightly in December, with most cracks spreads being back in positive territory on average for the month with the exception of US Gulf product cracks to LLS, which were still negative. Gasoline market fundamentals are still weak, with stock levels above average as refiners increase supplies after maintenance, whereas demand especially in the US is muted due to high prices at the pump. The closure of Sunoco's Marcus Hook refinery in December however provided some support to prices throughout December, together with slightly more bullish sentiment based on better US economic data.





The European gasoline market also improved, opening the arbitrage to the US East Coast and reducing some of Europe's supply surplus. Markets were further supported by increased exports to Saudi Arabia, which has refinery maintenance in 1Q12, and North Africa. The announcement of the closure of three of Petroplus' refineries in Europe gave further support to prices at the end of the month, although news of the removal of fuel subsidies in Nigeria added some uncertainty in the market.

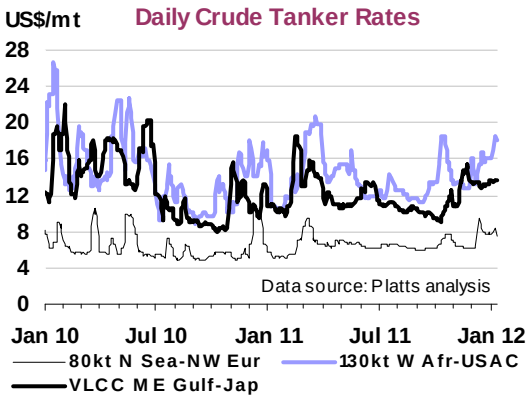
Asian gasoline markets strengthened, with gasoline crack spreads to Dubai increasing by $3.57/bbl over the month, to an average of $7.43/bbl in December, around $5/bbl more than Brent cracks in Europe. The Asian market faces strong demand, and supplies have been limited by regional maintenance. At the same time, Chinese gasoline exports were lowered by Chinese stockpiling before the Lunar Year Holiday at the end of January.

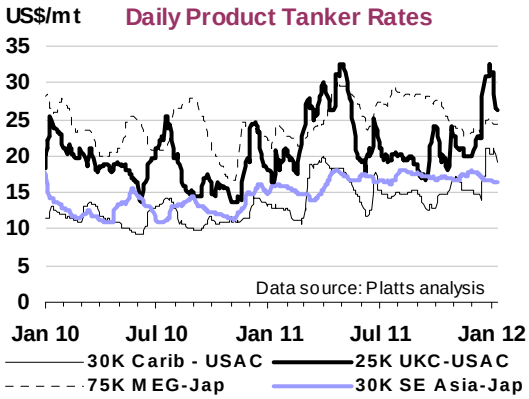
Naphtha markets turned up sharply in December from the lows seen in November, but prices retained a near -$11/bbl discount to crude in Europe and an $8/bbl discount in Singapore. The main reasons for the higher prices were increased buying from South Korea and Taiwan, where petrochemical producers

needed to refill their stocks. Naphtha market fundamentals remain constrained, however, by poor petrochemical margins and weak demand for plastics.

Freight

Tanker rates on all benchmark crude voyages strengthened over December and into early-January, finishing 2011 on an upward note and reversing their dire 3Q11 performance. Despite a slow start, rates on the Middle East Gulf – Japan VLCC route firmed from mid-December onwards, buoyed by high Asian demand and a rush to fix cargoes before the holidays. By the end of the month, Middle East fixings had again reached a record level but plentiful tonnage availability muted rate rises. In the Suezmax market the picture was rosier, and rates on the West Africa – US Atlantic coast trade surged to approximately $17/mt in early-January, as healthy demand combined with tight tonnage following delays in Bosphorus transits. In Northwest Europe storm delays propelled the North Sea – UK coast Aframax route to a mid-month peak of $9.50/mt, its highest level since 1Q11.

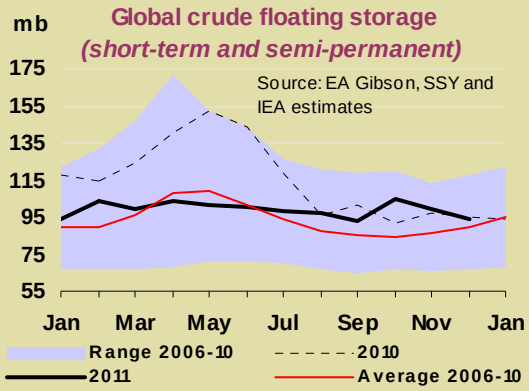




Clean product tanker markets exhibited a distinct geographical split, with Atlantic basin trades outperforming those in Asian markets. In response to extremely tight fundamentals in the Atlantic Basin, the transatlantic UK – US Atlantic Coast route experienced a mid-month surge, breaching $32/mt by late-December. Over the same period the Caribbean – US Atlantic coast voyage also benefitted from the US East Coast's thirst for imports, peaking at over $21/mt. However, as fundamentals eased, these traditionally volatile rates began to weaken in the second week of January. In contrast, thin trading in the East was unable to sustain recent gains on the 30 Kt Singapore – Japan route, while the rise on the Middle East Gulf – Japan route was capped by plentiful tonnage.

Floating Storage Falls Away….

Recent market conditions have seen the appeal of putting oil into short-term floating storage diminish. Although the redistribution of crude and products is still taking place using long-term-moored tankers in regions including offshore Malaysia and the Baltic, short-term volumes have declined with crude falling from a peak of 93.0 mb in May 2010 to 34.5 mb as of end-December 2011. Similarly, no products have been stored at sea since September 2011, a far cry from the 97.7 mb peak in November 2009. The only current significant short-term floating storage are unsold Iranian crude cargoes (currently 32.3 mb), stored for logistical, rather than economic, reasons. As the role of floating storage in the dynamics of oil and shipping markets has diminished, shipbrokers have tended to cease publishing these data and therefore we will no longer routinely track these volumes until an uptick in floating storage leads to renewed reporting once again.



REFINING

Summary

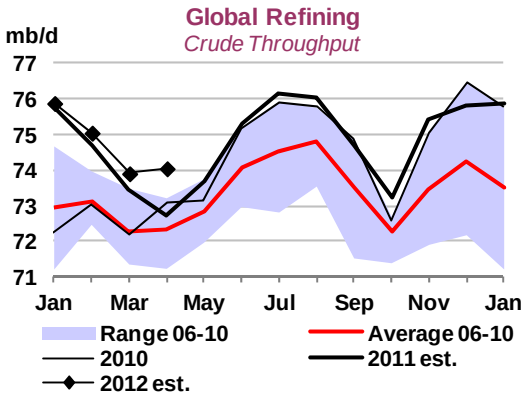
- **Global refinery crude throughputs have been revised down by a sharp 250 kb/d for 4Q11 since last month's report,** as weak economic growth and warm winter weather led global demand to contract for the first time since 3Q09. Revisions stem from both OECD and non-OECD countries, with preliminary data pointing to weaker-than-expected runs in Europe, Thailand and Argentina, among others. At 74.8 mb/d, global crude runs stood only 130 kb/d higher than the same quarter of 2010.

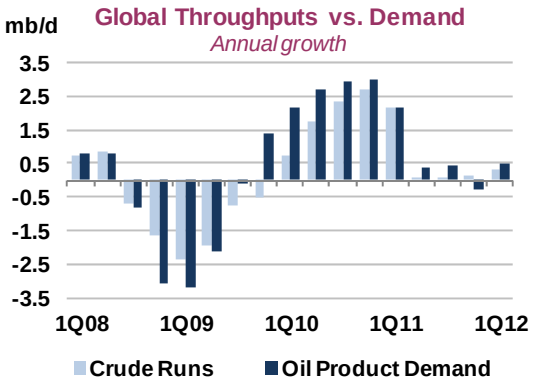
- **1Q12 global crude run estimates have similarly been lowered since last month's report,** in large part due to the weakening economic outlook and recent refinery shutdowns in Europe. Global throughputs are now expected to average 74.9 mb/d, 170 kb/d less than in our previous report.

- **Refinery crude runs rose in all OECD regions in November, adding more than 1 mb/d in total, to 36.5 mb/d**. A winding down of autumn maintenance was behind the increase. Refinery profitability remained weak in all regions, and only North America maintained throughput rates above year-earlier levels. Preliminary data for key countries indicate stable throughputs for December, and in particular, weaker-than-expected European runs.

- **Refinery margins diverged in December, yet remained mostly in negative territory.** Some improvements came in European margins late-month and early January, as product prices were buoyed by news that independent refiner Petroplus would close three of its five European plants. US West Coast margins saw sharp gains, of as much as $15.30/bbl from end-November, and bounced back into positive territory, as Californian crude discounts to WTI widened significantly.

- **Independent refiner Petroplus became the latest victim of the European downstream crisis,** as it was forced to shut three of its five European plants in early January when creditors pulled the plug on its revolving credit lines. The company shut its Belgian, Swiss and French plants, but has so far been able to keep its UK and German plants running. The 340 kb/d of shut capacity comes in addition to LyondellBasel's 105 kb/d Berre l'Etang plant, which was mothballed in early January, and Repsol's 220 kb/d Bilbao plant, which halted crude and gasoline units in January due to weak margins.





Global Refinery Overview

Global refinery markets took a turn for the worse in December, and full-cost refining margins remained negative for almost all configurations surveyed. The most recent available data indicate that 4Q11 global crude runs averaged as much as 250 kb/d less than previously forecast and that global demand actually contracted in the quarter, for the first time since 3Q09. Part of the demand weakness follows from

exceptionally strong demand a year earlier, particularly in China, and a much warmer-than-normal winter so far this year in the northern hemisphere. Economic weakness and high oil prices continue to weigh on oil product demand in developed nations, however, putting further pressure on refiners. 4Q11 runs are now estimated to have averaged 74.8 mb/d, practically flat from a year earlier. Some growth continued to come from China, the FSU, Latin America and other non-OECD countries, though 'Other Asian' runs were curtailed by maintenance and unscheduled outages and African runs limited by continued shutdowns in Libya.

Refinery margins saw a slight improvement at the end of the December and early January, even turning positive for cracking plants in NW Europe and the Mediterranean on the news that Petroplus was shutting three of its five European refineries due to a credit squeeze (see '*Petroplus – Latest Victim of European Downstream Malaise'*). That did not prevent another refinery, Repsol's Bilbao plant in Spain, from shutting crude and gasoline producing units for at least two months starting in January on weak demand and margins. Repsol described the situation as "unprecedented in the history of the company". January also saw the mothballing of LyondellBasel's Berre l'Etang refinery in France, though the company is still looking for a buyer to avoid a permanent closure.

Selected Refining Margins in Major Refining Centres

($/bbl)

		Monthly Average				Change	Average for week ending:				
		Oct 11	Nov 11	Dec 11		Dec 11-Nov 11	16 Dec	23 Dec	30 Dec	06 Jan	13 Jan
NW Europe	Brent (Cracking)	1.52	0.51	-0.26	↓	-0.77	-0.39	-0.99	0.87	1.61	2.30
	Urals (Cracking)	2.48	0.70	0.27	↓	-0.43	-0.11	-0.19	2.23	3.94	3.13
	Brent (Hydroskimming)	-1.30	-1.15	-1.95	↓	-0.80	-2.07	-2.59	-1.13	-0.40	0.64
	Urals (Hydroskimming)	-2.99	-3.68	-4.53	↓	-0.84	-4.95	-4.86	-2.92	-1.07	-0.96
Mediterranean	Es Sider (Cracking)	0.39	-0.65	-1.26	↓	-0.61	-2.00	-1.24	0.49	1.71	1.29
	Urals (Cracking)	0.93	-0.98	-1.46	↓	-0.48	-2.19	-1.27	0.53	1.45	1.24
	Es Sider (Hydroskimming)	-4.51	-3.91	-4.12	↓	-0.21	-4.96	-3.98	-2.40	-1.16	-1.95
	Urals (Hydroskimming)	-5.01	-5.94	-6.73	↓	-0.79	-7.45	-6.43	-5.01	-3.91	-3.83
US Gulf Coast	Brent (Cracking)	-3.76	-6.01	-6.31	↓	-0.30	-7.38	-6.55	-4.03	-3.62	-2.99
	LLS (Cracking)	0.10	-0.42	-0.97	↓	-0.55	-2.00	0.26	0.94	1.26	3.70
	Mars (Cracking)	-1.52	-2.97	-3.18	↓	-0.21	-3.83	-2.03	-1.68	-1.24	0.19
	Mars (Coking)	0.47	-1.39	-1.30	↑	0.08	-2.03	-0.30	0.45	0.32	1.51
	Maya (Coking)	1.92	-5.88	-7.17	↓	-1.29	-7.43	-7.11	-6.06	-5.93	-4.31
US West Coast	ANS (Cracking)	-0.36	-5.48	-1.24	↑	4.23	-1.95	1.41	3.26	2.03	-1.69
	Kern (Cracking)	-2.07	-7.28	1.49	↑	8.78	0.38	5.16	5.82	7.53	5.91
	Oman (Cracking)	2.47	-3.58	-5.16	↓	-1.58	-7.28	-2.50	-0.83	-0.27	-3.46
	Kern (Coking)	4.11	-4.29	2.18	↑	6.47	0.84	5.82	6.82	9.26	6.56
Singapore	Dubai (Hydroskimming)	0.42	-1.55	-2.01	↓	-0.46	-2.48	-1.23	-1.06	0.78	0.70
	Tapis (Hydroskimming)	-8.18	-7.94	-7.89	↑	0.05	-7.41	-7.82	-7.75	-6.91	-5.22
	Dubai (Hydrocracking)	2.34	-0.71	-0.50	↑	0.20	-0.50	0.31	0.33	2.16	2.08
	Tapis (Hydrocracking)	-7.98	-8.48	-8.41	↑	0.07	-7.54	-8.45	-8.51	-7.62	-5.77
China	Cabinda (Hydroskimming)	-2.61	-1.24	-0.01	↑	1.23	-0.24	0.12	1.31	1.39	2.49
	Daqing (Hydroskimming)	0.71	-1.74	-0.43	↑	1.31	-0.99	0.96	0.39	-0.58	-0.60
	Dubai (Hydroskimming)	0.35	-1.70	-2.29	↓	-0.59	-2.77	-1.51	-1.36	0.52	0.46
	Daqing (Hydrocracking)	2.88	-2.16	-0.52	↑	1.64	-0.52	0.80	0.21	-0.50	-0.32
	Dubai (Hydrocracking)	2.52	-0.62	-0.66	↓	-0.03	-0.69	0.14	0.16	2.04	1.97

For the purposes of this report, refining margins are calculated for various complexity configurations, each optimised for processing the specific crude in a specific refining centre on a 'full-cost' basis. Consequently, reported margins should be taken as an indication, or proxy, of changes in profitability for a given refining centre. No attempt is made to model or otherwise comment upon the relative economics of specific refineries running individual crude slates and producing custom product sales, nor are these calculations intended to infer the marginal values of crudes for pricing purposes.

*The China refinery margin calculation represents a model based on spot product import/export parity, and does not reflect internal pricing regulations.
Sources: IEA, Purvin & Gertz Inc.

Across the Atlantic, on the US East Coast, Sunoco is equally looking to offload its Pennsylvania and Marcus Hook refineries. The latter has already halted operations and both will reportedly shut permanently if no buyer comes forward by June 2012. ConocoPhillips' Trainer refinery is also idle and scheduled to shut permanently if no buyer is found.

Global Refinery Crude Throughput[1]

(million barrels per day)

	Sep 11	**3Q2011**	Oct 11	Nov 11	Dec 11	**4Q2011**	Jan 12	Feb 12	Mar 12	**1Q2012**	Apr 12
North America	18.1	**18.3**	17.3	17.7	17.7	**17.6**	17.5	17.2	17.1	**17.3**	17.5
Europe	12.2	**12.4**	11.9	12.2	12.1	**12.0**	12.1	11.8	11.8	**11.9**	11.6
Pacific	6.4	**6.4**	6.2	6.6	6.7	**6.5**	6.9	6.9	6.4	**6.7**	6.3
Total OECD	**36.7**	**37.2**	**35.5**	**36.5**	**36.4**	**36.1**	**36.5**	**35.9**	**35.3**	**35.9**	**35.4**
FSU	6.3	**6.6**	6.5	6.6	6.7	**6.6**	6.6	6.6	6.5	**6.6**	6.3
Non-OECD Europe	0.5	**0.5**	0.5	0.6	0.6	**0.5**	0.6	0.5	0.5	**0.5**	0.5
China	8.8	**8.8**	8.7	9.2	9.2	**9.1**	9.3	9.2	9.1	**9.2**	9.4
Other Asia	8.7	**8.9**	8.5	9.1	9.2	**8.9**	9.3	9.1	9.1	**9.2**	9.0
Latin America	5.4	**5.4**	5.2	5.2	5.3	**5.3**	5.4	5.4	5.3	**5.3**	5.4
Middle East	6.3	**6.3**	6.2	6.1	6.1	**6.1**	5.9	6.0	5.8	**5.9**	5.8
Africa	2.0	**2.1**	2.1	2.2	2.3	**2.2**	2.3	2.3	2.3	**2.3**	2.3
Total Non-OECD	**38.0**	**38.5**	**37.8**	**39.0**	**39.4**	**38.7**	**39.3**	**39.1**	**38.6**	**39.0**	**38.6**
Total	**74.7**	**75.6**	**73.2**	**75.4**	**75.8**	**74.8**	**75.9**	**75.0**	**73.9**	**74.9**	**74.0**

1 Preliminary and estimated runs based on capacity, know n outages, economic run cuts and global demand forecast

A slightly more positive outlook is seen outside of the OECD. Recent runs in China, India, Russia, Saudi Arabia and Brazil have been touching record-highs, on still relatively robust domestic demand. 1Q12 also sees the commissioning of new capacity in Asia, in particular in China, where PetroChina's recently completed Yinchuan refinery in Ningxia Province and Sinopec's Beihai plant, which started up in late-December are expected to ramp up runs. The return to normal rates of Shell's Singapore refinery from January will also add to product supplies. As a result, non-OECD crude runs are expected to grow annually by 555 kb/d in 1Q12. Given the recent weakening outlook for the European economy and demand prospects, the 1Q12 global crude run forecast has nevertheless been cut by close to 170 kb/d, to average 74.9 mb/d, leaving global runs only 310 kb/d above year-earlier levels.

OECD Refinery Throughput

OECD refinery crude runs rose by more than 1 mb/d in November, to average 36.5 mb/d. Increases stemmed from all regions and were only 45 kb/d shy of our previous forecast. Final October official data and preliminary weekly and monthly data for December, however, were lower than earlier assumptions, and throughput levels for these two months have been revised down by 275 kb/d and 290 kb/d, respectively. While the October adjustment was split across regions, December weakness stemmed almost entirely from OECD Europe. Preliminary Euroilstock data for 16 European countries show aggregate runs down slightly from November's levels, as opposed to an anticipated pick-up in runs towards the end of the year, as maintenance wound down and peak winter demand set in. In all, 4Q11 OECD runs have been cut by 205 kb/d since last month's report.

1Q12 expected throughputs have similarly been lowered by some 330 kb/d, on the back of a sharply reduced European outlook. The shutdown of Petroplus' three European refineries and the reduced runs at two others due to credit problems (see '*Petroplus – Latest Victim of European Downstream Malaise*'), and a lower demand outlook than previously, add to an already weak market. Our US estimates have been lifted slightly, however, providing a partial offset.

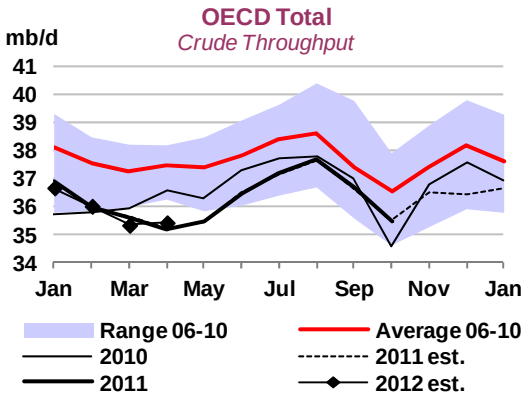
Refinery Crude Throughput and Utilisation in OECD Countries

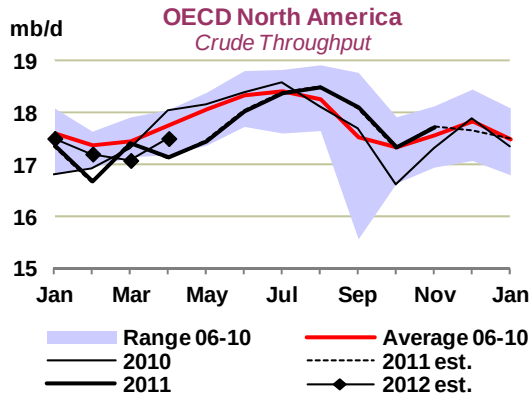
(million barrels per day)

	Jun 11	Jul 11	Aug 11	Sep 11	Oct 11	Nov 11	Change from Oct 11	Change from Nov 10	Utilisation rate[1] Nov 11	Utilisation rate[1] Nov 10
US[2]	15.37	15.62	15.59	15.27	14.54	14.87	0.33	0.24	85.6%	83.6%
Canada	1.54	1.61	1.68	1.74	1.62	1.68	0.06	-0.02	91.6%	93.1%
Mexico	1.14	1.16	1.24	1.10	1.15	1.18	0.03	0.19	71.3%	64.4%
OECD North America	**18.05**	**18.39**	**18.51**	**18.11**	**17.32**	**17.73**	**0.41**	**0.40**	**85.0%**	**83.0%**
France	1.35	1.34	1.37	1.33	1.32	1.38	0.07	-0.01	83.0%	75.3%
Germany	1.79	2.02	2.02	1.91	2.03	1.95	-0.07	-0.10	91.7%	86.0%
Italy	1.62	1.55	1.66	1.57	1.55	1.52	-0.03	-0.22	69.5%	76.3%
Netherlands	1.04	1.04	1.04	1.04	0.97	0.99	0.02	0.01	76.4%	75.5%
Spain	1.06	1.01	1.07	1.09	1.00	1.10	0.10	0.06	67.9%	74.1%
United Kingdom	1.45	1.50	1.51	1.47	1.39	1.45	0.07	0.06	80.4%	76.8%
Other OECD Europe	3.92	3.93	3.94	3.76	3.66	3.76	0.10	-0.33	76.2%	83.5%
OECD Europe	**12.23**	**12.39**	**12.61**	**12.18**	**11.92**	**12.16**	**0.24**	**-0.53**	**77.7%**	**79.7%**
Japan	2.93	3.17	3.37	3.14	2.98	3.24	0.26	-0.25	70.5%	74.3%
South Korea	2.52	2.52	2.43	2.50	2.63	2.64	0.01	0.10	96.4%	92.7%
Other OECD Pacific	0.77	0.70	0.74	0.73	0.63	0.72	0.09	-0.02	76.9%	78.9%
OECD Pacific	**6.21**	**6.38**	**6.54**	**6.37**	**6.24**	**6.59**	**0.35**	**-0.17**	**79.8%**	**80.8%**
OECD Total	**36.49**	**37.16**	**37.66**	**36.66**	**35.48**	**36.48**	**1.01**	**-0.29**	**81.5%**	**81.4%**

1 Expressed as a percentage, based on crude throughput and current operable refining capacity

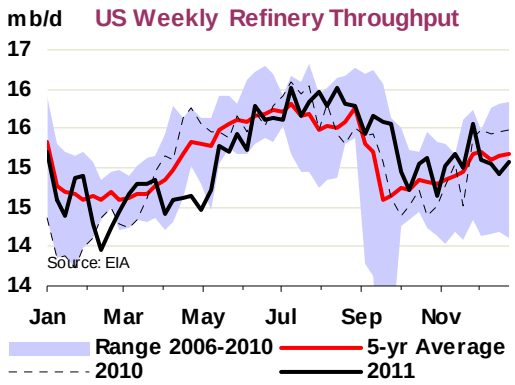
2 US50

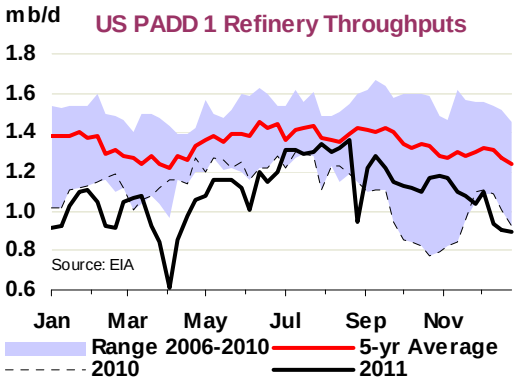




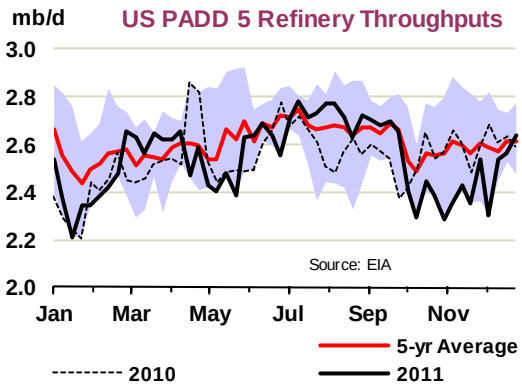
OECD North American crude runs averaged 17.7 mb/d in November, 400 kb/d above both this October's and November 2010 levels. Increases came mostly from the US, where runs rose in all regions, except for the East Coast, despite poor margins and a narrowing of the WTI-Brent discount. Lower maintenance activity was mostly responsible for the increase.

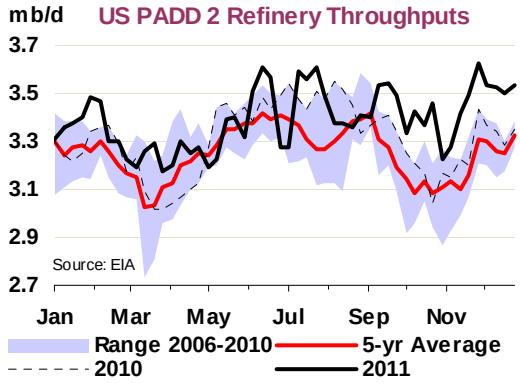
Preliminary weekly data show **US** runs slightly lower in December (-90 kb/d), but mostly in line with previous estimates. Runs fell sharply on the East Coast (-150 kb/d) to only 60% utilisation. Sunoco announced on 1 December that it would immediately shut its 178 kb/d Marcus Hook refinery, ahead of an earlier July 2012 deadline due to deteriorating market conditions. The Marcus Hook plant, as well as ConocoPhillips' 185 kb/d Trainer refinery which was idled in September, only run expensive Brent-linked crudes and have seen profits slump. Also on the East Coast, PBF Energy announced it plans to invest $1 billion over the next three years to build a hydrocracker and hydrogen plant at its 190 kb/d Delaware refinery. The project will allow the plant to process heavy crude oil while increasing production of distillates, in particular producing large volumes of ULSD, and thus improve its competitiveness.





US West Coast runs rebounded in December, gaining 120 kb/d on average, after several months of exceptionally weak activity. Regional refining margins saw significant improvements in the month, gaining more than $15/bbl for Kern cracking from end-November to regain positive territory on a monthly basis for the first time since August. Independent refiner and marketer Tesoro, which operates five refineries on the West Coast with combined capacity of 540 kb/d, announced in January it expects to report a fourth quarter net loss of between $0.55 and $0.80 per share due to the "extremely weak margin environment in California and the collapse of the WTI to Brent crude oil spread". The company cited unusually high prices for California crude oil relative to light sweet crude oil as having a negative impact. Heavy Californian crude oil traded at a $1/bbl discount relative to Brent in the quarter compared with a discount of $7/bbl in the fourth quarter of 2010 and $12/bbl in 3Q11. In the last week of 2011, California market conditions improved and the discount of heavy Californian crude widened to nearly $5/bbl, lifting refinery margins in turn. Margins were also boosted by loftier gasoline prices, as both Tesoro and Valero were planning work to their respective plants in Wilmington, California.





The US Gulf Coast also saw runs falling in December (-130 kb/d) on persistently weak economics. Margins improved somewhat towards the end of the month however, and even turned positive for LLS cracking and Mars coking configurations. Gulf Coast runs, and subsequently US runs, nevertheless lagged 2010 for the first time since July, by some 340 kb/d and 270 kb/d respectively.

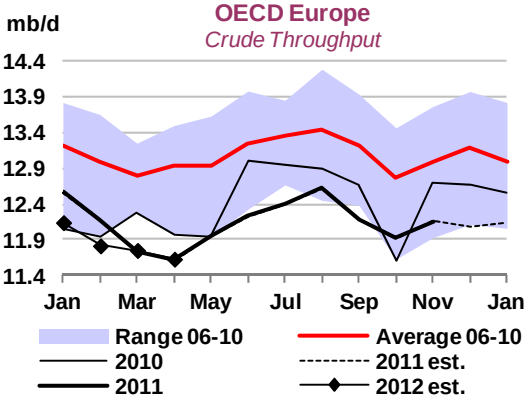
Midwest runs, on the other hand, continued to enjoy high throughputs and healthy profits despite a narrowing WTI-Brent discount. ConocoPhillips completed the start-up of its expanded Wood River Refinery in Illinois in December. The $3.8 billion expansion added 50 kb/d of crude distillation capacity and a coking unit, boosting the plant's ability to process Canadian heavy crude.

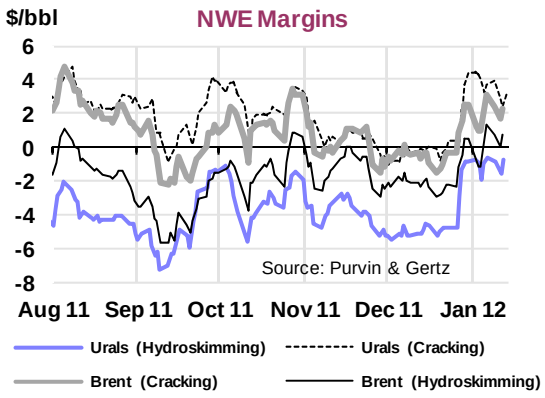
The biggest changes to the outlook this month come from **OECD Europe**. While European crude runs for November were largely in line with forecast, both final October data and preliminary December data

came in lower (-80 kb/d and -300 kb/d respectively). Total regional throughputs were up by 240 kb/d in November, with gains in Spain (+100 kb/d), Sweden (+75 kb/d) France (+65 kb/d), UK (+65 kb/d) partly offset by lower runs in Germany and Belgium. Indeed, Belgian runs fell to 460 kb/d, their lowest since November 2006, as Total's Antwerp refinery was partly closed for maintenance.

Albeit preliminary, Euroilstock data for December show 'EU15 + Norway' crude runs down 40 kb/d from November, leading to further downward revisions for OECD Europe. European crude runs are now seen averaging only 12.1 mb/d in December, 300 kb/d less than previously expected. Weak demand, in part due to a mild winter, was contributing to the counter-seasonal decline in runs at the end of the year. The 1Q12 forecast has equally been lowered by some 370 kb/d as the outlook for the region's economies and oil product demand has deteriorated.

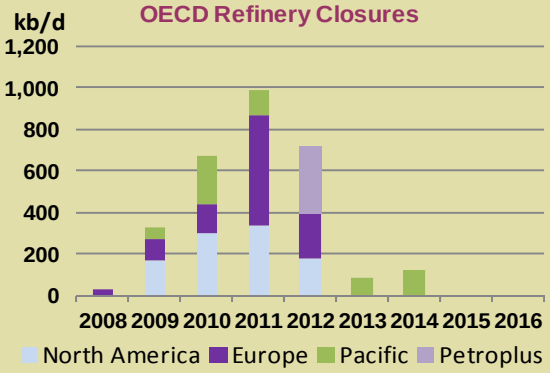
Further refinery closures also add to the weaker activity outlook. While the mothballing of LyondellBasel's refinery in France was already included in our forecast from early January, the announcement that Repsol's Bilbao refinery will shut one crude unit for at least two months and a gasoline producing unit (FCC) for January due to poor economics and the recent shutdowns of Petroplus' three European plants, further drag down forecasted rates. Repsol described the measure as "unprecedented in the history of the company, due to the drastic decline in margins in the last three months and the fall in demand that has been occurring throughout the year 2011". The most recent closures had a positive impact on margins, however, and could thus entice other refiners to increase runs to offset lost volumes.





Petroplus – Latest Victim of European Downstream Malaise

Independent Swiss refining group Petroplus became the latest and the single largest victim of the European downstream industry's ongoing economic woes. The company was forced to suspend operations at three of its five remaining plants in January, due to limited credit availability. If the shutdowns are made permanent, it would take total European capacity rationalisation since the 2008 economic downturn to 1.35 mb/d, to 15.0 mb/d by end-2012 (net reductions are lower due to some expansions notably in Poland, Spain and Greece). Global shutdowns would amount to 2.9 mb/d, not counting plants scheduled to shut if not sold or temporarily idled due to poor economics. While such a scenario would be disastrous for the company, independent refining, Petroplus' employees and the local economies, it could provide a welcome respite to those refineries still operating in this increasingly difficult environment.



Petroplus – Latest Victim of European Downstream Malaise (continued)

On 30 December 2011, Petroplus Holdings announced that it would commence temporary shutdowns of its Petit Couronne, Antwerp and Cressier refineries, given "limited credit availability and the economic climate in Europe". The restart of the plants will depend on economic conditions and credit availability. The statement came shortly after a group of lenders, including BNP Paribas, Natixis, Credit Suisse, Société Générale, Morgan Stanley and Deutsche Bank, pulled the plug on the uncommitted $1.05 billion portion of Petroplus' $2.01 billion revolving credit facility (RCF). The RCF was critical to the company's ability to buy crude oil.

Petroplus' Refinery Portfolio

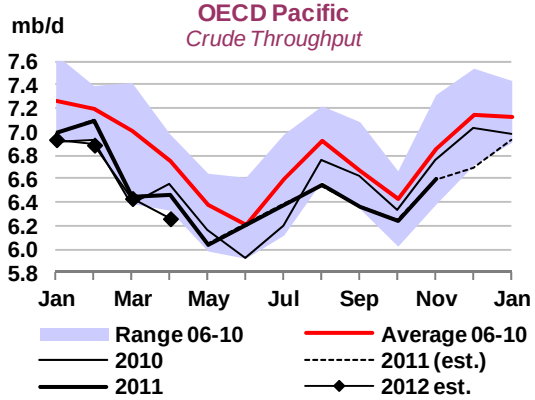
Refinery	Capacity	Status
Coryton, UK	220 kb/d	Running at reduced rates
Petit Couronne, France	161 kb/d	Temporary shutdown
Ingolstadt, Germany	110 kb/d	Running at reduced rates
Antwerp, Belgium	108 kb/d	Temporary shutdown
Cressier, Switzerland	68 kb/d	Temporary shutdown
Reichstett, France	85 kb/d	Converted to oil terminal 2Q11
Teesside, UK	100 kb/d	Converted to oil terminal 2Q09

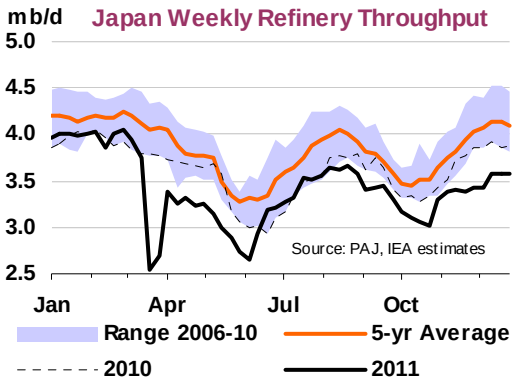
Petroplus is the largest independent refiner and marketer of refined oil products in Europe. Since the economic downturn, the company already converted its Teesside plant in the UK in 2Q09 and its French Reichstett plant in 2Q11 to oil terminals. The recent shutdowns of the company's French, Belgian and Swiss refineries bring the company's shutdowns since 2009 to 515 kb/d, leaving only 330 kb/d of capacity at two sites. Petroplus announced on 11 January that it had reached a temporary agreement with lenders under the revolving credit facility to allow it to maintain operations at the two remaining plants. The company also announced it was in negotiations with a third party for the supply of crude and feedstock for those two refineries.

In the short-run the temporary closures, while only reducing throughputs by some 240 kb/d (the rate at which the three plants ran over the first nine months of 2011), provided a welcome boost to a persistently weak margin environment in Europe and the Atlantic Basin. Following the news, European benchmark margins gained on average $3.30/bbl. If the plants are shut permanently, it would help to reduce the capacity overhang in the Atlantic Basin and could provide longer-lasting support to margins. Some argue that the closures lower regional crude demand and reduce product availability, in turn increasing the region's import requirements for diesel. Given currently low operating rates at European refiners, it seems there is still enough spare distillation capacity in the region to make up the difference. Several plants continue to run at reduced rates, or are shut altogether due to weak margins.

It remains to be seen if the shutdown provides enough support to entice European refiners to increase runs and keep regional product supplies stable. A looming embargo on Iranian crude and potentially reduced gasoline demand from Nigeria (one of the few outlets for surplus European gasoline) given the recent dismantling of subsidies could still provide further challenges ahead.

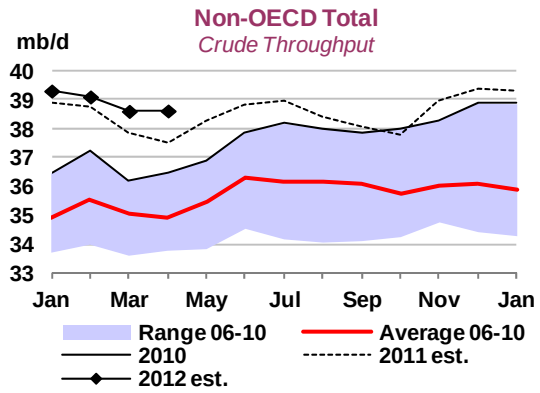
OECD Pacific crude runs averaged 6.6 mb/d in November, up 350 kb/d from October but 165 kb/d below the same month a year earlier. Preliminary data from the Petroleum Association of Japan show Japanese runs increasing seasonally in December on the completion of autumn maintenance. The increase was nevertheless slightly less than anticipated (by 40 kb/d). The outlook for 1Q12 is largely unchanged, seeing regional runs increasing to 6.7 mb/d, before spring maintenance cuts runs in 2Q12. Both Idemitsu and JX Nippon have announced plans to process less crude year-on-year over the January-March period due to structurally declining demand and capacity still off-line since the March 2011 earthquake.

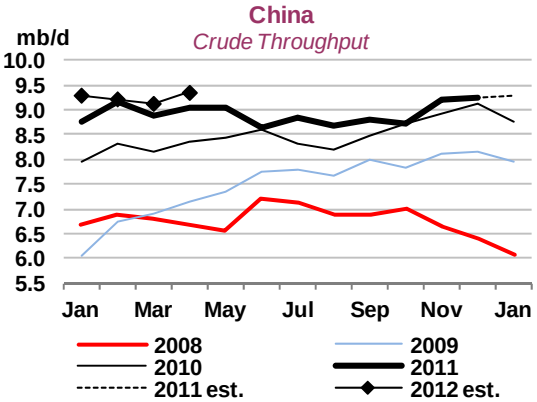




Non-OECD Refinery Throughput

Non-OECD refinery crude runs have been revised down by 50 kb/d for the fourth quarter of 2011, with lower runs seen in a number of regions. In particular, lower-than-expected October readings for Thailand, where operations were disrupted by floods and refinery maintenance, were offset by higher runs in Russia, India and Singapore in November (carried forward to December). Russian crude throughputs in December were in line with expectations, hovering around the 5.2 mb/d mark, though recent historical data has been revised higher to adjust for the recently commissioned Taneko refinery, not included in Ministry data. 1Q12 estimates have been raised, largely as the higher Russian figures feed through the forecast. The announcement of further security check shutdowns at Mailiao in Taiwan in February, lower estimates for Yemen and China provide a partial offset. Non-OECD runs are now estimated at 38.7 mb/d and 39.0 mb/d for 4Q11 and 1Q12, respectively.



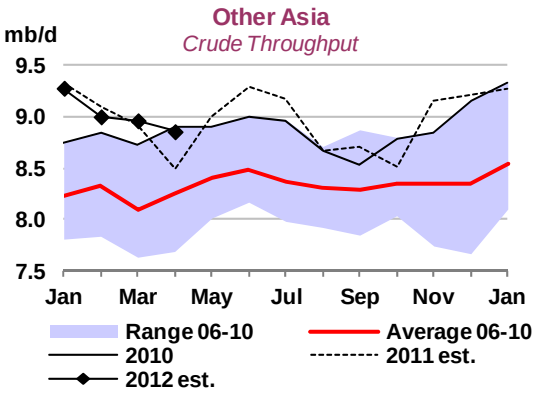


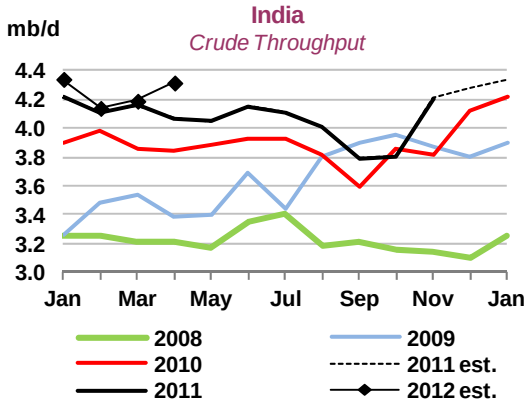
As highlighted in last month's report, **Chinese** crude runs reached a record high of 9.2 mb/d in November. The near-0.5 mb/d monthly increase followed stronger runs from both Sinopec and PetroChina to refill depleted inventories and avoid domestic shortages amid seasonally higher demand. Another record-high was reached in December, when total runs reach 9.24 mb/d. Company plans for January indicate runs stayed at elevated levels ahead of the New Year holidays, starting on 23 January, and the spring ploughing season. Some maintenance is scheduled for February and March, however, leading expected throughputs to dip slightly in these months.

Both PetroChina and Sinopec have announced plans to increase runs in 2012 compared to 2011, by 6.0% and 3.8% respectively. PetroChina is reportedly planning to process 3.04 mb/d of crude in 2012, while Sinopec plans to process 4.53 mb/d on average. PetroChina will add a 100 kb/d crude unit at its Hohhot Petrochemical plant and complete a 200 kb/d refinery in Pengzhou by the end of the year or early 2013. Further increases are expected to come from the recently completed 100 kb/d addition at PetroChina's Yinchuan refinery in Ningxia Province. Higher runs at Dalian, which was hit by a fire in July of last year, will also add to volumes. Sinopec's growth is expected to come from the 100 kb/d Beihai refinery that became operational in early January. Other Sinopec projects expected to become operational later in 2012 include Shijiazhuang (+60 kb/d), Anqing (70 kb/d) and Jinling (90 kb/d).

'Other Asian' throughput estimates are largely unchanged for 4Q11 and 1Q12, at 8.9 mb/d and 9.2 mb/d, respectively. **Indian** refinery crude runs surged 400 kb/d in November after several months of reduced runs due to maintenance. Total runs, adjusting official statistics higher to account for Jamnagar's 580 kb/d export refinery and the recently commissioned 120 kb/d Bina refinery currently not included, are estimated to have averaged 4.2 mb/d in the month, more than 10% higher than a year earlier when Reliance underwent maintenance. The monthly increase stemmed from the return of Essar's Vadinar refinery from maintenance. Runs there rose by 250 kb/d, to 309 kb/d. Higher runs were also recorded from Indian Oil Corporation's Mathura plant, up from 72 kb/d in October to 183 kb/d in November and MRPL's Mangalore plant, up 60 kb/d to 257 kb/d in November. Reliance will shut a 290 kb/d crude unit

at its 580 kb/d Jamnagar export refinery from mid-February for three weeks of maintenance. This will be the first scheduled turnaround at the plant since it was commissioned in 2008.

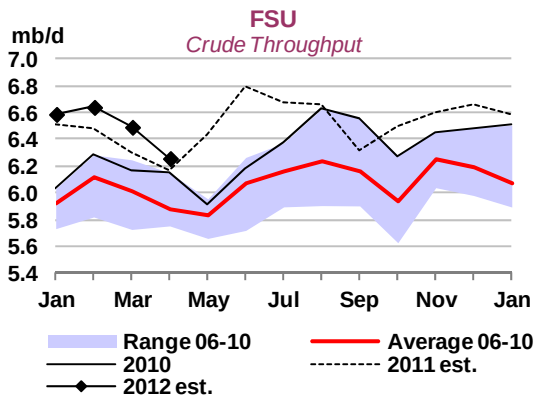


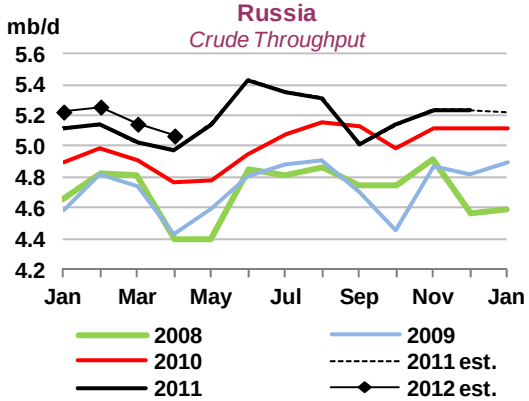


Shell's **Singapore** refinery is thought to have regained full production by end-2011. Runs are believed to have recovered to 1.2 mb/d in November, up from 1.08 mb/d in October. The 550 kb/d refinery, which completely shut in late September following a fire, was progressively restarted over October and November, to pre-shutdown rates assessed around 400 kb/d, or 70% utilisation.

Thailand refinery runs came in weaker than expected in October, averaging only 860 kb/d, compared to 970 kb/d a year earlier and 910 kb/d in September. The lower runs are likely due to the devastating floods that have plagued the country since July, and in a possibly related move, several plants underwent maintenance in October. Star Petroleum Refining Co, a joint venture of Chevron and Thailand's top energy company, PTT, partially shut its 145 kb/d refinery in Rayong from mid-September for a month, while Esso shut its 160 kb/d refinery in Sriracha for two months from 16 September. IRPC Pcl meanwhile was planning major maintenance at its 215 kb/d plant for 40 days from mid-November.

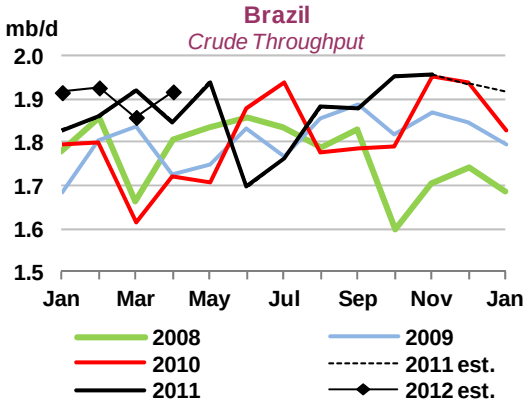
Russian crude runs bounced back above 5.2 mb/d in November, after several months of maintenance-reduced throughputs. At 5.24 mb/d, throughputs were 120 kb/d higher than the previous year, in large part due to the start-up of Tatneft's Taneko refinery earlier this year. In fact, this refinery is not included in Ministry data, so we have adjusted for this for recent months. The monthly increase of 90 kb/d followed a return of Rosneft's Syrzan, Angarsk and Salavat plants from maintenance, while the Moscow refinery cut runs by 90 kb/d amid maintenance. Preliminary data show December runs steady, and mostly in line with our previous forecast.

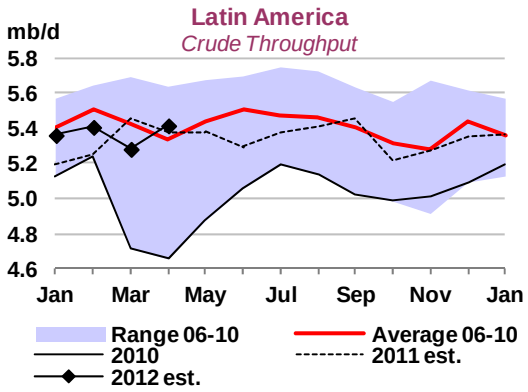




The restart of **Libya's** largest refinery, the 220 kb/d Ras Lanuf plant, has been delayed by at least a month, from an earlier expected start-up date of end-2011. We now assume the Ras Lanuf plant to be operational by mid-February, with gradual ramp-up towards full rates by mid-March, though this could easily slip further. The country's other refineries have reportedly restored 160 kb/d of capacity.

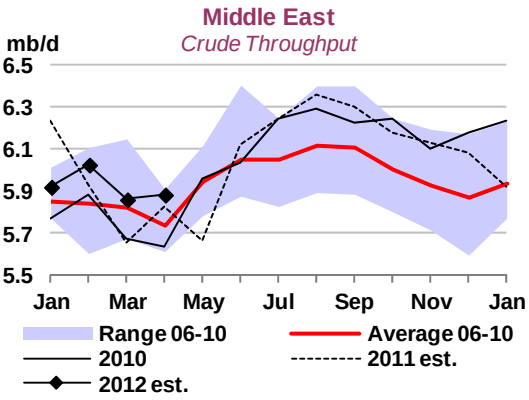
In **Latin America**, **Brazil**'s refinery runs held steady at around 1.96 mb/d in November, as crude output hit a record high. Petrobras is expected to add 400 kb/d of capacity through two grassroots projects in 2014. Prior to this, product imports are expected to increase to meet robust demand growth. **Uruguay's** sole refinery closed for maintenance from early September through December. The 50 kb/d Ancap plant started work to bring two desulphurisation units into operation by March or April 2012, allowing the production of low sulphur gasoline. Meanwhile, Hovensa completed maintenance work at its 350 kb/d St Croix refinery in the **US Virgin Islands** in early December. According to a company spokesman, the refinery continued to run at "the necessary rates to meet customer commitments" during the work.

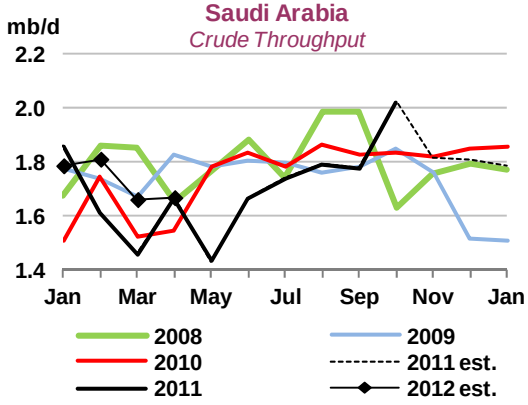




According to JODI data, **Saudi Arabian** refinery runs hit 2 mb/d in October, the highest on record. Compared to domestic distillation capacity of 2.1 mb/d, this represents a monthly increase of 240 kb/d and a utilisation rate of 96%. Also in the Kingdom, Aramco is reportedly to shut some units at its Riyadh refinery in January for maintenance and some units at its Ras Tanura refinery in March and possibly into April. The 550 kb/d Ras Tanura plant includes a condensate splitter, which will also reportedly shut down in the period.

In **Kuwait**, KNPC is planning to partially shut its Mina Al-Ahmadi refinery in January for maintenance work. CDU capacity of around 250 kb/d will reportedly be offline for anywhere between 20-35 days. **Israel's** Haifa refinery was partially shut over Nov-Dec, hitting Mediterranean diesel supplies. **Yemen's** Aden refinery remained shut as of early January, due to lack of crude supplies following sabotage to key pipelines. We assume the plant to be offline until 2Q12 or until the security situation improves. **Iraqi** runs fell to only 436 kb/d in October, from 610 kb/d the month before, though no reports of outages or maintenance has been found.





The OECD Refinery Yields Table is available in the Tables Section on the OMR Website, as Table 16.

Table 1
WORLD OIL SUPPLY AND DEMAND
(million barrels per day)

	2008	2009	1Q10	2Q10	3Q10	4Q10	2010	1Q11	2Q11	3Q11	4Q11	2011	1Q12	2Q12	3Q12	4Q12	2012
OECD DEMAND																	
North America	24.2	23.3	23.4	23.7	24.1	23.9	23.8	23.8	23.3	23.5	23.1	23.4	23.4	23.1	23.5	23.3	23.3
Europe	15.4	14.7	14.3	14.3	14.9	14.8	14.6	14.2	14.1	14.7	14.3	14.3	13.9	13.8	14.5	14.3	14.1
Pacific	8.1	7.7	8.2	7.3	7.6	8.1	7.8	8.3	7.1	7.7	8.3	7.9	8.5	7.4	7.5	8.1	7.9
Total OECD	47.6	45.6	46.0	45.3	46.6	46.7	46.2	46.3	44.5	45.9	45.7	45.6	45.8	44.3	45.5	45.6	45.3
NON-OECD DEMAND																	
FSU	4.2	4.2	4.4	4.3	4.6	4.6	4.5	4.5	4.6	4.8	4.9	4.7	4.6	4.6	4.8	4.9	4.7
Europe	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
China	7.7	8.1	8.6	9.1	8.9	9.7	9.1	9.5	9.5	9.3	9.7	9.5	9.7	9.9	9.8	10.2	9.9
Other Asia	9.7	10.1	10.4	10.5	10.1	10.6	10.4	10.7	10.7	10.4	10.8	10.6	10.9	11.0	10.7	11.2	11.0
Latin America	6.0	6.0	6.1	6.3	6.5	6.4	6.3	6.3	6.5	6.6	6.5	6.5	6.5	6.6	6.8	6.7	6.7
Middle East	7.3	7.5	7.4	7.8	8.3	7.7	7.8	7.6	8.0	8.5	7.9	8.0	7.9	8.3	8.7	8.1	8.3
Africa	3.3	3.3	3.3	3.4	3.4	3.4	3.4	3.4	3.3	3.3	3.4	3.3	3.4	3.5	3.5	3.5	3.5
Total Non-OECD	38.9	39.9	40.8	42.2	42.4	43.0	42.1	42.7	43.4	43.6	43.9	43.4	43.7	44.7	45.1	45.5	44.8
Total Demand[1]	86.6	85.6	86.8	87.5	89.1	89.8	88.3	89.0	87.9	89.5	89.5	89.0	89.5	89.0	90.7	91.1	90.0
OECD SUPPLY																	
North America[4]	13.3	13.6	14.0	14.0	14.1	14.4	14.1	14.4	14.3	14.5	14.7	14.5	14.8	14.6	14.6	14.9	14.7
Europe	4.8	4.5	4.5	4.2	3.8	4.2	4.2	4.1	3.8	3.6	4.0	3.9	4.1	3.8	3.7	4.0	3.9
Pacific	0.6	0.7	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.6	0.5	0.6	0.6	0.7	0.7	0.7
Total OECD	18.7	18.8	19.1	18.8	18.5	19.1	18.9	19.0	18.6	18.6	19.4	18.9	19.5	19.1	19.0	19.5	19.3
NON-OECD SUPPLY																	
FSU	12.8	13.3	13.5	13.5	13.5	13.6	13.5	13.6	13.6	13.5	13.7	13.6	13.8	13.9	13.7	13.9	13.8
Europe	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
China	3.8	3.9	4.0	4.1	4.1	4.2	4.1	4.2	4.2	4.1	4.1	4.1	4.2	4.2	4.2	4.3	4.2
Other Asia[2]	3.7	3.6	3.7	3.7	3.7	3.7	3.7	3.6	3.5	3.5	3.5	3.5	3.6	3.5	3.5	3.5	3.5
Latin America[2,4]	3.7	3.9	4.0	4.1	4.1	4.1	4.1	4.2	4.2	4.2	4.3	4.2	4.3	4.4	4.4	4.5	4.4
Middle East	1.7	1.7	1.8	1.7	1.7	1.7	1.7	1.8	1.6	1.6	1.5	1.6	1.5	1.5	1.6	1.6	1.5
Africa[2]	2.6	2.6	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.6	2.6	2.6	2.6	2.6
Total Non-OECD	28.4	29.1	29.6	29.7	29.9	30.1	29.8	30.1	29.7	29.6	29.7	29.8	30.1	30.2	30.1	30.4	30.2
Processing Gains[3]	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.2	2.2	2.3	2.2	2.2	2.3	2.3
Global Biofuels[4]	1.4	1.6	1.4	2.0	2.1	1.8	1.8	1.5	1.9	2.2	1.8	1.8	1.6	1.9	2.2	2.0	1.9
Total Non-OPEC[2]	50.6	51.5	52.2	52.6	52.6	53.1	52.6	52.7	52.3	52.5	53.1	52.7	53.5	53.5	53.6	54.2	53.7
Non-OPEC: Historical Composition[2]	49.6	51.5	52.2	52.6	52.6	53.1	52.6	52.7	52.3	52.5	53.1	52.7	53.5	53.5	53.6	54.2	53.7
OPEC																	
Crude[5]	31.6	29.1	29.3	29.3	29.7	29.6	29.5	30.0	29.5	29.9	30.5	30.0					
NGLs	4.5	4.9	5.2	5.2	5.5	5.6	5.4	5.7	5.7	5.8	5.9	5.8	6.2	6.2	6.5	6.6	6.4
Total OPEC[2]	36.2	34.1	34.5	34.5	35.1	35.2	34.8	35.8	35.2	35.7	36.4	35.8					
OPEC: Historical Composition[2]	37.2	34.1	34.5	34.5	35.1	35.2	34.8	35.8	35.2	35.7	36.4	35.8					
Total Supply[6]	86.7	85.6	86.7	87.1	87.8	88.3	87.5	88.5	87.5	88.3	89.6	88.4					
STOCK CHANGES AND MISCELLANEOUS																	
Reported OECD																	
Industry	0.3	-0.1	0.4	0.9	-0.1	-0.9	0.1	-0.4	0.5	-0.1							
Government	0.0	0.1	0.0	-0.1	-0.1	0.1	0.0	0.0	0.0	-0.4							
Total	0.3	0.0	0.4	0.9	-0.2	-0.7	0.1	-0.5	0.5	-0.5							
Floating Storage/Oil in Transit	0.0	0.3	-0.2	0.1	-0.2	-0.3	-0.2	0.2	-0.2	-0.2							
Miscellaneous to balance[7]	-0.2	-0.3	-0.3	-1.3	-0.9	-0.4	-0.7	-0.2	-0.7	-0.5							
Total Stock Ch. & Misc	0.2	0.0	-0.1	-0.4	-1.3	-1.4	-0.8	-0.5	-0.4	-1.3	0.1	-0.5					
Memo items:																	
Call on OPEC crude + Stock ch.[8]	31.4	29.1	29.5	29.7	31.0	31.1	30.3	30.5	29.9	31.2	30.5	30.5	29.8	29.3	30.6	30.3	30.0
Adjusted Call on OPEC + Stock ch.[9]	31.3	28.8	29.1	28.4	30.1	30.7	29.6	30.3	29.2	30.7	30.0	30.0	29.4	28.8	30.1	29.8	29.5

1 Measured as deliveries from refineries and primary stocks, comprises inland deliveries, international marine bunkers, refinery fuel, crude for direct burning, oil from non-conventional sources and other sources of supply.
2 Other Asia includes Indonesia throughout. Latin America excludes Ecuador throughout. Africa excludes Angola throughout.
Total Non-OPEC excludes all countries that were members of OPEC at 1 January 2009. Non-OPEC Historical Composition excludes countries that were OPEC members at that point in time.
Total OPEC comprises all countries which were OPEC members at 1 January 2009. OPEC Historical Composition comprises countries which were OPEC members at that point in time.
3 Net volumetric gains and losses in the refining process and marine transportation losses.
4 As of the July 2010 OMR, Global Biofuels comprise all world biofuel production including fuel ethanol from the US and Brazil.
5 As of the March 2006 OMR, Venezuelan Orinoco heavy crude production is included within Venezuelan crude estimates. Orimulsion fuel remains within the OPEC NGL and non-conventional category, but Orimulsion production reportedly ceased from January 2007.
6 Comprises crude oil, condensates, NGLs, oil from non-conventional sources and other sources of supply.
7 Includes changes in non-reported stocks in OECD and non-OECD areas.
8 Equals the arithmetic difference between total demand minus total non-OPEC supply minus OPEC NGLs.
9 Equals the "Call on OPEC + Stock Ch." with "Miscellaneous to balance" added for historical periods and with an average of "Miscellaneous to balance" for the most recent 8 quarters added for forecast periods.

Table 1A
WORLD OIL SUPPLY AND DEMAND: CHANGES FROM LAST MONTH'S TABLE 1

(million barrels per day)

	2008	2009	1Q10	2Q10	3Q10	4Q10	2010	1Q11	2Q11	3Q11	4Q11	2011	1Q12	2Q12	3Q12	4Q12	2012
OECD DEMAND																	
North America	-	-	-	-	-	-	-	-	-	-	-0.3	-0.1	-0.1	-	-	-0.2	-0.1
Europe	-	-	-	-	-	-	-	-	-	-	-0.1	-	-0.1	-	-	-	-
Pacific	-	-	-	-	-	-	-	-	-	-	-0.1	-	-	-	-	-	-
Total OECD	-	-	-	-	-	-	-	-	-	-	-0.4	-0.1	-0.2	-0.1	-	-0.2	-0.1
NON-OECD DEMAND																	
FSU	-	-	-	-	-	-	-	-	-	-	0.1	-	-	-	-	-	-
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-	-	-	-0.2	-0.1	-0.1	0.1	-0.1
Other Asia	-	-	-	-	-	-	-	-	-	-	-	-	-0.1	-	-	-	-
Latin America	-	-	-	-	-	-	-	-	-	-	-0.1	-	-	-	-	-	-
Middle East	-	-	-	-	-	-	-	-	0.1	0.1	0.1	0.1	-	-	-	-	-
Africa	-	-	-	-	-	-	-	-	-	-	-	-	-0.1	-	-	-	-
Total Non-OECD	-	-	-	-	-	-	-	-	0.1	0.1	0.1	0.1	-0.3	-0.2	-0.1	0.1	-0.1
Total Demand	-	-	-	-	-	-	-	-	0.1	0.1	-0.3	-	-0.5	-0.3	-0.1	-0.1	-0.2
OECD SUPPLY																	
North America	-	-	-	-	-	-	-	-	-	-	-	-	-	0.1	-	0.1	0.1
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total OECD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.1	-
NON-OECD SUPPLY																	
FSU	-	-	-	-	-	-	-	-	-	-	-	-	-	0.1	-	0.1	-
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-	-0.2	-	-0.1	-0.1	-0.1	-	-0.1
Other Asia	-	-	-	-	-	-	-	-	-	-	0.1	-	0.1	-	-	-	-
Latin America	-	-	-	-	-	-	-	-	-	-	-	-	-0.1	-	-	-	-
Middle East	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Non-OECD	-	-	-	-	-	-	-	-	-	-	-0.1	-	-0.1	-0.1	-0.1	0.1	-
Processing Gains	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Global Biofuels	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Non-OPEC	-	-	-	-	-	-	-	-	-	-	-0.1	-	-0.1	-0.1	-	0.2	-
Non-OPEC: historical composition	-	-	-	-	-	-	-	-	-	-	-0.1	-	-0.1	-0.1	-	0.2	-
OPEC																	
Crude	-	-	-	-	-	-	-	-	-	-							
NGLs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total OPEC	-	-	-	-	-	-	-	-	-	-							
OPEC: historical composition	-	-	-	-	-	-	-	-	-	-							
Total Supply	-	-	-	-	-	-	-	-	-	-							
STOCK CHANGES AND MISCELLANEOUS																	
REPORTED OECD																	
Industry	-	-	-	-	-	-	-	-	-	-							
Government	-	-	-	-	-	-	-	-	-	-							
Total	-	-	-	-	-	-	-	-	-	-							
Floating Storage/Oil in Transit	-	-	-	-	-	-	-	-	-	-							
Miscellaneous to balance	-	-	-	-	-	-	-	-	-	-0.1							
Total Stock Ch. & Misc	-	-	-	-	-	-	-	-	-	-0.1							
Memo items:																	
Call on OPEC crude + Stock ch.	-	-	-	-	-	-	-	-	-	0.1	-0.2	-	-0.4	-0.2	-0.1	-0.3	-0.2
Adjusted Call on OPEC + Stock ch.	-	-	-	-	-	-	-	-	-	-	-0.2	-	-0.4	-0.2	-0.1	-0.3	-0.2

When submitting their monthly oil statistics, OECD Member countries periodically update data for prior periods. Similar updates to non-OECD data can occur.

Table 2

SUMMARY OF GLOBAL OIL DEMAND

	2009	1Q10	2Q10	3Q10	4Q10	2010	1Q11	2Q11	3Q11	4Q11	2011	1Q12	2Q12	3Q12	4Q12	2012
Demand (mb/d)																
North America	23.29	23.41	23.69	24.07	23.85	23.76	23.76	23.29	23.54	23.11	23.43	23.37	23.08	23.50	23.27	23.31
Europe	14.66	14.32	14.26	14.93	14.83	14.58	14.18	14.11	14.69	14.26	14.31	13.86	13.81	14.51	14.26	14.11
Pacific	7.69	8.23	7.34	7.62	8.07	7.82	8.35	7.11	7.68	8.28	7.85	8.53	7.37	7.54	8.07	7.88
Total OECD	45.64	45.95	45.29	46.62	46.75	46.16	46.29	44.52	45.91	45.65	45.59	45.77	44.26	45.55	45.60	45.30
Asia	18.19	18.99	19.60	19.06	20.21	19.47	20.24	20.23	19.68	20.44	20.14	20.65	20.97	20.57	21.38	20.90
Middle East	7.53	7.42	7.83	8.29	7.72	7.82	7.64	8.02	8.49	7.92	8.02	7.85	8.29	8.73	8.15	8.26
Latin America	5.99	6.05	6.30	6.47	6.39	6.31	6.27	6.46	6.64	6.51	6.47	6.46	6.65	6.83	6.75	6.67
FSU	4.18	4.38	4.33	4.56	4.58	4.46	4.45	4.62	4.83	4.92	4.70	4.60	4.59	4.84	4.94	4.74
Africa	3.33	3.33	3.43	3.38	3.43	3.39	3.40	3.33	3.26	3.37	3.34	3.44	3.50	3.46	3.51	3.48
Europe	0.71	0.67	0.68	0.68	0.70	0.68	0.67	0.69	0.72	0.72	0.70	0.68	0.70	0.72	0.72	0.71
Total Non-OECD	39.93	40.84	42.18	42.44	43.03	42.13	42.67	43.35	43.61	43.87	43.38	43.69	44.70	45.15	45.45	44.75
World	85.57	86.80	87.47	89.06	89.78	88.29	88.96	87.87	89.53	89.53	88.97	89.45	88.96	90.70	91.05	90.05
of which: US50	18.77	18.87	19.15	19.47	19.23	19.18	19.17	18.82	18.89	18.51	18.84	18.82	18.63	18.90	18.68	18.76
Europe 5*	8.98	8.87	8.75	9.15	9.01	8.95	8.70	8.57	8.89	8.65	8.70	8.51	8.37	8.79	8.63	8.58
China	8.06	8.63	9.06	8.92	9.66	9.07	9.54	9.52	9.30	9.66	9.50	9.70	9.94	9.82	10.19	9.91
Japan	4.39	4.82	4.07	4.36	4.57	4.45	4.86	3.92	4.32	4.82	4.48	5.08	4.15	4.24	4.60	4.52
India	3.26	3.38	3.45	3.13	3.38	3.34	3.50	3.57	3.26	3.53	3.46	3.61	3.67	3.37	3.64	3.57
Russia	3.03	3.16	3.17	3.41	3.36	3.28	3.20	3.43	3.64	3.70	3.50	3.33	3.39	3.64	3.69	3.51
Brazil	2.54	2.60	2.71	2.82	2.80	2.73	2.69	2.76	2.87	2.83	2.79	2.74	2.81	2.93	2.93	2.85
Saudi Arabia	2.47	2.33	2.73	3.02	2.54	2.66	2.49	2.89	3.15	2.66	2.80	2.59	3.00	3.24	2.77	2.90
Canada	2.16	2.15	2.17	2.26	2.25	2.21	2.25	2.15	2.28	2.22	2.22	2.21	2.12	2.24	2.21	2.19
Korea	2.19	2.31	2.18	2.16	2.35	2.25	2.36	2.04	2.21	2.30	2.23	2.31	2.08	2.14	2.30	2.21
Mexico	2.07	2.07	2.10	2.05	2.07	2.07	2.03	2.05	2.09	2.08	2.06	2.03	2.04	2.07	2.07	2.05
Iran	2.11	2.10	2.08	2.08	2.09	2.09	2.09	2.05	2.05	2.06	2.06	2.11	2.09	2.08	2.08	2.09
Total	60.03	61.30	61.61	62.84	63.31	62.27	62.86	61.78	62.94	63.02	62.65	63.06	62.30	63.46	63.80	63.16
% of World	70.2%	70.6%	70.4%	70.6%	70.5%	70.5%	70.7%	70.3%	70.3%	70.4%	70.4%	70.5%	70.0%	70.0%	70.1%	70.1%
Annual Change (% per annum)																
North America	-3.7	-0.1	3.3	3.4	1.3	2.0	1.5	-1.7	-2.2	-3.1	-1.4	-1.6	-0.9	-0.2	0.7	-0.5
Europe	-4.7	-5.1	-1.3	2.3	2.0	-0.5	-1.0	-1.0	-1.6	-3.8	-1.9	-2.3	-2.1	-1.2	0.0	-1.4
Pacific	-4.6	1.2	0.4	4.7	0.6	1.7	1.5	-3.1	0.8	2.6	0.5	2.2	3.6	-1.9	-2.5	0.3
Total OECD	-4.2	-1.5	1.3	3.3	1.4	1.1	0.7	-1.7	-1.5	-2.3	-1.2	-1.1	-0.6	-0.8	-0.1	-0.7
Asia	4.4	12.0	6.8	3.2	6.6	7.0	6.6	3.2	3.2	1.1	3.5	2.1	3.7	4.5	4.6	3.7
Middle East	3.5	5.0	3.4	2.9	4.3	3.8	2.9	2.5	2.4	2.6	2.6	2.8	3.3	2.8	3.0	3.0
Latin America	0.0	4.7	5.3	6.2	4.6	5.2	3.6	2.5	2.7	1.9	2.7	2.9	2.9	2.8	3.6	3.0
FSU	-1.2	8.1	6.5	5.3	7.3	6.8	1.6	6.7	5.8	7.4	5.4	3.3	-0.5	0.4	0.5	0.9
Africa	1.6	-1.6	2.1	2.3	5.4	2.0	2.1	-3.0	-3.5	-1.8	-1.6	1.3	5.0	6.1	4.0	4.1
Europe	-6.3	-7.5	-6.9	-3.7	1.3	-4.2	-0.2	1.8	5.2	2.5	2.4	2.0	1.6	0.4	0.6	1.1
Total Non-OECD	2.5	7.6	5.3	3.6	5.8	5.5	4.5	2.8	2.8	2.0	3.0	2.4	3.1	3.5	3.6	3.2
World	-1.2	2.6	3.2	3.4	3.5	3.2	2.5	0.5	0.5	-0.3	0.8	0.6	1.2	1.3	1.7	1.2
Annual Change (mb/d)																
North America	-0.89	-0.01	0.75	0.80	0.31	0.46	0.35	-0.40	-0.53	-0.74	-0.33	-0.39	-0.21	-0.05	0.16	-0.12
Europe	-0.73	-0.77	-0.18	0.33	0.29	-0.08	-0.14	-0.15	-0.24	-0.56	-0.27	-0.32	-0.30	-0.17	0.00	-0.20
Pacific	-0.37	0.10	0.03	0.34	0.05	0.13	0.12	-0.23	0.06	0.21	0.04	0.19	0.25	-0.14	-0.21	0.02
Total OECD	-1.98	-0.69	0.60	1.47	0.65	0.51	0.33	-0.77	-0.71	-1.09	-0.56	-0.52	-0.26	-0.36	-0.05	-0.30
Asia	0.77	2.04	1.25	0.59	1.26	1.28	1.25	0.62	0.62	0.23	0.68	0.42	0.75	0.89	0.95	0.75
Middle East	0.25	0.35	0.26	0.24	0.32	0.29	0.22	0.20	0.20	0.20	0.20	0.21	0.27	0.24	0.23	0.24
Latin America	0.00	0.27	0.32	0.37	0.28	0.31	0.22	0.16	0.18	0.12	0.17	0.18	0.19	0.18	0.23	0.20
FSU	-0.05	0.33	0.26	0.23	0.31	0.28	0.07	0.29	0.26	0.34	0.24	0.15	-0.03	0.02	0.02	0.04
Africa	0.05	-0.06	0.07	0.08	0.18	0.07	0.07	-0.10	-0.12	-0.06	-0.05	0.04	0.17	0.20	0.14	0.14
Europe	-0.05	-0.05	-0.05	-0.03	0.01	-0.03	0.00	0.01	0.04	0.02	0.02	0.01	0.01	0.00	0.00	0.01
Total Non-OECD	0.98	2.88	2.11	1.48	2.35	2.20	1.83	1.17	1.17	0.84	1.25	1.02	1.35	1.53	1.58	1.37
World	-1.00	2.19	2.71	2.95	3.00	2.72	2.16	0.40	0.46	-0.25	0.69	0.50	1.09	1.17	1.53	1.07
Revisions to Oil Demand from Last Month's Report (mb/d)																
North America	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.31	-0.08	-0.07	-0.02	0.02	-0.18	-0.06
Europe	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.08	-0.02	-0.06	-0.01	0.00	-0.02	-0.02
Pacific	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.05	-0.01	-0.04	-0.03	0.00	0.02	-0.01
Total OECD	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.44	-0.11	-0.17	-0.06	0.02	-0.17	-0.10
Asia	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.03	0.03	0.02	-0.26	-0.17	-0.08	0.09	-0.10
Middle East	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.05	0.06	0.07	0.05	-0.01	0.04	0.04	0.04	0.03
Latin America	0.00	0.01	0.01	0.01	0.01	0.01	0.00	-0.01	0.00	-0.05	-0.01	-0.02	-0.03	-0.02	-0.04	-0.03
FSU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	0.08	0.02	0.01	-0.01	-0.01	0.03	0.01
Africa	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.01	-0.05	-0.04	0.00	-0.02	-0.03
Europe	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	-0.01	0.00	0.00	0.00
Total Non-OECD	0.00	0.01	0.01	0.01	0.01	0.01	0.02	0.05	0.11	0.13	0.08	-0.34	-0.21	-0.07	0.11	-0.13
World	0.00	0.01	0.01	0.01	0.01	0.01	0.02	0.05	0.11	-0.31	-0.03	-0.51	-0.26	-0.06	-0.06	-0.22
Revisions to Oil Demand Growth from Last Month's Report (mb/d)																
World	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.04	0.10	-0.32	-0.04	-0.54	-0.31	-0.17	0.25	-0.19

* France, Germany, Italy, Spain and UK

Table 2a

OECD REGIONAL OIL DEMAND[1]

(million barrels per day)

	2009	2010	4Q10	1Q11	2Q11	3Q11	Aug 11	Sep 11	Oct 11 [2]	Latest month vs. Sep 11	Latest month vs. Oct 10
North America											
LPG&Ethane	2.83	2.95	3.12	3.31	2.71	2.76	2.78	2.76	2.94	0.17	0.05
Naphtha	0.31	0.37	0.33	0.36	0.35	0.33	0.34	0.31	0.36	0.05	0.04
Motor Gasoline	10.56	10.57	10.51	10.14	10.45	10.48	10.55	10.32	10.21	-0.11	-0.38
Jet/Kerosene	1.61	1.65	1.63	1.60	1.68	1.71	1.79	1.63	1.56	-0.07	-0.07
Gasoil/Diesel Oil	4.61	4.82	5.01	5.04	4.77	4.85	5.07	5.01	5.04	0.03	0.21
Residual Fuel Oil	0.92	0.93	0.89	0.97	0.87	0.77	0.75	0.86	0.78	-0.08	-0.07
Other Products	2.45	2.46	2.36	2.34	2.46	2.64	2.74	2.47	2.33	-0.14	-0.12
Total	23.29	23.76	23.85	23.76	23.29	23.54	24.02	23.36	23.21	-0.15	-0.34
Europe											
LPG&Ethane	0.96	0.96	0.96	1.04	0.96	0.94	0.95	0.95	0.92	-0.04	0.04
Naphtha	1.18	1.26	1.27	1.27	1.17	1.13	1.16	1.09	1.03	-0.06	-0.19
Motor Gasoline	2.31	2.21	2.14	2.02	2.18	2.20	2.24	2.21	2.09	-0.12	-0.10
Jet/Kerosene	1.25	1.27	1.26	1.20	1.27	1.35	1.33	1.38	1.28	-0.10	-0.04
Gasoil/Diesel Oil	6.04	6.13	6.43	6.04	5.73	6.17	6.21	6.41	6.31	-0.11	-0.13
Residual Fuel Oil	1.44	1.27	1.30	1.29	1.22	1.25	1.21	1.25	1.23	-0.02	-0.07
Other Products	1.50	1.47	1.46	1.32	1.57	1.63	1.60	1.69	1.47	-0.22	-0.08
Total	14.66	14.58	14.83	14.18	14.11	14.69	14.71	14.98	14.32	-0.66	-0.57
Pacific											
LPG&Ethane	0.86	0.84	0.83	0.88	0.81	0.79	0.81	0.77	0.78	0.02	0.08
Naphtha	1.62	1.68	1.75	1.78	1.55	1.73	1.79	1.70	1.62	-0.08	-0.09
Motor Gasoline	1.55	1.57	1.59	1.51	1.47	1.61	1.69	1.54	1.50	-0.04	-0.03
Jet/Kerosene	0.85	0.87	0.98	1.18	0.64	0.63	0.63	0.69	0.79	0.10	0.03
Gasoil/Diesel Oil	1.61	1.62	1.70	1.67	1.53	1.59	1.56	1.60	1.64	0.04	0.04
Residual Fuel Oil	0.77	0.74	0.73	0.80	0.65	0.76	0.79	0.78	0.75	-0.03	0.07
Other Products	0.44	0.49	0.48	0.54	0.47	0.56	0.53	0.60	0.64	0.03	0.25
Total	7.69	7.82	8.07	8.35	7.11	7.68	7.80	7.69	7.73	0.05	0.34
OECD											
LPG&Ethane	4.65	4.76	4.91	5.23	4.48	4.49	4.54	4.48	4.63	0.15	0.17
Naphtha	3.11	3.31	3.36	3.41	3.07	3.20	3.29	3.11	3.02	-0.09	-0.25
Motor Gasoline	14.41	14.35	14.24	13.67	14.11	14.30	14.48	14.07	13.80	-0.27	-0.51
Jet/Kerosene	3.70	3.80	3.88	3.98	3.58	3.70	3.75	3.69	3.63	-0.07	-0.08
Gasoil/Diesel Oil	12.25	12.58	13.14	12.75	12.04	12.61	12.84	13.03	12.99	-0.03	0.12
Residual Fuel Oil	3.13	2.94	2.92	3.06	2.74	2.78	2.75	2.90	2.76	-0.14	-0.08
Other Products	4.39	4.42	4.30	4.19	4.50	4.83	4.87	4.76	4.44	-0.32	0.05
Total	45.64	46.16	46.75	46.29	44.52	45.91	46.53	46.03	45.27	-0.76	-0.58

1 Demand, measured as deliveries from refineries and primary stocks, comprises inland deliveries, international bunkers and refinery fuel. It includes crude for direct burning, oil from non-conventional sources and other sources of supply. Jet/kerosene comprises jet kerosene and non-aviation kerosene. Gasoil comprises diesel, light heating oil and other gasoils. North America comprises US 50 states, US territories, Mexico and Canada.

2 Latest official OECD submissions (MOS).

Table 2b

OIL DEMAND IN SELECTED OECD COUNTRIES[1]

(million barrels per day)

	2009	2010	4Q10	1Q11	2Q11	3Q11	Aug 11	Sep 11	Oct 11 [2]	Latest month vs. Sep 11	Latest month vs. Oct 10
United States[3]											
LPG	2.05	2.17	2.32	2.47	1.96	1.99	1.99	2.05	2.16	0.11	0.03
Naphtha	0.25	0.26	0.22	0.27	0.27	0.25	0.25	0.23	0.28	0.05	0.07
Motor Gasoline	9.00	8.99	8.92	8.61	8.87	8.89	8.92	8.75	8.63	-0.12	-0.39
Jet/Kerosene	1.41	1.45	1.44	1.40	1.49	1.50	1.57	1.43	1.37	-0.06	-0.08
Gasoil	3.63	3.80	3.94	3.95	3.75	3.78	3.97	3.94	3.95	0.01	0.17
Residual Fuel Oil	0.51	0.54	0.52	0.61	0.51	0.36	0.32	0.47	0.40	-0.07	-0.09
Other Products	1.92	1.97	1.87	1.86	1.97	2.12	2.21	1.96	1.84	-0.12	-0.08
Total	18.77	19.18	19.23	19.17	18.82	18.89	19.23	18.82	18.62	-0.20	-0.35
Japan											
LPG	0.50	0.48	0.47	0.54	0.50	0.45	0.46	0.44	0.46	0.02	0.08
Naphtha	0.72	0.77	0.81	0.79	0.65	0.74	0.79	0.70	0.66	-0.04	-0.14
Motor Gasoline	0.99	1.00	1.00	0.95	0.92	1.04	1.10	0.98	0.95	-0.03	0.00
Jet/Kerosene	0.55	0.55	0.62	0.80	0.36	0.34	0.33	0.38	0.47	0.10	0.05
Diesel	0.43	0.41	0.43	0.41	0.39	0.41	0.39	0.42	0.42	0.01	0.03
Other Gasoil	0.42	0.43	0.44	0.48	0.36	0.36	0.35	0.35	0.38	0.04	0.00
Residual Fuel Oil	0.41	0.40	0.39	0.42	0.36	0.48	0.51	0.48	0.48	0.00	0.12
Other Products	0.39	0.41	0.40	0.47	0.38	0.51	0.50	0.55	0.57	0.02	0.23
Total	4.39	4.45	4.57	4.86	3.92	4.32	4.44	4.29	4.41	0.12	0.35
Germany											
LPG	0.10	0.10	0.09	0.10	0.10	0.11	0.11	0.10	0.08	-0.02	0.00
Naphtha	0.36	0.41	0.41	0.44	0.40	0.39	0.41	0.37	0.33	-0.04	-0.06
Motor Gasoline	0.47	0.46	0.45	0.43	0.47	0.47	0.49	0.48	0.48	0.00	0.00
Jet/Kerosene	0.19	0.18	0.18	0.17	0.19	0.19	0.18	0.19	0.18	-0.01	-0.02
Diesel	0.64	0.67	0.69	0.63	0.67	0.71	0.73	0.74	0.68	-0.06	-0.03
Other Gasoil	0.42	0.43	0.47	0.37	0.23	0.42	0.48	0.43	0.47	0.04	-0.03
Residual Fuel Oil	0.16	0.15	0.16	0.16	0.14	0.15	0.15	0.14	0.14	0.01	-0.02
Other Products	0.11	0.09	0.09	0.05	0.12	0.12	0.12	0.12	0.14	0.02	0.02
Total	2.45	2.49	2.53	2.35	2.34	2.55	2.67	2.56	2.50	-0.06	-0.15
Italy											
LPG	0.10	0.11	0.11	0.12	0.08	0.08	0.08	0.09	0.09	0.00	0.01
Naphtha	0.10	0.12	0.11	0.11	0.10	0.08	0.08	0.09	0.08	-0.01	-0.04
Motor Gasoline	0.25	0.24	0.24	0.22	0.24	0.24	0.24	0.24	0.23	-0.01	0.02
Jet/Kerosene	0.09	0.10	0.09	0.09	0.10	0.12	0.11	0.12	0.11	-0.01	0.01
Diesel	0.49	0.49	0.50	0.47	0.51	0.50	0.46	0.52	0.50	-0.03	0.00
Other Gasoil	0.13	0.12	0.14	0.11	0.09	0.10	0.10	0.11	0.13	0.02	-0.01
Residual Fuel Oil	0.18	0.13	0.12	0.10	0.11	0.13	0.13	0.12	0.12	0.00	0.01
Other Products	0.20	0.23	0.25	0.21	0.24	0.22	0.20	0.24	0.21	-0.03	-0.05
Total	1.54	1.53	1.56	1.43	1.47	1.47	1.40	1.54	1.47	-0.08	-0.05
France											
LPG	0.12	0.15	0.17	0.17	0.12	0.12	0.12	0.12	0.13	0.01	-0.01
Naphtha	0.13	0.13	0.10	0.13	0.14	0.13	0.14	0.11	0.10	-0.01	0.01
Motor Gasoline	0.20	0.19	0.18	0.17	0.20	0.19	0.19	0.18	0.17	-0.01	-0.01
Jet/Kerosene	0.15	0.15	0.14	0.14	0.15	0.16	0.16	0.16	0.15	-0.01	0.01
Diesel	0.67	0.69	0.69	0.69	0.71	0.71	0.69	0.73	0.70	-0.03	-0.01
Other Gasoil	0.32	0.30	0.34	0.35	0.19	0.28	0.28	0.32	0.31	-0.01	0.00
Residual Fuel Oil	0.10	0.09	0.09	0.08	0.08	0.08	0.08	0.09	0.09	0.00	0.02
Other Products	0.18	0.17	0.15	0.13	0.19	0.20	0.16	0.23	0.16	-0.07	0.01
Total	1.87	1.86	1.86	1.86	1.79	1.87	1.84	1.95	1.81	-0.14	0.03
United Kingdom											
LPG	0.15	0.14	0.13	0.14	0.15	0.13	0.13	0.13	0.12	0.00	0.00
Naphtha	0.02	0.03	0.02	0.03	0.03	0.02	0.02	0.02	0.02	0.00	0.00
Motor Gasoline	0.37	0.35	0.34	0.34	0.34	0.33	0.34	0.34	0.33	-0.01	-0.03
Jet/Kerosene	0.33	0.33	0.34	0.34	0.32	0.33	0.33	0.36	0.33	-0.03	-0.01
Diesel	0.43	0.45	0.44	0.45	0.45	0.45	0.45	0.47	0.46	-0.01	0.00
Other Gasoil	0.12	0.12	0.12	0.11	0.11	0.13	0.14	0.13	0.11	-0.02	-0.01
Residual Fuel Oil	0.08	0.06	0.07	0.07	0.06	0.06	0.06	0.07	0.06	0.00	-0.02
Other Products	0.14	0.14	0.15	0.15	0.16	0.15	0.15	0.15	0.14	-0.01	-0.02
Total	1.65	1.62	1.60	1.62	1.61	1.61	1.61	1.66	1.57	-0.09	-0.09
Canada											
LPG	0.35	0.35	0.36	0.39	0.35	0.36	0.39	0.30	0.36	0.06	0.03
Naphtha	0.05	0.08	0.08	0.09	0.08	0.08	0.09	0.08	0.06	-0.01	-0.01
Motor Gasoline	0.73	0.73	0.73	0.69	0.74	0.77	0.78	0.74	0.74	0.00	0.01
Jet/Kerosene	0.11	0.11	0.11	0.11	0.10	0.12	0.12	0.11	0.10	-0.02	0.00
Diesel	0.23	0.22	0.23	0.22	0.22	0.23	0.23	0.23	0.23	-0.01	0.00
Other Gasoil	0.28	0.31	0.34	0.36	0.28	0.32	0.33	0.32	0.33	0.01	0.01
Residual Fuel Oil	0.10	0.10	0.11	0.11	0.09	0.09	0.09	0.11	0.10	-0.01	0.00
Other Products	0.31	0.30	0.30	0.28	0.29	0.31	0.32	0.31	0.29	-0.03	-0.03
Total	2.16	2.21	2.25	2.25	2.15	2.28	2.34	2.21	2.21	-0.01	0.00

1 Demand, measured as deliveries from refineries and primary stocks, comprises inland deliveries, international bunkers and refinery fuel. It includes crude for direct burning, oil from non-conventional sources and other sources of supply. Jet/kerosene comprises jet kerosene and non-aviation kerosene. Gasoil comprises diesel, light heating oil and other gasoils.

2 Latest official OECD submissions (MOS).

3 US figures exclude US territories.

Table 3
WORLD OIL PRODUCTION
(million barrels per day)

	2010	2011	2012	3Q11	4Q11	1Q12	2Q12	3Q12	Oct 11	Nov 11	Dec 11
OPEC											
Crude Oil											
Saudi Arabia	8.13	9.05		9.34	9.38				9.15	9.45	9.55
Iran	3.70	3.58		3.53	3.51				3.53	3.55	3.45
Iraq	2.36	2.67		2.67	2.68				2.69	2.68	2.69
UAE	2.31	2.50		2.53	2.54				2.51	2.52	2.58
Kuwait	2.03	2.21		2.26	2.35				2.35	2.37	2.32
Neutral Zone	0.53	0.59		0.60	0.60				0.60	0.60	0.60
Qatar	0.80	0.82		0.82	0.82				0.81	0.82	0.82
Angola	1.73	1.64		1.69	1.72				1.72	1.69	1.75
Nigeria	2.08	2.18		2.26	2.06				2.02	2.10	2.06
Libya	1.55	0.46		0.04	0.57				0.35	0.55	0.80
Algeria	1.25	1.28		1.28	1.29				1.29	1.29	1.29
Ecuador	0.47	0.50		0.49	0.49				0.50	0.50	0.48
Venezuela	2.53	2.52		2.42	2.52				2.55	2.53	2.50
Total Crude Oil[6]	29.49	29.99		29.93	30.53				30.07	30.64	30.89
Total NGLs[1,6]	5.35	5.80	6.35	5.80	5.92	6.15	6.20	6.50	5.92	5.92	5.92
Total OPEC[6]	34.84	35.79		35.74	36.45				35.98	36.56	36.80
OPEC: Historical Composition[6]	34.84	35.79		35.74	36.45				35.98	36.56	36.80
NON-OPEC[2]											
OECD											
North America	14.10	14.47	14.73	14.52	14.73	14.82	14.60	14.62	14.67	14.78	14.75
United States[5]	7.77	8.07	8.24	8.10	8.28	8.22	8.34	8.18	8.26	8.32	8.27
Mexico	2.96	2.94	2.85	2.92	2.91	2.89	2.88	2.83	2.93	2.92	2.87
Canada	3.37	3.46	3.63	3.50	3.54	3.71	3.38	3.62	3.47	3.54	3.61
Europe	4.16	3.89	3.91	3.62	4.04	4.07	3.81	3.75	3.93	4.05	4.14
UK	1.37	1.16	1.20	0.94	1.27	1.27	1.17	1.09	1.20	1.30	1.30
Norway	2.14	2.05	2.04	1.99	2.09	2.12	1.97	2.00	2.04	2.06	2.16
Others	0.65	0.68	0.66	0.68	0.68	0.68	0.67	0.66	0.69	0.69	0.67
Pacific	0.61	0.53	0.66	0.51	0.59	0.62	0.65	0.68	0.52	0.61	0.64
Australia	0.51	0.44	0.57	0.42	0.50	0.53	0.56	0.59	0.43	0.52	0.55
Others	0.10	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
Total OECD	18.87	18.89	19.29	18.65	19.37	19.51	19.06	19.05	19.12	19.45	19.54
NON-OECD											
Former USSR	13.55	13.63	13.82	13.54	13.74	13.79	13.89	13.69	13.72	13.82	13.68
Russia	10.45	10.58	10.73	10.58	10.67	10.67	10.73	10.75	10.69	10.70	10.63
Others	3.10	3.05	3.09	2.96	3.07	3.13	3.15	2.94	3.02	3.13	3.05
Asia	7.80	7.67	7.70	7.56	7.60	7.74	7.68	7.65	7.45	7.60	7.76
China	4.10	4.13	4.20	4.06	4.06	4.18	4.18	4.17	3.96	4.05	4.18
Malaysia	0.72	0.65	0.63	0.65	0.65	0.64	0.63	0.62	0.65	0.66	0.63
India	0.86	0.90	0.92	0.89	0.91	0.93	0.92	0.92	0.88	0.90	0.94
Indonesia	0.97	0.91	0.86	0.91	0.89	0.88	0.86	0.85	0.89	0.87	0.90
Others	1.14	1.08	1.10	1.06	1.10	1.12	1.09	1.09	1.07	1.12	1.12
Europe	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14
Latin America	4.07	4.20	4.42	4.17	4.27	4.31	4.41	4.45	4.25	4.35	4.21
Brazil[5]	2.14	2.18	2.32	2.15	2.22	2.27	2.30	2.33	2.20	2.28	2.18
Argentina	0.69	0.66	0.66	0.67	0.66	0.62	0.67	0.67	0.69	0.69	0.61
Colombia	0.79	0.92	1.02	0.92	0.96	0.98	1.01	1.03	0.94	0.96	0.99
Others	0.45	0.44	0.42	0.44	0.43	0.43	0.43	0.42	0.42	0.43	0.44
Middle East[3]	1.74	1.62	1.55	1.64	1.48	1.54	1.54	1.56	1.45	1.47	1.52
Oman	0.87	0.89	0.93	0.90	0.91	0.92	0.92	0.94	0.90	0.91	0.91
Syria	0.39	0.33	0.27	0.32	0.22	0.28	0.27	0.27	0.19	0.22	0.26
Yemen	0.30	0.20	0.15	0.21	0.15	0.14	0.15	0.16	0.15	0.15	0.15
Others	0.19	0.20	0.19	0.20	0.20	0.20	0.20	0.19	0.20	0.20	0.20
Africa	2.52	2.52	2.56	2.53	2.50	2.57	2.57	2.57	2.54	2.47	2.48
Egypt	0.70	0.69	0.68	0.69	0.68	0.68	0.68	0.67	0.69	0.68	0.68
Gabon	0.25	0.24	0.25	0.24	0.25	0.24	0.24	0.25	0.25	0.25	0.25
Others	1.58	1.58	1.64	1.60	1.57	1.64	1.65	1.64	1.61	1.54	1.55
Total Non-OECD	29.83	29.77	30.19	29.58	29.73	30.10	30.23	30.06	29.55	29.86	29.80
Processing Gains[4]	2.10	2.17	2.26	2.14	2.23	2.28	2.23	2.24	2.23	2.23	2.23
Global Biofuels[5]	1.83	1.83	1.94	2.16	1.80	1.58	1.93	2.24	1.92	1.82	1.65
TOTAL NON-OPEC[6]	52.62	52.66	53.68	52.52	53.13	53.48	53.46	53.58	52.82	53.36	53.22
Non-OPEC: Historical Composition[6]	52.62	52.66	53.68	52.52	53.13	53.48	53.46	53.58	52.82	53.36	53.22
TOTAL SUPPLY	87.46	88.45		88.26	89.58				88.80	89.92	90.02

1 Includes condensates reported by OPEC countries, oil from non-conventional sources, e.g. Venezuelan Orimulsion (but not Orinoco extra-heavy oil), and non-oil inputs to Saudi Arabian MTBE. Orimulsion production reportedly ceased from January 2007.
2 Comprises crude oil, condensates, NGLs and oil from non-conventional sources
3 Includes small amounts of production from Israel, Jordan and Bahrain.
4 Net volumetric gains and losses in refining and marine transportation losses.
5 As of the July 2010 OMR, Global Biofuels comprise all world biofuel production including fuel ethanol from the US and Brazil.
6 Total OPEC comprises all countries which were OPEC members at 1 January 2009. OPEC Historical Composition comprises countries which were OPEC members at that point in time. Total Non-OPEC excludes all countries that were OPEC members at 1 January 2009. Non-OPEC Historical Composition excludes countries that were OPEC members at that point in time.

Table 4

OECD INDUSTRY STOCKS[1] AND QUARTERLY STOCK CHANGES

	RECENT MONTHLY STOCKS[2] in Million Barrels					PRIOR YEARS' STOCKS[2] in Million Barrels			STOCK CHANGES in mb/d			
	Jul2011	Aug2011	Sep2011	Oct2011	Nov2011*	Nov2008	Nov2009	Nov2010	4Q2010	1Q2011	2Q2011	3Q2011
North America												
Crude	486.8	484.9	466.3	477.6	474.1	449.7	464.3	498.4	-0.30	0.25	0.02	-0.36
Motor Gasoline	247.9	246.2	250.6	243.0	251.0	232.6	252.6	244.3	0.02	-0.03	-0.01	0.02
Middle Distillate	231.7	230.0	227.8	218.0	218.2	205.5	243.7	236.9	-0.07	-0.24	-0.04	0.16
Residual Fuel Oil	45.2	46.1	42.4	44.4	46.9	47.0	43.3	47.9	0.01	-0.05	-0.01	-0.02
Total Products[3]	710.7	710.1	707.0	688.5	693.2	671.7	715.2	705.7	-0.31	-0.58	0.29	0.30
Total[4]	1360.4	1361.7	1341.0	1334.1	1330.4	1283.8	1334.4	1366.2	-0.77	-0.39	0.49	0.02
Europe												
Crude	310.1	310.5	308.3	299.7	305.5	328.3	343.3	322.1	0.04	0.01	-0.05	-0.11
Motor Gasoline	92.2	90.8	89.0	90.6	95.0	100.3	97.5	96.8	0.02	0.04	-0.09	-0.03
Middle Distillate	274.8	273.7	265.4	261.0	262.9	270.5	294.8	283.8	-0.02	0.09	-0.13	-0.09
Residual Fuel Oil	63.3	67.7	64.1	63.1	64.7	73.7	68.8	69.6	-0.09	-0.01	-0.03	0.00
Total Products[3]	548.4	552.9	538.6	535.8	543.9	561.8	570.5	557.8	-0.07	0.11	-0.22	-0.08
Total[4]	925.8	929.5	911.3	901.4	916.7	964.3	981.6	948.4	0.02	0.06	-0.24	-0.23
Pacific												
Crude	163.7	155.2	157.2	155.4	149.5	166.4	167.1	164.8	0.03	0.00	0.01	-0.03
Motor Gasoline	25.2	25.1	24.4	24.0	23.2	24.1	25.2	24.5	-0.01	0.01	0.01	-0.01
Middle Distillate	66.5	70.0	67.8	66.6	67.5	69.7	69.2	65.3	-0.07	-0.06	0.14	0.01
Residual Fuel Oil	21.2	19.4	20.2	19.9	19.8	20.8	19.2	19.4	-0.03	0.02	0.01	-0.01
Total Products[3]	176.7	180.7	181.0	180.5	177.3	186.4	177.4	178.8	-0.16	-0.09	0.18	0.10
Total[4]	411.9	409.7	411.6	407.4	399.8	426.1	407.3	414.7	-0.13	-0.10	0.26	0.07
Total OECD												
Crude	960.6	950.7	931.8	932.7	929.1	944.4	974.7	985.3	-0.23	0.26	-0.02	-0.49
Motor Gasoline	365.3	362.1	363.9	357.6	369.2	357.0	375.2	365.6	0.03	0.02	-0.09	-0.02
Middle Distillate	573.0	573.8	561.1	545.6	548.5	545.7	607.7	586.0	-0.16	-0.21	-0.03	0.07
Residual Fuel Oil	129.7	133.1	126.7	127.3	131.4	141.4	131.3	136.9	-0.12	-0.04	-0.04	-0.03
Total Products[3]	1435.8	1443.6	1426.5	1404.8	1414.4	1419.8	1463.1	1442.3	-0.54	-0.56	0.25	0.32
Total[4]	2698.1	2700.9	2663.9	2642.9	2647.0	2674.1	2723.2	2729.3	-0.87	-0.43	0.50	-0.14

OECD GOVERNMENT-CONTROLLED STOCKS[5] AND QUARTERLY STOCK CHANGES

	RECENT MONTHLY STOCKS[2] in Million Barrels					PRIOR YEARS' STOCKS[2] in Million Barrels			STOCK CHANGES in mb/d			
	Jul2011	Aug2011	Sep2011	Oct2011	Nov2011*	Nov2008	Nov2009	Nov2010	4Q2010	1Q2011	2Q2011	3Q2011
North America												
Crude	718.2	696.5	696.0	696.0	696.0	701.8	726.1	726.6	0.00	0.00	0.00	-0.33
Products	0.0	0.0	0.0	0.0	0.7	2.0	2.0	2.0	0.00	-0.02	0.00	0.00
Europe												
Crude	183.4	183.1	183.0	182.8	182.8	187.3	183.7	186.2	0.05	-0.01	-0.01	-0.02
Products	237.0	236.5	235.9	235.5	235.5	226.8	241.0	231.2	-0.01	-0.03	0.05	-0.01
Pacific												
Crude	389.1	390.6	390.7	391.1	392.6	386.2	388.8	387.1	0.08	0.02	0.00	0.00
Products	18.5	18.7	18.7	20.0	20.0	19.2	20.0	20.0	0.00	0.00	0.00	-0.01
Total OECD												
Crude	1290.8	1270.2	1269.6	1269.9	1271.4	1275.3	1298.5	1299.9	0.13	0.01	-0.01	-0.36
Products	255.5	255.2	254.6	255.5	256.1	248.0	263.0	253.2	-0.01	-0.05	0.05	-0.03
Total[4]	1547.7	1526.8	1525.6	1526.7	1528.8	1524.2	1563.0	1554.4	0.12	-0.03	0.04	-0.38

* estimated

1 Stocks are primary national territory stocks on land (excluding utility stocks and including pipeline and entrepot stocks where known) and include stocks held by industry to meet IEA, EU and national emergency reserve commitments and are subject to government control in emergencies.

2 Closing stock levels.

3 Total products includes gasoline, middle distillates, fuel oil and other products.

4 Total includes NGLs, refinery feedstocks, additives/oxygenates and other hydrocarbons.

5 Includes government-owned stocks and stock holding organisation stocks held for emergency purposes.

Table 5

TOTAL STOCKS ON LAND IN OECD COUNTRIES[1]

('millions of barrels' and 'days')

	End September 2010		End December 2010		End March 2011		End June 2011		End September 2011 [3]	
	Stock Level	Days Fwd[2] Demand	Stock Level	Days Fwd Demand	Stock Level	Days Fwd Demand	Stock Level	Days Fwd Demand	Stock Level	Days Fwd Demand
North America										
Canada	195.5	86	196.5	86	185.2	84	189.7	80	187.8	-
Mexico	49.0	24	44.5	22	45.0	22	46.5	22	46.1	-
United States[4]	1863.2	97	1796.1	94	1769.5	94	1807.6	96	1780.9	-
Total[4]	2129.8	89	2059.2	87	2021.7	87	2065.9	88	2036.9	88
Pacific										
Australia	40.5	41	38.1	39	39.1	39	39.5	39	38.2	-
Japan	581.8	127	588.3	121	575.4	147	593.2	137	601.1	-
Korea	173.5	74	165.4	70	170.2	83	175.2	79	173.6	-
New Zealand	8.2	53	8.2	51	8.0	53	8.2	56	8.1	-
Total	804.0	100	800.0	96	792.7	111	816.0	106	821.0	99
Europe[5]										
Austria	18.9	65	19.7	77	19.4	77	19.6	70	18.0	-
Belgium	34.3	51	33.6	50	37.0	59	38.1	58	36.7	-
Czech Republic	21.1	105	21.2	117	21.5	106	21.7	109	20.1	-
Denmark	26.9	159	26.8	171	21.4	132	21.5	134	22.4	-
Finland	28.5	121	27.8	127	26.9	133	27.0	130	27.0	-
France	163.4	88	168.2	91	167.4	94	166.7	89	160.0	-
Germany	285.6	113	286.8	122	289.4	124	290.8	114	282.6	-
Greece	36.3	95	34.3	92	33.9	106	32.6	99	30.9	-
Hungary	15.9	103	15.9	119	17.4	124	17.3	118	16.2	-
Ireland	11.4	68	9.8	63	10.8	79	10.2	73	11.3	-
Italy	126.6	81	133.3	93	131.8	90	130.0	88	130.1	-
Luxembourg	0.7	12	0.6	10	0.5	9	0.6	9	0.7	-
Netherlands	121.2	122	125.8	129	125.7	124	117.8	114	114.3	-
Norway	20.8	77	20.8	81	21.1	93	23.5	96	24.5	-
Poland	64.2	107	65.5	123	62.8	109	64.6	105	65.2	-
Portugal	22.8	84	22.9	89	23.5	87	23.3	86	21.9	-
Slovak Republic	8.6	101	8.3	109	9.0	111	8.9	104	8.3	-
Spain	133.0	92	133.2	93	132.9	97	130.1	94	131.2	-
Sweden	34.4	94	32.4	94	33.7	101	32.5	101	32.6	-
Switzerland	37.7	146	36.8	156	36.6	168	37.2	150	37.0	-
Turkey	58.5	90	58.5	101	58.3	85	56.6	73	56.4	-
United Kingdom	94.5	59	88.8	55	92.8	57	84.9	53	84.1	-
Total	1365.5	92	1371.1	97	1374.0	97	1355.4	92	1331.6	93
Total OECD	4299.2	92	4230.3	92	4188.5	94	4237.3	92	4189.5	92
DAYS OF IEA Net Imports[6]	-	145	-	146	-	146	-	147	-	145

1 Total Stocks are industry and government-controlled stocks (see breakdown in table below). Stocks are primary national territory stocks on land (excluding utility stocks and including pipeline and entrepot stocks where known) they include stocks held by industry to meet IEA, EU and national emergency reserves commitments and are subject to government control in emergencies.
2 Note that days of forward demand represent the stock level divided by the forward quarter average daily demand and is very different from the days of net imports used for the calculation of IEA Emergency Reserves.
3 End September 2011 forward demand figures are IEA Secretariat forecasts.
4 US figures exclude US territories. Total includes US territories.
5 Data not available for Iceland.
6 Reflects stock levels and prior calendar year's net imports adjusted according to IEA emergency reserve definitions (see www.iea.org/netimports.asp). Net exporting IEA countries are excluded.

TOTAL OECD STOCKS

CLOSING STOCKS	Total	Government[1] controlled	Industry	Total	Government[1] controlled	Industry
	Millions of Barrels			*Days of Fwd. Demand[2]*		
3Q2008	4164	1522	2641	88	32	56
4Q2008	4206	1527	2679	90	33	57
1Q2009	4278	1547	2731	96	35	61
2Q2009	4306	1561	2745	95	35	61
3Q2009	4327	1564	2763	94	34	60
4Q2009	4205	1564	2641	92	34	57
1Q2010	4241	1567	2675	94	35	59
2Q2010	4319	1562	2757	93	34	59
3Q2010	4299	1549	2750	92	33	59
4Q2010	4230	1561	2670	92	34	58
1Q2011	4188	1558	2631	94	35	59
2Q2011	4237	1561	2676	92	34	58
3Q2011	4189	1526	2664	92	33	58

1 Includes government-owned stocks and stock holding organisation stocks held for emergency purposes.
2 Days of forward demand calculated using actual demand except in 3Q2011 (when latest forecasts are used).

Table 6

IEA MEMBER COUNTRY DESTINATIONS OF SELECTED CRUDE STREAMS[1]

(million barrels per day)

	2008	2009	2010	4Q10	1Q11	2Q11	3Q11	Aug 11	Sep 11	Oct 11	Year Earlier Oct 10	Year Earlier change
Saudi Light & Extra Light												
North America	0.70	0.52	0.69	0.75	0.71	0.72	0.47	0.55	0.31	0.59	0.67	-0.09
Europe	0.70	0.59	0.66	0.69	0.70	0.79	0.93	1.00	0.82	0.90	0.64	0.26
Pacific	1.22	1.28	1.21	1.26	1.33	1.14	1.21	1.12	1.27	1.22	1.03	0.19
Saudi Medium												
North America	0.64	0.40	0.36	0.36	0.33	0.36	0.40	0.33	0.45	0.35	0.36	-0.01
Europe	0.05	0.02	0.00	-	-	0.02	0.05	0.07	0.03	0.01	-	-
Pacific	0.39	0.34	0.34	0.37	0.39	0.38	0.43	0.47	0.45	0.33	0.33	0.00
Saudi Heavy												
North America	0.07	0.03	0.02	0.01	0.02	0.03	0.03	-	0.07	0.02	-	-
Europe	0.09	0.02	0.00	-	0.00	0.00	0.03	0.02	0.02	0.02	-	-
Pacific	0.24	0.15	0.22	0.21	0.20	0.21	0.23	0.19	0.25	0.08	0.20	-0.12
Iraqi Basrah Light[2]												
North America	0.60	0.40	0.36	0.29	0.21	0.41	0.31	0.47	0.23	0.01	0.21	-0.20
Europe	0.21	0.12	0.09	0.08	0.03	0.10	0.19	0.21	0.19	0.13	0.11	0.01
Pacific	0.15	0.24	0.29	0.38	0.40	0.26	0.38	0.39	0.35	0.32	0.44	-0.11
Iraqi Kirkuk												
North America	0.08	0.06	0.03	0.04	0.11	0.07	0.05	0.15	0.00	0.03	0.04	-0.01
Europe	0.23	0.31	0.27	0.23	0.21	0.31	0.32	0.29	0.26	0.29	0.21	0.09
Pacific	-	-	-	-	-	-	-	-	-	-	-	-
Iranian Light												
North America	-	-	-	-	-	-	-	-	-	-	-	-
Europe	0.23	0.15	0.24	0.18	0.24	0.28	0.20	0.20	0.17	0.20	0.16	0.04
Pacific	0.08	0.07	0.04	0.01	0.06	0.03	0.04	0.07	0.02	0.02	-	-
Iranian Heavy[3]												
North America	-	-	-	-	-	-	-	-	-	-	-	-
Europe	0.49	0.40	0.49	0.43	0.34	0.59	0.73	0.68	0.71	0.58	0.54	0.04
Pacific	0.61	0.57	0.52	0.52	0.63	0.41	0.51	0.49	0.53	0.51	0.50	0.01
Venezuelan Light & Medium												
North America	0.62	0.39	0.14	0.16	0.06	0.30	0.24	0.31	0.24	0.30	0.11	0.20
Europe	0.06	0.07	0.02	0.01	0.03	0.01	0.02	0.01	0.02	-	0.03	-
Pacific	-	-	-	-	-	-	-	-	-	-	-	-
Venezuelan 22 API and heavier												
North America	0.65	0.75	0.86	0.75	0.89	0.77	0.70	0.77	0.51	0.65	0.69	-0.05
Europe	0.07	0.07	0.06	0.05	0.04	0.05	0.06	0.07	0.05	0.04	0.07	-0.03
Pacific	-	-	-	-	-	-	-	-	-	-	-	-
Mexican Maya												
North America	1.02	0.93	0.91	0.92	0.82	0.80	0.84	0.93	0.76	0.81	0.90	-0.09
Europe	0.14	0.10	0.11	0.09	0.14	0.12	0.12	0.09	0.11	0.11	0.15	-0.04
Pacific	-	-	-	-	-	-	-	-	-	-	-	-
Mexican Isthmus												
North America	0.01	0.01	0.04	0.09	0.05	0.08	0.06	0.06	0.07	0.07	0.07	0.00
Europe	0.01	0.01	0.02	0.05	0.01	0.02	0.00	-	-	0.01	0.10	-0.09
Pacific	-	-	-	-	-	-	-	-	-	-	-	-
Russian Urals												
North America	0.05	0.15	0.08	0.03	0.01	-	-	-	-	0.05	0.07	-0.02
Europe	1.81	1.72	1.80	1.71	1.76	1.87	1.52	1.35	1.56	1.57	1.60	-0.04
Pacific	-	-	-	-	-	-	-	-	-	-	-	-
Nigerian Light[4]												
North America	0.68	0.54	0.60	0.58	0.62	0.60	0.43	0.48	0.22	0.75	0.56	0.19
Europe	0.29	0.32	0.34	0.49	0.40	0.40	0.54	0.62	0.55	0.39	0.47	-0.09
Pacific	-	0.00	-	-	0.05	0.04	0.06	0.05	0.06	0.06	-	-
Nigerian Medium												
North America	0.27	0.21	0.25	0.22	0.20	0.18	0.18	0.17	0.17	0.17	0.20	-0.03
Europe	0.14	0.13	0.09	0.11	0.14	0.17	0.11	0.14	0.14	0.10	0.09	0.01
Pacific	-	-	-	-	-	-	-	-	-	-	-	-

1 Data based on monthly submissions from IEA countries to the crude oil import register (in '000 bbl), subject to availability. May differ from Table 8 of the Report.
IEA North America includes United States and Canada.
IEA Europe includes all countries in OECD Europe except Hungary. The Slovak Republic and Poland is excluded through December 2007 but included thereafter.
IEA Pacific data includes Australia, New Zealand, Korea and Japan.

2 Iraqi Total minus Kirkuk.

3 Iranian Total minus Iranian Light.

4 33° API and lighter (e.g., Bonny Light, Escravos, Qua Iboe and Oso Condensate).

Table 7
REGIONAL OECD IMPORTS[1,2]

(thousand barrels per day)

	2008	2009	2010	4Q10	1Q11	2Q11	3Q11	Aug-11	Sep-11	Oct-11	Year Earlier Oct-10	Year Earlier % change
Crude Oil												
North America	8076	7353	7346	6625	6571	6928	6766	6711	6590	6826	6474	5%
Europe	9776	8893	9076	9110	8901	8903	9390	9580	9283	8820	8731	1%
Pacific	6605	6082	6249	6479	6645	6086	6255	6232	6271	6217	6077	2%
Total OECD	24457	22329	22671	22213	22117	21917	22411	22523	22145	21863	21432	2%
LPG												
North America	31	13	8	6	21	4	4	4	5	6	7	-6%
Europe	268	260	270	299	313	284	304	297	336	318	229	39%
Pacific	589	529	558	567	569	547	580	525	573	508	580	-12%
Total OECD	887	802	836	872	904	836	888	825	914	833	815	2%
Naphtha												
North America	56	22	36	35	34	51	43	45	45	40	48	-16%
Europe	298	352	390	382	292	336	285	218	282	325	318	2%
Pacific	776	841	900	893	917	830	906	928	910	809	949	-15%
Total OECD	1130	1215	1326	1309	1243	1217	1234	1191	1237	1174	1315	-11%
Gasoline[3]												
North America	1077	878	788	712	668	981	704	776	594	612	767	-20%
Europe	215	193	174	127	223	221	216	228	207	226	79	187%
Pacific	90	96	64	67	71	61	70	87	63	83	64	29%
Total OECD	1383	1167	1025	907	961	1262	990	1090	864	921	910	1%
Jet & Kerosene												
North America	64	62	76	89	62	86	81	75	65	65	96	-33%
Europe	401	452	417	396	320	367	451	450	455	438	405	8%
Pacific	34	53	40	46	58	43	45	39	61	65	45	45%
Total OECD	500	567	532	531	440	497	578	565	582	568	546	4%
Gasoil/Diesel												
North America	74	55	49	14	46	30	32	25	48	5	6	-4%
Europe	871	1035	1045	1235	1078	931	934	781	1096	1143	1216	-6%
Pacific	119	87	97	92	99	153	123	113	135	146	81	80%
Total OECD	1064	1177	1191	1340	1224	1114	1088	919	1279	1294	1303	-1%
Heavy Fuel Oil												
North America	288	270	277	254	345	305	193	204	195	206	235	-13%
Europe	458	534	529	502	505	582	651	676	614	629	534	18%
Pacific	125	113	117	101	147	111	156	169	169	142	106	34%
Total OECD	871	917	923	857	997	997	1001	1049	978	977	875	12%
Other Products												
North America	1078	870	805	906	855	896	900	833	872	747	962	-22%
Europe	734	770	666	737	683	776	725	857	640	571	761	-25%
Pacific	298	325	335	352	383	252	343	318	394	316	293	8%
Total OECD	2110	1964	1806	1996	1921	1924	1967	2008	1906	1634	2016	-19%
Total Products												
North America	2667	2171	2038	2017	2032	2355	1958	1962	1824	1681	2120	-21%
Europe	3245	3595	3491	3678	3415	3497	3565	3507	3630	3651	3541	3%
Pacific	2032	2045	2111	2118	2244	1995	2223	2179	2306	2068	2118	-2%
Total OECD	7944	7810	7639	7812	7690	7848	7746	7648	7760	7401	7780	-5%
Total Oil												
North America	10743	9524	9384	8641	8603	9283	8724	8673	8415	8507	8745	-3%
Europe	13022	12488	12567	12788	12316	12401	12955	13087	12913	12471	12272	2%
Pacific	8637	8127	8360	8596	8888	8081	8478	8411	8577	8285	8195	1%
Total OECD	32401	30139	30310	30025	29807	29765	30157	30171	29904	29264	29212	0%

1 Based on Monthly Oil Questionnaire data submitted by OECD countries in tonnes and converted to barrels.
2 Excludes intra-regional trade.
3 Includes additives.

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For information on the data sources, definitions, technical terms and general approach used in preparing the *Oil Market Report (OMR)*, *Medium-Term Oil and Gas Markets (MTOGM)* and *Annual Statistical Supplement* (current issue of the Statistical Supplement dated 10 August 2011), readers are referred to the *Users' Guide* at www.oilmarketreport.org/glossary.asp. It should be noted that the spot crude and product price assessments are based on daily Platts prices, converted when appropriate to US$ per barrel according to the Platts specification of products (© 2012 Platts - a division of The McGraw-Hill Companies, Inc.).

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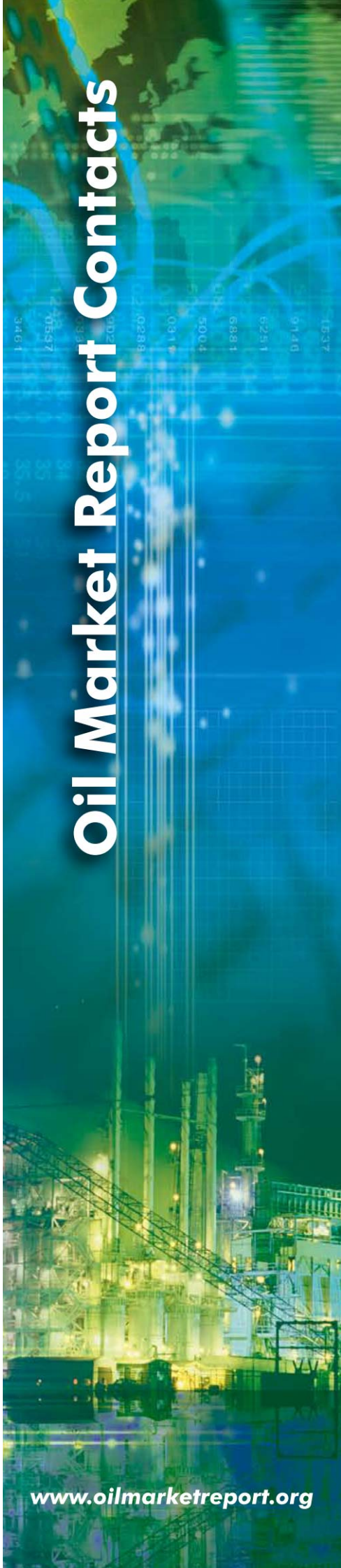

International Energy Agency

10 February 2012

HIGHLIGHTS

- **An uneasy balance characterised oil markets in January, with tensions surrounding Iran counteracting a weaker economic outlook.** The onset of winter weather pushed prices for Brent to six-month highs in early February. Brent was last trading at $117.50/bbl. By contrast, rising stocks at the Cushing storage depot pressured WTI prices lower in early February, to $99.50/bbl.

- **Global oil demand is forecast to climb to 89.9 mb/d in 2012, a gain of 0.8 mb/d (or 0.9%) on the year.** Growth has been curtailed by 0.3 mb/d versus January's *OMR*, as the economic growth rate that underpins the global oil demand outlook has been reduced to 3.3% from 4.0% previously.

- **Non-OPEC supply fell by 0.2 mb/d to 53.2 mb/d in January,** on lower global biofuels output, an escalation of conflict in Syria and between Sudan and South Sudan, and continuing outages in the North Sea. North American light tight oil production and NGLs, as well as increasing production in Latin America, offset declines elsewhere, supporting an expected 0.9 mb/d rebound in non-OPEC supply in 2012.

- **OPEC crude oil supply in January rose to 30.9 mb/d, the highest level since October 2008,** on a steady ramp-up in Libyan production and sustained output from Saudi Arabia and the UAE. The 'call on OPEC crude and stock change' is cut by 100 kb/d for 2012, to 29.9 mb/d. OPEC's 'effective' spare capacity is largely unchanged, at 2.82 mb/d.

- **Global refinery crude throughput estimates for 1Q12 are largely unchanged** from last month's report, as slightly higher OECD runs are offset by a weaker outlook for Latin America, following further capacity rationalisation. At 74.9 mb/d, global 1Q12 runs are forecast 220 kb/d above year-ago levels and unchanged from the previous quarter.

- **December OECD industry oil stocks declined by 40.8 mb to 2 611 mb,** and remained below the five-year average for a sixth consecutive month. Forward demand cover fell by 0.7 days to 57.2 days, but remains 1.6 days above the five-year average. January preliminary data show a shallower-than-normal 11.4 mb build in OECD industry stocks.

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- Plan, lead and co-ordinate the preparation of the IEA's monthly ***Oil Market Report***, annual ***Medium-Term Oil Market Report*** and Annual Statistical Supplement, the presentation of results for the Governing Board and the Standing Group on the Oil Market (SOM), and follow up with media, governments and the oil industry.
- Advise Governments on recent trends in the global oil market and medium-term developments and analysis on the role of physical and financial markets in oil price formation, particularly highlighting policy-related issues and recommending appropriate action; plan and coordinate meetings of the Standing Group on the Oil Market.
- Supervise the work of professional and support staff and consultants.
- Develop and maintain close contacts with government officials on important policy developments, as well as with oil companies and consultants.
- Co-operate with other Divisions in the IEA on, inter alia, oil industry aspects of their work, country reviews, the development of long-range energy outlooks and environmental issues.
- Provide market information and expertise during oil emergencies and support and participate in exercises related to maintaining emergency response capabilities.

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- Ten to fifteen years' experience in the international oil industry with experience in the field of oil and energy policy. Specific areas of expertise include any or all of the following: oil production, refining and distribution, oil trade, oil stock policy or product quality issues.
- Strong analytical, communication and interpersonal skills, political sensitivity and ability to establish and maintain effective working relations with senior government and industry officials.
- Proven ability in team-building as well as in planning, co-ordinating and supervising team work. Strong achievement orientation and personal initiative, as well as the ability to work under pressure, often to tight deadlines.
- An excellent level of oral and written communication skills and excellent drafting ability in English; working knowledge of French and other languages would be an advantage.

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DON'T FORGET THE BIT IN THE MIDDLE

It is tempting, amid economic turmoil on one hand, and a ratcheting higher of tensions over Iran on the other, to see the oil market via the polar extremes of end-user demand and crude oil production. For sure, this month's report dwells on recent economic downgrades, and resultant weaker oil products demand growth for 2012. As we noted last month, this is providing a ceiling for otherwise stubbornly-high crude prices. Equally impossible to ignore is the influence of conjecture over the potential impact of international sanctions on Iranian crude supplies. In that regard, the market in 2012 likely has sufficient supply-side flexibility (between existing OPEC spare capacity and expected 2012 capacity additions among OPEC and non-OPEC producers) to adjust to any loss in Iranian volumes. There is also, as ever, the back-stop provided by strategic stocks in the event that market mechanisms fail. Despite these assurances, *perceptions* of impending supply issues are clearly placing a floor under oil prices for now.

However, simply focusing on the extremes of final oil product demand and upstream production capacity neglects the ever-important influence on markets and prices of the midstream and downstream segments of the industry. Changes in the availability of pipeline capacity and marine tankers, shifts in strategic storage and fluctuations in refinery processing capacity can all play a role in influencing not just absolute prices but, more importantly, price differentials, arbitrage flows and therefore overall market dynamics. While the potential for economic meltdown or heightened geopolitical tension makes good headlines, and provides an envelope for prices in general, it cannot wholly explain price dynamics.

The renewed widening of Brent's now entrenched premium to WTI is a case in point. There are multiple contributory factors, but a shortage of pipeline capacity to evacuate crude from the US Midwest to US Gulf refineries is central to the issue. An added twist is the deferral of the Keystone XL pipeline project, even though that decision will arguably prompt development of alternative routes to the US Gulf or, longer term, push Canadian crude towards the Pacific Coast. In a global context, strong relative Brent prices would normally confine Atlantic Basin crudes within the region. However, Japanese power sector oil demand, after nuclear capacity shutdowns, is strengthening Asian fuel oil prices, and so too heavier Middle East crude prices. An arbitrage for Brent-linked African crudes into Asia has therefore opened.

The importance of logistical infrastructure is also emphasised by the current Sudan-South Sudan stalemate. A pipeline tariff dispute is depriving Asian buyers of marginal barrels of fuel oil-rich crude, also used for direct burning. If the situation continues, it may boost the attractiveness to Asian buyers of Iranian barrels offered into the region at discounted prices, notwithstanding EU and US sanctions.

Another overlooked element in the Iranian situation concerns confusion over the likely implementation of the US and European financial measures. This is causing marine insurers and ship owners to be doubly cautious over the cover they provide or the routes they sail. It will likely complicate crude shipments, not only those transiting the Middle East Gulf, but also on a broader global basis. Why take a risk on insuring a vessel that has regularly called at Iranian ports in recent months, if it might result in punitive economic measures from the middle of the year? That said, ample new-build tanker capacity may ease the impact of what might otherwise be a logistical barrier to trade.

We also note this month that incremental midstream demand, for example to fill new strategic storage capacity in China, could pull upwards of 200 kb/d extra crude into Asian markets, over and above rising regional products demand and refinery runs. Finally, the apparent paradox of weakening European 2012 oil demand, but strengthening refining margins, looks less puzzling when recent refinery rationalisation is taken into account. A spate of actual and threatened closures, from Petroplus plants in Europe, through to major export-oriented units in the Caribbean, plus a late-winter freeze in Europe and Asia, have driven products cracks sharply higher, despite an increasingly gloomy economic picture. The midstream and downstream meat in the sandwich is often just as interesting as the more visible bread that surrounds it.

DEMAND

Summary

- **An increasingly problematic global economic backdrop – confirmed by the IMF lowering its economic projections – is seen supporting 0.8 mb/d of oil demand growth in 2012** (versus 1.1 mb/d in January's *OMR*). Global GDP growth is revised down to 3.3% for 2012, from the 4.0% level assumed since September. Total oil product demand will climb to 89.9 mb/d in 2012, from 89.1 mb/d in 2011.

- **A two-speed outlook prevails – with robust oil demand growth envisaged in the non-OECD, while demand continues to fall across most of the OECD.** Non-OECD oil demand will rise by 1.2 mb/d (2.8%) in 2012, more than offsetting the reduction in OECD consumption of 0.4 mb/d (0.8%), mimicking the demand trends seen in 2011.

- **The most recent data suggest a global demand contraction of 5 kb/d in the fourth quarter of 2011** year-on-year, the first such drop since the global credit crunch, albeit 4Q demand in North America and non-OECD Asia came in stronger than preliminary data suggested. Europe saw the steepest year-on-year fall in 4Q11, with demand 690 kb/d lower amid weaker economic activity and mild weather. North American demand was 530 kb/d less than a year ago.

Global Oil Demand (2010-2012)

(million barrels per day)

	1Q10	2Q10	3Q10	4Q10	2010	1Q11	2Q11	3Q11	4Q11	2011	1Q12	2Q12	3Q12	4Q12	2012
Africa	3.3	3.4	3.4	3.4	3.4	3.4	3.3	3.3	3.4	3.3	3.5	3.5	3.5	3.6	3.5
Americas	29.5	30.0	30.6	30.2	30.1	30.1	29.8	30.2	29.8	30.0	29.8	29.7	30.4	30.2	30.0
Asia/Pacific	27.2	27.0	26.7	28.3	27.3	28.6	27.3	27.4	28.9	28.1	29.2	28.2	28.1	29.6	28.8
Europe	15.0	14.9	15.6	15.5	15.3	14.9	14.8	15.4	14.9	15.0	14.4	14.3	15.0	14.8	14.6
FSU	4.4	4.3	4.6	4.6	4.5	4.5	4.6	4.8	4.9	4.7	4.6	4.7	4.9	5.0	4.8
Middle East	7.4	7.8	8.3	7.7	7.8	7.6	8.0	8.5	8.0	8.0	7.8	8.2	8.6	8.1	8.2
World	**86.8**	**87.5**	**89.1**	**89.8**	**88.3**	**89.0**	**87.9**	**89.5**	**89.8**	**89.1**	**89.1**	**88.7**	**90.5**	**91.2**	**89.9**
Annual Chg (%)	2.6	3.2	3.5	3.5	3.2	2.6	0.4	0.5	0.0	0.8	0.1	1.0	1.1	1.5	0.9
Annual Chg (mb/d)	2.2	2.7	3.0	3.0	2.8	2.2	0.4	0.4	0.0	0.7	0.1	0.9	1.0	1.4	0.8
Changes from last OMR (mb/d)	-0.01	0.03	0.07	0.05	0.04	0.05	0.01	0.02	0.29	0.10	-0.34	-0.23	-0.18	0.13	-0.15

Global Overview

The world economy is now expected to expand by 3.3% in 2012, according to the IMF's January update, a sharp deterioration from its previously assumed 4.0% growth. The largest adjustments are applied to the euro area, down by 1.6 percentage points since September and leaving an absolute euro zone contraction of 0.5% in 2012. Much of Europe already saw declines in economic activity in 4Q11 and with further drops assumed for the 1Q12, this equates to the technical definition of recession. Non-OECD Europe, saw similar stark reductions, with 1.6 percentage points extracted from their growth estimates, to 1.1%.

In North America, the US outlook remained unchanged, at 1.8% GDP growth in 2012. However, both Canada and Mexico saw slight downgrades. The Mexican economy is now forecast to grow by 3.5% in 2012 (3.6% previously), while the Canadian estimate was reduced to 1.7%, from 1.9% previously.

A combination of the worsening external environment and weakening internal demand, meanwhile, curtailed the IMF's estimate for economic growth in the emerging economies, to 5.4% for 2012 (previously 6.1%). Notable reductions in expected 2012 economic growth affect China (8.2% versus a previous 9.0% estimate), India (7.0% versus 7.5%) and Brazil (3.0% versus 3.6%). Underlying the overall forecast is the IMF's assumption that European policymakers intensify efforts to address the debt crisis. Without such cohesive action, the Fund sees a worse economic outcome likely to occur.

Real GDP Growth
OMR dated 10 February 2012

% change	2011	2012
WORLD	**3.7**	**3.3**
OECD	**1.6**	**1.1**
OECD, North America	1.8	1.9
OECD, Europe	1.9	(0.2)
OECD, Pacific	0.6	2.3
Non-OECD	**6.2**	**5.7**
Africa	4.3	4.9
Latin America	4.4	3.8
China (excl. Hong Kong)	9.2	8.2
Other Asia	5.9	5.7
Non-OECD Europe	2.0	2.1
FSU	4.5	3.9
Middle East	4.4	3.3

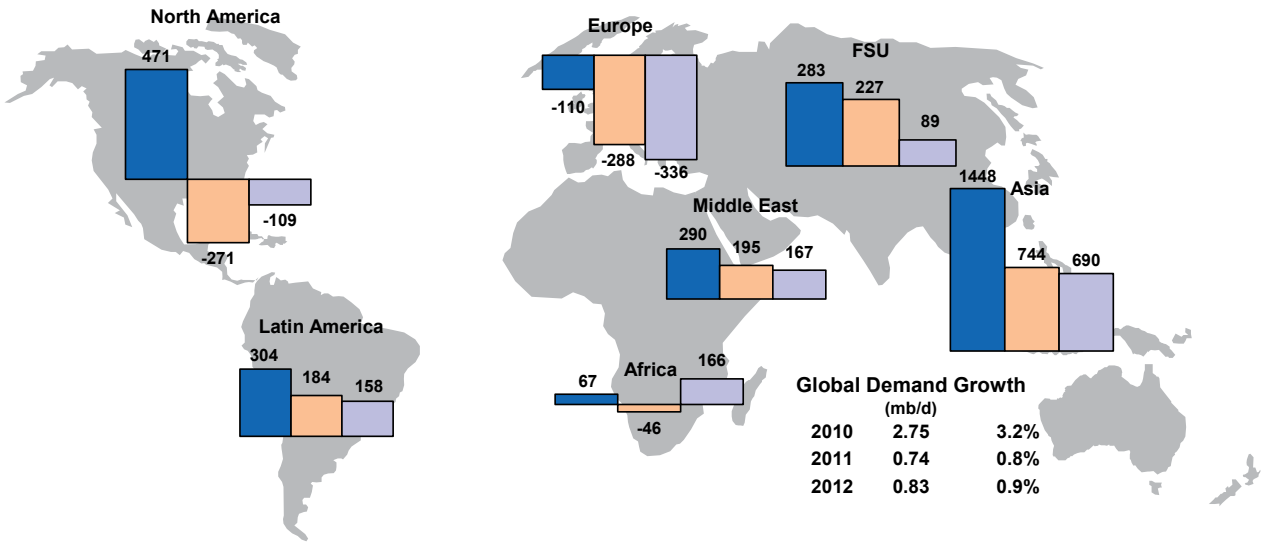
Sources: IMF, IEA

Current vs. Previous
OMR dated 12 October 2011

WORLD	**(0.1)**	**(0.6)**
OECD	**(0.1)**	**(0.8)**
OECD, North America	0.0	(0.1)
OECD, Europe	-	(1.6)
OECD, Pacific	(0.2)	(0.6)
Non-OECD	**(0.2)**	**(0.5)**
Africa	0.5	0.5
Latin America	(0.3)	(0.2)
China (excl. Hong Kong)	(0.3)	(0.8)
Other Asia	(0.4)	(0.6)
Non-OECD Europe	0.2	(0.9)
FSU	(0.1)	(0.4)
Middle East	(0.3)	(0.7)

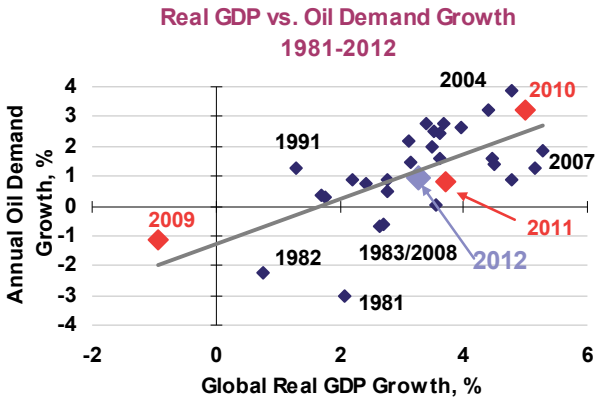
Having grown by as much as 5.0% in 2010, the global economy decelerated sharply in 2011, to 3.8%. Global oil demand rose from 85.6 mb/d in 2009, to 88.3 mb/d in 2010 and 89.1 mb/d in 2011, implying growth of 2.8 mb/d in 2010 and 0.7 mb/d in 2011. Admittedly, the 2010 trajectory was magnified by a post-recessionary bounce, but the sheer scale of the 2011 slowdown surprised most analysts. Our own projections for 2011 were progressively scaled back, from initial 4.3% GDP growth and 1.3 mb/d of incremental oil demand.

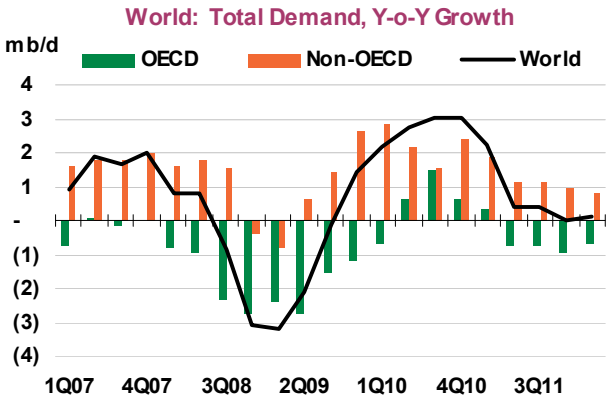
Global Oil Demand Growth 2010/2011/2012
thousand barrels per day



Despite the economic backdrop darkening further in 2012 – with global growth of just 3.3% envisaged – global oil demand is forecast to average 89.9 mb/d, up 0.8 mb/d on 2011. Growth marginally accelerates as prices, based on the futures strip, are unlikely to have the same negative influence on demand as in 2011.

Middle distillates will provide the majority of global demand growth in 2012, with gasoil demand projected to rise by 1.6% supported by the still relatively strong industrial base in emerging markets. Consumption of fuel oil and gasoline lags behind, with demand growth in these products forecast to inch just 0.4% higher in 2012. Fuel oil demand is suffering at the hands of switching to other less polluting fuels. Gasoline demand is ailing due to the continued, albeit slowing, trend in many parts of the transportation sector towards diesel and the plateau in car sales across the OECD.





OECD

Preliminary data for December imply an OECD-wide decline of around 1.2 mb/d (or 2.6%) on the corresponding period a year earlier, leading to a 4Q11 drop of 1.0 mb/d or 2.1% over 4Q10. Europe, predictably given the weak economic backdrop, led the downtrend, with year-on-year demand decline of 0.7 mb/d seen in both December and 4Q11 overall.

OECD Demand based on Adjusted Preliminary Submissions - December 2011

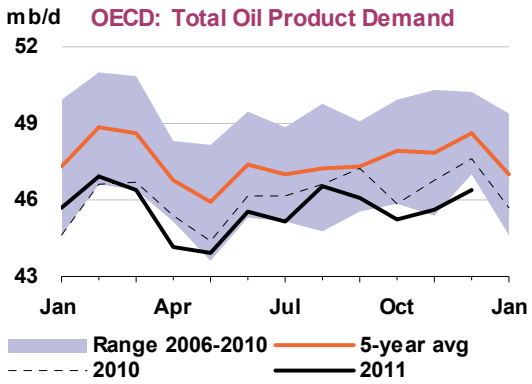
(million barrels per day)

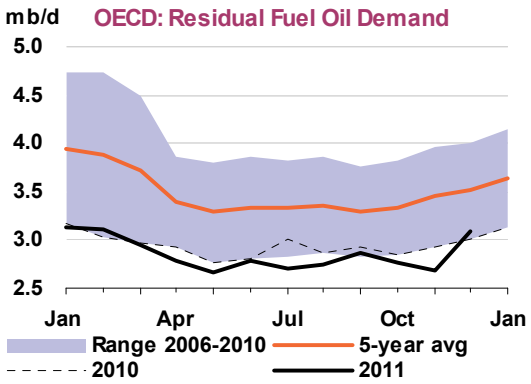
	Gasoline		Jet/Kerosene		Diesel		Other Gasoil		RFO		Other		Total Products	
	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa
OECD North America*	**10.16**	**-3.7**	**1.62**	**-0.6**	**4.01**	**1.3**	**1.09**	**-15.3**	**0.92**	**3.6**	**5.58**	**-8.04**	**23.37**	**-4.1**
US50	8.54	-4.2	1.43	-0.5	3.43	0.9	0.56	-27.6	0.51	-3.2	4.18	-10.6	18.65	-5.5
Canada	0.74	-0.4	0.10	-8.0	0.22	-2.3	0.37	1.9	0.10	-11.1	0.71	-1.6	2.24	-1.5
Mexico	0.83	-1.1	0.06	8.8	0.32	8.7	0.14	8.7	0.24	33.6	0.64	3.0	2.24	5.3
OECD Europe	**2.00**	**-3.1**	**1.20**	**-1.4**	**4.18**	**0.6**	**1.90**	**-15.5**	**1.20**	**-8.8**	**3.42**	**-4.8**	**13.91**	**-4.7**
Germany	0.45	9.9	0.19	24.8	0.66	10.5	0.40	-14.5	0.15	-10.8	0.51	-6.4	2.37	0.8
United Kingdom	0.31	-4.8	0.34	0.6	0.42	4.9	0.11	-3.0	0.06	-7.3	0.27	-3.3	1.51	-0.8
France	0.16	-6.4	0.15	4.4	0.68	-0.3	0.25	-39.7	0.11	-10.3	0.40	-7.2	1.75	-10.9
Italy	0.23	-9.5	0.08	-13.0	0.47	-2.7	0.13	-19.4	0.10	-24.8	0.48	-2.0	1.49	-7.6
Spain	0.12	-6.6	0.10	-8.5	0.44	-5.2	0.22	-12.9	0.18	-4.3	0.29	-8.0	1.35	-7.4
OECD Pacific	**1.68**	**2.3**	**1.20**	**-0.9**	**1.15**	**3.9**	**0.63**	**-3.3**	**0.98**	**22.9**	**3.47**	**7.6**	**9.11**	**5.5**
Japan	1.07	1.4	0.83	2.0	0.44	-2.0	0.48	-2.5	0.66	58.3	2.01	12.5	5.51	9.5
Korea	0.20	4.1	0.22	-12.9	0.29	3.2	0.14	-4.9	0.28	-19.3	1.30	3.6	2.43	-1.8
Australia	0.35	0.4	0.13	5.0	0.36	10.7	0.00	0.0	0.02	7.2	0.15	-5.5	1.02	3.6
OECD Total	**13.84**	**-2.9**	**4.02**	**-0.9**	**9.34**	**1.3**	**3.61**	**-13.6**	**3.10**	**3.2**	**12.47**	**-3.2**	**46.39**	**-2.6**

* Including US territories

Gasoline, gasoil and LPG demand in the OECD weakened in December, with all three seeing respective year-on-year demand declines of 0.4 mb/d. Only residual fuel oil bucked December's falling OECD demand trend, with a 0.1 mb/d y-o-y gain seen as the Japanese power sector continued to run fuel oil after mid-March's tsunami-related closures of nuclear facilities.

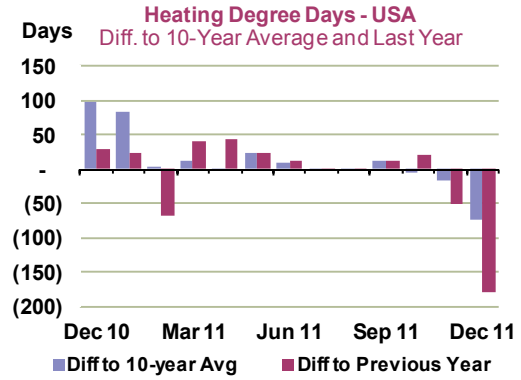
OECD demand is expected to fall by 0.4 mb/d y-o-y in 2012, or 0.8%, with gasoline accounting for more than 40% of the decline. In contrast, gasoil/diesel demand in the OECD should edge down by a more modest 35 kb/d (-0.3%). It is assumed that economic slow-down is sharpest in 4Q11 and 1Q12, so that the annual oil demand contraction tapers off running through 2012.

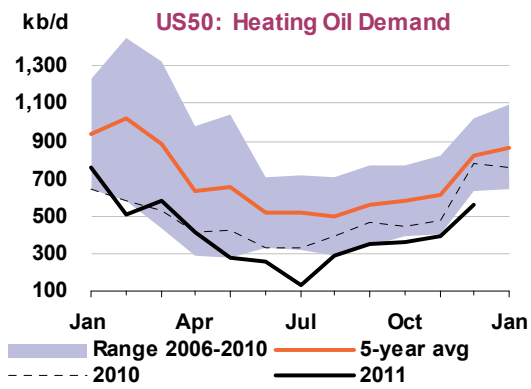




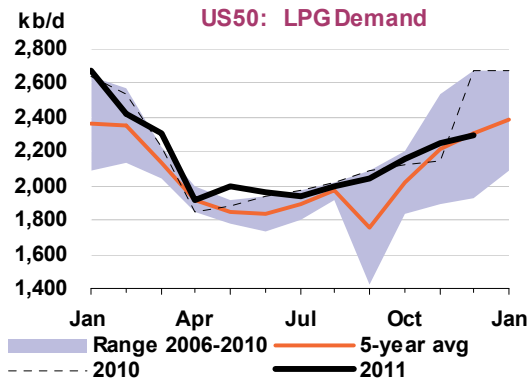
North America

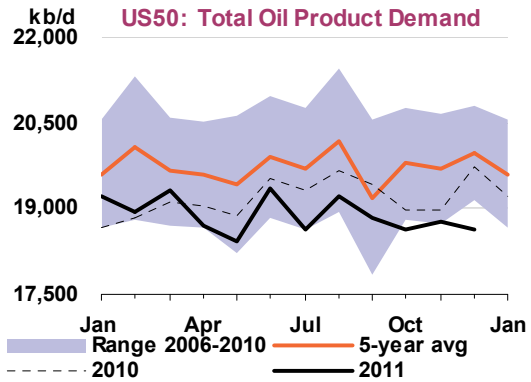
The latest preliminary statistics for December point towards sharply falling North American demand, down 4.1% on the corresponding reading a year earlier, despite numerous reports of economic resilience. Our estimates suggest a US demand contraction of more than 5% in December, with particularly sharp declines for heating oil and LPG given unseasonably mild weather.





The US economy has recently been showing signs of recovery. Early indicators of 4Q11 GDP growth point towards a 2.8% expansion, not far off its long term trend, while robust statistics have emerged in the employment and Purchasing Managers Indices (PMI). Consumption of oil products has however failed to match the more supportive economics, a consequence we believe of cash-strapped US consumers' heightened aversion to high prices. US gasoline prices, for example, have been clearly above year earlier levels since the end of 2009. The premium over previous year prices peaked, just shy of 40%, in May 2011, coinciding with a period of 3% year-on-year contraction in gasoline demand, a trend that appears to have become entrenched.

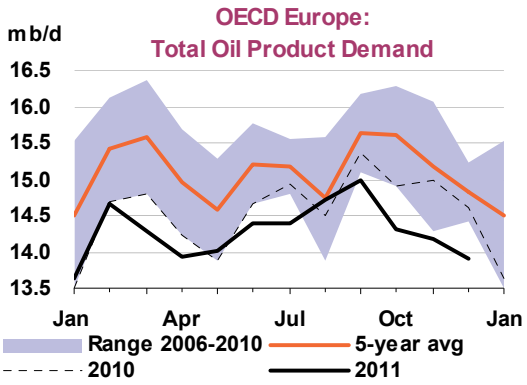


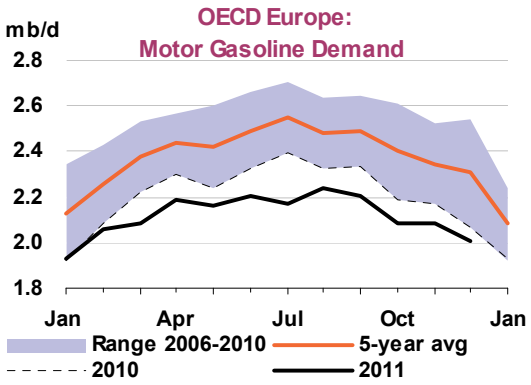


Despite starting 2011 in growth territory, US consumption has edged lower ever since, with the pace of the decline escalating to around 3% in both 3Q11 and 4Q11, taking demand to 18.7 mb/d. US demand is expected to decline by around 2% in the first quarter of 2012 and by 1% in the second quarter. The strengthening economy, from mid-year, could then support a slowly recuperating US demand trend. Nonetheless, US consumption for the year as a whole is seen edging 0.5% lower, equivalent to a decline of around 0.1 mb/d.

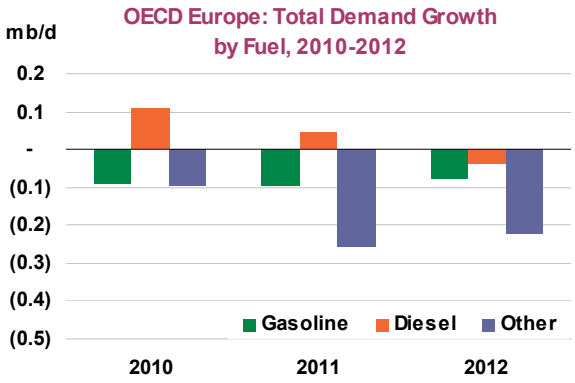
Europe

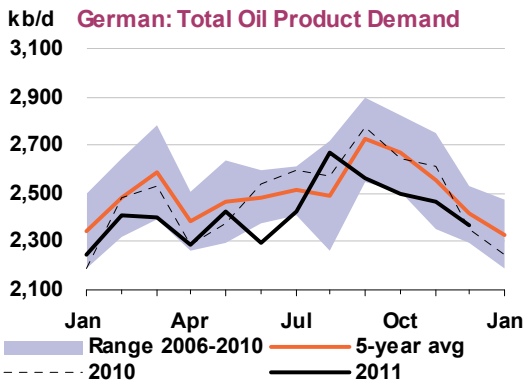
In line with the weak economic outlook, European oil demand will likely post the greatest relative decline in 2012, down by 0.3 mb/d from 2011 at an average 13.9 mb/d. The LPG, fuel oil and gasoline categories are forecast to contract most sharply, down by 4.7%, 4.4% and 3.7% respectively in 2012. Indeed all of the major European product sub-categories will see demand contractions, as the weaker economic backdrop coupled with persistently high assumed prices act to suppress consumption.





Preliminary December data point towards a year-on-year slide in OECD European oil demand for 4Q11 of 0.7 mb/d, or 4.7%, reflecting both economic slow-down and mild winter weather. *Markit's* Composite PMI (which tracks the overall health of the economy) for the euro zone fell to 48.3 in December – clearly signalling a decline in business sentiment (whereby any reading below 50 signals a contraction) – whereas the more oil-intensive Manufacturing PMI fell even further, to 46.9.





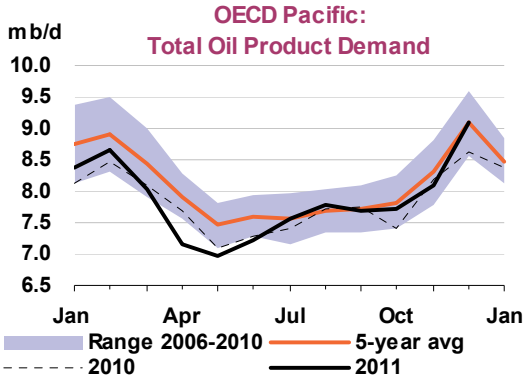
Having led the drop in 2011 consumption, the heavily indebted economies of southern Europe are expected to continue to dominate the forecast contraction in OECD European demand in 2012. **Italian** demand, for example, will fall by 4.9% (or 70 kb/d in 2012), as the IMF predicts a further economic drop of around 2.2%. The Italian forecast follows on from December's stark 7.6% contraction, with the residual fuel oil (-24.8%), naphtha (-15.4%) and LPG (-13.8%) categories particularly weak. The Italian manufacturing PMI fell to 44.3 in December. **Spain** will also see demand drop by around 4.5% in 2012, with the IMF predicting a 1.7% fall in economic activity. The Spanish projection comes on the back of December's 7.4% year-on-year drop. The manufacturing PMI for Spain fell to 43.7 in December.

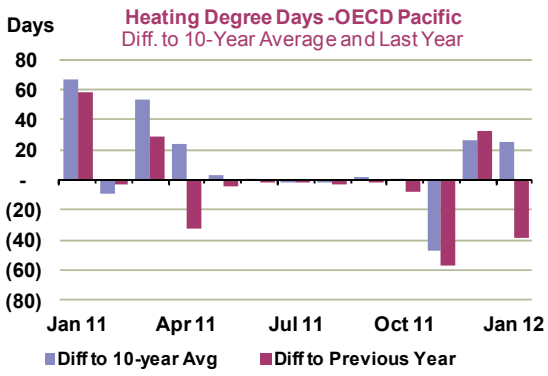
Slightly stronger demand is foreseen in the more northerly European nations. **German** demand, for example, is expected to fall by just 0.5% in 2012. The *IMF's* latest economic projection for Germany points towards a modest gain of 0.3% in 2012. The preliminary December series for Germany depicted a 0.8% year-on-year gain in demand. Mild December temperatures suppressed German heating oil demand, which fell by 14.5% on its year earlier level. Demand in the **Netherlands** is expected to fall by less than 1%, with GDP growth assumed at 0.2% in 2012.

French December demand more closely matched the south European trend, declining y-o-y by 10.9%. Heating oil (-39.7%) and LPG (-27.0%) led the decline, underpinned by milder than normal December temperatures. The generally ailing economic backdrop, with unemployment above 10% and broadly flat GDP foreseen for 2012, is expected to keep oil demand on a declining 2% trend.

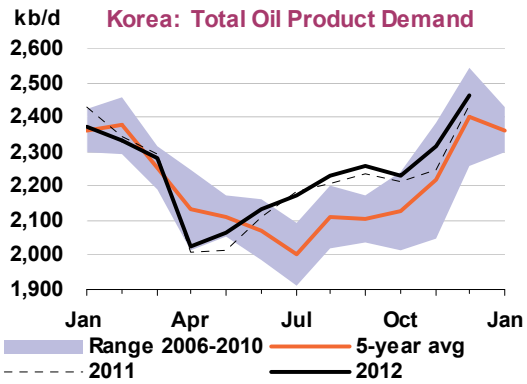
Pacific

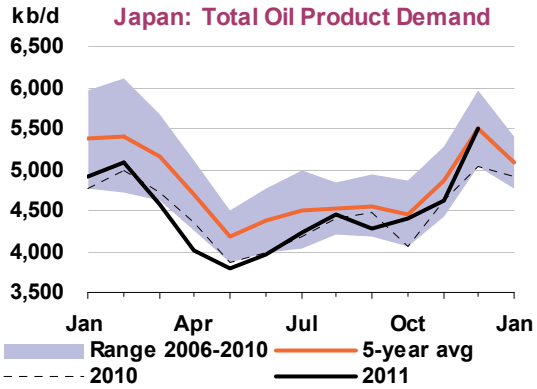
OECD Pacific demand in December grew by 5.5% y-o-y. Gains in diesel (+3.9%), residual fuel oil (+22.9%) and other products (+40.2%) – including direct crude oil burning – drove the rise on the back of cold weather and low nuclear capacity availability (see box, below). December heating degree-days (HDDs) in the region were above both the ten-year average and the previous year, especially in Japan.





The recent decline in **South Korean** demand continued with December's 1.8% year-on-year contraction. Worsening business conditions in the Korean manufacturing sector further undermined oil demand, as the PMI fell for a fifth successive month to 46.4. Korean demand will modestly expand by 15 kb/d (or 0.6%) in 2012, to 2.24 mb/d.

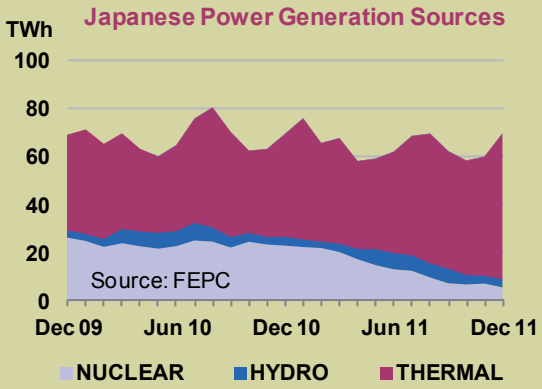




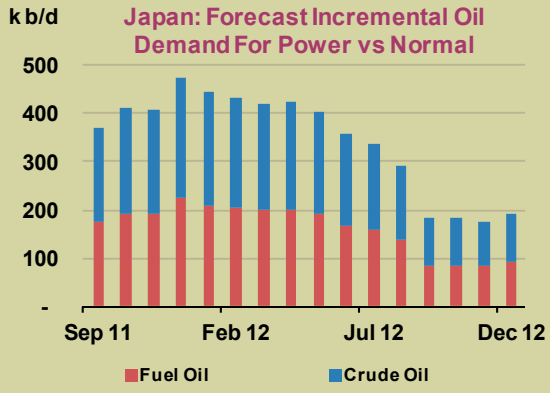
Japanese oil demand grew in December by 9.5% year-on-year, lifted by greater consumption of residual fuel oil (58.3%) and other products (54.9%) on the back of additional power generation demand amid nuclear capacity closures. Taking into account the current fuel mix in the power sector, total Japanese demand will edge 0.9% higher in 2012, to 4.5 mb/d. Demand growth in the OECD Pacific region in general will accelerate very slightly, to 0.8% (adding 0.1 mb/d of additional demand), to 7.9 mb/d.

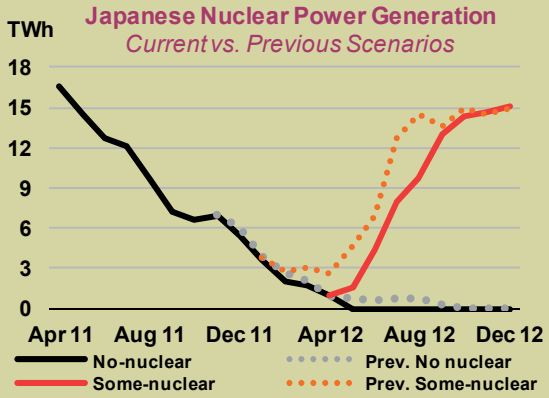
Outlook for Japanese Power Sector Oil Demand

Back in August 2011, the *OMR* carried out an updated assessment of the impact of nuclear outages in Japan (see *Nuclear Outages See Japan's Power Sector Turn to Thermal, OMR* dated 10 August 2011). Only 16 nuclear reactors were operational and the distinct possibility existed that all 54 reactors could be idle until May 2012. In that report, we estimated that incremental oil demand could amount to 230 kb/d in 2011 and grow to 270 kb/d in 2012 versus an outlook of 'normal' nuclear generation (see chart; combined crude and fuel oil generation demand was about 200 kb/d in 2010). Our latest update, based on nuclear capacity dropping to less than 0.9 TWh in April and slowly coming back online to 15 TWh by December 2012, now suggests incremental oil demand in the power sector of 280 kb/d in 2011 and 320 kb/d in 2012. This expected incremental demand implies an upward revision of 50 kb/d for both years. Should all nuclear plants remain idle after April, then incremental oil demand could reach 465 kb/d versus an outlook of normal nuclear generation.



Fossil fuel powered plants (FFPP) generated 60.4 TWh in December, a year-on-year expansion of 41.7%, backed by the nuclear outages and colder-than-normal temperature. Residual oil and crude consumption at FFPP came in at 560 kb/d in December, 470 kb/d more than would have been assumed in pre-tsunami Japan. The incremental need for oil in the power sector offset contracting demand elsewhere in the economy and led to Japanese oil demand rising overall in 2011 by 34 kb/d or 0.8%. Our latest projection envisages total 2012 Japanese oil demand growth of 42 kb/d or 0.9%, with the power sector demand averaging 320 kb/d, again offsetting weaker lighter products requirements.





Overall, the Japanese oil demand outlook remains highly uncertain, and the possibility of a 'no nuclear' capacity profile, at least for 2012, remains a real one. Demand will also be influenced by efforts put in place to improve end-use efficiency; the impact of weaker economic growth; and the potential for renewed weather extremes such as were seen in summer 2010. Nonetheless, sustained Japanese power sector oil demand will likely be one of the few growth areas for OECD oil consumption in 2012.

Non-OECD

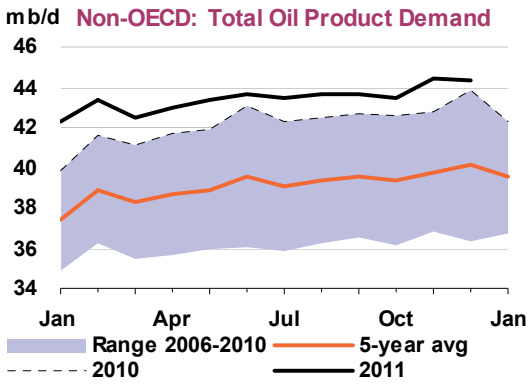
Maintaining its relatively strong expansionary backdrop, the non-OECD region will see demand growth of 1.2 mb/d (or 2.8%) in 2012, to average 44.6 mb/d. The industrially important gasoil market will predominate, forecast to provide 0.4 mb/d of the projected 2012 gain in oil demand. The non-OECD will dominate in oil demand terms as not only are many of its economies more heavily dependent upon oil, but they are also driven by stronger underlying economic growth. Economic growth in the emerging and developing economies averages 5.4% in 2012.

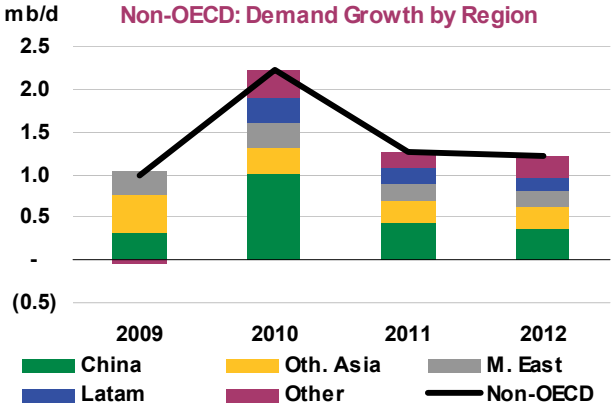
Non-OECD: Demand by Product

(thousand barrels per day)

	Demand			Annual Chg (kb/d)		Annual Chg (%)	
	2010	2011	2012	2011	2012	2011	2012
LPG & Ethane	4,734	4,968	5,125	234	157	4.9	3.2
Naphtha	2,680	2,655	2,699	-25	43	-0.9	1.6
Motor Gasoline	8,081	8,357	8,600	276	243	3.4	2.9
Jet Fuel & Kerosene	2,640	2,728	2,787	88	59	3.3	2.2
Gas/Diesel Oil	12,944	13,507	13,948	563	440	4.4	3.3
Residual Fuel Oil	5,480	5,515	5,603	35	88	0.6	1.6
Other Products	5,600	5,700	5,882	100	181	1.8	3.2
Total Products	**42,160**	**43,431**	**44,644**	**1,271**	**1,212**	**3.0**	**2.8**

Having started 2011 in a strongly expansionary phase, with oil demand up 6.1% year-on-year in January, the non-OECD demand trend has subsequently slowed, with preliminary data for December pointing towards 1.0% year-on-year expansion, its slowest pace of growth since April 2009. Putting the slowdown in perspective, the comparison is against exceptionally strong demand for late-2010 in particular.





Non-OECD: Demand by Product

(thousand barrels per day)

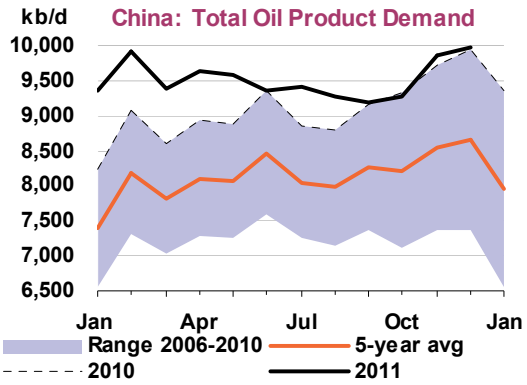
	Demand			Annual Chg (kb/d)		Annual Chg (%)	
	Oct-11	Nov-11	Dec-11	Nov-11	Dec-11	Nov-11	Dec-11
LPG & Ethane	4,964	5,023	5,104	202	250	4.2	5.1
Naphtha	2,582	2,798	2,645	97	-154	3.6	-5.5
Motor Gasoline	8,446	8,517	8,811	304	353	3.7	4.2
Jet Fuel & Kerosene	2,790	2,869	2,835	178	96	6.6	3.5
Gas/Diesel Oil	13,569	13,999	13,655	762	-124	5.8	-0.9
Residual Fuel Oil	5,538	5,518	5,675	-26	70	-0.5	1.2
Other Products	5,566	5,693	5,570	133	-65	2.4	-1.2
Total Products	**43,455**	**44,417**	**44,294**	**1,650**	**426**	**3.9**	**1.0**

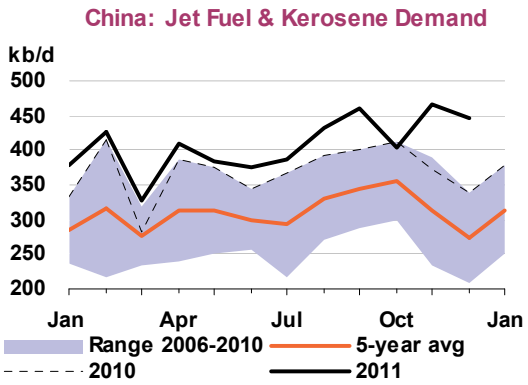
China

The outlook for **Chinese** oil demand has been curtailed, on the back of weaker economic underpinnings, with growth of 0.4 mb/d (or 3.9%) now estimated for 2012. A previous GDP growth assumption of 9% for 2012 has now been curbed to 8.2%. This lower growth assumption, along with higher domestic prices, underpins the trimmed demand projection. Moreover, some analysts have been pointing to the prospects for weaker Chinese growth, amid concerns over the impact of an ailing property market and sluggish manufacturing indicators.

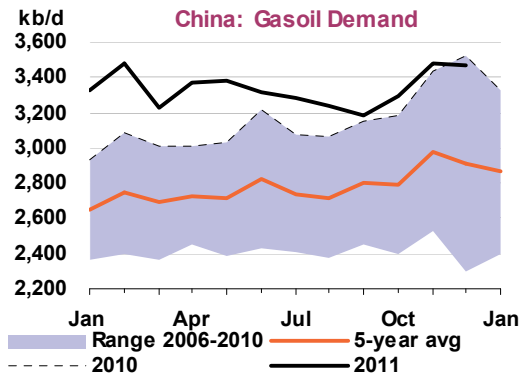
China: Demand by Product
(thousand barrels per day)

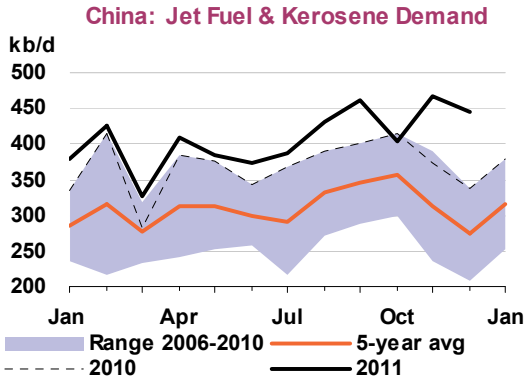
	Demand			Annual Chg (kb/d)		Annual Chg (%)	
	2010	2011	2012	2011	2012	2011	2012
LPG & Ethane	668	693	709	26	16	3.8	2.3
Naphtha	1,129	1,165	1,201	37	35	3.3	3.0
Motor Gasoline	1,546	1,655	1,718	109	63	7.1	3.8
Jet Fuel & Kerosene	368	408	419	39	11	10.7	2.7
Gas/Diesel Oil	3,143	3,337	3,448	195	111	6.2	3.3
Residual Fuel Oil	531	542	544	11	2	2.0	0.4
Other Products	1,685	1,714	1,846	30	132	1.8	7.7
Total Products	**9,069**	**9,514**	**9,885**	**445**	**371**	**4.9**	**3.9**





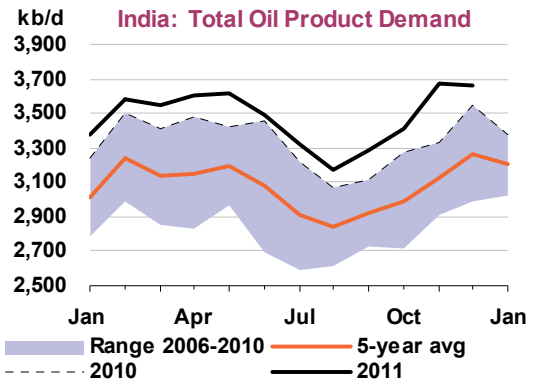
Preliminary estimates of apparent demand in China – net product imports plus refinery output – point towards a near stagnation in demand in December and the fourth quarter in general. However, year-on-year comparisons for China post-September have to be treated with caution given 2010's unusually high fourth quarter demand strength. The fourth quarter of 2011 was a mixed bag, with strong gains in the jet/kerosene (+16.9%) and LPG (9.6%) categories cancelling out big drops in other products (-8.6%) and residual fuel oil (-4.1%).

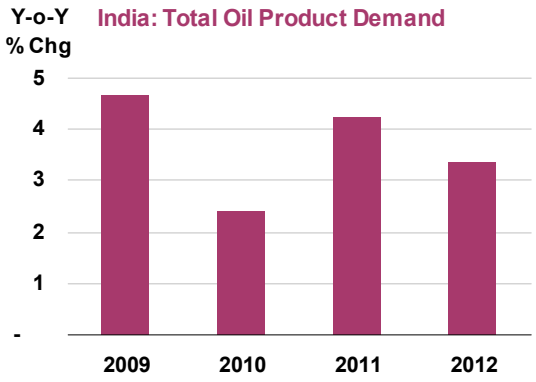




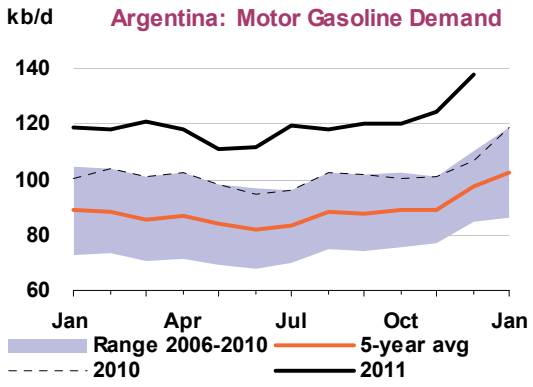
Other Non-OECD

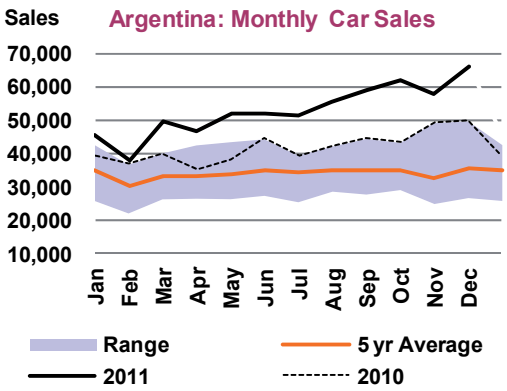
The preliminary December data for **India** matched our forecast from a month ago, of 3.5% year-on-year growth. Strong gains in gasoline (+11.5%), gasoil (+6.0%) and LPG (+5.3%) offset declines in naphtha (-20.8%), residual fuel oil (-18.2%) and jet/kerosene (-2.4%). The 4Q11 demand estimate came in at 3.6 mb/d, 0.2 mb/d (or 5.9%) higher than 4Q10, and a rise of 50 kb/d compared with last month's estimate. This higher baseline, and an economic growth assumption of 7.0%, combined to generate oil demand growth of 120 kb/d (3.4%) in 2012.





Argentinean oil demand grew in December by 1.9% following 1.3% growth in November and continuing the rising trend evident since mid-year. Strong growth in gasoline (29.2%) and fuel oil (25.1%) outweighed the hefty declines in other products (-10.8%). Resilient economics have supported the relatively strong demand dynamic, as industrial output rose by 2.8% year-on-year in December, while car sales rose 32%. Having risen by close to 30 kb/d (4%) in 2011, demand growth will abate to a more subdued 10 kb/d (1.3%) in 2012 as the projected growth rate of the economy roughly halves to 3.7%.





SUPPLY

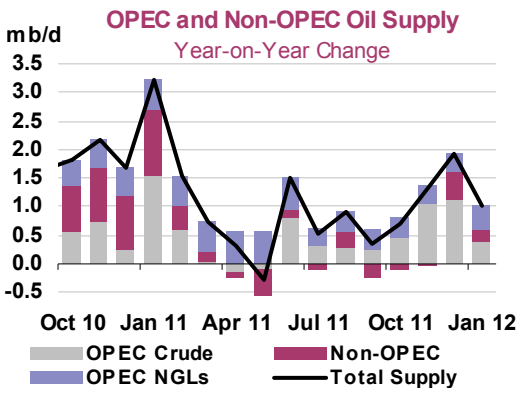
Summary

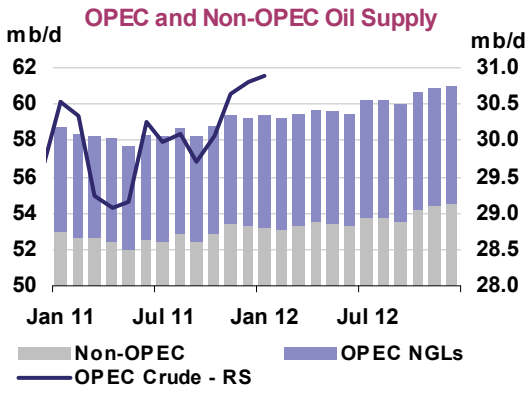
- **Global oil supply rose by 0.1 mb/d to 90.2 mb/d in January, with gains in OPEC NGLs and crude production offsetting a 0.2 mb/d decline from non-OPEC countries.** Compared to a year ago, global oil production stood 1.0 mb/d higher in January, 80% of which stemmed from increased output of OPEC crude and NGLs.

- **Non-OPEC supply fell by 0.2 mb/d to 53.2 mb/d in January, on lower global biofuels output, an escalation of conflict in Syria, a worsening dispute over transit revenues between Sudan and South Sudan, and continuing outages in the North Sea.** North American light tight oil production and NGLs, as well as increasing production in Latin America, offset declines elsewhere and should support a strong non-OPEC supply rebound, with growth of +0.9 mb/d expected in 2012.

- **OPEC crude oil supply in January rose to 30.9 mb/d, the highest level since October 2008, largely reflecting the steady ramp-up in Libyan output,** as well as sustained output from Saudi Arabia and the UAE. New international sanctions targeting Iran's oil exports do not take effect until 1 July, but several European customers have already curtailed imports of Iranian crude and Asian buyers are also moving to line-up alternative supplies.

- **The 'call on OPEC crude and stock change' is reduced by 100 kb/d for both the first half of 2012 and the year as a whole. It averages 29.8 mb/d for 1Q12 and 29.2 mb/d for 2Q12.** At 29.9 mb/d, the 2012 'call' is 700 kb/d below the 2011 average, due to a combination of higher non-OPEC supply and OPEC NGLs. OPEC's 'effective' spare capacity is estimated at 2.82 mb/d, largely unchanged from last month.





All world oil supply figures for January discussed in this report are IEA estimates. Estimates for OPEC countries, Alaska, and Russia are supported by preliminary January supply data.

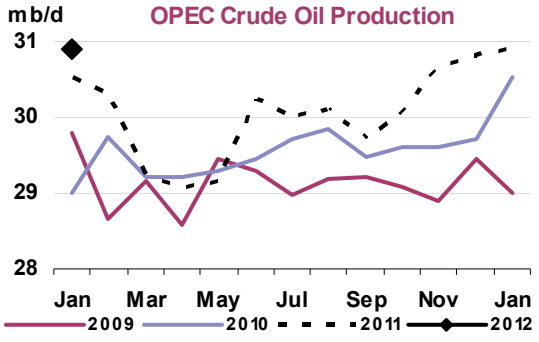
Note: Random events present downside risk to the non-OPEC production forecast contained in this report. These events can include accidents, unplanned or unannounced maintenance, technical problems, labour strikes, political unrest, guerrilla activity, wars and weather-related supply losses. Specific allowance has been made in the forecast for scheduled maintenance in all regions and for typical seasonal supply outages (including hurricane-related stoppages) in North America. In addition, from July 2007, a nationally allocated (but not field-specific) reliability adjustment has also been applied for the non-OPEC forecast to reflect a historical tendency for unexpected events to reduce actual supply compared with the initial forecast. This totals –200 kb/d for non-OPEC as a whole, with downward adjustments focused in the OECD.

OPEC Crude Oil Supply

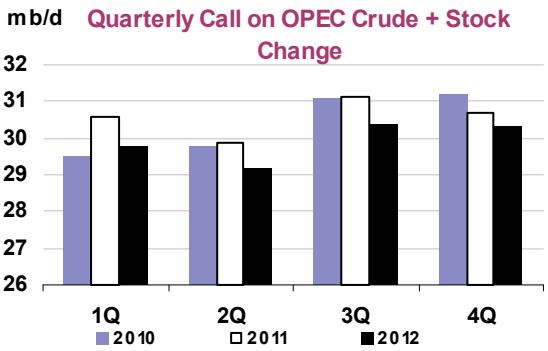
OPEC crude oil supply in January rose to 30.9 mb/d, the highest level since October 2008, largely reflecting the steady ramp-up in Libyan production as well as sustained high levels of output from Saudi Arabia, Kuwait and the UAE. The increase in Libyan production was partially offset by small monthly declines from Iraq, Kuwait, Angola, Nigeria and Venezuela.

OPEC supply was 900 kb/d over the group's 30 mb/d collective output target agreed at its mid-December ministerial conference in Vienna. After OPEC's consensual meeting at year-end, Iranian Oil Minister Rostam Qasemi sharpened the rhetoric in recent weeks by warning Arab OPEC members not to increase production to replace any Iranian barrels shut out of the market due to tighter sanctions on the country's oil and banking sectors. As anticipated, on 23 January the EU implemented plans for an embargo on Iranian oil effective from 1 July, and a freeze on the assets of the country's central bank, largely in line with more stringent sanctions adopted by the US.

The 'call on OPEC crude and stock change' is reduced by 100 kb/d for the first half of the year, with 1Q12 now pegged at 29.8 mb/d and 2Q12 at 29.2 mb/d. The 'call' for full-year 2012 is also lowered by 100 kb/d, to 29.9 mb/d, which is 0.7 mb/d below the 2011 average of 30.6 mb/d, due to a combination of higher non-OPEC supply (+0.9 mb/d) and OPEC NGLs (+0.5 mb/d). OPEC's 'effective' spare capacity is estimated at 2.82 mb/d compared with 2.85 mb/d last month.



Entire series based on OPEC Composition as of January 2009 onwards (including Angola & Ecuador & excluding Indonesia)



Entire series based on OPEC Composition as of January 2009 onwards (including Angola & Ecuador & excluding Indonesia)

Saudi Arabian crude supplies in January were unchanged at 9.85 mb/d. Saudi Arabia has increased output by 400 kb/d since last October, with some of the extra volumes going to China. Saudi Aramco reduced March official selling prices for Asian customers for the second month in a row, which some market participants viewed as a signal that the Kingdom is prepared to offer competitively priced alternatives to Iranian barrels. Saudi Oil Minister Ali al-Naimi was on record as saying the country could "easily get up to 11.4-11.8 mb/d almost immediately, in a few days...all we need is to turn valves." The minister said it would take Aramco around 90 days to bring on an additional 700 kb/d of capacity.

UAE, Iranian and **Qatari** output were also unchanged in January, at 2.58 mb/d, 3.45 mb/d and 820 kb/d, respectively. Kuwaiti production slipped 40 kb/d, to 2.56 kb/d in January. That is 110 kb/d below the 2.67 mb/d average for November, when it is thought the country was testing its capacity limits.

Iraqi January crude oil supply fell by 40 kb/d, to 2.65 mb/d, with lower exports of both Kirkuk and Basrah crude. Total Iraqi exports were down 40 kb/d to 2.11 mb/d last month, with southern shipments off by 25 kb/d to 1.71 mb/d, and volumes from the northern export terminal of Ceyhan on the Mediterranean down 15 kb/d to 395 kb/d. Baghdad had hoped to boost Basra Light shipments to 1.9 mb/d in January, with the start-up of a new 900 kb/d single point mooring in the Gulf but technical delays have derailed completion of the export facility. As a result of continuing export constraints, we have downgraded our expectation for a 400 kb/d increase in Iraqi capacity for 2012, to around 250 kb/d.

OPEC Crude Production

(million barrels per day)

	Nov 2011 Supply	Dec 2011 Supply	Jan 2012 Supply	Sustainable Production Capacity[1]	Spare Capacity vs Jan 2012 Supply	3Q12 Average Sustainable Production Capacity	3Q12 Production Capacity Versus 1Q12 Capacity
Algeria	1.29	1.29	1.29	1.30	0.01	1.37	0.06
Angola	1.69	1.75	1.73	1.90	0.17	2.10	0.20
Ecuador	0.50	0.48	0.48	0.51	0.03	0.54	0.03
Iran	3.55	3.45	3.45	3.51	0.06	3.56	0.04
Kuwait[2]	2.67	2.60	2.56	2.84	0.28	2.84	0.00
Libya	0.55	0.75	0.98	1.00	0.03	1.21	0.21
Nigeria[3]	2.10	2.06	2.04	2.45	0.41	2.48	0.02
Qatar	0.82	0.82	0.82	0.90	0.08	0.90	0.00
Saudi Arabia[2]	9.75	9.85	9.85	11.88	2.03	11.88	0.00
UAE	2.52	2.58	2.58	2.74	0.16	2.79	0.05
Venezuela[4]	2.53	2.50	2.48	2.54	0.06	2.63	0.09
OPEC-11	**27.97**	**28.13**	**28.26**	**31.57**	**3.31**	**32.27**	**0.70**
Iraq	2.68	2.69	2.65	3.00	0.36	3.13	**0.13**
Total OPEC	**30.64**	**30.82**	**30.90**	**34.57**	**3.67**	**35.40**	**0.83**
(excluding Iraq, Nigeria, Venezuela and Libya					*2.82)*		

1 Capacity levels can be reached within 30 days and sustained for 90 days.
2 Includes half of Neutral Zone production.
3 Nigeria's current capacity estimate excludes some 200 kb/d of shut-in capacity.
4 Includes upgraded Orinoco extra-heavy oil assumed at 430 kb/d in January.

Libyan output continued on an upward swing in January, rising by 225 kb/d to an average 975 kb/d, based largely on preliminary tanker data. At end-January the National Oil Co (NOC) reported that production hit 1.3 mb/d and the government's latest forecast is for output to reach pre-war levels of 1.6 mb/d this summer. Libya has so far consistently outperformed industry expectations, yet a number of companies operating there are sceptical that this higher level will be sustained in the short-term given planned maintenance and repair work on wells and pipelines. Marathon, a partner in the Oasis Group, cautioned that output growth will likely be constrained by planned oil-field maintenance against the backdrop of political unrest. Libya's Arabian Gulf Oil Company (AGOCO) reported that electricity problems at the Messla and Sarir fields have delayed the planned ramp up there from 300 kb/d to 425 kb/d. Completion of repairs is now expected in April.

Escalating internal strife is now seen as the biggest risk to Libya achieving its production goals. Though not unexpected, a political divide between the National Transitional Council (NTC) and the diverse tribal regions is widening, with internal criticism of the country's new leadership becoming acute. In addition, outbreaks of violence in Bani Walid, a former Gaddafi stronghold, and Tripoli are threatening the fragile political structure, according to a new UN report. The deep-rooted legacy of weak state institutions and civil organisations is making the country's transition more difficult, according to UN officials. As a result, the UN cautioned that there is an 'ever present possibility that similar outbreaks of violence could escalate and widen in scope.'

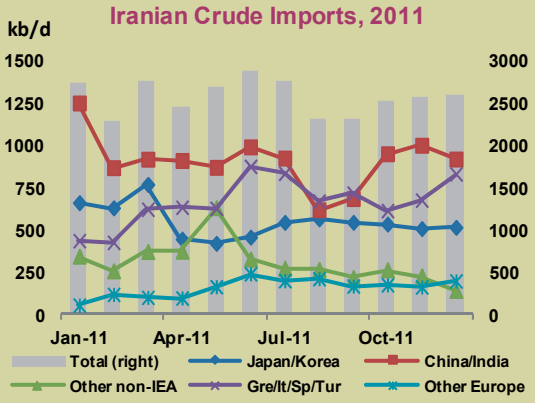
Nigerian production was down 20 kb/d to 2.04 mb/d in January, due to month-long problems with the Nembe Creek trunk line in the Niger Delta. Shell lifted the *force majeure* on Bonny Light crude exports in early February after repairs were completed on the pipeline, damaged after earlier incidents of sabotage and theft. The loss of Bonny crude was partially offset by the return of production from the offshore Bonga field, after pipeline repairs were completed in early January, as well as start-up of EA field output following maintenance work.

Venezuelan output slipped 20 kb/d to 2.48 mb/d, largely due to problems reactivating the Petroanzoategui heavy crude upgrader after maintenance work. **Ecuador's** output was estimated at 480 kb/d, unchanged from December levels.

Iranian Customers Start Lining Up Alternative Crude Supplies

International sanctions targeting Iran's existing oil exports do not come into effect until 1 July but they are already having an impact on crude trade flows in Europe, Asia and the Middle East. As anticipated, on 23 January the EU adopted plans to ban oil imports from Iran and require all member countries to halt financial transactions with the country's Central Bank. Intended to increase pressure on Tehran to halt its nuclear development programme, the EU measures follow a similar time line to new US sanctions announced at the end of 2011. The grace period for implementing the embargo is designed to allow member countries time to find alternative supplies.

Based on 2011 exports, the EU embargo could affect up to 600 kb/d of supplies, although broader US and EU economic sanctions on Iran's Central Bank could be more pervasive if they successfully block the predominant channel for oil payments to Iran. Some estimates suggest that up to 1 mb/d of Iran's 2.6 mb/d of exports may be replaced by alternative supplies once sanctions go into effect, either forcing the state oil company to place unsold barrels into floating storage or shut-in production in the second half of the year.



The market largely discounted retaliatory Iranian threats to pre-empt a European embargo by cutting off exports to EU countries immediately, though the heightened rhetoric may have contributed to recent price strength. Iranian officials have also warned fellow OPEC producers not to fill any gap created by Iran's loss of market share but commercial imperatives are expected to rule the day.

Saudi Arabia's Oil Minister said the country could easily increase production to around 11.8 mb/d in a matter of days, or about 2 mb/d above our current production estimate of 9.85 mb/d. Angola, the UAE, Libya and Iraq are all expected to bring on new production capacity over the course of 2012, potentially as much as 850 kb/d, while non-OPEC supply is expected to rebound to the tune of nearly 1 mb/d in 2012.

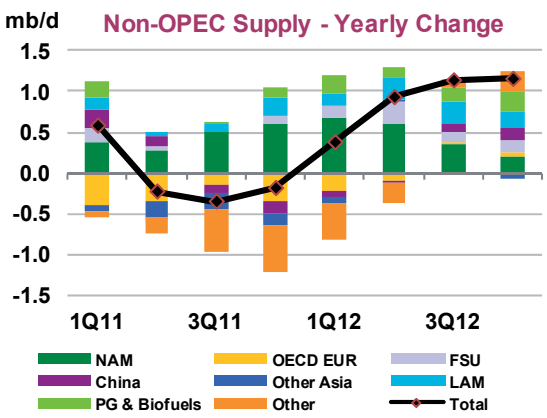
Although there are five months before restrictions on existing contracts take effect, European customers have already curtailed imports of Iranian crude and Asian buyers are lining up alternative sources of supply. European customers are likely to look to Russia, Iraq and Saudi Arabia for replacement barrels. China, the single largest buyer of Iranian crude (some 550 kb/d or about 20% of exports), is thought to be lifting around half of 2011 volumes during 1Q12, although this is probably more to do with a dispute over prices. Although China has strongly opposed sanctions, the state oil companies' bargaining position with the National Iranian Oil Co (NIOC) has clearly been strengthened by the international measures.

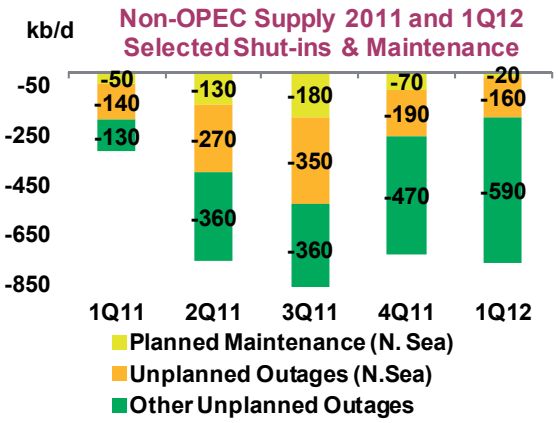
The prospect of adequately supplied crude markets through 2012 is therefore lessening concerns over European and Asian customers finding suitable alternatives. China has stepped up purchases of Saudi crude, reportedly buying an additional 200 kb/d in recent months, though some of these extra volumes may be destined for newly completed strategic storage. China is also buying more Russian ESPO crude and Angolan grades. India has also increased purchases from Saudi Arabia and reached an agreement with Iran to pay for 45% of its crude purchases in rupees. India last year bought 350 kb/d from Iran. Other Asian buyers, including Japan and South Korea, are importing record levels of crude from West Africa, especially Angolan and Nigerian grades. While these are generally lighter and sweeter than Iranian crudes, increased demand may indicate that regional refiners are having to blend-up from now-heavier base-load supply.

While there appears to be ample crude currently available in the market, the stricter sanctions are nonetheless muddying the waters for the tanker industry. On 8 December 2011, Lloyd's Joint War Committee confirmed that Iran was deemed an area of enhanced risk of war, which led a number of underwriters to charge higher premiums for vessels calling at Iranian ports or transiting within 12 miles of the Iranian coast.

Non-OPEC Overview

Non-OPEC oil production is estimated to have fallen by 0.2 mb/d to 53.2 mb/d in January, largely due to a seasonal downturn in global biofuels output, weather and mechanical-related field outages in the North Sea, and the transit dispute between Sudan and South Sudan. The latter conflict is likely to dent non-OPEC output for the remainder of the first half of 2012 by around 240 kb/d compared to 1H11 levels. The Sudan/South Sudan dispute adds to around 160 kb/d of various unplanned field outages in the North Sea and in other parts of the world *(below)*. Oil production remains offline in China at the offshore Peng Lai field, and unrest has dented output in Yemen and Syria by around 100 kb/d each.





As the remainder of 2011 data comes in, 4Q11 supply has been revised up by 70 kb/d from last month as higher US figures were partly offset by lower-than-expected North Sea production. With these revisions incorporated, non-OPEC oil supply is seen to have grown by 110 kb/d to 52.7 mb/d in 2011. Yet the last month has seen the non-OPEC supply picture for 1Q12 take a turn for the worse, notably for Africa and OECD Europe. These trends are again offset by higher expectations of growth from US liquids production. We now expect non-OPEC supply to show annual growth of 490 kb/d in 1Q12, or 270 kb/d less than last month's estimate, and reach 53.2 mb/d. Non-OPEC oil production in 2012 is only slightly (-30 kb/d) lower that last month's estimate and should post gains of around 940 kb/d to average 53.6 mb/d.

On the one hand, unplanned outages at facilities operating near capacity levels and continued unrest have the potential to continue to plague non-OPEC supply in 2012. On the other hand, high prices give operators an opportunity to more intensively deploy existing and new technologies, such as horizontal drilling and EOR, to increase oil production from existing wells. The latter occurs almost entirely under the radar, but it more than offsets the most pessimistic shut-in scenarios and underpins our estimate of substantial growth in non-OPEC supply of 0.9 mb/d in 2012. Provided that unplanned outages do abate from exceptional recent levels, normalised performance, even from mature assets, holds the potential to generate healthy growth from the stunted baseline of 2011.

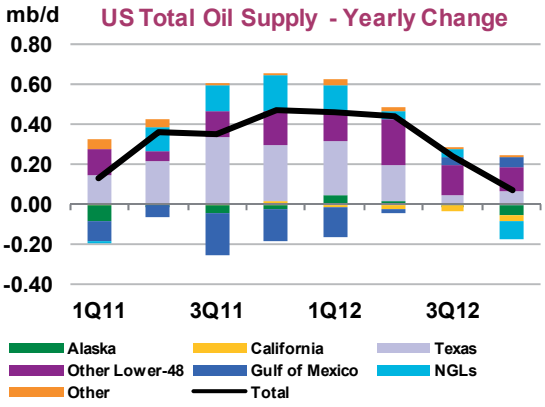
OECD

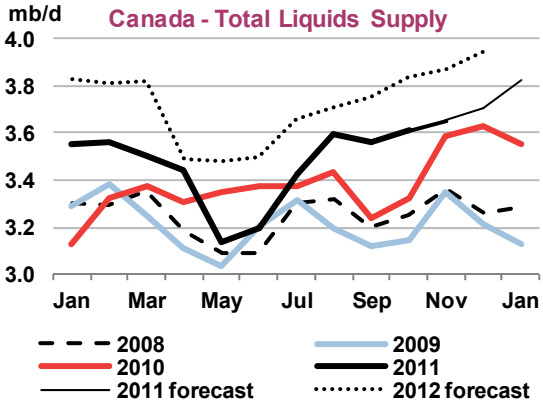
North America

US – December preliminary, Alaska actual, other states estimated: US crude oil supply stayed at around 5.8 mb/d in December, some 300 kb/d higher than December 2010. US NGL growth also likely rebounded by 130 kb/d to 2.3 mb/d in December, and biofuels output reached record levels of around 950 kb/d before the expiration of the ethanol tax credit. The most recent state-level Petroleum Supply Monthly data for September 2011 showed increases in production in Colorado's Niobrara. Texas Eagle Ford oil production (as defined by the Texas RRC) fell by around 25 kb/d to 110 kb/d, of which around 40% was condensate. Light tight oil production has also boosted output to over 200 kb/d in New Mexico, which includes parts of the Permian and San Juan basins. The stronger showing have resulted in a slight upwards revision to the 2012 estimate. Light tight oil growth in North Dakota and Texas are the primary sources of

US crude oil production growth in 2012, which is expected to increase by 250 kb/d (+4.5%) to 5.9 mb/d. Higher-than-expected production in North Dakota, Texas, New Mexico, and Colorado cause an uptick of 0.1 mb/d for the 2012 crude outlook compared to last month. Natural gas plant liquids production, which accounted for over 30% (or 100 kb/d) of US liquids growth in 2011, also reached a record high of 2.3 mb/d in November 2011, and we expect a 30 kb/d stronger performance for the 2012 outlook.

Canada—November actual: Rising output from the oil sands brought Canadian oil production to 3.7 mb/d in 4Q11, around 140 kb/d higher than 2010 levels and around 120 kb/d above 3Q11. Canadian oil production also benefited from a stronger-than-expected return to normal production at the Canadian Oil Sands' Syncrude project, higher Suncor output from the Firebag project, and the completion of routine maintenance offshore Newfoundland. In fact, Canadian syncrude production likely reached over 1.0 mb/d for the first time in December, or around 300 kb/d higher than June 2011 levels. The Canadian oil outlook for 2012 is increased by 90 kb/d from last month, to 3.7 mb/d, to take into account higher expectations for Suncor output and the fast-tracking of the 20 kb/d Southern Pacific McKay River oil sands project. This year Canadian oil production should increase by around 230 kb/d (or 6.6%) compared to last year. Late-breaking news of an unplanned shut down at the 110 kb/d Horizon oil sands project has taken the project offline for 2-3 weeks. Although this is not explicitly incorporated in the forecast this month, the forecast assumes -120 kb/d of downtime for mining and in-situ Canadian projects in the late spring and early summer. An even longer outage could be on the cards if CNRL chooses to undergo further maintenance now that had been deferred to 2013.





Short-term Impacts of Keystone XL Decision

The Obama administration rejected Transcanada's September 2008 request to build the 700 kb/d Keystone XL pipeline from Alberta to the US Gulf Coast due to the "arbitrary nature of a deadline" imposed by the US Congress in a December 2011 payroll tax bill. Incremental US tight oil and Canadian heavy oil destined for Keystone XL's capacity will now have to find alternative routes for export. In the US the short term impact on production will be limited, as rail and alternative pipeline takeaway capacity is rapidly increasing in North Dakota, but the decision will likely lead to a more rapid reconfiguration of the US domestic pipeline infrastructure.

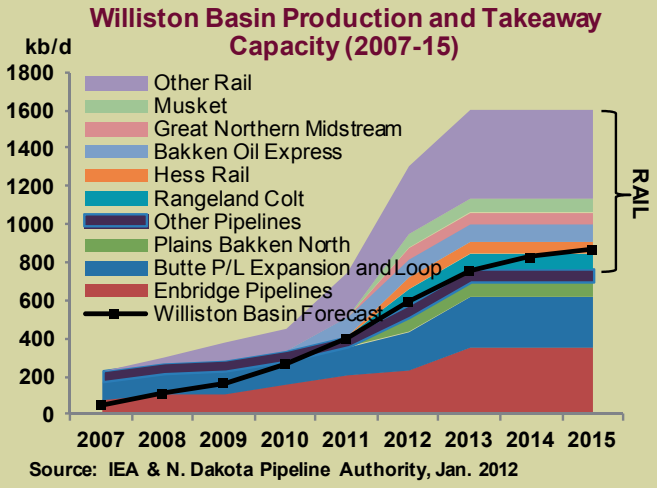
In November, the US State Department decided that it had insufficient information to make a recommendation to President Obama whether or not the cross-border Keystone XL pipeline was in the national interest. The Department received many public comments from stakeholders and felt that an in-depth analysis would be required to evaluate alternative routes. The time required for that analysis exceeded the 60-day deadline that the US Congress required in its December 2011 legislation. Therefore, President Obama accepted the State Department's recommendation to deny the presidential permit and determine that the pipeline was not in the national interest. The White House stressed that the decision was not a judgement on the merits of the pipeline, and it does not preclude TransCanada from submitting a new proposal. Although the review process would have to begin again, TransCanada still hopes to have a revised version of the project up and running by 2014.

Short-term Impacts of Keystone XL Decision (continued)

Impact on Canadian Crude: TransCanada transports roughly 150 kb/d of West Canadian crude oil to Midwestern (PADD II) and Gulf Coast (PADD III) refineries and obtained firm long-term contracts to transport 380 kb/d in additional supplies to storage at Cushing, Oklahoma and to PADD II and PADD III refineries via the proposed expansion. Refiners in PADD III were seeking to replace declining supplies of imported heavy crude with Canadian supplies. In the short term, the decision has caused Canadian producers and the government to switch their focus onto Canadian West Coast export outlets, but these too have encountered local opposition.

Growing US Rockies and Midwestern production has meant that PADD II refiners are now taking less imported crude from the US Gulf Coast via ever-emptier pipelines such as Seaway, Capline, and Spearhead. Keystone XL would initially have relieved that function by bringing crude from Cushing to the Gulf Coast. Operators are now likely to increase the flexibility in the US system so that Canadian heavy crudes can satisfy incremental PADD III demand via various reversal plans. In the absence of either Keystone XL or a pipeline to Canada's West Coast, Canadian producers will have to export incremental volumes to refiners in the Midwest and the Rockies, instead of to PADD III or to China, incurring an $8/bbl value loss in revenue according to a recent Wood Mackenzie assessment for the Alberta Dept. of Energy.

Impact on Williston Basin Light Tight Oil Production: Keystone XL was expected to provide 65-100 kb/d of new takeaway capacity for producers in the basin in light of constrained railcar availability and Enbridge's pipeline capacity. In addition, PADD II refiners are operating at 95% utilization rates in January, compared to 85% in PADD III. Because of these constraints in PADD II, refiners in PADD III will be more likely to process surplus Williston basin crude and to fill up stocks at Cushing with more expensive crudes, further depressing WTI prices compared to other crude oil benchmarks. Despite the project's rejection and the short-term concerns listed above, an annual accounting suggests that rail and pipeline takeaway capacity are unlikely to pose constraints to producers in the medium term. In fact, over 550 kb/d of new takeaway capacity is planned in 2012, 70% of which is rail-based. In addition, trucks are travelling to Canada to feed as much as 35 kb/d of light tight oil into the main Canada-US pipeline systems. In the absence of Keystone XL, rail-based capacity should account for over half of total takeaway capacity by 2015 according to the North Dakota Pipeline Authority.



Source: IEA & N. Dakota Pipeline Authority, Jan. 2012

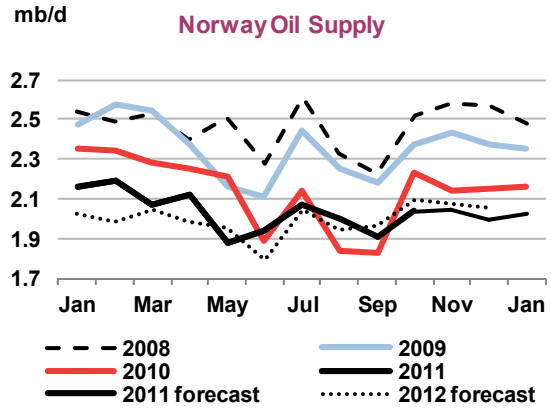
Outlook: The Keystone XL decision has longer-term implications for Canadian producers and will result in intensified Canadian efforts to find a West Coast outlet by the middle of this decade. In the meantime, incremental Canadian and Williston Basin crude oil will still make its way to US refiners, as favourable netbacks are likely to prevent upstream project cancellations or serious bottlenecks.

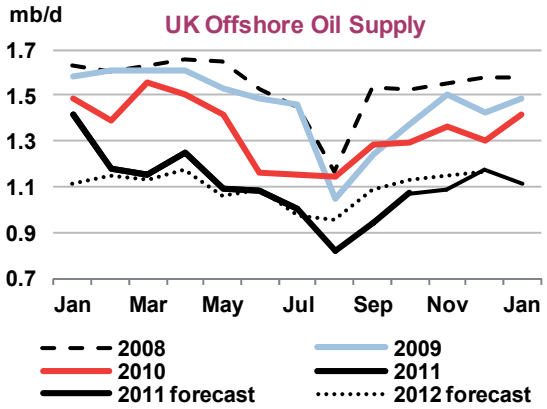
North Sea

Production from the North Sea rebounded to around 3.0 mb/d in 4Q11, 200 kb/d higher than the prior quarter, yet roughly 380 kb/d lower than 4Q10. Weather-related outages in UK, Norway, and Denmark plagued production during the last quarter and into the current quarter, keeping 1Q12 production at around 3.1 mb/d. Despite news of the UK's Buzzard field returning to levels of more than 200 kb/d for short periods of time, average output for the months of December and January is likely to have remained between 160 kb/d and 190 kb/d.

In the **UK**, October's preliminary crude oil output data were revised downward by 60 kb/d, underpinning a 140 kb/d lower 4Q11 estimate of 1.1 mb/d. Additionally, BP reported that the 40 kb/d

Foinaven field would remain shut in February after it discovered a small leak on a flow line. Gryphon, Tullich, Maclure and the Gannett group of fields are likely to remain offline until 2H12 at best. In **Norway,** 4Q11 maintenance and related turnarounds were especially heavy in the Statfjord area. These stoppages have constrained Norway's production to 2.0 mb/d when most analysts were expecting a post-maintenance rebound. In fact, Norway's 4Q11 oil production increased by only 35 kb/d over 3Q11 levels and 7% below last year's levels. In sum, lingering field problems and unscheduled maintenance in 1Q12 mean that Norway and the UK's output is around 160 kb/d lower than normal outage rates for this time of year. We have revised our 2012 outlook for the North Sea lower by 130 kb/d to 3.0 mb/d, preferring to be surprised to the upside.





OECD Asia

Australia—November actual: Australian oil production increased by around 20 kb/d in November to nearly 460 kb/d. We expect that production in January will fall by around 40 kb/d from December's estimate to 470 kb/d on the impact of Cyclones Heidi and Iggy, which have reduced output at the Waenea/Cossack, Stybarrow, and Vincent fields as well as at the Mutineer/Exeter FPSO. Other field additions should raise total Australian oil output by 140 kb/d y-o-y to 570 kb/d in 2012.

Non-OECD

Former Soviet Union

Russia—January actual: Recent data for January show oil production increased by 50 kb/d to 10.7 mb/d, of which 9.9 mb/d was crude oil. On an annual basis, January's figure stood around 1.5% above January 2011 levels. Almost all of the monthly gain came from a near 40-kb/d increase in Gazprom condensate output. In January, Rosneft's Vankor field increased production by 15 kb/d to average 330 kb/d, raising the company's output to 2.6 mb/d. We expect production from this new field to continue increasing during 2012 to over 400 kb/d. Gazprom is set to inaugurate a new gas and gas condensate processing facility at the Zapolyarnoye field, allowing the company to process an additional 75 kb/d of condensate and keeping annual Russian liquids output growth near 1.2%. 1Q12 expectations in Russia are tempered slightly from last month's outlook given the severity of the winter, which we expect could cut power supplies to remote oil-producing areas as it did in 2006.

FSU net oil exports stood at 8.8 mb/d in December, their lowest level since 4Q08 and a fall of 320 kb/d compared to a month earlier. Crude shipments plummeted by 270 kb/d to 6.4 mb/d as seaborne cargoes dispatched via Black Sea and Baltic ports fell by a combined 400 kb/d. Consequently, Transneft volumes fell by 260 kb/d to 4.2 mb/d. In the Black Sea, volumes of Azerbaijani and Kazakhstani crudes sent via Novorossiysk contracted by a combined 100 kb/d, while cargoes of Siberian Light shipped via Tuapse declined by another 80 kb/d. In the Baltic, Gdansk's brief resurgence ended as loadings dried up, and Primorsk exports declined by 70 kb/d. In the East, loadings of ESPO from Kozmino rebounded by 60 kb/d

to 330 kb/d, and shipments of Vityaz and Sokol crudes from Sakhalin island remained low at below 250 kb/d. Outside Transneft's system, flows through the CPC and BTC pipelines were lower-than-normal at 620 kb/d and 640 kb/d, respectively. Product exports inched down by 30 kb/d after declines in fuel oil (-70 kb/d m-o-m) and gasoil (-20 kb/d m-o-m) while 'other products' (here including naphtha and gasoline) deliveries rose by 60 kb/d, despite the continued 90% Russian excise duty on light products.

Complete 2011 data indicate that FSU net exports contracted by a significant 350 kb/d compared to 2010. Crude shipments fell by 260 kb/d after lower Kazakhstani and Azerbaijani supplies offset increased Russian volumes. Flows through the Transneft network increased by 180 kb/d to 4.2 mb/d, largely as a result of the start up the ESPO pipeline spur to China which replaced railed deliveries. Loadings at Lukoil's Varandey terminal fell to 90 kb/d due to a precipitous decline at Lukoil's Yuzhno Khylchuyuskoye field, whilst exports from Sakhalin I and II remained stable at a combined 280 kb/d. The introduction of the 60:66 tax regime in Russia curbed product exports in 2011. On an average annual basis, total product shipments fell by 80 kb/d as a 30 kb/d rise in fuel oil was offset by drops in gasoil (-100 kb/d) and *Other Products* (-10 kb/d), the former also a consequence of tighter Russian product specifications.

FSU Net Exports of Crude & Petroleum Products

(million barrels per day)

	2010	2011	1Q2011	2Q2011	3Q2011	4Q2011	Oct 11	Nov 11	Dec 11	Latest month vs. Nov 11	Latest month vs. Dec 10
Crude											
Black Sea	2.10	1.93	2.06	1.87	1.87	1.92	1.85	2.05	1.85	-0.20	-0.33
Baltic	1.60	1.50	1.48	1.57	1.37	1.56	1.52	1.68	1.48	-0.20	-0.17
Arctic/FarEast	0.74	0.67	0.70	0.69	0.65	0.65	0.72	0.60	0.63	0.03	-0.13
BTC	0.77	0.70	0.72	0.76	0.69	0.64	0.68	0.61	0.64	0.03	-0.17
Crude Seaborne	**5.22**	**4.80**	**4.96**	**4.89**	**4.58**	**4.77**	**4.77**	**4.94**	**4.60**	**-0.34**	**-0.80**
Druzhba Pipeline	1.13	1.17	1.14	1.12	1.18	1.24	1.20	1.24	1.28	0.03	0.15
Other Routes	0.42	0.53	0.53	0.54	0.54	0.50	0.48	0.49	0.52	0.03	0.08
Total Crude Exports	**6.76**	**6.50**	**6.63**	**6.55**	**6.30**	**6.51**	**6.45**	**6.68**	**6.40**	**-0.27**	**-0.57**
Of Which: Transneft[1]	4.00	4.18	4.15	4.16	4.09	4.31	4.22	4.48	4.22	-0.26	0.12
Products											
Fuel oil[2]	1.54	1.58	1.43	1.82	1.59	1.46	1.45	1.50	1.44	-0.07	-0.04
Gasoil	0.88	0.77	0.90	0.79	0.72	0.69	0.70	0.69	0.67	-0.02	-0.14
Other Products	0.43	0.42	0.48	0.53	0.36	0.32	0.36	0.27	0.34	0.06	-0.05
Total Product	**2.85**	**2.77**	**2.81**	**3.14**	**2.66**	**2.47**	**2.51**	**2.47**	**2.44**	**-0.03**	**-0.23**
Total Exports	**9.61**	**9.27**	**9.44**	**9.68**	**8.96**	**8.98**	**8.96**	**9.15**	**8.85**	**-0.30**	**-0.80**
Imports	0.06	0.07	0.06	0.06	0.08	0.06	0.05	0.05	0.08	0.02	0.00
Net Exports	**9.55**	**9.20**	**9.39**	**9.62**	**8.88**	**8.92**	**8.91**	**9.09**	**8.77**	**-0.32**	**-0.80**

Sources: Argus Media Ltd, IEA estimates

[1]Transneft data exclude Russian CPC volumes.

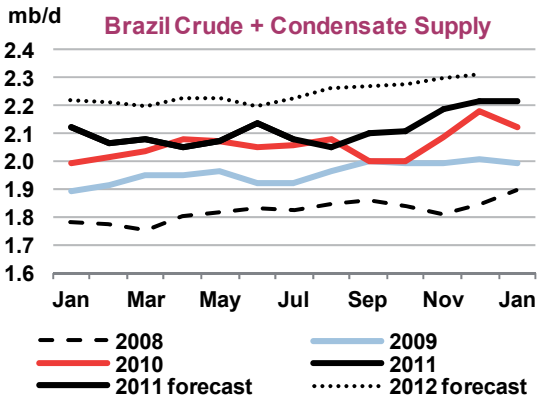
[2]Includes Vacuum Gas Oil

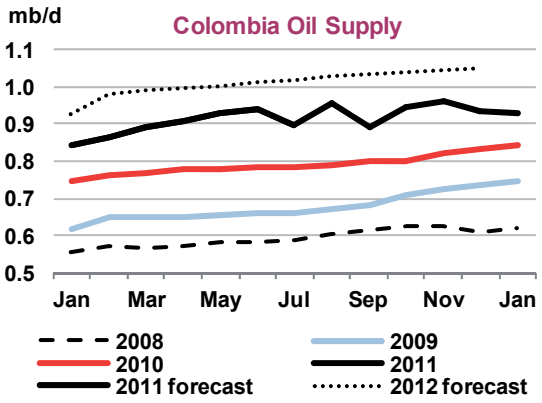
Latin America

Brazil – December actual: Brazilian crude and condensate production continued to climb to record levels of around 2.2 mb/d in December 2011, following leaks at the Frade field and Marlim Sul P-40 platform in November. Output from the Lula field continued to increase by 10 kb/d to 65 kb/d in December, and output from well tests in the BM-S-9 concession in the pre-salt of the Santos basin reached around 20 kb/d at the end of last year. However, in January Petrobras found a leak in the well and shut it in. Based on government estimates, output from the pre-salt now constitutes 170 kb/d or 8% of Brazil's crude and condensate production. A year's worth of data show Brazil's crude and condensate production rose by 50 kb/d or 2.5% in 2011, to 2.1 mb/d, roughly a third of the growth expected for 2011 a year ago. Fields adding significant amounts of production this past year included Jubarte (+70 kb/d), Frade (+20 kb/d), Marlim Leste (+20 kb/d), and Cachalote (+45 kb/d). These increases were offset by declines at Marlim (-30 kb/d), Roncador (-40 kb/d), and Albacora Leste (-30 kb/d).

Colombia – December actual: Colombian oil production fell by 30 kb/d to 930 kb/d in December because of attacks on the Caño Limón pipeline, worker strikes, and transportation restrictions. Labour unrest in

January dented production at EcoPetrol's 30 kb/d la Cira field, which is likely to keep Colombia's production at December levels. In 2012, Colombia's oil output growth is expected to come from increasing production at the Castilla field, which should rise by 40 kb/d to around 120 kb/d by the end of the year. The government reported that oil-related FDI in Colombia has surged to $7.1 billion in 2011, up 145% from the prior year.



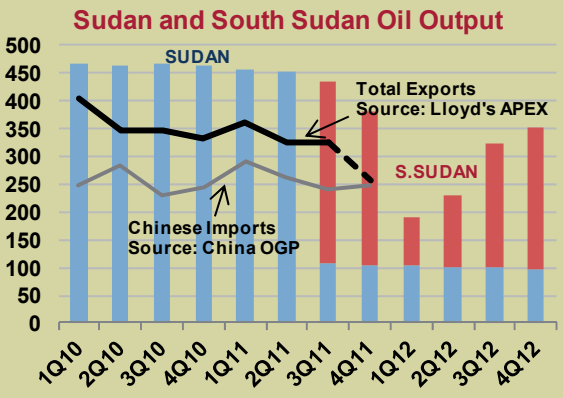


Africa

Sudan and South Sudan: Over a Barrel Again

Newly independent South Sudan pledged to shut down its output completely after it failed to agree on a revenue sharing scheme with Sudan. Sudan and South Sudan produced around 450 kb/d during 1H11 before Southern Sudan declared independence on 9 July. This report for the first time carries differentiated production levels for both countries beginning in July 2011. Based on field level analysis, we assess that South Sudan was producing roughly 260 kb/d in December, while Sudan produced around 110 kb/d. In the absence of a foreseeable resolution, we have also reduced production estimates by around 200 kb/d in 1Q12 and by 100 kb/d for 2012, reflecting landlocked South Sudan's export conundrum.

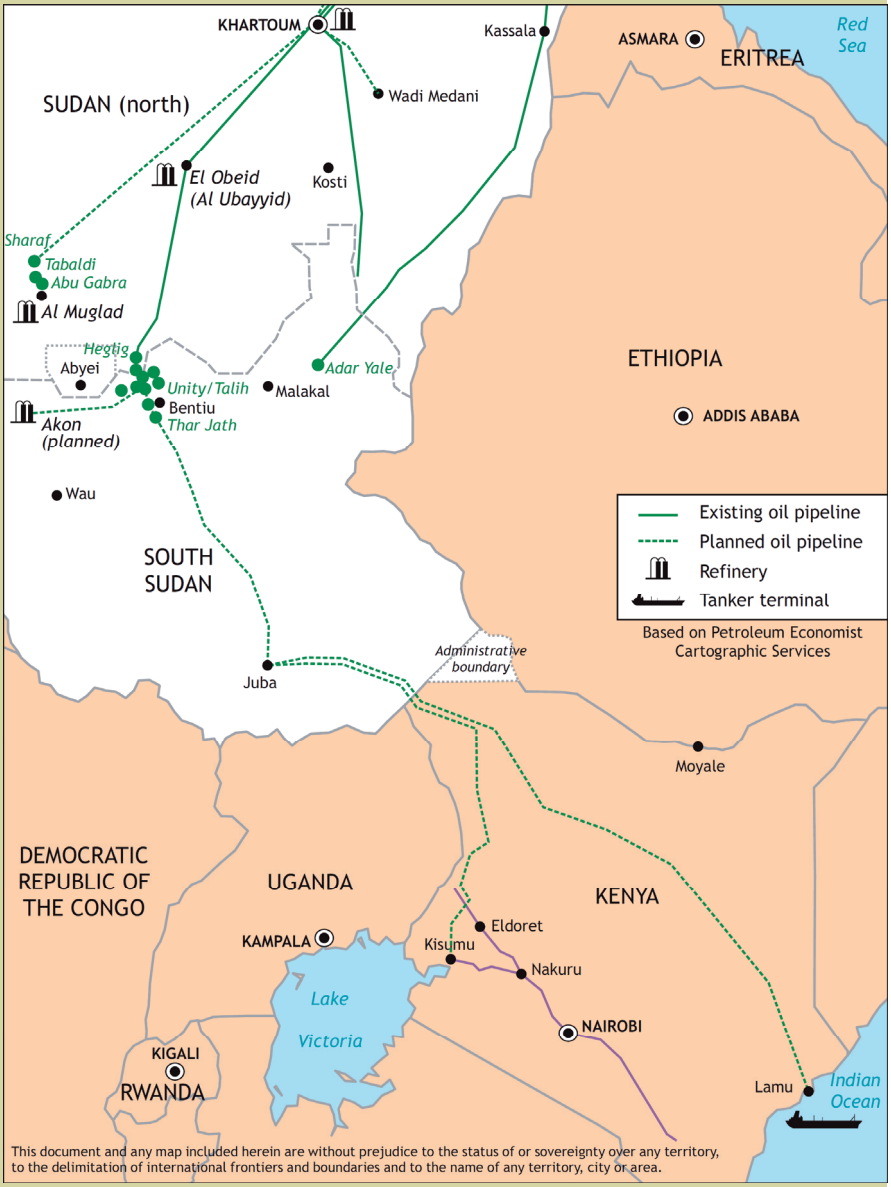
Revenue-sharing agreement breaks down. Since South Sudan declared independence, a tenuous revenue sharing scheme persisted in which Southern Sudan paid Sudan in kind for the use of its transit pipeline and the use of its port. Sudan lost around 75% of its pre-independence revenues to the South. After the South's secession, the sharing agreement gave South Sudan 60% of the revenues from the Unity field's output (located in South Sudan) and around 25% of the revenues from Block 2's output (located in Sudan). Initially, Khartoum in the north was asking for a $32-$38/bbl transit fee. After a week of negotiations in Addis Ababa, Ethiopia, South Sudan had offered $1.7 billion to Sudan and transit fees of $0.63-0.69 a barrel for use of the two lines to Port Sudan. Khartoum then demanded $5.4 billion in cash and $3/bbl. The latest African Union proposal involves the South giving Sudan a direct cash transfer of $5.4 billion, plus transit fees worth up to $1.1 billion, covering the period until the end of 2014. Reports also indicated that the cash payment could be reduced in-kind by supplies of 35 kb/d to Sudan's refineries.



South Sudan's 260 kb/d could remain absent from world markets for the near future. The Unity field and other related fields in South Sudan are located within GNPOC's Block 1A and 1B. They are integrated with GNPOC's production system for the fields located in Block 2 in Sudan, which include the Grand Heglig field and its satellites. The Unity field produced around 80 kb/d during the first half of 2011, or around 60% of GNPOC's production. Cross-border gas lines for reinjection connect these fields, and GNPOC's Central Processing Facility is located near Heglig. Therefore, any sustainable restart of production in the South will have to account for these fields' joint operation.

Sudan and South Sudan: Over a Barrel Again (continued)

South Sudanese officials assess that all 274 wells in Blocks 1, 2, and 4 were shut by 25 January. In addition, officials said that 600 wells in Block 3 and 7, reportedly producing around 130 kb/d, had reached a "reduced production stage." Petrodar, in which Petronas and CNPC hold the major stakes, is refusing Sudanese requests to continue to send oil to Port Sudan.



Bad timing for a disruption. China imported roughly 260 kb/d of Sudanese and South Sudanese crude oil in 2011, roughly 5.2% of total imports, and is likely to see the most acute effects of the disruption. The loss of over 200 kb/d of heavy and acidic Dar Blend and light, sweet, and waxy Nile Blend crude oils is coinciding with strong Asian demand for medium and heavy crude oil—not to mention the threat to Iranian supplies from heightened US and European sanctions. Elsewhere in Asia, Japan's direct crude oil burn to replace nuclear-fired power is 150 kb/d more than 1Q11 y-o-y, and cyclones have shut in around 60 kb/d of Australian production. ONGC reportedly sold a cargo of Nile Blend crude at a $4.50/bbl premium to Minas blend, a record $2/bbl increase from January, and Asian customers are also bidding up the prices of Australian grades. In addition, Low Sulphur Waxy Residue (LSWR) cracks have increased by $5.49/bbl since December.

Outlook. On the one hand, both Sudan and South Sudan are almost entirely dependent on oil export revenues for their economy so a quick resolution would make economic sense and would avoid the need for new transport infrastructure. Funding for an alternative pipeline to the Kenyan cities of Lamu or Mombasa (to the south) would require greater clarity on South Sudan's oil reserves and security situation. Eventually, current and new South Sudanese oil could flow via routes that are exporting new oil production from Tullow's fields in the Albert basin in Uganda , which will add around 150 kb/d post-2014.

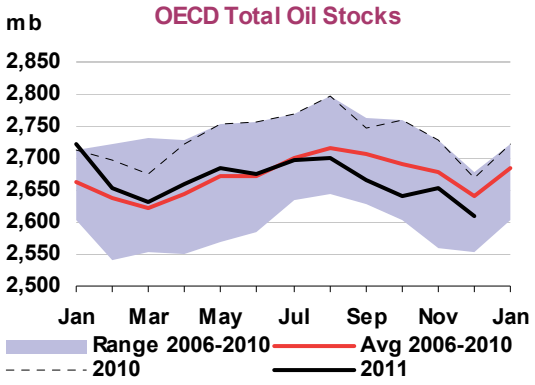
The two governments remain at loggerheads due to a whole host of other bilateral issues which linger after the South's secession. In addition to the transit fee dispute, the sides have not agreed on the final border status of the Abyei region. Also, citizenship issues of displaced persons, ongoing ethnic conflict, and the potential for Sudan to use its military force are inflaming tensions between the two countries amidst a worsening economic situation. Therefore, the negotiations which are to restart on 10 February are no longer just about oil, but about the two states' sovereignty. While it is impossible to predict the outcome, the broader set of economic and political factors at play mean that the two countries' oil output will remain at risk at least for the remainder of the year.

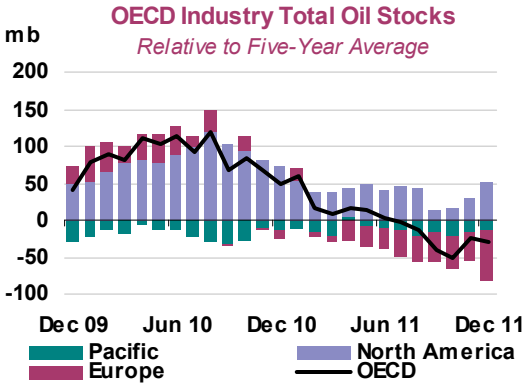
OECD STOCKS

Summary

- **OECD industry oil stocks fell by 40.8 mb in December, to 2 611 mb, or 57.2 days of forward demand cover.** The reduction in inventories, broadly in line with a five-year average 37.4 mb draw for December, widened the deficit versus the five-year average to 29.0 mb, from 25.6 mb in November. OECD inventory levels therefore came in below the historical average for a sixth consecutive month.

- **Preliminary data indicate an 11.4 mb build in January OECD industry inventories,** a weaker build than the five-year average 43.2 mb. Crude oil stocks rose by 19.7 mb, largely in North America and Europe. In the meantime, product inventories fell by 13.2 mb driven by a sharp decline in 'other products' holdings.





- **New Chinese strategic storage capacity completed between 3Q11 and 1Q12 amounts to nearly 79 mb.** This is equivalent to an incremental 220 kb/d of Chinese crude demand were the sites to be filled steadily over the course of 2012. Current high crude prices and term structure may argue against such buying, but additional crude purchasing could emerge if price or geopolitical factors warrant it.

OECD Inventories at End-December and Revisions to Preliminary Data

OECD industry oil stocks fell by 40.8 mb to 2 611 mb in December. With the reduction in stocks broadly in line with a five-year average 37.4 mb draw, the deficit of inventories versus the five-year average widened to 29.0 mb, from 25.6 mb in November. As a result, inventory levels stand below the five-year average for a sixth consecutive month. Regionally, the surplus of inventories versus the five-year average in North America rose significantly, offset by a similar widening in deficit in Europe. OECD forward demand cover fell to 57.2 days from 57.9 days in November, but remained 1.6 days above the five-year average of 55.6 days.

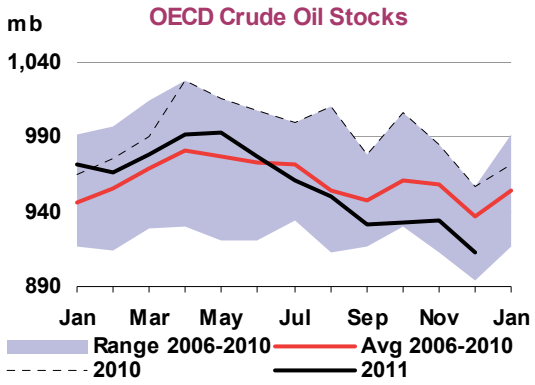
Preliminary Industry Stock Change in December and Fourth Quarter 2011

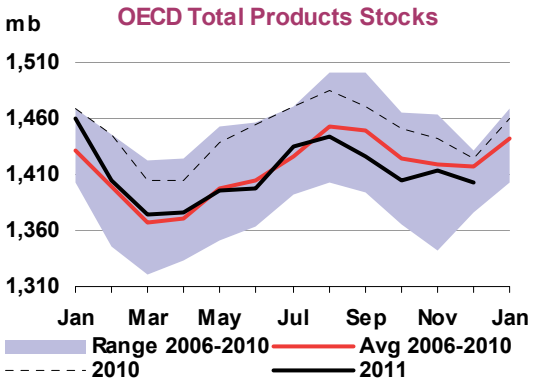
	December (preliminary) (million barrels)				December (preliminary) (million barrels per day)				Fourth Quarter 2011 (million barrels per day)			
	N.Am	Europe	Pacific	Total	N.Am	Europe	Pacific	Total	N.Am	Europe	Pacific	Total
Crude Oil	**-6.3**	**-15.3**	**0.2**	**-21.4**	**-0.20**	**-0.49**	**0.01**	**-0.69**	**0.02**	**-0.22**	**-0.01**	**-0.21**
Gasoline	8.1	-0.9	-1.6	5.6	0.26	-0.03	-0.05	0.18	0.13	0.05	-0.03	0.15
Middle Distillates	3.3	4.8	-7.7	0.4	0.11	0.16	-0.25	0.01	-0.09	0.03	-0.08	-0.14
Residual Fuel Oil	-3.0	-2.5	-0.6	-6.2	-0.10	-0.08	-0.02	-0.20	0.02	-0.04	-0.01	-0.03
Other Products	-5.5	-0.4	-4.8	-10.8	-0.18	-0.01	-0.16	-0.35	-0.13	-0.03	-0.07	-0.23
Total Products	**2.9**	**1.0**	**-14.7**	**-10.9**	**0.09**	**0.03**	**-0.47**	**-0.35**	**-0.07**	**0.01**	**-0.19**	**-0.26**
Other Oils[1]	-3.4	-1.3	-3.9	-8.5	-0.11	-0.04	-0.12	-0.27	-0.12	0.04	-0.04	-0.12
Total Oil	**-6.8**	**-15.6**	**-18.4**	**-40.8**	**-0.22**	**-0.50**	**-0.59**	**-1.32**	**-0.17**	**-0.17**	**-0.24**	**-0.58**

1 Other oils includes NGLs, feedstocks and other hydrocarbons.

Crude stocks declined seasonally by 21.4 mb to 913 mb, marking a sixth straight month of below average readings. Crude holdings in Europe led the decline, falling by 15.3 mb while OECD Pacific showed a marginal gain of 0.2 mb. Despite a continued increase in Libyan crude production, the backwardated price structure encouraged European refiners to run down crude oil inventories.

Moreover, product inventories fell by 10.9 mb, compared with a five-year average 1.6 mb drop, increasing the deficit against the five-year average to 14.3 mb, from 5.0 mb in November. Most of the product stock draw stemmed from OECD Pacific, showing a 14.7 mb fall, while product holdings in Europe and North America rose by 1.0 mb and 2.9 mb, respectively. Middle distillate inventories in the Pacific led the decrease there, falling by 7.7 mb as cold winter weather at the end of the month finally drew down heating kerosene stocks. On the other hand, gasoline stocks in North America rose by a significant 8.1 mb amid higher production during a seasonal trough in demand.





OECD stocks were revised 4.7 mb higher in November, upon receipt of more complete monthly submissions from member countries. This implies a 9.6 mb build in November inventory levels, compared with preliminary estimates of a 4.1 mb build. Upward adjustments were centred on OECD Pacific crude oil and North American gasoline stocks, which were revised higher by 6.3 mb and 3.5 mb, respectively. Lower-than-initially estimated fuel oil stocks provided a partial offset.

Revisions versus 18 January 2012 Oil Market Report

(million barrels)

	North America		*Europe*		*Pacific*		*OECD*	
	Oct-11	Nov-11	Oct-11	Nov-11	Oct-11	Nov-11	Oct-11	Nov-11
Crude Oil	**-0.1**	**0.9**	**-0.1**	**-2.0**	**-0.3**	**6.3**	**-0.5**	**5.2**
Gasoline	0.1	3.5	0.3	-0.7	0.0	0.2	0.4	2.9
Middle Distillates	0.1	-1.5	-1.0	0.0	0.0	0.8	-0.9	-0.7
Residual Fuel Oil	0.0	0.2	0.0	-1.6	0.0	-0.1	0.0	-1.5
Other Products	0.3	2.5	0.0	-3.3	0.0	-0.2	0.3	-1.0
Total Products	**0.5**	**4.7**	**-0.7**	**-5.6**	**0.0**	**0.7**	**-0.1**	**-0.1**
Other Oils[1]	-0.2	-3.3	-0.1	2.2	0.1	0.7	-0.3	-0.4
Total Oil	**0.2**	**2.3**	**-0.8**	**-5.4**	**-0.3**	**7.7**	**-0.9**	**4.7**

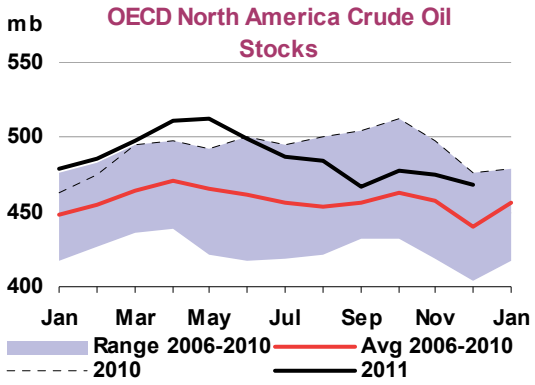
1 Other oils includes NGLs, feedstocks and other hydrocarbons.

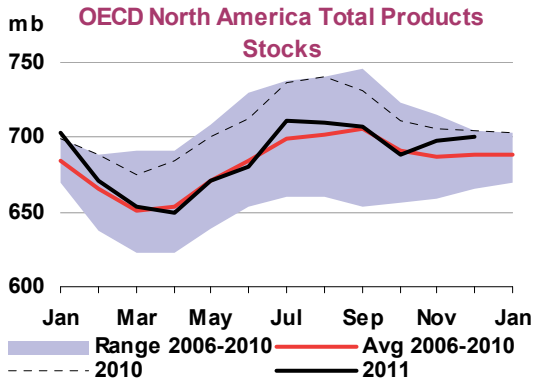
Preliminary data indicate a 11.4 mb build in January OECD industry inventories, a weaker build than the five-year average 43.2 mb. Crude oil stocks rose by 19.7 mb, most of which stemmed from North America and Europe. In the meantime, product holdings fell by 13.2 mb. North American 'other products' inventories led the decline by falling 12.5 mb. Gasoline was the only product stocks category that showed a build, rising by 9.8 mb but only to be offset by a 9.3 mb decline in middle distillate holdings.

Analysis of Recent OECD Industry Stock Changes

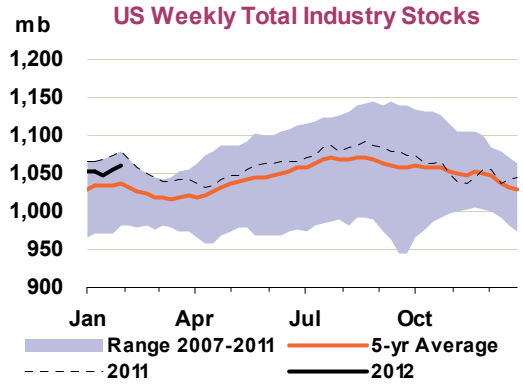
OECD North America

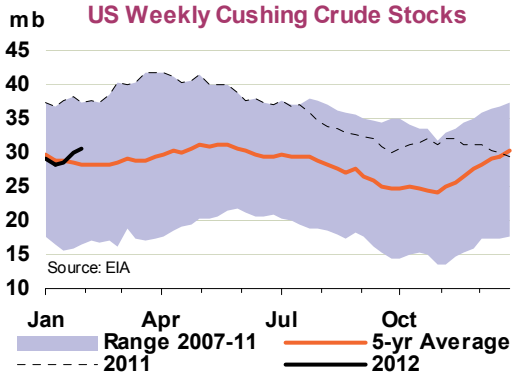
North American industry oil inventories fell by 6.8 mb to 1 326 mb in December, nonetheless representing a shallower drop than the seasonal norm of 28.4 mb. Crude oil holdings declined by 6.3 mb on lower imports into the US as refiners deferred tanker arrivals to reduce end-year tax liabilities. 'Other oils' stocks, including feedstocks, also fell by 3.4 mb. Meanwhile, product inventories rose by 2.9 mb driven by an increase in gasoline holdings. Gasoline inventories rose by 8.1 mb due to higher refinery production. The need to sustain middle distillate production kept gasoline supply higher, even in the midst of low seasonal demand. Gasoline inventories have now been above the five-year range for four successive months. Middle distillate stocks also increased by 3.3 mb, as refiners ramped up production while exports decreased. In the meantime, fuel oil and 'other products' holdings declined by 3.0 mb and 5.5 mb respectively, providing a partial offset to increases among the main products.





US weekly data point to an 11.4 mb increase in US industry stocks in January, in line with a five-year average 12.6 mb rise. Crude holdings rose by 8.1 mb, amid lower refinery runs and as US refiners re-entered the market after end-year stock minimisation. In the meantime, crude levels at Cushing, Oklahoma rose by 1.1 mb to 30.4 mb, rebounding above the five-year average after standing below it for a second consecutive month in December. A 5.4 mb increase in 'other oils' stocks added to the US stock build in January.

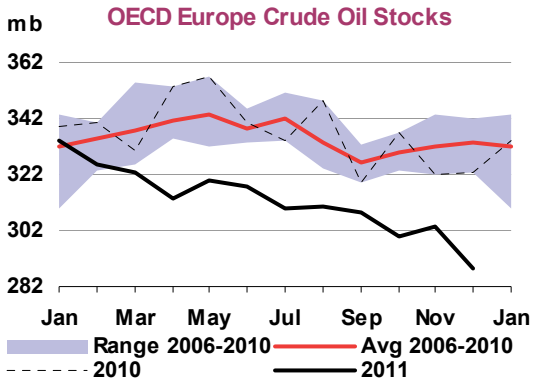


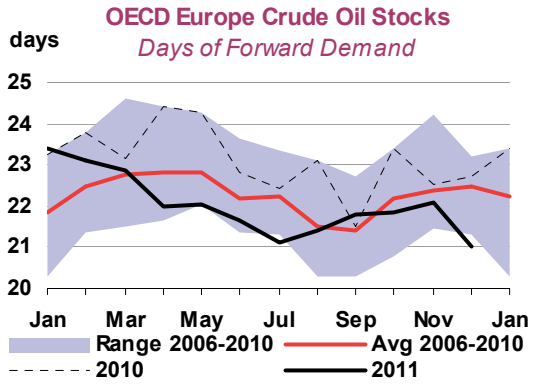


US product inventories fell by 2.0 mb in January, driven by a draw in 'other products' stocks. 'Other products' holdings plunged by 12.5 mb due to the increased use of propane for heating. In the meantime gasoline holdings rose by 10.1 mb, offsetting much of the 'other products' loss. Although gasoline production in January dropped significantly, the stock build followed four-week average gasoline demand declining to the lowest level since February 2001.

OECD Europe

Industry oil inventories in Europe fell by 15.6 mb in December to 896 mb, in contrast with a five-year average 11.2 mb build. This counter-seasonal monthly draw widened the deficit versus the five-year average to 66.4 mb, from 39.6 mb in November, holding stock levels below the historical range and at their lowest since February 2003. Crude stocks counter-seasonally plummeted by 15.3 mb to 288 mb, marking the lowest level since August 1997 and a tenth straight month under the five-year range. Despite a rapid increase in Libyan crude production, a backwardated price structure encouraged European refiners to run down crude oil inventories. It is worth noting, however that crude stocks look less tight when measured against forward demand, and at 21.0 days of forward cover stand only just below the five-year range. In the meantime, European refined product holdings rose by 1.0 mb on higher refinery runs. Middle distillates led the increase, rising by 4.8 mb while gasoline, fuel oil and 'other products' holdings declined by 0.9 mb, 2.5 mb and 0.4 mb, respectively. Meanwhile, German end-user heating oil stocks fell by 2 percentage points to 57% fill at end-December.

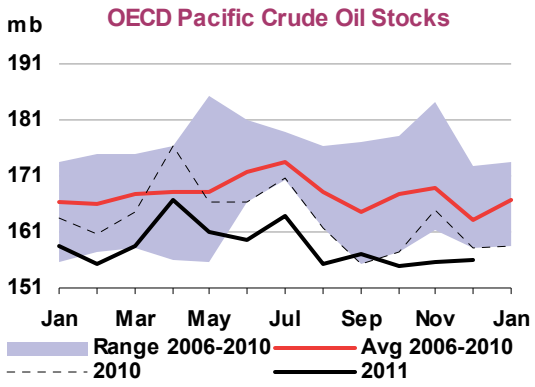


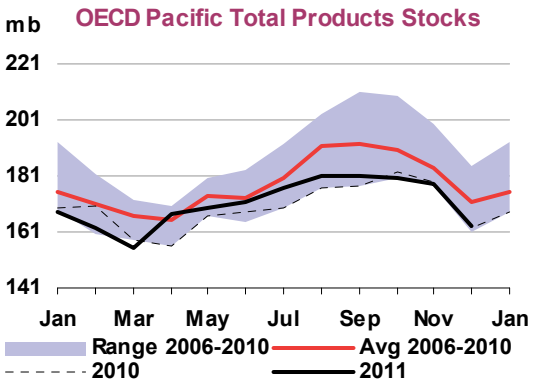


Preliminary data from Euroilstock point to a 1.5 mb stock build in the EU-15 and Norway in January. Despite a seasonal increase, they are far short of the five-year average build of 21.1 mb. Crude oil inventories led the increase, rising by 8.1 mb. Refined product holdings, however, fell by 6.7 mb due to a sharp decline in middle distillate stocks. Middle distillate holdings decreased by 7.4 mb on a seasonal increase in heating oil use. In the meantime, gasoline stocks also declined by 1.2 mb while fuel oil and 'other products' holdings rose by 0.7 mb and 1.3 mb, respectively. Refined product stocks held in independent storage in Northwest Europe rose amid expectations of a seasonal boost in heating oil demand.

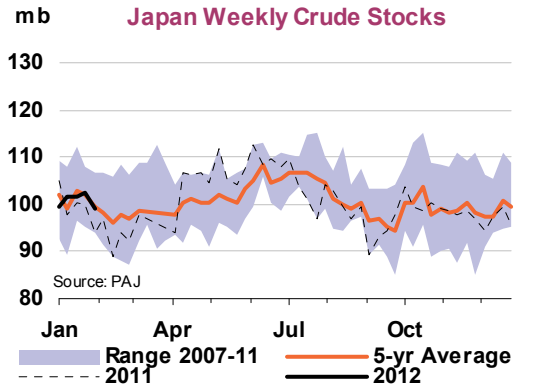
OECD Pacific

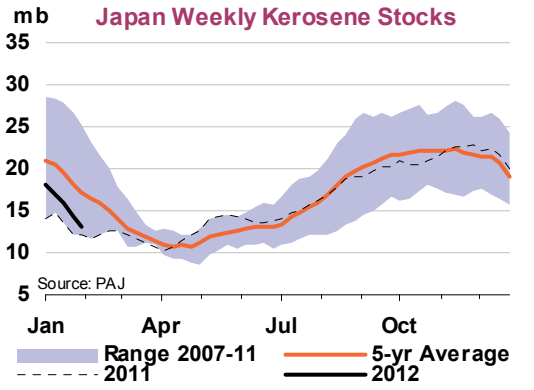
Commercial oil inventories in the OECD Pacific fell seasonally by 18.4 mb to 389 mb in December, close to the five-year average drop of 20.2 mb. The deficit of inventories versus the five-year average narrowed to 13.9 mb, from 15.8 mb in November. Crude was the only stocks category that showed a build. Although crude holdings edged up counter-seasonally by 0.2 mb to 156 mb, they remained under the five-year range for a third consecutive month. In the meantime, product stocks fell seasonally by 14.7 mb, staying barely within the historical range. Middle distillate holdings led the decline, falling by 7.7 mb as cold winter weather at the end of the month finally drew on heating kerosene stocks. 'Other products', gasoline and fuel oil holdings declined by 4.8 mb, 1.6 mb and 0.6 mb, respectively.





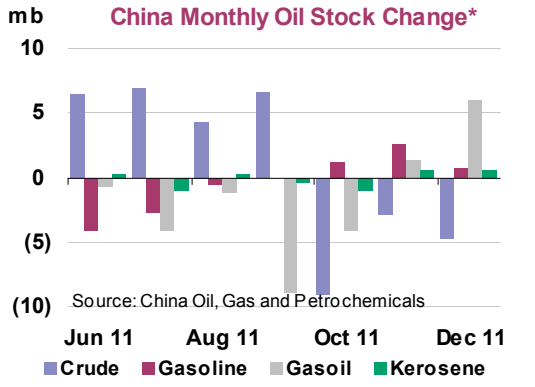
Weekly data from Petroleum Association of Japan (PAJ) suggest a counter-seasonal drop of 1.6 mb in Japanese industry oil inventories in January. Crude oil stocks rose by 3.5 mb, likely on higher crude oil imports. Product stocks fell by 4.6 mb driven by a further drop in kerosene holdings. A cold spell drove kerosene stocks down by 4.2 mb. Gasoline inventories increased by 0.9 mb while fuel oil stocks edged down by 0.1 mb.

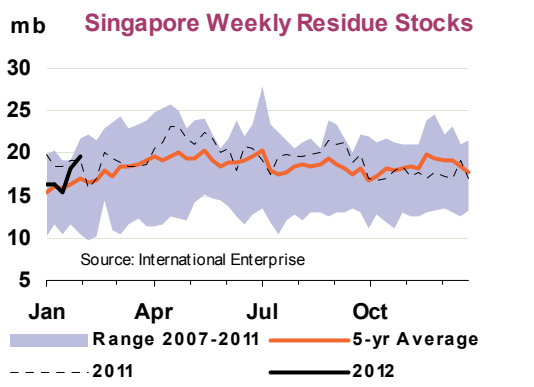




Recent Developments in Singapore and China Stocks

According to *China Oil, Gas and Petrochemicals (OGP)*, Chinese commercial oil inventories rose in December by an equivalent of 2.5 mb (data are reported in terms of percentage stock change). Crude oil stocks fell for a third consecutive month, by 2.2% (4.7 mb). Record high refinery throughput, lower imports and a sharp increase in crude exports led the decline. High refinery runs amid an overall flattening in demand growth drove product stocks higher, by 6.1% (7.3 mb). Gasoline, diesel and kerosene inventories increased by 1.4% (0.8 mb), 10.2% (6.0 mb) and 4.9% (0.5 mb), respectively.





*Since August 2010, COGP only reports percentage stock change

China's SPR Expansion: Potentially Boosting 2012 Crude Demand

Owing to the absence of comprehensive end-user consumption data, the *OMR* makes an assessment of Chinese apparent oil demand based on refined product output and net oil products imports. This is consistent with the measure of products-based oil demand presented for other countries. However, it does not capture potential swings in Chinese crude oil demand caused by changes in strategic storage. China has been continuing the construction of the second phase of its Strategic Petroleum Reserve (SPR), the filling of which, dependent on price and buying schedule, could materially affect Chinese crude oil demand in 2012.

In 2008, China completed building of the first phase of its SPR (SPR-1) – four storage facilities with capacity of 103 mb – and filled them with crude oil by April 2009. Although the Chinese government has yet to officially announce the locations and capacities of the crude storage sites for SPR-2, unofficial news reports identify eight storage facilities with a total capacity of 169 mb. Among them, the Dushanzi and Lanzhou sites (both with 18.9 mb capacity) were reportedly completed in the second half of 2011 and Jinzhou (18.9 mb) and Tianjin (22.0 mb) are set to be completed during the early part of 2012. Again, according to unofficial reports, the remaining four SPR-2 sites are expected to become operational by early 2013. For SPR-3, China aims to construct further capacity of nearly 230 mb to boost total SPR capacity to approximately 500 mb by 2016.

Chinese Strategic Petroleum Reserve Sites
(million barrels)

Operator	Location	Capacity	Status	Completion
Sinopec	Zhenhai, Zhejiang	32.7	Filled	3Q06
Sinochem	Zhoushan, Zhejiang	31.4	Filled	4Q07
Sinopec	Huangdao, Shandong	20.1	Filled	4Q07
CNPC	Dalian, Liaoning	18.9	Filled	4Q08
Phase 1		**103.2**		**2008**
CNPC	Dushanzi, Xinjiang	18.9	Completed and ready to be filled	3Q11
CNPC	Lanzhou, Gansu	18.9	Completed and ready to be filled	4Q11
CNPC	Jinzhou, Liaoning	18.9	Under construction	1Q12
Sinopec	Tianjin	22.0	Under construction	1Q12
	Other	90.3		2013
Phase 2		**169.0**		**2013**
Phase 3		**227.8**		**2016**
Total SPR		**500.0**		

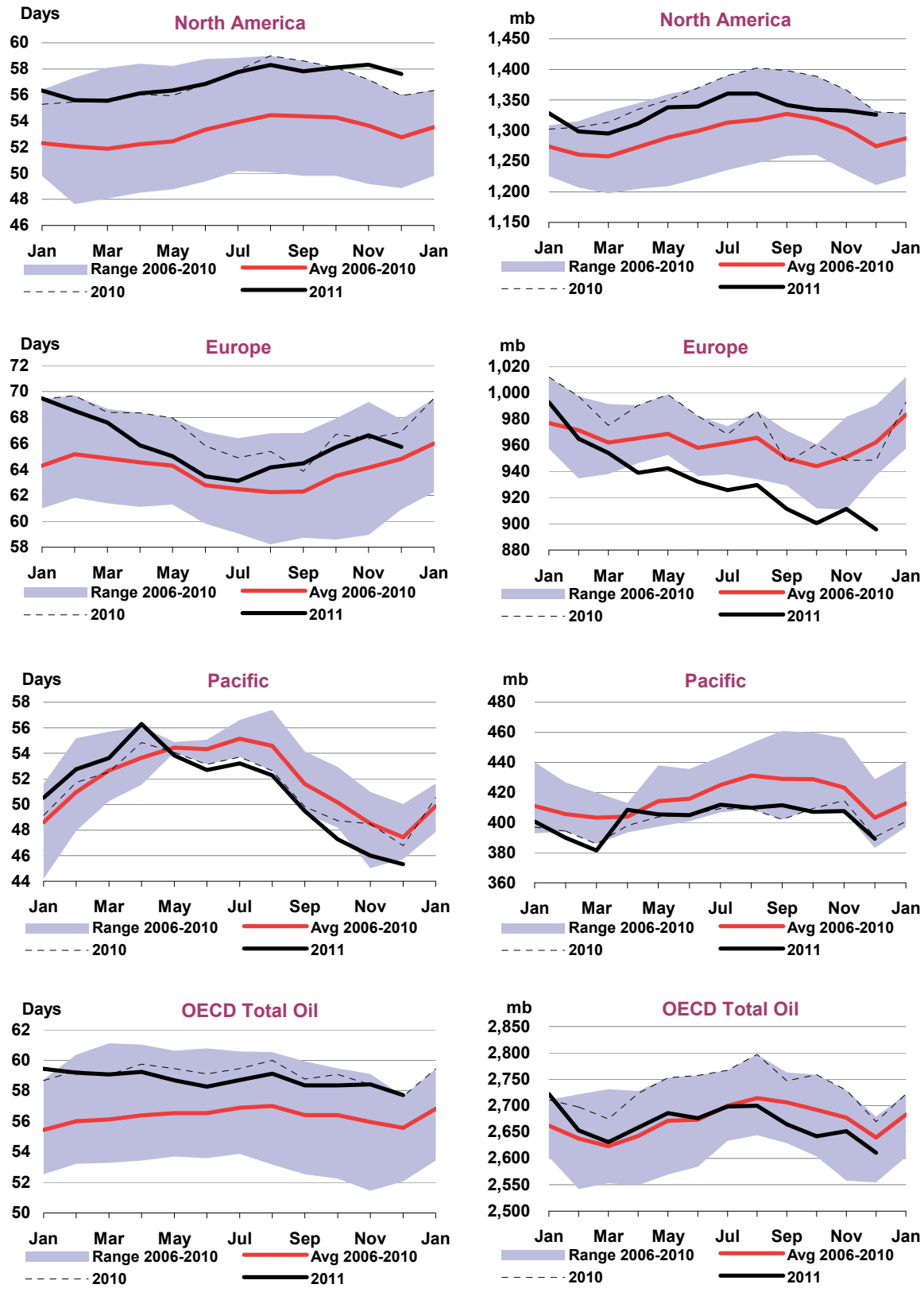
If these reports are correct, then up to 79 mb of new storage facilities would be available to receive crude in 2012. Notionally, this would imply 220 kb/d of crude demand if they were filled steadily throughout the year. However, in reality, the pace of buying will be influenced by market conditions, and there may be disincentives to fill the reserve currently, given prevailing high prices and backwardated market structure. Equally, however, purchasing could accelerate if prices weaken, if there is a perceived need to rapidly fill empty storage capacity or if distressed cargoes become available in the Asian market following tightening EU and US sanctions against Iran.

Singapore onshore inventories rose by 1.9 mb in January, driven by an increase in fuel oil holdings. Fuel oil stocks surged by 2.8 mb, rebounding from a two-and-a-half-year low in the middle of the month. A high volume of arbitrage cargoes was reported flowing into Singapore from the West. In the meantime, gasoline stocks edged down by 0.3 mb on strong demand from Indonesia and middle distillate inventories fell by 0.6 mb as surplus Indian cargoes, which might have gone to Singapore otherwise, headed to Europe, where the structural deficit is being exacerbated by lower refining capacity.

Regional OECD End-of-Month Industry Stocks

(in days of forward demand and millions barrels of total oil)

Days[1] Million Barrels



1 Days of forward demand are based on average demand over the next three months

PRICES

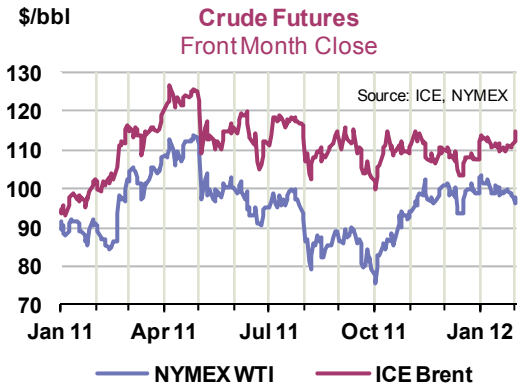
Summary

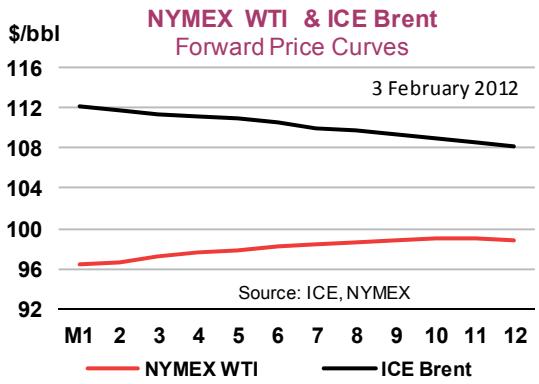
- **An uneasy balance characterised oil markets through much of January, despite a sharp escalation in international tensions surrounding Iran. Oil prices seem to have risen only marginally on the Iranian issue, but it was the onset of winter weather that fuelled prices** for international benchmark Brent to six-month highs in early February. Brent was last trading around $117.50/bbl. By contrast, rising stocks at the regional Cushing storage depot pressured WTI prices lower in early February, last trading around $99.50/bbl.

- **As the Brent-WTI price differential surged to levels not seen since last September's peaks, the ratio of Brent to WTI futures open interest climbed to 57% in January.** Open interest in ICE Brent contracts surpassed 1 million contracts on 26 January 2012 and it is expected to rise further.

- **Product crack spreads increased across the board in January, with differentials for gasoline and naphtha at the top of the barrel, and fuel oil at the bottom of the barrel, increasing the most.** Middle distillate markets are still strong, but moved within a smaller range over the month, except for in the US, where crack spreads improved.

- **Benchmark crude tanker rates experienced a sharp downturn in late January and early February, although they still held above their 3Q11 lows.** The VLCC Middle East Gulf – Japan route initially rallied to over $17/mt on brisk pre-Chinese new year holiday trading, but market activity eased again as tonnage built, notably from new builds arriving in the market, and rates plunged again.





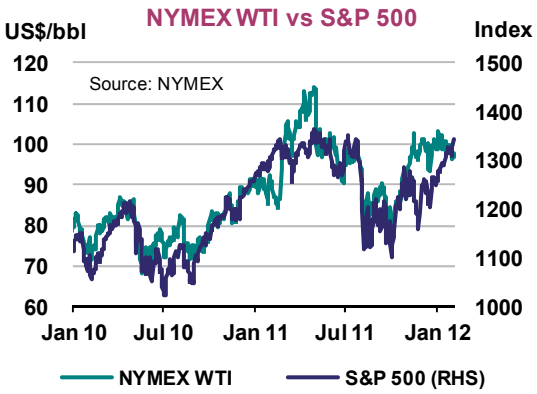
Market Overview

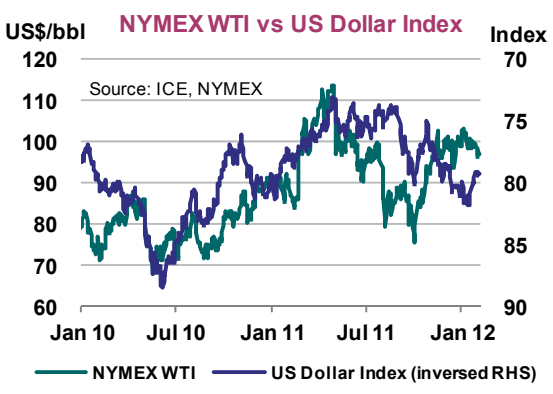
Crude oil futures traded in a higher range during January as new EU sanctions on Iranian oil imports and regulations that essentially block member countries from transacting business with the country's central bank triggered retaliatory rhetoric from Tehran. In January, futures prices for Brent posted an increase of around $3.75/bbl to an average $111.45/bbl, while WTI rose by about $1.75/bbl to an average $100.32/bbl.

By early February, cold weather in Europe fuelled stronger demand and propelled North Sea Brent futures up by a further $6/bbl over January levels, last trading around $117.50/bbl. By contrast, rising stocks at the key Cushing storage depot, the delivery point for the NYMEX contract, added downward pressure on WTI, last trading around $1/bbl below January levels, at $99.50/bbl.

Despite tougher new sanctions by the international community, the market is largely still taking the situation in its stride. Although the new measures will not go into effect until 1 July 2012, refiners and traders are already lining up alternative sources of supply. Indeed, the delayed time-line was designed to allow traditional buyers of Iranian crude a grace period of around five months to secure crude replacements (*see Supply, 'Iranian Customers Start Lining Up Alternative Crude Supplies')*.

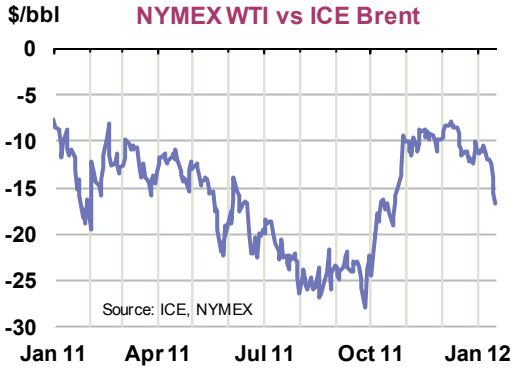
While there appears to be ample crude on offer in the market, the new, stricter sanctions are nonetheless causing significant problems for the tanker industry, with rates for vessels calling at Iranian ports running at a premium and talk of insurers shying away altogether from providing cover for vessels that have recently called at Iranian ports. As a result, a two-tier tanker market is emerging.

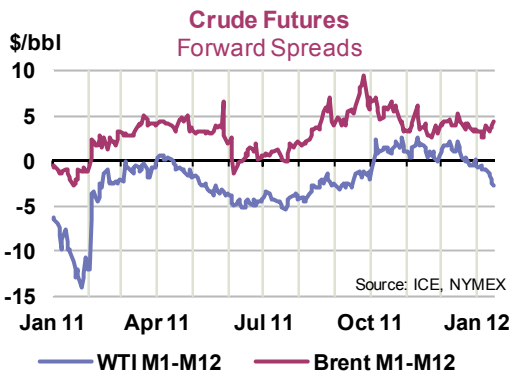




Higher prices spurred on by geopolitical concerns with Iran and turmoil in Syria were tempered by persistent concerns about the worsening euro zone debt crisis and an across-the-board downgrade in global GDP forecasts by the International Monetary Fund (IMF). The IMF cut its 2012 forecast for global economic growth to 3.3% from 4% and, indeed, this report's downward demand revisions reflect the lower projections. Global oil demand for 2012 has been revised lower by 0.2 mb/d to 89.9 mb/d, with growth now expected to average 0.8 mb/d this year. Despite more encouraging economic signals from within the US, WTI prices remain under severe pressure from swelling stocks at Cushing, rising crude flows from Canada into the Midcontinent and higher output of Bakken crude from North Dakota. As a result, the Brent-WTI price differential surged to levels not seen since peaking last October.

The late arrival of winter weather is also providing unexpected support for the crude market. Fears of gas shortages in Europe have raised the prospect of increased oil burn at power plants, with Italy already putting in place some alternative plans to start up some oil-fired plants. Indeed, despite some rather grim demand data for December, refining margins rose significantly in all major regions, albeit related more to concerns over product supply than expectations of sustained demand strength.





Brent futures prices remained backwardated in January, whereby prompt prices are stronger than further out. However, Brent M1-M12 backwardation was relatively unchanged in January at $3.65/bbl, compared with $3.70/bbl in December although the differential widened again in early February on stronger prompt prices for the North Sea marker, likely driven higher by cold weather demand.

By contrast, weak prompt demand for WTI saw the WTI M1-M12 contract move deeper into contango, with the early-February differential running at around -$2.95/bbl compared with -$0.18/bbl in January and $1.13/bbl in December.

Prompt Month Oil Futures Prices

(monthly and weekly averages, $/bbl)

	Nov	Dec	Jan	Jan-Dec Avg Chg	% Chg	Week Commencing: 02 Jan	09 Jan	16 Jan	23 Jan	30 Jan
NYMEX										
Light Sweet Crude Oil	97.16	98.58	100.32	1.74	1.7	102.39	100.44	100.04	99.44	97.81
RBOB	108.50	109.14	117.45	8.31	7.1	115.73	115.59	117.57	119.20	121.24
No.2 Heating Oil	128.63	122.13	127.94	5.81	4.5	128.49	128.69	126.79	127.49	128.75
No.2 Heating Oil ($/mmbtu)	22.08	20.97	21.96	1.00	4.5	22.06	22.09	21.77	21.89	22.10
Henry Hub Natural Gas ($/mmbtu)	3.56	3.25	2.71	-0.54	-19.9	3.03	2.82	2.41	2.62	2.53
ICE										
Brent	110.49	107.72	111.45	3.73	3.3	112.91	111.93	110.96	110.53	111.99
Gasoil	129.27	124.05	128.54	4.50	3.5	129.18	130.17	127.64	127.45	128.56
Prompt Month Differentials										
NYMEX WTI - ICE Brent	-13.33	-9.15	-11.13	-1.99		-10.52	-11.49	-10.92	-11.10	-14.17
NYMEX No.2 Heating Oil - WTI	31.47	23.56	27.62	4.06		26.10	28.25	26.75	28.05	30.94
NYMEX RBOB - WTI	11.34	10.57	17.13	6.56		13.34	15.15	17.53	19.76	23.43
NYMEX 3-2-1 Crack (RBOB)	18.05	14.90	20.63	5.73		17.60	19.51	20.60	22.52	25.93
NYMEX No.2 - Natural Gas ($/mmbt	18.53	17.72	19.26	1.54		19.03	19.27	19.36	19.27	19.57
ICE Gasoil - ICE Brent	18.78	16.32	17.09	0.77		16.27	18.23	16.68	16.91	16.58

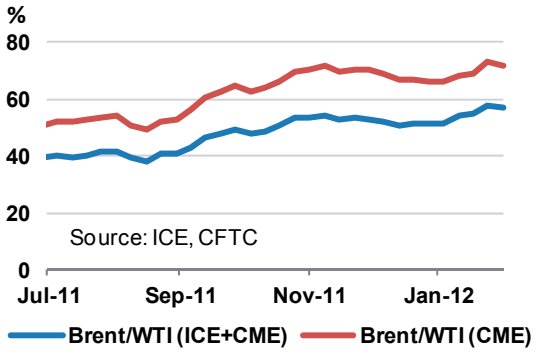
Source: ICE, NYMEX

Futures Markets

Activity Levels

The ratio of Brent futures contracts traded on the London ICE to WTI contracts in New York and London combined climbed to 57% in January, more than an 18% increase since July 2011, triggered by a persistent decline in open interest in ICE WTI contracts and an increase in Brent open interest. Both volume and open interest have been consistently declining in ICE WTI contracts. However, the upward trend in the ratio of Brent to WTI open interest is also present when we exclude ICE WTI contracts from our calculation. The ratio of ICE Brent to CME WTI open interest reached more than 73% on 24 January 2012, compared to just over 50% in July 2011.

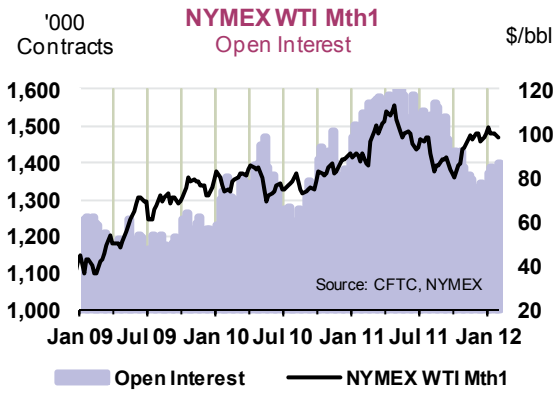
Percentage of Brent to WTI Open Interest

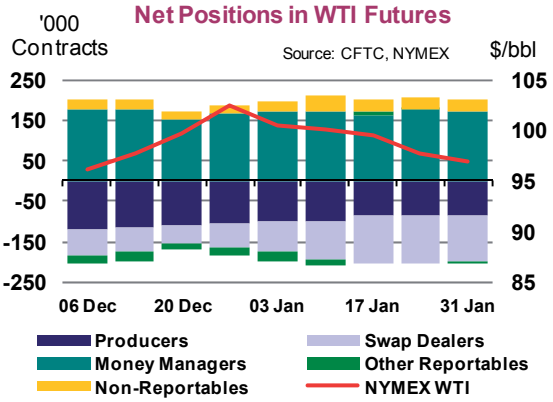


Open interest in New York CME WTI futures and options contracts increased by less than 1 000 contracts from 3 January 2012 to 31 January 2012, reaching 2.32 million contracts. Meanwhile, open interest in futures-only contracts increased by 1.96% during the same period, from 1.37 million to a three-month high of 1.4 million. Over the same period, open interest in London ICE WTI contracts dropped to 0.36 million and 0.42 million contracts in futures-only and combined contracts, respectively. As opposed

to open interest in ICE WTI contracts in London, open interest in ICE Brent contracts peaked at its highest level at 1.0 and 1.12 million contracts in futures-only and combined contracts, respectively.

With relatively stable prices for New York CME WTI contracts, money managers barely increased their bets on rising WTI crude oil prices by 2 890 contracts in January, to a two-month high of 172 921 contracts. However, WTI traders in London increased their net long position by more than 66% to a six- month high of 24 294 contracts. Over the same period, money managers reduced their bets on rising Brent prices by 10.5% from 94 315 to 84 417 contracts.





Producers reduced their net futures short positions from 99 231 to 85 660 contracts in January; they held 19.78% of the short and 13.66% of the long contracts in CME WTI futures-only contracts. Swap dealers, who accounted for 27.18% and 35.46% of the open interest on the long side and short side, respectively, increased their net short position by 58.8% to hold 115 800 net short in January. Producers' trading activity in the London WTI contracts also followed a similar pattern as CME WTI contracts. Producers in the London ICE WTI contracts increased their net long positions contracts from 5 890 to 20 199 contracts over the same period. Swap dealers, on the other hand, increased their net short positions during the same period to 47 011 from 40 694 contracts.

NYMEX RBOB futures and combined open interest increased by more than 16% in January. Open interest in NYMEX heating oil futures contracts increased by 2.04% to 274 900 contracts while open interest in natural gas markets increased by 18.41% to reach an all time high of 1.2 million contracts.

Index investors' long exposure in commodities in December 2011 declined by $24.4 billion. Meanwhile, they cut their long exposure by $9.8 billion from WTI Light Sweet Crude Oil, both on and off futures contracts in December. The number of futures equivalent contracts dipped to 603 000, the lowest since June of 2009, equivalent to $59.6 billion in notional value.

Positions on NYMEX Light Sweet Crude Oil (WTI) Futures Contracts

Thousand Contracts

31 January 2012	Long	Short	Net	Long/Short	Δ Net from Prev. Week	Δ Net Vs Last Month
Producers' Positions	191.3	276.9	-85.7	*Short*	↓ -0.1	↑ 19.0
Swap Dealers' Positions	175.2	291.0	-115.8	*Short*	↑ 3.9	↓ -57.1
Money Managers' Positions	212.1	39.2	172.9	*Long*	↓ -2.5	↑ 7.4
Others' Positions	109.1	111.3	-2.2	*Short*	↓ -4.7	↑ 18.7
Non-Reportable Positions	85.9	55.1	30.8	*Long*	↑ 3.3	↑ 12.0
Open Interest			**1399.9**		↑ 58.1	↑ 74.3

Source: CFTC

Market Regulation

On 21 January 2011, the US Court of Appeals for the District of Columbia Circuit sided with the US CFTC's argument that the International Swaps and Derivatives Association (ISDA) and the Securities Industry and Financial Markets Association (SIFAM) challenge to CFTC's position limit rule must first be heard by a lower court. Industry groups had also filed a similar challenge at the district court, which could eventually go to the Supreme Court.

On 31 January 2012, the US CFTC and SEC released their joint report to the public on the regulatory framework in the US and abroad. The report provides an update on the regulatory reforms in the US and abroad and suggests that since regulatory progress in meeting the 2009 G-20 Leaders' commitments varies across jurisdictions, it is still too early to determine precisely where there is alignment internationally and where there may be gaps or inconsistencies.

On 24 January 2012, EU ministers agreed on the final draft of the European markets infrastructure regulation (EMIR). Specifically, the EU Council of Finance Ministers agreed on the treatment of third country Central Counterparty Clearing Houses (CCPs) within EMIR. The Ministers agreed that CCPs from third countries will be recognised in the European Union if the legal regime of their home country has an effective equivalent system for the authorisation of CCPs authorised under foreign legal regimes. Furthermore, the Ministers also reached an agreement on a system that limits the power of the European Securities and Markets Authority (ESMA) in the authorization process of CCPs. However, the European Parliament raised concerns over the limited role of the ESMA. Once the final text has been agreed by the European Parliament in February 2012, it will be voted on in the European Parliament and by the European Council.

Grounds for Divorce?

In a narrow 3-2 vote on 11 January 2012, CFTC Commissioners proposed their own version of the Volcker Rule, which prohibits proprietary trading activities of banks and limits their investments in private-equity and hedge funds in line with the restrictions already proposed by the Federal Deposit Insurance Corp., the Federal Reserve, the SEC and the Comptroller of the Currency in October, 2011. The intent of the Volcker Rule is to reduce risk in the US banking system by limiting the excessive risk-taking activities of banking entities, defined as any insured depository institutions and their subsidiaries.

The Dodd-Frank Act mandates the rule to be implemented by 21 July 2012. Banking entities must comply with the new requirement by 21 July 2014 for their pre-existing investments. However, the Federal Reserve Board can extend the deadline for compliance for up to three years.

Volcker Rule

The rule has basically two parts. The first part is related to restrictions on activities of banking institutions, except for non-US banking entities' transactions outside of the United States with non-US residents. The rule prohibits proprietary trading, while allowing transactions related to underwriting, market-making, risk mitigating hedging, trading in certain US government obligations, and trading on behalf of customers. The statute defines proprietary trading as engaging in the purchase or sale of certain financial assets as a principal for the trading account of a covered banking entity.

Financial assets include securities, derivatives, commodity futures and options on these instruments, but do not include positions in loans, spot foreign exchange or spot commodities. The rule also explains what constitutes an entity's trading account. The definition of trading account specifically includes positions taken principally for the purpose of short-term (less than 60 days) resale. The proposed rule calls for the establishment of internal compliance programmes and reporting requirements on banking entities. The rule further provides guidance on what banking entities must do to prove that they are not proprietary trading but engaging in permitted activities, such as market-making or trading on behalf of customers. Finally, the proposed rule provides detailed limitations on the permitted activities. For instance, if their permitted activity would endanger the safety or soundness of the banking entity or the financial stability of the United States, then it is considered proprietary trading and it is prohibited.

Grounds for Divorce? (continued)

The second part of the proposed rule is related to banking entities' relationship with private equity funds and hedge funds. In order to prevent a bank from indirectly engaging in proprietary trading through direct investment and also to prevent a bank from possibly bailing out such funds, the rule limits banking entities' investment in such funds.

Concerns over the Volcker Rule

Market participants, including regulators themselves, argued that the proposed regulation is overly complex. Even Volcker himself said during a speech in November that the proposed rule was much more complicated than initially intended. Regulators have already admitted the difficulty in implementing the rule. The determination of what constitutes proprietary trading and what constitutes legitimate trading activity will be challenging. Although most banking entities already closed their proprietary trading desks, some argue that they are merely moving these activities to their market-making activities. Some market participants urge regulators to put more clarity on the scope of proprietary trading and on the exceptions for permissible activities. However, regulators argued that compliance with the rules will not be based on trade-by-trade enforcement but rather at policies and procedural levels. On the other hand, if the rule mistakenly identifies banks' market-making trades as proprietary trades, this will have an impact on liquidity and thereby on the overall economy.

Foreign governments also raised concerns over the prohibition of US banks trading in foreign governments bonds. Since the US banks are one of the biggest bond buyers, prohibitions imply more costly borrowing for foreign governments. The proposed rule, rather than reducing risk, most likely will drive that risk into other places. The Japanese, Canadian and British governments have said the proposal aggravates the risk for their markets. Some further argue that if the Volcker rule does result in increased borrowing costs for European governments, which are already faced with higher borrowing costs, then the economic fallout may not be contained to the Continent.

Impact on Energy Markets

In its current proposed form, the Volcker Rule does not prohibit banking institutions from holding positions in spot commodities, in which case several reports suggest that some banks may become very active physical market players. However, the rule prohibits proprietary trading by banking entities and their subsidiaries in energy derivatives markets. Banking institutions have been active players, especially since the mid-2000s in energy derivatives markets, including in over-the counter (OTC) markets. In fact, most swap dealers in energy derivatives markets are either banking institutions or their affiliates; the latest Commitments of Traders position data suggests that 27.18% and 35.46% of the open interest on the long side and short side, respectively, of the WTI futures contracts are held by swap dealers. However, there is no estimate of how much of the swap dealers' position could be considered as proprietary trading. It will depend on how narrowly regulators interpret the scope of the definition of market-making versus proprietary trading. The interpretation is much more important in the case of their trading activity in swaps markets, where they are generally counter-parties to commodity index traders, hedgers and speculators. If their trades with other parties are considered as proprietary trading, then the ban would cover almost every trade by swap dealers in the futures and swaps markets. However, we expect most trades to be considered as market-making or trading on behalf of customers, and therefore we anticipate limited impact on liquidity in energy markets.

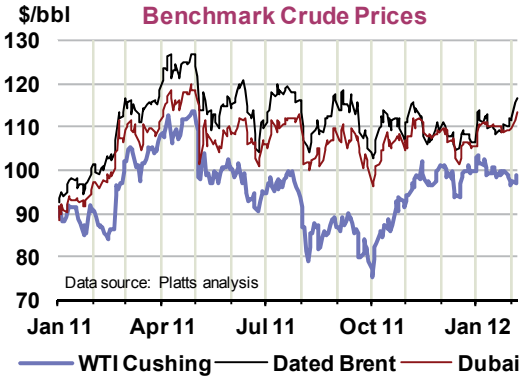
Spot Crude Oil Prices

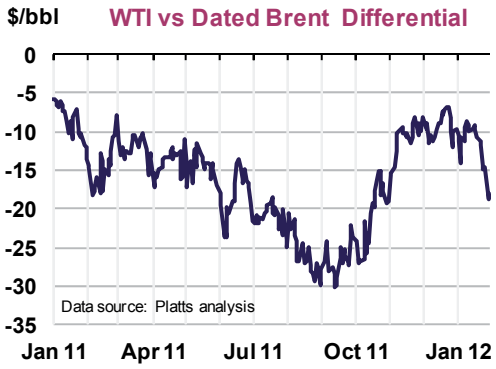
Spot crude oil markets strengthened in January in line with rising tensions between Iran and the West following new, more stringent sanctions adopted by the EU and US. In response, Tehran threatened to cut-off exports to some European countries it deems especially hostile. Spot prices for benchmark crudes rose in January by $1.75-$2.75/bbl, with average prices for Dated Brent around $110.60/bbl and WTI at $100.35/bbl.

Our usual summary tables of average spot crude oil and products prices, and Table 13, in the subscriber edition of this report have been removed pending further licensing discussions with the data provider.

Spot crude prices' moves in early February, however, were mixed. Dated Brent continued its upward climb to six-month highs as a cold blast of Siberian weather swept across Europe and pushed spot prices about $6/bbl above January levels. By contrast, spot prices for WTI were off about $1/bbl over the same period as rising stock levels at Cushing, Oklahoma added downward pressure.

By early February the price spread between the two benchmark crudes had widened to levels not seen since last September, when they averaged over $27.50/bbl. By 6 February, the WTI/Brent differential hit an intra-day trading high of over $20/bbl compared with an average $10.20/bbl in January and $9.25/bbl in December.





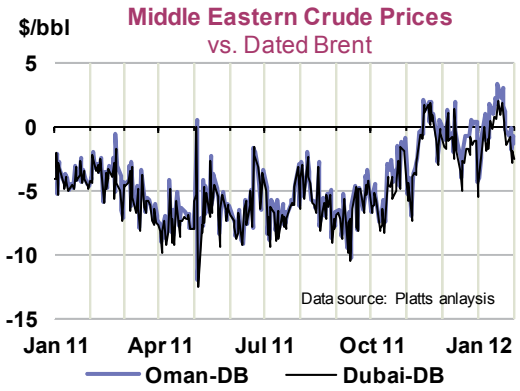
US crude oil stocks held in storage at Cushing moved above the five-year average in early February, to a lofty 30.4 mb, after declining for five weeks due to a combination of sharply higher crude flows from Canada, a surge in Bakken output from North Dakota and reduced refinery throughput rates in the Midcontinent region due to maintenance work.

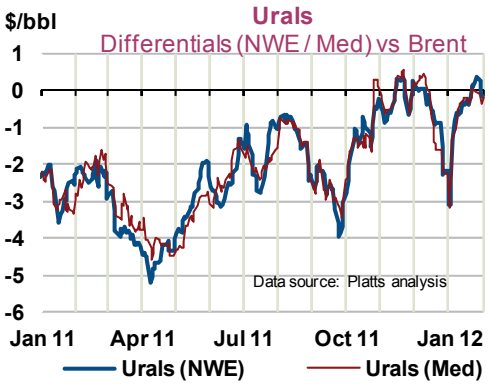
An increase in Cushing storage capacity last year, with more planned for 2012, should theoretically provide more room to hold growing supplies in the region, taking the pressure off prompt prices (*see OMR 18 January 2012, Stocks, 'Cushing Storage Expansion'*). But in practice, the relatively steady increase in crude flows into Cushing, especially from the Bakken producing region that posted an increase of around 250 kb/d last year, continues to exacerbate market dynamics (*see OMR 10 November 2011, Supply, 'Eagle Ford and Bakken Bonanza to Transform US Oil Production Outlook'*).

Ultimately, the addition of new pipeline capacity flowing out of Cushing to the US Gulf Coast refining centre will provide the only permanent relief valve for the region. The planned reversal of the Seaway pipeline, which will have a capacity of 150 kb/d, has been delayed several months and is now not expected to be operational until end-June. The fate of the controversial 700 kb/d Keystone XL pipeline, which will run from Alberta, Canada to the US Gulf Coast is still caught in a quagmire (*see Supply, 'Short-Term Impacts of Keystone XL decision'*).

Planned and unplanned maintenance work by refiners in the US Midcontinent has also sharply curtailed demand for crude in the short-term, especially from Canadian producers. Combined with tight pipeline capacity, price discounts for Canadian crude versus WTI have also cratered. Western Canada Select (WCS) heavy crude was trading at a discount of $31.50/bbl to WTI in early February compared to around $17.50/bbl a month ago.

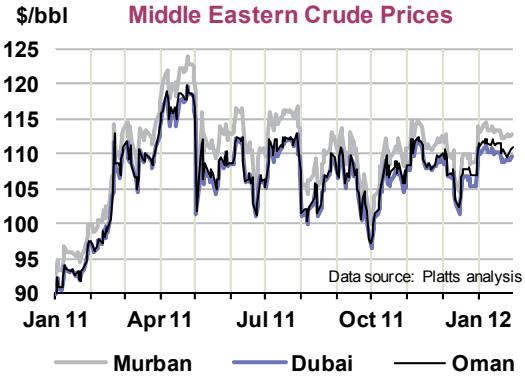
A blast of exceptionally cold weather across Europe triggered a jump in Dated Brent prices in early February. That said, prices are relatively cheap compared with Dubai and other Middle East grades, prompting a record level of exports to Asia in recent weeks. Middle East Dubai and Oman grades were briefly trading at a premium to dated Brent in January. However, the average Brent/Dubai differential narrowed to around -$0.80/bbl in January compared with -$1.40/bbl in December and a more normal -$5/bbl seen on average in 2011.

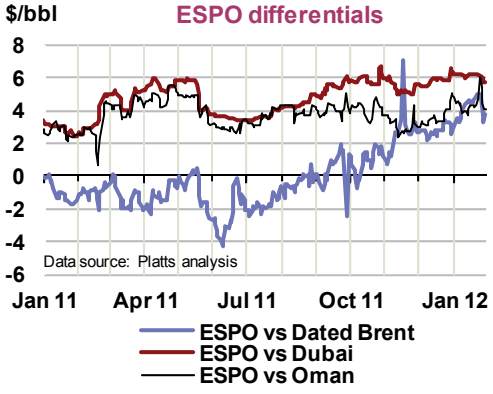




The relatively weaker Brent price reflects growing availabilities of light, sweet crude in Europe, especially from the North Sea as well as Libya, and reduced refiner demand in Europe. In turn, stronger demand for distillates, higher fuel oil crack spreads and reduced Russian exports boosted Urals to a premium to Dated Brent for a few days at end-January. The Urals/Brent price spread was running at around -$0.30/bbl in early February compared with around an average -$0.70/bbl in January. Urals is seen by many as a fairly close substitute in the event of curtailed Iranian supplies into Europe.

Competitively priced West African crudes from Nigeria and Angola are also moving at a steady clip to Asia, with arguably arbitrage economics playing more of a role in this trade than moves to replace Iranian crude, given the quality differentials between African and Iranian grades. China is reportedly taking in extra Saudi and Russian ESPO crude. Exceptionally strong fuel oil crack spreads are supporting stronger prices for heavier Middle East grades.





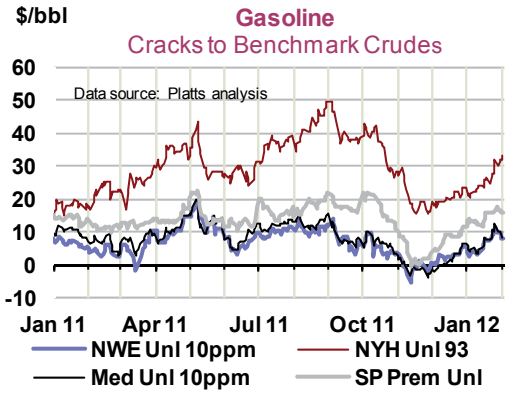
Spot Product Prices

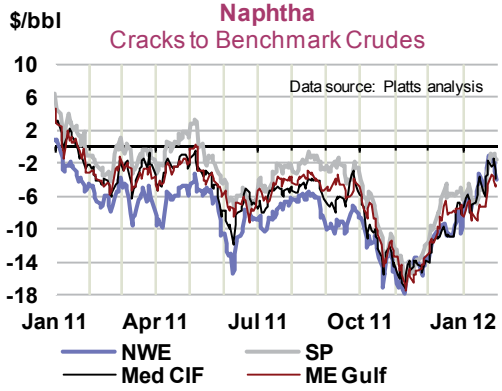
Product crack spreads increased across-the-board in January, with differentials for gasoline and naphtha at the top of the barrel and fuel oils at the bottom of the barrel posting the largest gains. Middle distillate markets are still strong, but moved within a smaller range over the month, except in the US where cracks improved.

Gasoline prices posted healthy gains in all regions in January, with differentials increasing $5-6/bbl month-on-month. The surge was largely due to tighter supplies, stemming from refinery closures in both Europe and PADD I, and the announcement of the closure of Hovensa's 350 kb/d St.Croix refinery in the Caribbean from mid-February, an important supplier of gasoline to the US East Coast.

In the US, New York Harbour unleaded gasoline versus WTI increased by $6.11/bbl month-on-month, while the differential to Mars crude at the US Gulf increased $6.23/bbl. In addition to the announced refinery shutdowns, a number of smaller unplanned outages on the US East Coast towards the end of January also pushed crack spreads higher, even though the actual effect on supplies was limited. Although weekly US demand readings are still depressed, export demand, particularly from Latin America, has remained strong. US gasoline exports increased to record-high levels throughout 2011, based on latest available data from November 2011.

In Europe, crack spreads gained a similar $5-6/bbl on average in January. Due to the high US prices, the arbitrage to the US East Coast was open, but also exports to the Middle East and North Africa were supportive for the European market. After trade unions in Nigeria went on strike in mid-January to protest against the removal of fuel subsidies, part of the fuel subsidy was restored, also calming European gasoline markets.

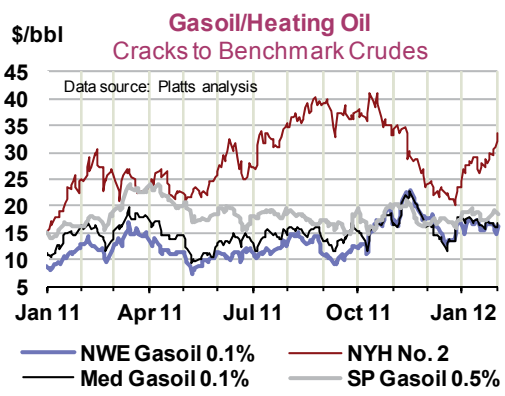


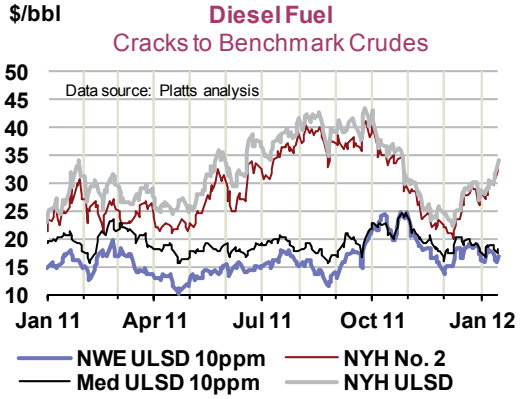


Asian gasoline crack spreads followed the increases in the Atlantic basin, with crack spreads gaining $6.75/bbl to Dubai month-on-month. The most important factor driving prices apart from continuously strong regional demand was expectations of tightening supply with the upcoming refinery maintenance season.

Naphtha cracks continued to improve in January, but were still trading at a $5/bbl discount to crude in both Europe and Singapore for the month on average. Both the recent rebound in gasoline markets and stronger demand from petrochemical producers in South Korea and Taiwan were supportive, partly as recently stronger LPG prices again made naphtha the preferred feedstock for petrochemical producers. Meanwhile, supplies are to be restricted by partial closure of Algeria's Skikda and India's Jamnagar refineries due to maintenance in the coming months.

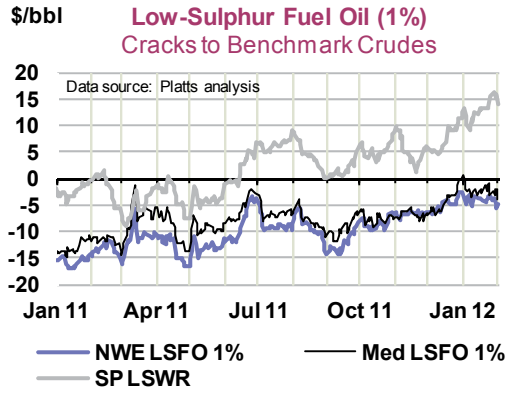
Middle distillate crack spreads in Europe stabilised at an elevated level in January, with gasoil crack spreads moving within a $15-18/bbl range. This was in spite of mild weather most of the month and independent stocks in the ARA region building in January and standing above the five-year average at end-month. Moving into February, renewed support could come from the colder weather.

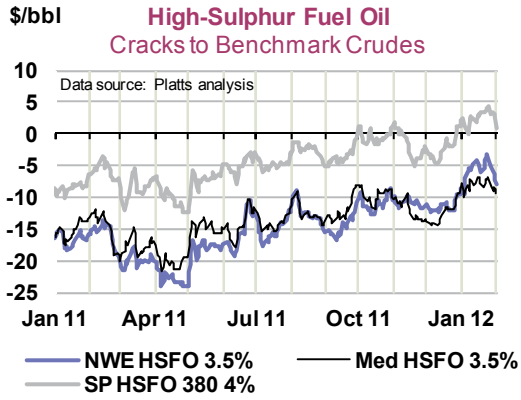




Middle distillate markets in the US strengthened in January and early February, and No. 2 oil gained $5.24/bbl versus WTI month-on-month in New York Harbour, and $3.36/bbl versus Mars in the US Gulf. This was partly due to stock draws in the second half of January, but also the announced closure of the St. Croix refinery supported crack spreads on expectations of higher middle distillate exports from the US to Latin America.

In Singapore, gasoil cracks improved by $1.45/bbl to Dubai as further stock draws from already low levels continued to support prices, together with prospects of even tighter supply ahead with the upcoming refinery maintenance season.

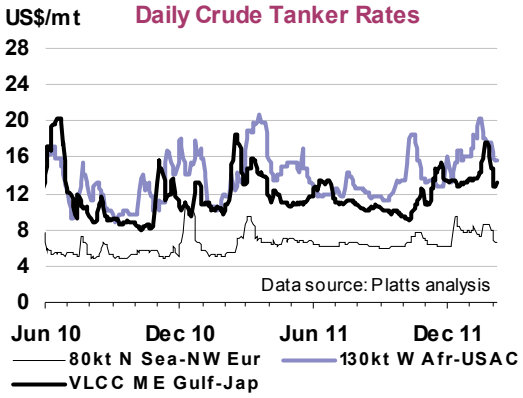


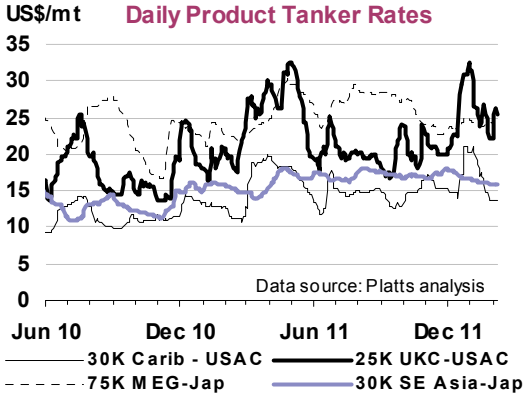


Fuel oil markets continued to show unusual strength, and in Asia HSFO cracks were at record-highs with positive differentials to Dubai for January on average. Continued tightness in the bunker fuel market, with refiners still adjusting to the new global sulphur regulations, explains much of the strength. In addition, the refinery closures in Europe have tightened supplies of straight-run fuel oils, together with the loss of Sudanese Dar Blend exports, which has hit the Chinese market in particular *(see Supply, 'Sudan and South Sudan: Over a Barrel')*. Moving into February, Asian crack spreads narrowed somewhat on the back of a large stock build in Singapore as arbitrage volumes arrived, and reports of less Chinese buying of straight run fuel oil. The Asian LSWR crack continued to strengthen on strong utility demand, especially from Japan amid falling temperatures.

Freight

All benchmark crude tanker rates experienced a sharp downturn in late January and early February, although they still held above their 3Q11 lows. The VLCC Middle East Gulf – Japan route initially rallied to over $17/mt on brisk pre-Chinese new year holiday trading but as the holiday began, market activity eased again, tonnage built, notably from new builds arriving in the market, and rates plunged to below $13/mt by early February. Anecdotal reports of problems securing insurance for vessels on routes into or out of Iran, or which have recently called at Iranian ports, have yet to translate into major vessel supply problems, although some analysts have warned this could become more of an issue going forward.





In the Suezmax market, rates on the benchmark West Africa – US Atlantic Coast trade experienced a similar pattern of boom and bust, after breaching $20/mt in mid-January for the first time since March 2011, rates nose-dived back to $15/mt by early February as demand waned. In Northern Europe, unseasonably mild weather limited gains on the Aframax North Sea – Northwest Europe voyage. Indeed, in mid-winter rates would normally be getting a boost from ice-related delays at Russian ports, however, for the first time in five years, Primorsk had no ice-class restrictions in place during January although this is likely to change in mid-February.

Product tanker rates experienced a similar trend to those for dirty vessels with any gains made during early January being erased by early February. The exception to this was the notoriously volatile transatlantic UK – US Atlantic voyage coast which, after descending in late February on the back of lengthening tonnage lists, managed to claw back some lost ground following the opening of a wide gasoline arbitrage in early February. In the East, 2012 has so far been characterised by a slow and steady erosion of rates, as demand has remained generally stable but serviced by an ample tonnage pool.

On a steady downward trend since the start of 2012, the Caribbean – US Atlantic Coast product trade is likely to remain depressed for the foreseeable future following the mid-February closure of Hovensa's St. Croix refinery in the US Virgin Islands. With the refinery being a major supplier of products, notably gasoline blending components, to the US East Coast, it is anticipated that its closure is likely to translate into lower demand for product tankers in the region given that US imports from other Caribbean refineries are comparatively small to those previously sourced from St. Croix. However, this closure could buttress the UK – US Atlantic Coast market since it is likely that US product imports will need to be sourced from elsewhere.

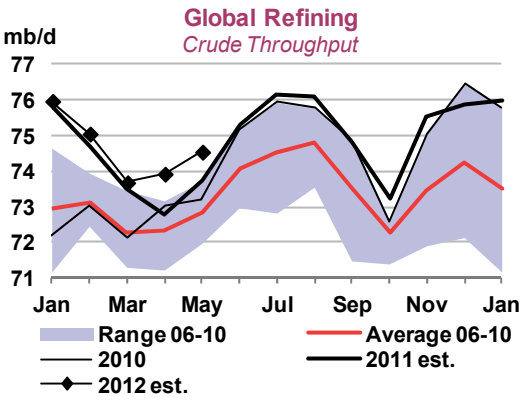
REFINING

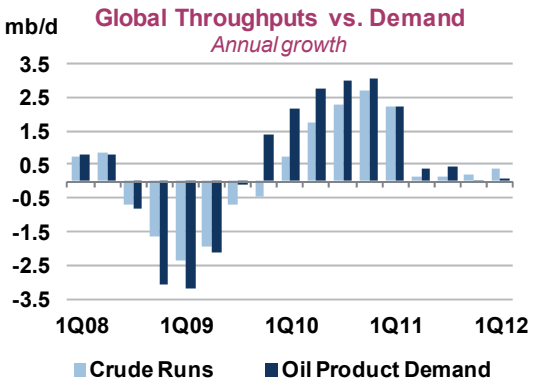
Summary

- **Global refinery crude throughput estimates for 1Q12 are largely unchanged from last month's report**, as minor upwards adjustment to OECD runs are offset by a lower outlook for the non-OECD. In particular, Latin American runs have been significantly reduced following the announced closure of Hovensa's 350 kb/d St. Croix refinery and lower run rates at Valero's Aruba plant. At 74.9 mb/d, global runs are forecast 220 kb/d above year-ago levels and unchanged from the previous quarter.

- **OECD crude runs rose by 200 kb/d in December, to 36.7 mb/d**, and 240 kb/d higher than suggested by preliminary data. Stronger runs in Europe and the Pacific were partly offset by lower runs in North America, the latter falling below year-earlier levels for the first time since July. As a result, total OECD runs fell 0.9 mb/d short of end-2010 levels, due to unseasonably weak demand and poor margins.

- **Refinery margins rose significantly in all regions surveyed in January,** as surplus capacity continued to be shed in mature markets. Concerns over Atlantic Basin product availability rose with the announced shutdown of Hovensa's 350 kb/d refinery in the US Virgin Islands and as European independent refiner Petroplus filed for insolvency. Margins surged by between $2.50-$7.70/bbl, but remained negative for several simple configurations surveyed.



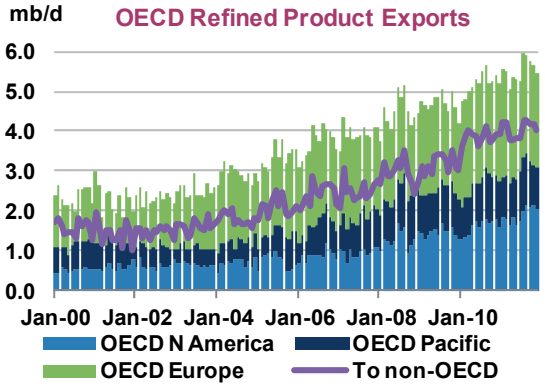


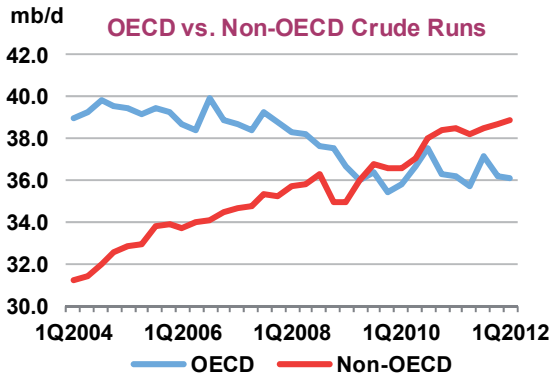
Global Refinery Overview

Global refinery crude runs estimates for both 4Q11 and 1Q12 are largely unchanged since last month's report, at 74.9 mb/d. While changes to 4Q11 were minimal, offsetting adjustments for the OECD and non-OECD for 1Q12 mostly cancelled each other out. Our outlook for Latin American crude throughputs has been significantly curtailed since last month's report following the announced closure of Hovensa's St. Croix refinery in the US Virgin Islands and economic run cuts at Valero's Aruba plant. In contrast, a slightly higher 4Q11 baseline for the OECD has been carried forward into the early part of 2012. Global annual growth in throughputs is estimated at around 0.2 mb/d for both quarters, with the OECD contracting and the non-OECD reporting modest growth, mirroring oil demand trends.

The significant slowdown seen in global oil product demand growth since 1Q11 is expected to extend into 2012, though non-OECD growth will again provide support for global demand from 2Q12 onwards. While the shift in economic activity and oil demand to the non-OECD will naturally extend to refinery operations, OECD runs could in part be supported by product exports. Total OECD refined product exports have been on a steadily rising trend and averaged 5.5 mb/d over 2011 (January-November), of which roughly 75% went to non-OECD countries. The US Gulf Coast and Europe could become a source for higher product imports requirements from Latin America and the US East Coast following the most recent refinery shutdowns in the latter two regions.

Despite lacklustre demand overall, margins rose significantly in all regions surveyed in January, providing temporary respite to operators. Surplus refinery capacity continues to be shed in mature markets. Concerns over Atlantic Basin product availability rose with the announced shutdown of Hovensa's 350 kb/d refinery in the US Virgin Islands and as European independent refiner Petroplus filed for insolvency in January. The future of Petroplus' five plants remain uncertain, though some interest from potential buyers has been noted. A sudden cold snap in the FSU, Europe and Japan provided further support. Margins rose by between $2.50-$7.70/bbl, but remained negative for several simple configurations surveyed. It remains to be seen if the improved economics entice refiners to hike runs, which would again put downward pressure on margins and in turn operations.





Regardless, planned maintenance will cut runs in coming months. OECD spring turnarounds normally peak over March and April, with US refiners traditionally completing work first. European maintenance is expected to peak in April this year, followed by the Pacific in May. Non-OECD runs are also expected to fall from January through March, as especially Russian and 'Other Asian' runs are curtailed by maintenance, and capacity is reduced in Latin America. The start-up of new capacity in China, Russia, India and Pakistan is expected to lift non-OECD runs in 2Q12 and 3Q12.

Global Refinery Crude Throughput[1]

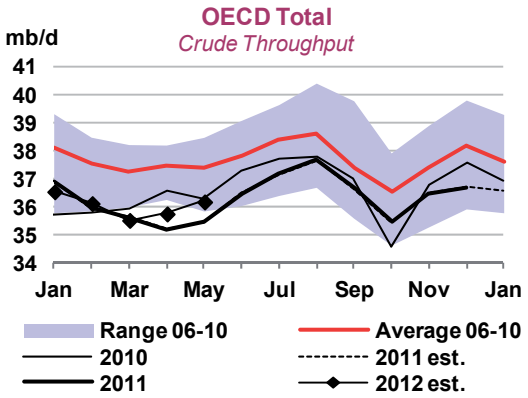
(million barrels per day)

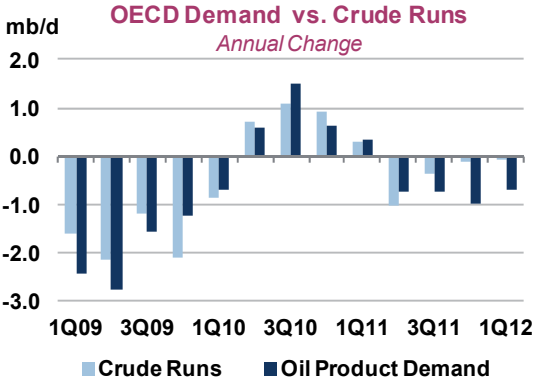
	3Q2011	Oct 11	Nov 11	Dec 11	**4Q2011**	Jan 12	Feb 12	Mar 12	**1Q2012**	Apr 12	May 12
North America	**18.3**	17.3	17.8	17.6	**17.6**	17.5	17.2	17.2	**17.3**	17.6	18.0
Europe	**12.4**	11.9	12.1	12.2	**12.1**	12.2	11.9	11.8	**11.9**	11.7	12.0
Pacific	**6.4**	6.2	6.6	6.8	**6.5**	6.9	7.0	6.6	**6.8**	6.4	6.2
Total OECD	**37.2**	**35.5**	**36.5**	**36.7**	**36.2**	**36.5**	**36.1**	**35.5**	**36.1**	**35.8**	**36.2**
FSU	**6.6**	6.5	6.6	6.6	**6.6**	6.7	6.6	6.4	**6.6**	6.3	6.3
Non-OECD Europe	**0.5**	0.5	0.6	0.6	**0.5**	0.6	0.5	0.5	**0.5**	0.5	0.6
China	**8.8**	8.7	9.2	9.2	**9.1**	9.4	9.2	9.1	**9.2**	9.3	9.1
Other Asia	**8.9**	8.5	9.1	9.1	**8.9**	9.3	9.1	9.1	**9.2**	9.0	9.3
Latin America	**5.4**	5.2	5.4	5.3	**5.3**	5.4	5.3	4.9	**5.2**	4.9	4.9
Middle East	**6.3**	6.2	6.1	6.0	**6.1**	5.9	6.0	5.7	**5.9**	5.8	6.0
Africa	**2.2**	2.2	2.2	2.3	**2.2**	2.2	2.2	2.2	**2.2**	2.2	2.2
Total Non-OECD	**38.5**	**37.8**	**39.1**	**39.2**	**38.7**	**39.4**	**38.9**	**38.2**	**38.8**	**38.2**	**38.4**
Total	**75.7**	**73.2**	**75.5**	**75.9**	**74.9**	**76.0**	**75.1**	**73.7**	**74.9**	**73.9**	**74.5**

1 Preliminary and estimated runs based on capacity, know n outages, economic run cuts and global demand forecast

OECD Refinery Throughput

OECD crude runs rose by 210 kb/d in December to 36.7 mb/d, or 240 kb/d higher than suggested by preliminary data. Runs nevertheless remained weak, compared to both the previous year and the five-year average. In total, OECD throughputs were 0.9 mb/d lower than a year earlier, with deficits recorded for all regions. In part, the contraction can be explained by exceptionally weak demand, due to both structural and temporary factors. OECD consumption of refined products fell by close to 1 mb/d in 4Q11, and 0.5 mb/d for the year in total. OECD demand will likely continue to decline in 1Q12, on a mild start to the winter and as several economies flirt with recession, potentially undermining the recent recovery in margins. As surplus capacity is being rationalised, the margin environment has recently improved, providing an incentive to boost throughputs in the short term. The recent cold snap recorded in Europe and the Pacific could further support February product demand and refinery runs, but the weak overall economic picture seems likely to limit gains in margins and therefore throughputs.





Refinery Crude Throughput and Utilisation in OECD Countries

(million barrels per day)

	Jul 11	Aug 11	Sep 11	Oct 11	Nov 11	Dec 11	Change from Nov 11	Change from Dec 10	Utilisation rate[1] Dec 11	Utilisation rate[1] Dec 10
US[2]	15.62	15.59	15.27	14.54	14.96	14.82	-0.14	-0.16	85.2%	85.5%
Canada	1.61	1.68	1.74	1.62	1.63	1.67	0.04	-0.14	91.2%	99.0%
Mexico	1.16	1.24	1.10	1.15	1.18	1.16	-0.02	0.06	70.0%	71.4%
OECD North America	**18.39**	**18.51**	**18.11**	**17.32**	**17.77**	**17.65**	**-0.12**	**-0.24**	**84.6%**	**85.6%**
France	1.34	1.37	1.33	1.32	1.38	1.41	0.02	-0.03	84.3%	77.5%
Germany	2.02	2.02	1.91	2.03	1.96	1.95	-0.01	-0.05	91.4%	83.3%
Italy	1.55	1.66	1.57	1.55	1.52	1.55	0.03	-0.25	70.8%	78.9%
Netherlands	1.04	1.04	1.04	0.97	0.97	0.99	0.02	-0.02	76.8%	78.5%
Spain	1.01	1.07	1.09	1.00	1.10	1.09	-0.02	0.00	66.7%	76.9%
United Kingdom	1.50	1.51	1.47	1.39	1.45	1.45	0.00	0.06	80.4%	77.3%
Other OECD Europe	3.93	3.94	3.76	3.64	3.75	3.81	0.06	-0.14	77.2%	80.5%
OECD Europe	**12.39**	**12.61**	**12.18**	**11.90**	**12.14**	**12.24**	**0.095**	**-0.42**	**78.2%**	**79.5%**
Japan	3.17	3.37	3.14	2.98	3.20	3.44	0.24	-0.27	74.9%	79.2%
South Korea	2.52	2.43	2.50	2.63	2.64	2.62	-0.02	0.05	95.7%	94.0%
Other OECD Pacific	0.70	0.74	0.73	0.63	0.72	0.74	0.02	-0.01	78.8%	80.1%
OECD Pacific	**6.38**	**6.54**	**6.37**	**6.24**	**6.56**	**6.80**	**0.24**	**-0.24**	**82.2%**	**84.1%**
OECD Total	**37.16**	**37.66**	**36.66**	**35.46**	**36.47**	**36.68**	**0.21**	**-0.90**	**81.9%**	**83.2%**

1 Expressed as a percentage, based on crude throughput and current operable refining capacity

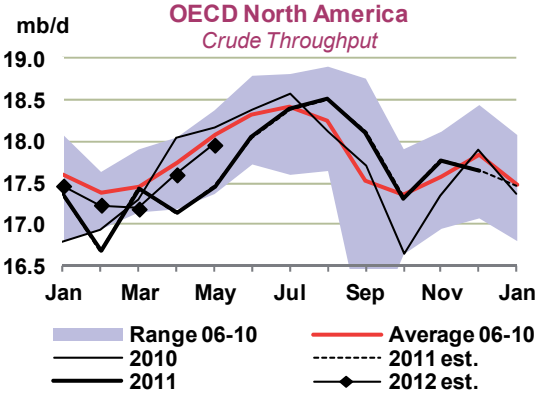
2 US50

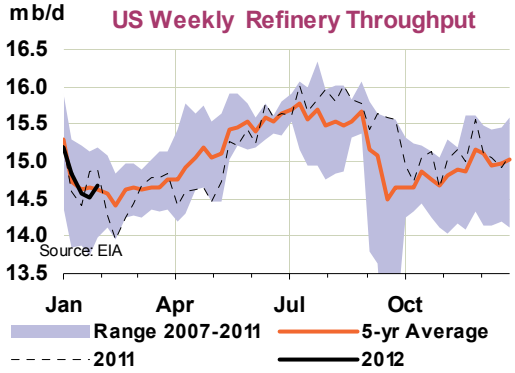
North American crude runs declined by some 120 kb/d in December, to average 17.6 mb/d. The steepest fall came from the US, where both the East Coast and Gulf Coast saw lower runs, though mostly offset by higher throughputs in the Midwest and the West Coast. East Coast runs fell by 160 kb/d, following the shutdown of Sunoco's 175 kb/d Marcus Hook refinery. The company, which had already announced in September last year that it would close its Philadelphia and Marcus Hook plants by July 2012 if no buyers were found, said on 1 December it was shutting its Marcus Hook plant earlier than expected due to "deteriorating market conditions". ConocoPhillips already halted operations at its 185 kb/d Trainer refinery in late September 2011, and will be followed by Sunoco's Philadelphia plant in July 2012 if no buyer is found. In contrast, refinery capacity on the Gulf Coast will increase in 2012, once Motiva's 325 kb/d Port Arthur refinery expansion is completed. The project will lift total plant capacity to 600 kb/d and is scheduled to be completed in 1Q12.

US East Coast Refinery Closures (kb/d)

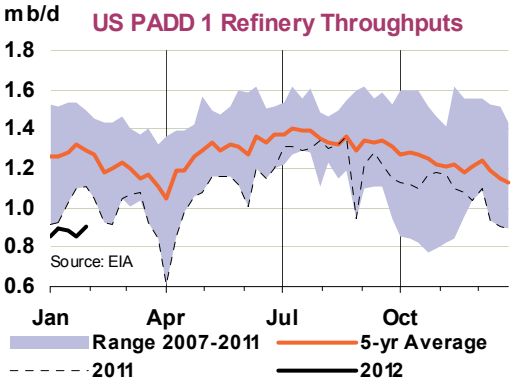
Company	Plant	Capacity	Close
Sunoco	Eagle Point	145	Nov-09
Western	Yorktown	65	Aug-10
ConocoPhillips	Trainer*	185	Sep-11
Sunoco	Marcus Hook*	175	Dec-11
Sunoco	Philadelphia*	330	Jul-12
Total Potential Closures		900	

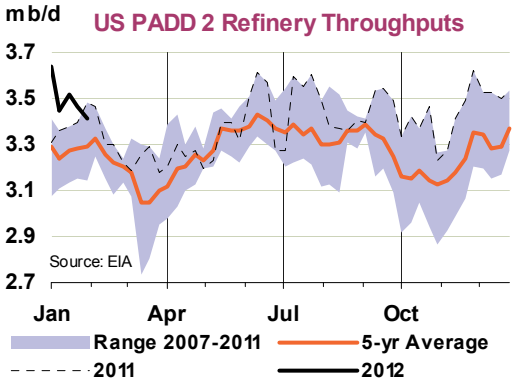
*To be shut permanently if no buyer is found





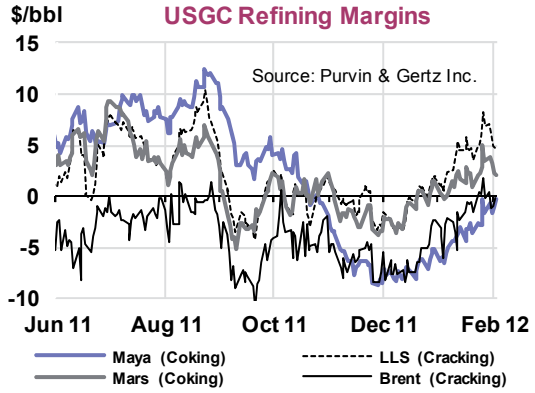
Weekly data from the EIA show US crude intake declining sharply in January, in line with our projection, to 14.6 mb/d on average. Throughputs fell in the Midwest, as Valero's 85 kb/d Ardmore refinery shut for planned maintenance, but remained above the historical range due to continued favourable economics. East Coast runs dropped to only 880 kb/d, 160 kb/d below January 2011 and 410 kb/d lower than the five-year average. Gulf Coast runs, meanwhile, fell 145 kb/d in January, despite significantly improved margins. Maintenance at Citgo's and Conoco's Lake Charles plants and BP's Texas City refinery reduced runs to 7.2 mb/d. While Gulf Coast maintenance is expected to intensify in coming weeks, some support to runs could come from improved margins and the start-up of Motiva's expanded plant. In addition, the shutdown of Hovensa's 350 kb/d St. Croix plant, and lower runs at Valero's Aruba plant could lead to extra demand for oil products from Gulf Coast refiners.

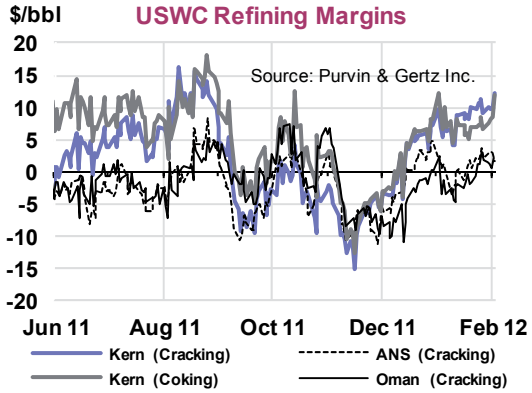




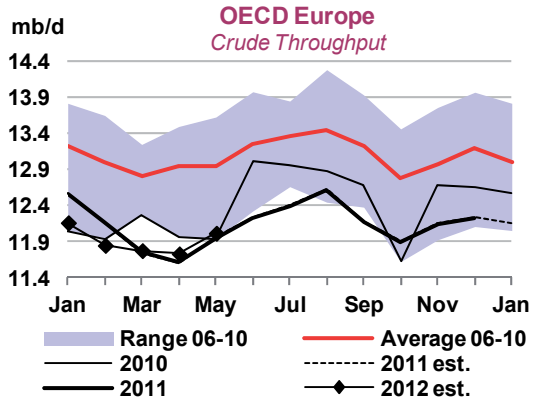
Margins saw significant improvements on both the Gulf and West Coasts in January, partly supported by the closures in Europe, the US East Coast and the Virgin Islands. US Gulf Coast margins rose sharply for all crudes and configurations surveyed, but remained negative for Brent Cracking and Maya Coking. LLS cracking margins saw the sharpest increase of $5.46/bbl on average, to reach $5.93/bbl in the week ending 3 February. Surging gasoline prices, on supply concerns, were behind the increased margins and cracks. US West Coast margins saw similar increases, with Kern margins posting the largest gains, as Kern strengthened less than other crudes.

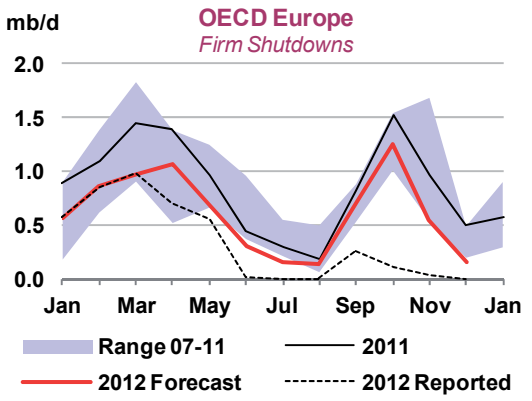
The January announcement that Hovensa is converting its 350 kb/d St. Croix plant into a terminal augmented concerns over product availability, especially to the vulnerable East Coast market, which has been a large importer of products from the Caribbean plant. In addition, Valero recently put the future of its 235 kb/d Aruba refinery back into question, as management suggested that the plant might also be turned into a terminal. Valero further announced they were no longer in discussion with Murphy Oil to take over its UK Milford Haven refinery. Murphy's CEO said in late January that the plant could be turned into a terminal if no buyer comes forward.



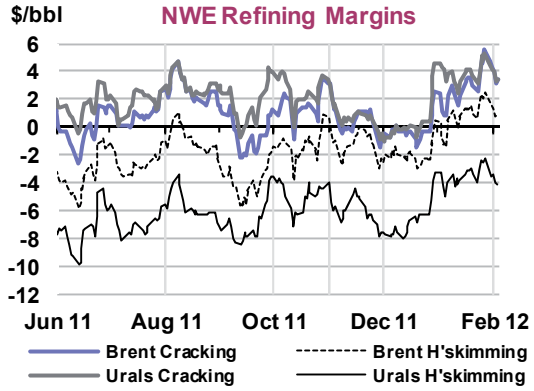


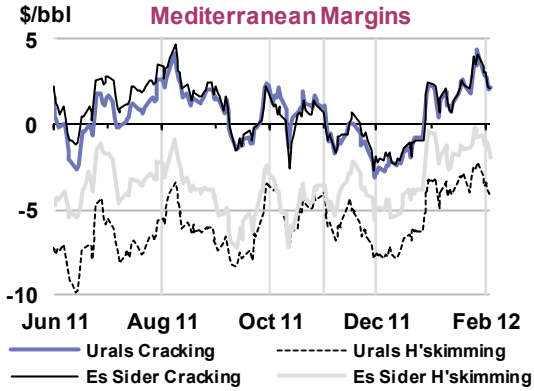
European runs for December averaged 12.2 mb/d**,** higher by 170 kb/d than suggested by preliminary Euroilstock data and 100 kb/d up versus November. The end-year figure is still some 400 kb/d below December 2010, with Italian runs in particular running below year-earlier levels. European fuel demand contracted by 300 kb/d in 2011, with 4Q consumption particularly weak at -690 kb/d y-o-y. Looking ahead, runs are expected to decline further in 1Q12 as spring maintenance intensifies. Preliminary Euroilstock data show January runs for EU15 + Norway down by 50 kb/d. European turnarounds normally peak over March-April. Some support could come from recently higher margins in the region, however. European refining margins surged by $3.30/bbl on average in January, though hydroskimming margins remained weak and mostly negative. Cracking margins initially improved in February, supported by the recent cold snap, but later fell back on higher crude prices.



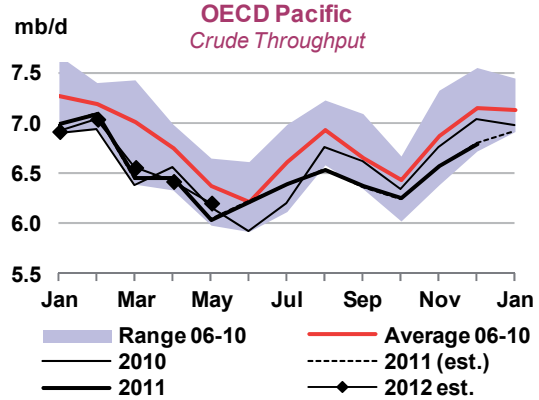


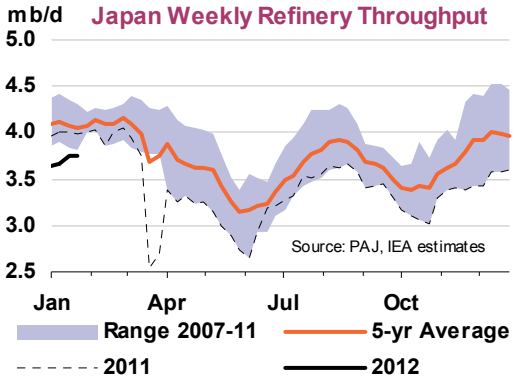
The future of Petroplus' five European refineries remains uncertain, after talks with lenders failed in late January and the company was forced to file for insolvency. Petroplus had already halted operations at its Belgian, Swiss and French plants in January due to problems financing crude purchases. Operations at the UK and German plants, currently run by administrators, have continued at reduced utilisation of 45% and 40% respectively. Swiss private equity group Goldsmith, already a shareholder in the group, has announced it is interested in buying all five plants. Swiss investment group Gary Klesch has shown its interest in buying the Coryton, Petit Couronne and Ingolstadt plants. While there is a risk that the Coryton refinery would also have to shut for some time before a sale can be finalised, as it struggles to secure crude supplies, we assume it will continue to run at reduced capacity utilisation. National authorities and administrators are making efforts to secure buyers and to re-start the refineries as soon as possible.





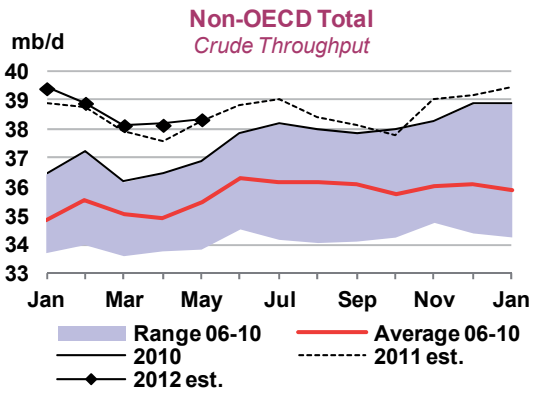
OECD Pacific runs surged 240 kb/d in December, to 6.8 mb/d, on stronger Japanese runs. Weekly data from the Petroleum Association of Japan (PAJ) indicate Japanese runs rose in January, to 3.5 mb/d, the highest since the devastating earthquake that hit the country in March 2011. The two refineries still closed after the disaster are expected to restart in coming months. JX Nippon started test runs at its 145 kb/d Sendai plant in January and is expected to recommence commercial operations in March. Cosmo Oil is planning to restart its Chiba refinery gradually, as soon as it secures approvals from local authorities. The plant already restarted some desulphurisation units in December. South Korean runs trended sideways, close to record highs of 2.6 mb/d in December, slightly higher than previous expectations.

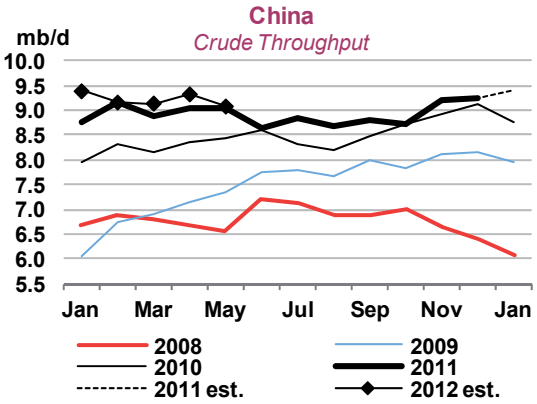




Non-OECD Refinery Throughput

Non-OECD refinery crude run estimates have been reduced by close to 200 kb/d for 1Q12 since last month's report, following the announced shutdown of Hovensa's 350 kb/d refinery in the US Virgin Islands and economic run cuts at Valero's Aruba plant. Some smaller downwards adjustment to Middle Eastern and African runs due to adjusted outages schedules also contributed. At 38.8 mb/d total non-OECD runs nevertheless stood 320 kb/d above year-earlier levels. 4Q11 non-OECD throughput estimates are unchanged since last month's report, at 38.7 mb/d.

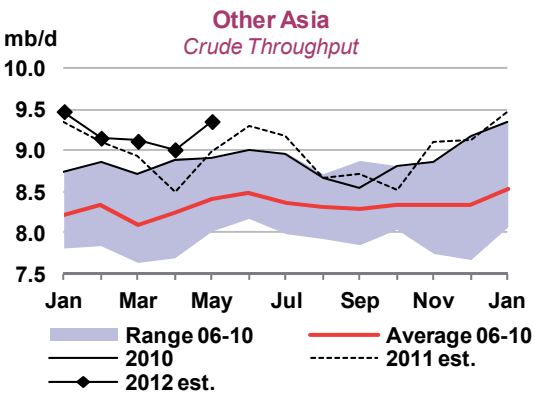


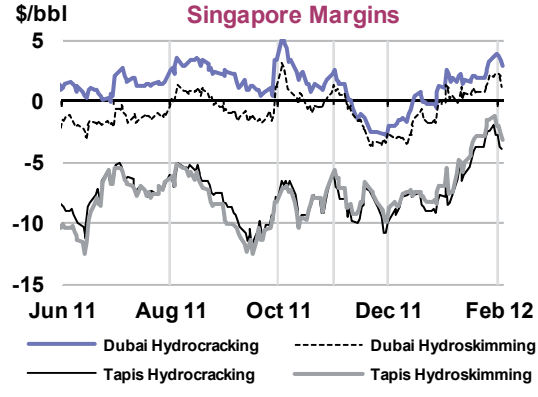


While no new data is available for **China** since last month's report, January crude throughput estimates have been raised slightly to a record-high of 9.3 mb/d on better refinery profitability leading up to the New Year holidays. Company surveys show both Sinopec and PetroChina were planning to hike runs in January from already record-high end-year rates. The National Development and Reform Commission (NDRC) is expected to raise retail ceiling prices of both gasoline and gasoil by CNY300/tonne from 8 February. Increased runs also derived from newly commissioned units at Sinopec and PetroChina's Yinchuan and Beihai plants, as these ramped up to full capacity in January. Overall, Chinese runs had already attained record levels for a second consecutive month in December, when total throughputs averaged 9.28 mb/d.

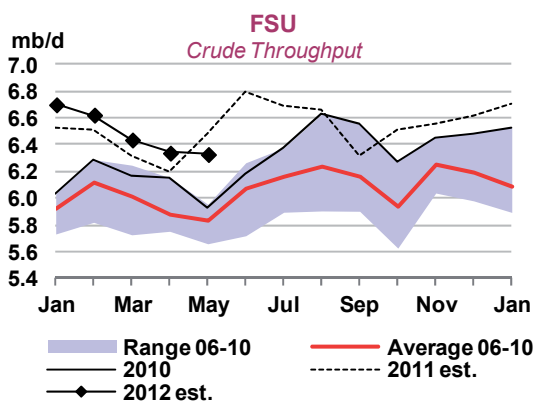
In **'Other Asia'**, refinery runs were largely in line with estimates for November and December, leaving 4Q11 estimates at 8.9 mb/d, unchanged from a year earlier. Indian runs are estimated to have averaged 4.3 mb/d in December, adjusting for Reliance's Jamnagar export refinery and BPCL's recently commissioned Bina refinery not included in Ministry data, 3.3% higher than a year earlier and essentially flat from the previous month. Refinery throughputs were also unchanged in **Singapore** in December, at 1.2 mb/d. Singapore refinery margins saw significant improvement over January and bounced back into positive territory for cracking configurations, with an even sharper rebound in hydroskimming margins. Dubai hydroskimming margins averaged $1.09/bbl in January, the highest monthly average since September 2008.

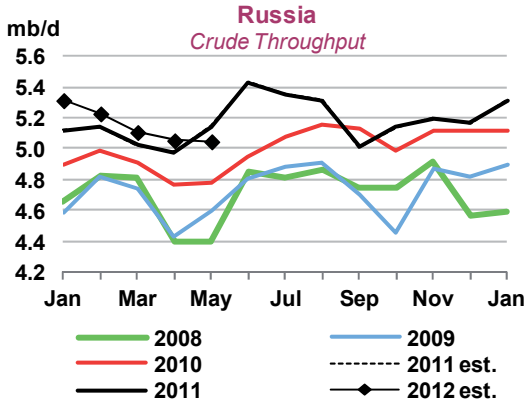
Pakistan's refinery run estimates have been adjusted slightly lower for November-January as Byco Oil Pakistan shut its 35 kb/d refinery outside Karachi, to prepare for the installation of a 120 kb/d crude unit. The completion of the project is now expected by the end of 2Q12, and will make the plant Pakistan's biggest. **Taiwan's** crude runs fell to 720 kb/d in December, from 850 kb/d a month earlier, on safety-related shutdowns at Formosa's Mailiao refinery, but were in line with our previous forecast. In **Thailand**, runs rebounded by 115 kb/d in December, to 910 kb/d as maintenance wound down, also in line with previous expectations.



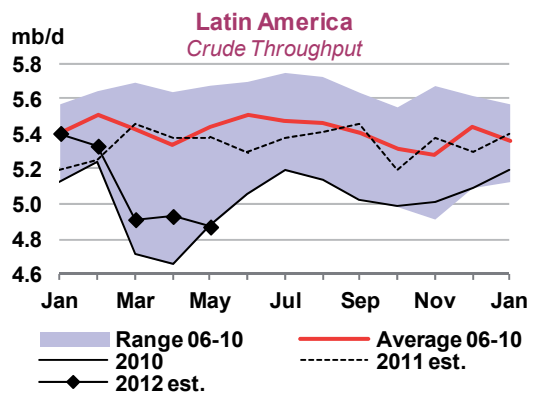


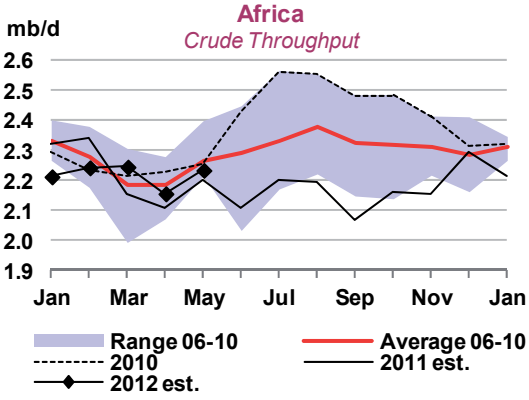
Russian crude runs rose by close to 150 kb/d in January, according to data from CDU TEK, to 5.3 mb/d, matching 2011 peak summer levels. Official Ministry data for December were slightly lower than our previous estimates due to lower runs at Taneco's recently commissioned Nizhnekamsk refinery. The Ministry data included this refinery for the first time in January, with the latest data showing the plant processed 108 kb/d in December. In all, December runs were down 0.6%, to 5.17 mb/d as maintenance at the Ryazan and Saratov plants was partly offset by higher runs at the Afipsky and Moscow refineries. In **Kazakhstan,** runs rose by some 60 kb/d, to 320 kb/d in December on rebounding runs at PetroKazakhstan's 105 kb/d Shymkent refinery. The plant was shut down for a planned 30-day turnaround from 19 October. A fire at the same plant in early February was rapidly extinguished but could entail lower runs if any damage was sustained. **Lithuania**'s Mazeikiai refinery is scheduled to shut for 30 days from mid-April. While the refineries nameplate capacity is 300 kb/d, recent throughputs average a lower 190 kb/d.





The outlook for **Latin American** refinery runs has been reduced significantly since last month's report, following the announced closure of Hovensa's 350 kb/d St Croix refinery from mid-February and due to lower runs at Valero's Aruba refinery. Hovensa, a joint venture between Venezuela's PDV and Hess Corporation of the US, announced on 18 January that it will permanently shut the 350 kb/d St. Croix refinery in the **US Virgin Islands**, after recording cumulative losses of $1.3 billion over the last three years. The plant, which will be converted to an oil product storage terminal, already cut capacity by 150 kb/d last January. The refinery processed mostly Venezuelan crudes and some West African grades, such as Gabonese Rabi light and Mandji. The implied loss of gasoline supplies, in particular, from the already tight US East Coast market pushed gasoline prices and cracks sharply higher. NYMEX RBOB futures cracks surged to almost $25/bbl in early February, up from only $10.70/bbl on average in December. Hovensa processed 270 kb/d in 4Q11. Valero, meanwhile, is looking into the viability and future of its **Aruba** refinery and has cut runs amid poor margins and narrow discounts for heavy/sour versus light/sweet crudes. The refinery runs heavy/sour crude and produces feedstocks primarily sold to the company's US Gulf Coast plants. The lower runs could benefit other operators on the US Gulf Coast.





In **Africa**, **Algeria**'s Sonatrach will partly shut its 300 kb/d Skikda refinery from March to August as it undertakes maintenance, sharply increasing gasoil import requirements while reducing naphtha exports. Sources expect the plant to operate at 50% utilisation during the work. The country's Arzew refinery, which has been partially shut since November due to maintenance, was expected to resume normal operations by mid-February.

Chad's sole refinery closed for a second time since its inauguration last July due to a pricing dispute between the government and majority stakeholder CNPC. The refinery stopped producing fuel on 23 December, but resumed operations on 6 February after the government and CNPC reached an agreement.

Elsewhere, **Nigeria's** NNPC had to temporarily shut its Kaduna refinery in December following an attack on a pipeline in the Delta state. **Libya's** largest refinery, the 220 kb/d Ras Lanuf plant, remains shut, but could restart as early as February if full electricity supply to the Sarir and Messla fields is restored. In **Sudan,** refinery operations could be impacted by lower crude shipments from South Sudan. Feedstock supplies to the 100 kb/d refinery in Khartoum are expected to be cut, as South Sudan halted crude production, also affecting Sudan's own production (*see non-OPEC, 'Sudan and South Sudan: Over a Barrel Again'*).

Selected Refining Margins in Major Refining Centres

($/bbl)

		Monthly Average				Change	Average for week ending:				
		Nov 11	Dec 11	Jan 12		Jan 12-Dec 11	06 Jan	13 Jan	20 Jan	27 Jan	03 Feb
NW Europe	Brent (Cracking)	0.55	-0.21	3.01	↑	3.22	1.53	2.23	3.37	4.31	3.92
	Urals (Cracking)	0.77	0.35	3.95	↑	3.60	4.02	3.21	3.99	4.47	3.82
	Brent (Hydroskimming)	-1.13	-1.93	0.87	↑	2.80	-0.51	0.55	1.26	1.81	1.32
	Urals (Hydroskimming)	-3.67	-4.51	-0.87	↑	3.64	-1.04	-0.94	-0.69	-0.63	-1.72
Mediterranean	Es Sider (Cracking)	-0.61	-1.22	2.20	↑	3.42	1.65	1.24	2.21	3.31	2.77
	Urals (Cracking)	-0.90	-1.38	2.16	↑	3.54	1.47	1.26	2.29	3.26	2.62
	Es Sider (Hydroskimming)	-3.90	-4.10	-1.31	↑	2.80	-1.24	-2.01	-1.42	-0.70	-1.23
	Urals (Hydroskimming)	-5.91	-6.69	-3.43	↑	3.26	-3.93	-3.85	-3.15	-2.85	-3.62
US Gulf Coast	Brent (Cracking)	-6.00	-6.30	-1.86	↑	4.44	-3.93	-3.31	-1.15	0.15	-0.38
	LLS (Cracking)	-1.14	-1.65	3.81	↑	5.46	0.59	3.08	4.83	5.45	5.93
	Mars (Cracking)	-3.52	-3.70	0.35	↑	4.05	-1.75	-0.27	1.09	1.58	1.93
	Mars (Coking)	-2.15	-2.02	1.50	↑	3.53	-0.39	0.86	2.06	2.62	2.96
	Maya (Coking)	-6.77	-8.02	-3.28	↑	4.74	-4.96	-3.27	-3.31	-2.42	-1.06
US West Coast	ANS (Cracking)	-5.46	-1.32	0.96	↑	2.28	2.23	-1.51	0.32	2.16	2.63
	Kern (Cracking)	-7.27	1.00	8.69	↑	7.69	8.48	6.78	8.70	10.48	10.19
	Oman (Cracking)	-3.56	-5.20	-0.83	↑	4.37	-0.13	-3.32	-1.59	0.69	1.51
	Kern (Coking)	-4.27	2.22	7.36	↑	5.15	9.29	6.61	6.27	7.38	8.57
Singapore	Dubai (Hydroskimming)	-1.60	-2.06	0.85	↑	2.91	0.55	0.48	0.66	1.19	1.92
	Tapis (Hydroskimming)	-8.00	-7.95	-4.27	↑	3.68	-7.03	-5.33	-3.56	-2.22	-2.22
	Dubai (Hydrocracking)	-0.84	-0.63	2.11	↑	2.74	1.85	1.77	1.84	2.34	3.49
	Tapis (Hydrocracking)	-8.59	-8.51	-5.02	↑	3.49	-7.79	-5.94	-4.35	-3.05	-3.06
China	Cabinda (Hydroskimming)	-1.28	-0.05	2.70	↑	2.75	0.92	2.04	3.41	3.48	4.15
	Daqing (Hydroskimming)	-1.78	-0.47	0.95	↑	1.42	-0.60	-0.62	1.67	2.37	2.98
	Dubai (Hydroskimming)	-1.76	-2.35	0.47	↑	2.82	0.21	0.15	0.25	0.75	1.61
	Daqing (Hydrocracking)	-2.23	-0.59	1.14	↑	1.73	-0.64	-0.45	1.81	2.77	3.35
	Dubai (Hydrocracking)	-0.75	-0.79	1.85	↑	2.64	1.61	1.54	1.55	2.03	3.35

For the purposes of this report, refining margins are calculated for various complexity configurations, each optimised for processing the specific crude in a specific refining centre on a 'full-cost' basis. Consequently, reported margins should be taken as an indication, or proxy, of changes in profitability for a given refining centre. No attempt is made to model or otherwise comment upon the relative economics of specific refineries running individual crude slates and producing custom product sales, nor are these calculations intended to infer the marginal values of crudes for pricing purposes.

*The China refinery margin calculation represents a model based on spot product import/export parity, and does not reflect internal pricing regulations.
Sources: IEA, Purvin & Gertz Inc.

Please note that from this report Purvin&Gertz has incorporated its normal yearly updating of Worldscale changes and various operating costs for the 2012 Margin Model, affecting also 2011 margins.

Table 1
WORLD OIL SUPPLY AND DEMAND
(million barrels per day)

	2008	2009	1Q10	2Q10	3Q10	4Q10	2010	1Q11	2Q11	3Q11	4Q11	2011	1Q12	2Q12	3Q12	4Q12	2012
OECD DEMAND																	
North America	24.2	23.3	23.4	23.7	24.1	23.9	23.8	23.8	23.3	23.6	23.3	23.5	23.3	23.1	23.6	23.5	23.4
Europe	15.4	14.7	14.3	14.3	14.9	14.8	14.6	14.2	14.1	14.7	14.1	14.3	13.7	13.6	14.3	14.1	13.9
Pacific	8.1	7.7	8.2	7.3	7.6	8.1	7.8	8.3	7.1	7.7	8.3	7.9	8.6	7.4	7.6	8.1	7.9
Total OECD	47.6	45.6	46.0	45.3	46.7	46.7	46.2	46.3	44.5	45.9	45.8	45.6	45.6	44.1	45.5	45.7	45.3
NON-OECD DEMAND																	
FSU	4.2	4.2	4.4	4.3	4.6	4.6	4.5	4.5	4.6	4.8	4.9	4.7	4.6	4.7	4.9	5.0	4.8
Europe	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
China	7.7	8.1	8.6	9.1	8.9	9.7	9.1	9.5	9.5	9.3	9.7	9.5	9.7	9.9	9.8	10.2	9.9
Other Asia	9.7	10.1	10.4	10.6	10.2	10.6	10.4	10.7	10.7	10.4	10.9	10.7	10.9	11.0	10.7	11.2	10.9
Latin America	6.0	6.0	6.0	6.3	6.5	6.4	6.3	6.3	6.5	6.7	6.5	6.5	6.4	6.6	6.8	6.7	6.6
Middle East	7.3	7.5	7.4	7.8	8.3	7.7	7.8	7.6	8.0	8.5	8.0	8.0	7.8	8.2	8.6	8.1	8.2
Africa	3.3	3.3	3.3	3.4	3.4	3.4	3.4	3.4	3.3	3.3	3.4	3.3	3.5	3.5	3.5	3.6	3.5
Total Non-OECD	38.9	39.9	40.8	42.2	42.5	43.1	42.2	42.7	43.3	43.6	44.1	43.4	43.5	44.6	45.0	45.5	44.6
Total Demand[1]	86.6	85.6	86.8	87.5	89.1	89.8	88.3	89.0	87.9	89.5	89.8	89.1	89.1	88.7	90.5	91.2	89.9
OECD SUPPLY																	
North America[4]	13.3	13.6	14.0	14.0	14.1	14.4	14.1	14.4	14.3	14.5	15.0	14.5	15.0	14.9	14.9	15.2	15.0
Europe	4.8	4.5	4.5	4.1	3.8	4.2	4.1	4.1	3.8	3.6	3.8	3.8	3.8	3.7	3.7	3.9	3.8
Pacific	0.6	0.7	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.6	0.5	0.6	0.6	0.7	0.7	0.7
Total OECD	18.8	18.8	19.1	18.8	18.5	19.1	18.9	19.0	18.6	18.7	19.4	18.9	19.5	19.2	19.2	19.7	19.4
NON-OECD SUPPLY																	
FSU	12.8	13.3	13.5	13.5	13.5	13.6	13.5	13.6	13.6	13.5	13.7	13.6	13.8	13.9	13.7	13.9	13.8
Europe	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
China	3.8	3.9	4.0	4.1	4.1	4.2	4.1	4.2	4.2	4.1	4.1	4.1	4.1	4.2	4.1	4.2	4.2
Other Asia[2]	3.7	3.6	3.7	3.7	3.7	3.7	3.7	3.6	3.5	3.5	3.6	3.5	3.6	3.5	3.5	3.5	3.5
Latin America[2,4]	3.7	3.9	4.0	4.1	4.1	4.1	4.1	4.2	4.2	4.2	4.3	4.2	4.3	4.4	4.5	4.5	4.4
Middle East	1.7	1.7	1.7	1.7	1.7	1.8	1.7	1.8	1.6	1.7	1.5	1.6	1.6	1.5	1.6	1.6	1.6
Africa[2]	2.6	2.6	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.3	2.4	2.5	2.5	2.4
Total Non-OECD	28.4	29.1	29.6	29.7	29.9	30.0	29.8	30.1	29.7	29.6	29.8	29.8	29.8	30.0	30.0	30.3	30.0
Processing Gains[3]	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.2	2.2	2.3	2.2	2.2	2.3	2.3
Global Biofuels[4]	1.4	1.6	1.4	2.0	2.1	1.8	1.8	1.5	1.9	2.2	1.8	1.8	1.6	1.9	2.2	2.0	1.9
Total Non-OPEC[2]	50.6	51.5	52.1	52.5	52.6	53.1	52.6	52.7	52.3	52.6	53.2	52.7	53.2	53.4	53.7	54.3	53.6
Non-OPEC: Historical Composition[2]	49.6	51.5	52.1	52.5	52.6	53.1	52.6	52.7	52.3	52.6	53.2	52.7	53.2	53.4	53.7	54.3	53.6
OPEC																	
Crude[5]	31.6	29.1	29.3	29.3	29.7	29.6	29.5	30.0	29.5	29.9	30.5	30.0					
NGLs	4.5	4.9	5.2	5.2	5.4	5.6	5.3	5.7	5.7	5.8	5.9	5.8	6.1	6.2	6.5	6.5	6.3
Total OPEC[2]	36.1	34.1	34.5	34.5	35.1	35.2	34.8	35.7	35.2	35.7	36.4	35.8					
OPEC: Historical Composition[2]	37.1	34.1	34.5	34.5	35.1	35.2	34.8	35.7	35.2	35.7	36.4	35.8					
Total Supply[6]	86.7	85.6	86.6	87.0	87.7	88.3	87.4	88.5	87.5	88.3	89.6	88.5					
STOCK CHANGES AND MISCELLANEOUS																	
Reported OECD																	
Industry	0.3	-0.1	0.4	0.9	-0.1	-0.8	0.1	-0.4	0.5	-0.1	-0.6	-0.2					
Government	0.0	0.1	0.0	-0.1	-0.1	0.1	0.0	0.0	0.0	-0.4	0.1	-0.1					
Total	0.3	0.0	0.4	0.9	-0.2	-0.7	0.1	-0.5	0.5	-0.5	-0.5	-0.2					
Floating Storage/Oil in Transit	0.0	0.3	-0.2	0.1	-0.2	-0.3	-0.2	0.2	-0.2	-0.2	-0.1	-0.1					
Miscellaneous to balance[7]	-0.2	-0.3	-0.4	-1.4	-0.9	-0.5	-0.8	-0.3	-0.7	-0.5	0.4	-0.2					
Total Stock Ch. & Misc	0.2	0.0	-0.2	-0.5	-1.4	-1.5	-0.9	-0.6	-0.4	-1.2	-0.2	-0.6					
Memo items:																	
Call on OPEC crude + Stock ch.[8]	31.5	29.2	29.5	29.8	31.1	31.2	30.4	30.6	29.9	31.2	30.7	30.6	29.8	29.2	30.4	30.3	29.9
Adjusted Call on OPEC + Stock ch.[9]	31.3	28.8	29.1	28.4	30.1	30.7	29.6	30.3	29.2	30.7	31.1	30.3	29.3	28.6	29.9	29.8	29.4

1 Measured as deliveries from refineries and primary stocks, comprises inland deliveries, international marine bunkers, refinery fuel, crude for direct burning, oil from non-conventional sources and other sources of supply.
2 Other Asia includes Indonesia throughout. Latin America excludes Ecuador throughout. Africa excludes Angola throughout.
Total Non-OPEC excludes all countries that were members of OPEC at 1 January 2009. Non-OPEC Historical Composition excludes countries that were OPEC members at that point in time.
Total OPEC comprises all countries which were OPEC members at 1 January 2009. OPEC Historical Composition comprises countries which were OPEC members at that point in time.
3 Net volumetric gains and losses in the refining process and marine transportation losses.
4 As of the July 2010 OMR, Global Biofuels comprise all world biofuel production including fuel ethanol from the US and Brazil.
5 As of the March 2006 OMR, Venezuelan Orinoco heavy crude production is included within Venezuelan crude estimates. Orimulsion fuel remains within the OPEC NGL and non-conventional category, but Orimulsion production reportedly ceased from January 2007.
6 Comprises crude oil, condensates, NGLs, oil from non-conventional sources and other sources of supply.
7 Includes changes in non-reported stocks in OECD and non-OECD areas.
8 Equals the arithmetic difference between total demand minus total non-OPEC supply minus OPEC NGLs.
9 Equals the "Call on OPEC + Stock Ch." with "Miscellaneous to balance" added for historical periods and with an average of "Miscellaneous to balance" for the most recent 8 quarters added for forecast periods.

Table 1A
WORLD OIL SUPPLY AND DEMAND: CHANGES FROM LAST MONTH'S TABLE 1

(million barrels per day)

	2008	2009	1Q10	2Q10	3Q10	4Q10	2010	1Q11	2Q11	3Q11	4Q11	2011	1Q12	2Q12	3Q12	4Q12	2012
OECD DEMAND																	
North America	-	-	-	-	-	-	-	-	-	-	0.2	0.1	-	-	0.1	0.2	0.1
Europe	-	-	-	-	-	-	-	-	-	-	-0.1	-	-0.2	-0.2	-0.2	-0.2	-0.2
Pacific	-	-	-	-	-	-	-	-	-	-	-	-	0.1	-	0.1	0.1	-
Total OECD	-	-	-	-	-	-	-	-	-	-	0.1	-	-0.1	-0.1	-	0.1	-
NON-OECD DEMAND																	
FSU	-	-	-	-	-	-	-	-	-	-	-0.1	-	-	0.1	-	-	-
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Asia	-	-	-	-	0.1	0.1	-	-	-	-	0.1	-	-	-0.1	-0.1	-	-
Latin America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Middle East	-	-	-	-	-	-	-	-	-	-	-	-	-0.1	-0.1	-0.1	-	-0.1
Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.1	-
Total Non-OECD	-	-	-	-	-	-	-	-	-	-	0.2	0.1	-0.2	-0.1	-0.2	-	-0.1
Total Demand	-	-	-	-	0.1	-	-	0.1	-	-	0.3	0.1	-0.3	-0.2	-0.2	0.1	-0.2
OECD SUPPLY																	
North America	-	-	-	-	-	-	-	-	-	-	0.2	0.1	0.2	0.3	0.3	0.3	0.3
Europe	-	-	-	-	-	-	-	-	-	-	-0.2	-0.1	-0.2	-0.1	-0.1	-0.1	-0.1
Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total OECD	-	-	-	-	-	-	-	-	-	-	-	-	-	0.1	0.2	0.2	0.1
NON-OECD SUPPLY																	
FSU	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Asia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Latin America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Middle East	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Africa	-	-	-	-	-	-	-	-	-	-	-	-	-0.2	-0.2	-0.1	-	-0.1
Total Non-OECD	-	-	-	-	-	-	-	-	-	-	0.1	-	-0.3	-0.2	-0.1	-0.1	-0.2
Processing Gains	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Global Biofuels	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Non-OPEC	-	-	-	-	-	-	-	-	-	0.1	0.1	-	-0.3	-0.1	0.1	0.1	-
Non-OPEC: historical composition	-	-	-	-	-	-	-	-	-	0.1	0.1	-	-0.3	-0.1	0.1	0.1	-
OPEC																	
Crude	-	-	-	-	-	-	-	-	-	-	-	-					
NGLs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total OPEC	-	-	-	-	-	-	-	-	-	-	-	-					
OPEC: historical composition	-	-	-	-	-	-	-	-	-	-	-	-					
Total Supply	-	-	-	-	-	-	-	-	-	0.1	-	-					
STOCK CHANGES AND MISCELLANEOUS REPORTED OECD																	
Industry	-	-	-	-	-	-	-	-	-	-							
Government	-	-	-	-	-	-	-	-	-	-							
Total	-	-	-	-	-	-	-	-	-	-							
Floating Storage/Oil in Transit	-	-	-	-	-	-	-	-	-	-							
Miscellaneous to balance	-	-	-	-0.1	-0.1	-0.1	-0.1	-0.1	-	-							
Total Stock Ch. & Misc	-	-	-	-0.1	-0.1	-0.1	-0.1	-0.1	-	-	-0.3	-0.1					
Memo items:																	
Call on OPEC crude + Stock ch.	-	-	-	0.1	0.1	0.1	0.1	0.1	-	-	0.2	0.1	-0.1	-0.1	-0.2	-	-0.1
Adjusted Call on OPEC + Stock ch.	-	-	-	-	-	-	-	-	-	-	1.1	0.3	-0.1	-0.2	-0.3	-	-0.2

When submitting their monthly oil statistics, OECD Member countries periodically update data for prior periods. Similar updates to non-OECD data can occur.

Table 2

SUMMARY OF GLOBAL OIL DEMAND

	2009	1Q10	2Q10	3Q10	4Q10	2010	1Q11	2Q11	3Q11	4Q11	2011	1Q12	2Q12	3Q12	4Q12	2012
Demand (mb/d)																
North America	23.29	23.41	23.69	24.10	23.85	23.76	23.78	23.31	23.56	23.32	23.49	23.35	23.12	23.61	23.46	23.38
Europe	14.66	14.32	14.26	14.93	14.83	14.58	14.18	14.11	14.69	14.14	14.28	13.70	13.63	14.33	14.10	13.94
Pacific	7.69	8.23	7.34	7.62	8.07	7.82	8.35	7.11	7.68	8.31	7.86	8.58	7.38	7.61	8.13	7.92
Total OECD	45.64	45.95	45.29	46.65	46.75	46.16	46.31	44.54	45.93	45.77	45.64	45.63	44.13	45.55	45.69	45.25
Asia	18.19	18.98	19.65	19.12	20.26	19.50	20.27	20.23	19.70	20.61	20.20	20.57	20.87	20.45	21.42	20.83
Middle East	7.53	7.42	7.83	8.29	7.72	7.82	7.62	8.00	8.45	7.96	8.01	7.76	8.20	8.63	8.12	8.18
Latin America	5.99	6.05	6.29	6.46	6.39	6.30	6.28	6.47	6.65	6.52	6.48	6.42	6.63	6.80	6.71	6.64
FSU	4.18	4.38	4.33	4.56	4.58	4.46	4.45	4.62	4.83	4.86	4.69	4.58	4.68	4.89	4.97	4.78
Africa	3.33	3.33	3.43	3.38	3.43	3.39	3.41	3.34	3.27	3.39	3.35	3.48	3.53	3.49	3.56	3.52
Europe	0.71	0.67	0.68	0.68	0.70	0.68	0.67	0.69	0.72	0.72	0.70	0.68	0.70	0.71	0.72	0.70
Total Non-OECD	39.93	40.84	42.21	42.49	43.08	42.16	42.70	43.34	43.61	44.05	43.43	43.49	44.61	44.98	45.49	44.64
World	85.57	86.79	87.50	89.14	89.83	88.32	89.01	87.88	89.55	89.82	89.07	89.12	88.73	90.52	91.18	89.89
of which: US50	18.77	18.87	19.15	19.47	19.23	19.18	19.17	18.82	18.89	18.68	18.89	18.75	18.65	18.97	18.81	18.80
Europe 5*	8.98	8.87	8.75	9.15	9.01	8.95	8.70	8.57	8.89	8.58	8.69	8.46	8.27	8.64	8.49	8.46
China	8.06	8.63	9.06	8.92	9.66	9.07	9.54	9.52	9.30	9.70	9.51	9.66	9.89	9.78	10.21	9.89
Japan	4.39	4.82	4.07	4.36	4.57	4.45	4.86	3.92	4.32	4.85	4.49	5.11	4.15	4.23	4.62	4.53
India	3.26	3.38	3.45	3.13	3.38	3.34	3.50	3.57	3.26	3.58	3.48	3.62	3.67	3.37	3.71	3.59
Russia	3.03	3.16	3.17	3.41	3.36	3.28	3.20	3.43	3.64	3.65	3.48	3.31	3.47	3.69	3.72	3.55
Brazil	2.54	2.60	2.71	2.82	2.80	2.73	2.69	2.76	2.87	2.82	2.79	2.71	2.79	2.90	2.89	2.82
Saudi Arabia	2.47	2.33	2.73	3.02	2.54	2.66	2.49	2.89	3.15	2.74	2.82	2.60	2.99	3.23	2.82	2.91
Canada	2.16	2.15	2.17	2.29	2.25	2.21	2.25	2.15	2.29	2.23	2.23	2.22	2.13	2.27	2.23	2.21
Korea	2.19	2.31	2.18	2.16	2.35	2.25	2.36	2.04	2.21	2.30	2.23	2.33	2.08	2.22	2.34	2.24
Mexico	2.07	2.07	2.10	2.05	2.07	2.07	2.05	2.06	2.09	2.11	2.08	2.07	2.06	2.08	2.11	2.08
Iran	2.11	2.10	2.08	2.08	2.09	2.09	2.09	2.05	2.03	2.04	2.05	2.07	2.06	2.05	2.06	2.06
Total	60.03	61.30	61.61	62.87	63.31	62.28	62.88	61.80	62.95	63.26	62.72	62.89	62.20	63.45	64.01	63.14
% of World	70.2%	70.6%	70.4%	70.5%	70.5%	70.5%	70.6%	70.3%	70.3%	70.4%	70.4%	70.6%	70.1%	70.1%	70.2%	70.2%
Annual Change (% per annum)																
North America	-3.7	-0.1	3.3	3.6	1.3	2.0	1.6	-1.6	-2.2	-2.2	-1.1	-1.8	-0.8	0.2	0.6	-0.5
Europe	-4.7	-5.1	-1.3	2.3	2.0	-0.5	-1.0	-1.0	-1.6	-4.6	-2.1	-3.4	-3.4	-2.4	-0.3	-2.4
Pacific	-4.6	1.2	0.4	4.7	0.6	1.7	1.5	-3.1	0.8	3.0	0.6	2.8	3.7	-1.0	-2.2	0.8
Total OECD	-4.2	-1.5	1.3	3.3	1.4	1.1	0.8	-1.7	-1.5	-2.1	-1.1	-1.5	-0.9	-0.8	-0.2	-0.8
Asia	4.4	12.0	7.1	3.5	6.9	7.2	6.8	2.9	3.0	1.7	3.6	1.5	3.2	3.8	3.9	3.1
Middle East	3.5	5.0	3.4	2.9	4.3	3.8	2.7	2.2	2.0	3.1	2.5	1.8	2.5	2.1	2.0	2.1
Latin America	0.0	4.6	5.2	6.0	4.5	5.1	3.8	2.8	3.0	2.1	2.9	2.2	2.4	2.2	2.9	2.4
FSU	-1.2	8.1	6.5	5.3	7.3	6.8	1.6	6.7	5.8	6.1	5.1	2.9	1.3	1.3	2.2	1.9
Africa	1.6	-1.6	2.1	2.3	5.4	2.0	2.2	-2.9	-3.3	-1.3	-1.4	2.2	5.8	6.9	5.0	5.0
Europe	-6.3	-7.5	-6.9	-3.7	1.3	-4.2	-0.2	1.8	5.2	2.6	2.4	1.5	0.8	-0.3	-0.2	0.4
Total Non-OECD	2.5	7.6	5.4	3.7	5.9	5.6	4.6	2.7	2.7	2.3	3.0	1.9	2.9	3.1	3.3	2.8
World	-1.2	2.6	3.2	3.5	3.5	3.2	2.6	0.4	0.5	0.0	0.8	0.1	1.0	1.1	1.5	0.9
Annual Change (mb/d)																
North America	-0.89	-0.01	0.75	0.83	0.31	0.47	0.37	-0.38	-0.54	-0.53	-0.27	-0.44	-0.19	0.04	0.14	-0.11
Europe	-0.73	-0.77	-0.18	0.33	0.29	-0.08	-0.14	-0.15	-0.24	-0.69	-0.30	-0.48	-0.48	-0.36	-0.04	-0.34
Pacific	-0.37	0.10	0.03	0.34	0.05	0.13	0.12	-0.23	0.06	0.24	0.05	0.24	0.26	-0.07	-0.18	0.06
Total OECD	-1.98	-0.69	0.60	1.50	0.65	0.52	0.36	-0.75	-0.72	-0.98	-0.53	-0.68	-0.41	-0.39	-0.08	-0.39
Asia	0.77	2.04	1.30	0.64	1.31	1.32	1.29	0.58	0.58	0.34	0.69	0.30	0.65	0.75	0.81	0.63
Middle East	0.25	0.35	0.26	0.24	0.32	0.29	0.20	0.18	0.16	0.24	0.20	0.14	0.20	0.18	0.16	0.17
Latin America	0.00	0.27	0.31	0.36	0.27	0.30	0.23	0.18	0.20	0.13	0.18	0.14	0.16	0.15	0.19	0.16
FSU	-0.05	0.33	0.26	0.23	0.31	0.28	0.07	0.29	0.26	0.28	0.23	0.13	0.06	0.06	0.11	0.09
Africa	0.05	-0.06	0.07	0.08	0.18	0.07	0.07	-0.10	-0.11	-0.05	-0.05	0.07	0.20	0.22	0.17	0.17
Europe	-0.05	-0.05	-0.05	-0.03	0.01	-0.03	0.00	0.01	0.04	0.02	0.02	0.01	0.01	0.00	0.00	0.00
Total Non-OECD	0.98	2.87	2.14	1.52	2.40	2.23	1.86	1.13	1.13	0.97	1.27	0.79	1.26	1.36	1.44	1.21
World	-1.00	2.19	2.74	3.03	3.04	2.75	2.22	0.38	0.41	-0.01	0.74	0.11	0.85	0.97	1.36	0.83
Revisions to Oil Demand from Last Month's Report (mb/d)																
North America	0.00	0.00	0.00	0.03	0.00	0.01	0.02	0.02	0.02	0.21	0.07	-0.03	0.04	0.11	0.19	0.08
Europe	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.13	-0.03	-0.16	-0.18	-0.18	-0.16	-0.17
Pacific	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.01	0.05	0.01	0.07	0.07	0.05
Total OECD	0.00	0.00	0.00	0.03	0.00	0.01	0.02	0.02	0.02	0.12	0.04	-0.14	-0.13	0.00	0.09	-0.05
Asia	0.00	0.00	0.04	0.05	0.05	0.04	0.04	0.00	0.02	0.17	0.06	-0.08	-0.10	-0.12	0.03	-0.07
Middle East	0.00	0.00	0.00	0.00	0.00	0.00	-0.02	-0.02	-0.04	0.04	-0.01	-0.10	-0.09	-0.10	-0.03	-0.08
Latin America	0.00	-0.01	-0.01	-0.01	-0.01	-0.01	0.01	0.01	0.01	0.01	0.01	-0.04	-0.02	-0.03	-0.03	-0.03
FSU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.06	-0.01	-0.02	0.08	0.05	0.03	0.03
Africa	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.02	0.01	0.04	0.04	0.03	0.05	0.04
Europe	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	-0.01	-0.01	-0.01
Total Non-OECD	0.00	-0.01	0.03	0.04	0.05	0.03	0.03	-0.01	0.00	0.18	0.05	-0.20	-0.10	-0.17	0.04	-0.11
World	0.00	-0.01	0.03	0.07	0.05	0.04	0.05	0.01	0.02	0.29	0.10	-0.34	-0.23	-0.18	0.13	-0.15
Revisions to Oil Demand Growth from Last Month's Report (mb/d)																
World	0.00	-0.01	0.03	0.07	0.05	0.04	0.06	-0.02	-0.05	0.25	0.06	-0.39	-0.24	-0.20	-0.17	-0.25

* France, Germany, Italy, Spain and UK

Table 2a

OECD REGIONAL OIL DEMAND[1]

(million barrels per day)

	2010	2011	4Q10	1Q11	2Q11	3Q11	Sep 11	Oct 11	Nov 11 [2]	Latest month vs. Oct 11	Latest month vs. Nov 10
North America											
LPG&Ethane	2.95	2.96	3.12	3.31	2.71	2.77	2.81	2.94	3.07	0.13	0.12
Naphtha	0.37	0.35	0.33	0.37	0.36	0.34	0.31	0.36	0.34	-0.02	-0.01
Motor Gasoline	10.57	10.31	10.51	10.14	10.45	10.49	10.33	10.20	10.12	-0.09	-0.27
Jet/Kerosene	1.65	1.65	1.63	1.60	1.68	1.71	1.63	1.56	1.64	0.08	0.00
Gasoil/Diesel Oil	4.82	4.94	5.01	5.04	4.77	4.85	5.02	5.04	5.17	0.13	0.23
Residual Fuel Oil	0.93	0.85	0.89	0.97	0.87	0.76	0.84	0.78	0.74	-0.04	-0.21
Other Products	2.46	2.43	2.36	2.35	2.47	2.64	2.46	2.33	2.30	-0.03	-0.10
Total	23.76	23.49	23.85	23.78	23.31	23.56	23.41	23.21	23.38	0.17	-0.25
Europe											
LPG&Ethane	0.96	0.98	0.96	1.04	0.96	0.94	0.95	0.92	0.98	0.06	0.02
Naphtha	1.26	1.16	1.27	1.27	1.17	1.13	1.09	1.03	1.08	0.05	-0.25
Motor Gasoline	2.21	2.12	2.14	2.02	2.18	2.20	2.21	2.09	2.09	0.00	-0.08
Jet/Kerosene	1.27	1.26	1.26	1.20	1.27	1.35	1.38	1.28	1.15	-0.12	-0.09
Gasoil/Diesel Oil	6.13	6.04	6.43	6.04	5.73	6.17	6.41	6.31	6.22	-0.09	-0.23
Residual Fuel Oil	1.27	1.24	1.30	1.29	1.22	1.25	1.25	1.23	1.15	-0.08	-0.11
Other Products	1.47	1.49	1.46	1.32	1.57	1.63	1.69	1.47	1.51	0.03	-0.06
Total	14.58	14.28	14.83	14.18	14.11	14.69	14.99	14.32	14.18	-0.14	-0.80
Pacific											
LPG&Ethane	0.84	0.84	0.83	0.88	0.81	0.79	0.77	0.78	0.83	0.05	-0.02
Naphtha	1.68	1.69	1.75	1.78	1.55	1.73	1.70	1.62	1.74	0.11	-0.03
Motor Gasoline	1.57	1.54	1.59	1.51	1.47	1.61	1.54	1.50	1.56	0.05	-0.04
Jet/Kerosene	0.87	0.85	0.98	1.18	0.64	0.63	0.69	0.79	0.88	0.08	-0.10
Gasoil/Diesel Oil	1.62	1.63	1.70	1.67	1.53	1.59	1.60	1.64	1.72	0.07	-0.03
Residual Fuel Oil	0.74	0.76	0.73	0.80	0.65	0.76	0.78	0.75	0.81	0.06	0.08
Other Products	0.49	0.55	0.48	0.54	0.47	0.56	0.60	0.64	0.57	-0.07	0.04
Total	7.82	7.86	8.07	8.35	7.11	7.68	7.69	7.73	8.09	0.36	-0.09
OECD											
LPG&Ethane	4.76	4.77	4.91	5.23	4.48	4.51	4.53	4.63	4.88	0.24	0.11
Naphtha	3.31	3.20	3.36	3.43	3.08	3.20	3.11	3.01	3.16	0.15	-0.29
Motor Gasoline	14.36	13.97	14.24	13.67	14.11	14.31	14.08	13.79	13.76	-0.03	-0.38
Jet/Kerosene	3.80	3.76	3.88	3.98	3.58	3.70	3.70	3.63	3.67	0.04	-0.19
Gasoil/Diesel Oil	12.58	12.61	13.14	12.75	12.04	12.62	13.03	13.00	13.11	0.11	-0.03
Residual Fuel Oil	2.94	2.85	2.92	3.06	2.74	2.77	2.87	2.76	2.69	-0.06	-0.24
Other Products	4.42	4.48	4.30	4.20	4.51	4.83	4.76	4.44	4.37	-0.07	-0.12
Total	46.16	45.64	46.75	46.31	44.54	45.93	46.09	45.27	45.65	0.38	-1.14

1 Demand, measured as deliveries from refineries and primary stocks, comprises inland deliveries, international bunkers and refinery fuel. It includes crude for direct burning, oil from non-conventional sources and other sources of supply. Jet/kerosene comprises jet kerosene and non-aviation kerosene. Gasoil comprises diesel, light heating oil and other gasoils. North America comprises US 50 states, US territories, Mexico and Canada.

2 Latest official OECD submissions (MOS).

Table 2b

OIL DEMAND IN SELECTED OECD COUNTRIES[1]

(million barrels per day)

	2010	2011	4Q10	1Q11	2Q11	3Q11	Sep 11	Oct 11	Nov 11 [2]	Latest month vs. Oct 11	Latest month vs. Nov 10
United States[3]											
LPG	2.17	2.16	2.32	2.47	1.96	1.99	2.05	2.16	2.24	0.09	0.10
Naphtha	0.26	0.26	0.22	0.27	0.27	0.25	0.23	0.28	0.26	-0.02	0.03
Motor Gasoline	8.99	8.73	8.92	8.61	8.87	8.89	8.75	8.63	8.54	-0.09	-0.28
Jet/Kerosene	1.45	1.45	1.44	1.40	1.49	1.50	1.43	1.37	1.44	0.07	0.00
Gasoil	3.80	3.87	3.94	3.95	3.75	3.78	3.94	3.95	4.06	0.11	0.19
Residual Fuel Oil	0.54	0.48	0.52	0.61	0.51	0.36	0.47	0.40	0.39	-0.01	-0.16
Other Products	1.97	1.93	1.87	1.86	1.97	2.12	1.96	1.84	1.83	-0.01	-0.09
Total	19.18	18.89	19.23	19.17	18.82	18.89	18.82	18.62	18.76	0.14	-0.22
Japan											
LPG	0.48	0.50	0.47	0.54	0.50	0.45	0.44	0.46	0.50	0.04	0.03
Naphtha	0.77	0.72	0.81	0.79	0.65	0.74	0.70	0.66	0.72	0.06	-0.10
Motor Gasoline	1.00	0.98	1.00	0.95	0.92	1.04	0.98	0.95	0.97	0.02	-0.03
Jet/Kerosene	0.55	0.53	0.62	0.80	0.36	0.34	0.38	0.47	0.54	0.06	-0.07
Diesel	0.41	0.41	0.43	0.41	0.39	0.41	0.42	0.42	0.43	0.00	-0.02
Other Gasoil	0.43	0.41	0.44	0.48	0.36	0.36	0.35	0.38	0.41	0.03	-0.03
Residual Fuel Oil	0.40	0.45	0.39	0.42	0.36	0.48	0.48	0.48	0.51	0.03	0.12
Other Products	0.41	0.49	0.40	0.47	0.38	0.51	0.55	0.57	0.54	-0.03	0.09
Total	4.45	4.49	4.57	4.86	3.92	4.32	4.29	4.41	4.62	0.21	0.00
Germany											
LPG	0.10	0.10	0.09	0.10	0.10	0.11	0.10	0.08	0.09	0.00	0.00
Naphtha	0.41	0.39	0.41	0.44	0.40	0.39	0.37	0.33	0.34	0.01	-0.10
Motor Gasoline	0.46	0.46	0.45	0.43	0.47	0.47	0.48	0.48	0.48	0.00	0.01
Jet/Kerosene	0.18	0.18	0.18	0.17	0.19	0.19	0.19	0.18	0.17	-0.02	-0.01
Diesel	0.67	0.68	0.69	0.63	0.67	0.71	0.74	0.68	0.73	0.05	-0.01
Other Gasoil	0.43	0.36	0.47	0.37	0.23	0.42	0.43	0.47	0.38	-0.09	-0.07
Residual Fuel Oil	0.15	0.15	0.16	0.16	0.14	0.15	0.14	0.14	0.14	0.00	-0.02
Other Products	0.09	0.11	0.09	0.05	0.12	0.12	0.12	0.14	0.15	0.02	0.05
Total	2.49	2.42	2.53	2.35	2.34	2.55	2.56	2.50	2.47	-0.03	-0.14
Italy											
LPG	0.11	0.10	0.11	0.12	0.08	0.08	0.09	0.09	0.10	0.01	-0.01
Naphtha	0.12	0.09	0.11	0.11	0.10	0.08	0.09	0.08	0.08	0.01	-0.03
Motor Gasoline	0.24	0.23	0.24	0.22	0.24	0.24	0.24	0.23	0.22	-0.01	-0.03
Jet/Kerosene	0.10	0.10	0.09	0.09	0.10	0.12	0.12	0.11	0.08	-0.03	-0.01
Diesel	0.49	0.49	0.50	0.47	0.51	0.50	0.52	0.50	0.49	-0.01	-0.02
Other Gasoil	0.12	0.11	0.14	0.11	0.09	0.10	0.11	0.13	0.13	0.00	0.00
Residual Fuel Oil	0.13	0.11	0.12	0.10	0.11	0.13	0.12	0.12	0.09	-0.04	-0.02
Other Products	0.23	0.23	0.25	0.21	0.24	0.22	0.24	0.21	0.22	0.01	-0.04
Total	1.53	1.46	1.56	1.43	1.47	1.47	1.54	1.47	1.41	-0.06	-0.14
France											
LPG	0.15	0.14	0.17	0.17	0.12	0.12	0.12	0.13	0.14	0.01	-0.03
Naphtha	0.13	0.13	0.10	0.13	0.14	0.13	0.11	0.10	0.12	0.02	0.01
Motor Gasoline	0.19	0.18	0.18	0.17	0.20	0.19	0.18	0.17	0.16	-0.01	-0.01
Jet/Kerosene	0.15	0.15	0.14	0.14	0.15	0.16	0.16	0.15	0.14	-0.01	0.00
Diesel	0.69	0.70	0.69	0.69	0.71	0.71	0.73	0.70	0.69	-0.01	0.02
Other Gasoil	0.30	0.27	0.34	0.35	0.19	0.28	0.32	0.31	0.24	-0.07	-0.06
Residual Fuel Oil	0.09	0.09	0.09	0.08	0.08	0.08	0.09	0.09	0.10	0.01	0.01
Other Products	0.17	0.17	0.15	0.13	0.19	0.20	0.23	0.16	0.17	0.01	0.00
Total	1.86	1.82	1.86	1.86	1.79	1.87	1.95	1.81	1.76	-0.05	-0.06
United Kingdom											
LPG	0.14	0.14	0.13	0.14	0.15	0.13	0.13	0.12	0.12	-0.01	-0.02
Naphtha	0.03	0.03	0.02	0.03	0.03	0.02	0.02	0.02	0.03	0.01	0.00
Motor Gasoline	0.35	0.33	0.34	0.34	0.34	0.33	0.34	0.33	0.34	0.01	-0.01
Jet/Kerosene	0.33	0.33	0.34	0.34	0.32	0.33	0.36	0.33	0.33	0.00	-0.03
Diesel	0.45	0.45	0.44	0.45	0.45	0.45	0.47	0.46	0.48	0.02	0.03
Other Gasoil	0.12	0.12	0.12	0.11	0.11	0.13	0.13	0.11	0.12	0.01	0.00
Residual Fuel Oil	0.06	0.06	0.07	0.07	0.06	0.06	0.07	0.06	0.06	-0.01	-0.01
Other Products	0.14	0.15	0.15	0.15	0.16	0.15	0.15	0.14	0.13	-0.01	-0.03
Total	1.62	1.60	1.60	1.62	1.61	1.61	1.66	1.57	1.59	0.02	-0.05
Canada											
LPG	0.35	0.37	0.36	0.39	0.35	0.37	0.35	0.36	0.39	0.02	0.01
Naphtha	0.08	0.08	0.08	0.09	0.08	0.08	0.08	0.06	0.07	0.00	-0.01
Motor Gasoline	0.74	0.73	0.73	0.69	0.74	0.77	0.75	0.74	0.73	-0.01	0.01
Jet/Kerosene	0.11	0.11	0.11	0.11	0.10	0.12	0.12	0.10	0.11	0.01	-0.01
Diesel	0.22	0.22	0.22	0.22	0.22	0.23	0.23	0.22	0.22	0.00	0.00
Other Gasoil	0.31	0.33	0.34	0.36	0.28	0.32	0.33	0.33	0.35	0.01	0.01
Residual Fuel Oil	0.10	0.09	0.11	0.11	0.09	0.08	0.09	0.10	0.11	0.02	0.00
Other Products	0.30	0.29	0.30	0.28	0.29	0.31	0.31	0.29	0.26	-0.03	-0.04
Total	2.21	2.23	2.25	2.25	2.15	2.29	2.26	2.21	2.23	0.03	-0.03

1 Demand, measured as deliveries from refineries and primary stocks, comprises inland deliveries, international bunkers and refinery fuel. It includes crude for direct burning, oil from non-conventional sources and other sources of supply. Jet/kerosene comprises jet kerosene and non-aviation kerosene. Gasoil comprises diesel, light heating oil and other gasoils.
2 Latest official OECD submissions (MOS).
3 US figures exclude US territories.

Table 3
WORLD OIL PRODUCTION
(million barrels per day)

	2010	2011	2012	3Q11	4Q11	1Q12	2Q12	3Q12	Nov 11	Dec 11	Jan 12
OPEC											
Crude Oil											
Saudi Arabia	8.13	9.05		9.34	9.38				9.45	9.55	9.55
Iran	3.70	3.58		3.53	3.51				3.55	3.45	3.45
Iraq	2.36	2.67		2.67	2.68				2.68	2.69	2.65
UAE	2.31	2.50		2.53	2.54				2.52	2.58	2.58
Kuwait	2.03	2.21		2.26	2.34				2.37	2.30	2.26
Neutral Zone	0.53	0.59		0.60	0.60				0.60	0.60	0.60
Qatar	0.80	0.82		0.82	0.82				0.82	0.82	0.82
Angola	1.73	1.64		1.69	1.72				1.69	1.75	1.73
Nigeria	2.08	2.18		2.26	2.06				2.10	2.06	2.04
Libya	1.55	0.46		0.04	0.55				0.55	0.75	0.98
Algeria	1.25	1.28		1.28	1.29				1.29	1.29	1.29
Ecuador	0.47	0.50		0.49	0.49				0.50	0.48	0.48
Venezuela	2.53	2.52		2.42	2.52				2.53	2.50	2.48
Total Crude Oil[6]	29.49	29.99		29.93	30.51				30.64	30.82	30.90
Total NGLs[1,6]	5.34	5.78	6.34	5.79	5.91	6.14	6.19	6.49	5.91	5.91	6.14
Total OPEC[6]	34.83	35.77		35.72	36.41				36.55	36.72	37.04
OPEC: Historical Composition[6]	34.83	35.77		35.72	36.41				36.55	36.72	37.04
NON-OPEC[2]											
OECD											
North America	14.10	14.54	14.99	14.55	14.97	15.04	14.86	14.90	15.02	15.04	14.99
United States[5]	7.77	8.10	8.40	8.10	8.40	8.31	8.48	8.35	8.45	8.43	8.25
Mexico	2.96	2.94	2.87	2.92	2.92	2.91	2.89	2.84	2.92	2.91	2.91
Canada	3.37	3.50	3.73	3.53	3.66	3.82	3.49	3.71	3.65	3.70	3.83
Europe	4.14	3.83	3.78	3.62	3.84	3.85	3.71	3.65	3.84	3.85	3.85
UK	1.36	1.12	1.12	0.94	1.13	1.16	1.13	1.01	1.10	1.21	1.15
Norway	2.14	2.03	2.00	1.99	2.03	2.02	1.91	1.99	2.05	2.00	2.03
Others	0.65	0.67	0.66	0.69	0.67	0.67	0.67	0.65	0.69	0.65	0.67
Pacific	0.61	0.52	0.65	0.51	0.55	0.61	0.64	0.67	0.54	0.60	0.55
Australia	0.51	0.43	0.57	0.42	0.47	0.52	0.56	0.59	0.45	0.51	0.47
Others	0.10	0.09	0.08	0.09	0.08	0.09	0.08	0.08	0.08	0.09	0.09
Total OECD	18.86	18.89	19.42	18.68	19.36	19.49	19.21	19.23	19.40	19.49	19.39
NON-OECD											
Former USSR	13.55	13.62	13.80	13.54	13.74	13.77	13.86	13.68	13.82	13.68	13.78
Russia	10.45	10.58	10.71	10.58	10.67	10.66	10.72	10.74	10.70	10.63	10.68
Others	3.10	3.04	3.08	2.96	3.07	3.12	3.15	2.94	3.13	3.05	3.10
Asia	7.80	7.67	7.67	7.57	7.61	7.70	7.66	7.63	7.63	7.76	7.69
China	4.10	4.13	4.17	4.06	4.06	4.14	4.15	4.14	4.05	4.18	4.13
Malaysia	0.72	0.65	0.63	0.65	0.65	0.64	0.63	0.62	0.66	0.63	0.64
India	0.86	0.90	0.92	0.89	0.91	0.93	0.92	0.92	0.90	0.94	0.92
Indonesia	0.97	0.91	0.86	0.91	0.90	0.88	0.86	0.85	0.89	0.90	0.89
Others	1.14	1.08	1.10	1.06	1.10	1.12	1.10	1.09	1.13	1.11	1.12
Europe	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14
Latin America	4.07	4.21	4.43	4.19	4.32	4.34	4.42	4.46	4.35	4.35	4.30
Brazil[5]	2.14	2.19	2.34	2.16	2.25	2.30	2.31	2.34	2.27	2.30	2.31
Argentina	0.69	0.67	0.66	0.67	0.69	0.64	0.67	0.67	0.69	0.68	0.62
Colombia	0.79	0.91	1.01	0.92	0.95	0.96	1.00	1.03	0.96	0.93	0.93
Others	0.45	0.44	0.42	0.44	0.43	0.43	0.43	0.42	0.43	0.44	0.44
Middle East[3]	1.74	1.64	1.56	1.66	1.49	1.55	1.54	1.56	1.49	1.53	1.54
Oman	0.87	0.89	0.91	0.89	0.89	0.89	0.90	0.92	0.89	0.89	0.88
Syria	0.39	0.33	0.27	0.32	0.22	0.28	0.27	0.27	0.22	0.26	0.28
Yemen	0.30	0.23	0.18	0.24	0.18	0.18	0.17	0.18	0.18	0.18	0.18
Others	0.19	0.20	0.19	0.20	0.20	0.20	0.20	0.19	0.20	0.20	0.20
Africa	2.52	2.52	2.43	2.53	2.50	2.34	2.39	2.49	2.50	2.48	2.45
Egypt	0.70	0.69	0.68	0.69	0.68	0.68	0.68	0.67	0.68	0.68	0.69
Gabon	0.25	0.24	0.25	0.24	0.25	0.24	0.24	0.25	0.25	0.25	0.25
Others	1.58	1.59	1.50	1.60	1.57	1.41	1.47	1.56	1.57	1.56	1.52
Total Non-OECD	29.82	29.81	30.02	29.63	29.79	29.84	30.00	29.95	29.92	29.95	29.91
Processing Gains[4]	2.10	2.17	2.26	2.14	2.23	2.28	2.23	2.24	2.23	2.23	2.28
Global Biofuels[5]	1.83	1.84	1.94	2.16	1.82	1.59	1.94	2.24	1.84	1.68	1.59
TOTAL NON-OPEC[6]	52.60	52.71	53.64	52.60	53.20	53.20	53.38	53.65	53.40	53.35	53.17
Non-OPEC: Historical Composition[6]	52.60	52.71	53.64	52.60	53.20	53.20	53.38	53.65	53.40	53.35	53.17
TOTAL SUPPLY	87.43	88.48		88.33	89.62				89.95	90.07	90.21

1 Includes condensates reported by OPEC countries, oil from non-conventional sources, e.g. Venezuelan Orimulsion (but not Orinoco extra-heavy oil), and non-oil inputs to Saudi Arabian MTBE. Orimulsion production reportedly ceased from January 2007.
2 Comprises crude oil, condensates, NGLs and oil from non-conventional sources
3 Includes small amounts of production from Israel, Jordan and Bahrain.
4 Net volumetric gains and losses in refining and marine transportation losses.
5 As of the July 2010 OMR, Global Biofuels comprise all world biofuel production including fuel ethanol from the US and Brazil.
6 Total OPEC comprises all countries which were OPEC members at 1 January 2009. OPEC Historical Composition comprises countries which were OPEC members at that point in time. Total Non-OPEC excludes all countries that were OPEC members at 1 January 2009. Non-OPEC Historical Composition excludes countries that were OPEC members at that point in time.

Table 4

OECD INDUSTRY STOCKS[1] AND QUARTERLY STOCK CHANGES

	RECENT MONTHLY STOCKS[2] in Million Barrels					PRIOR YEARS' STOCKS[2] in Million Barrels			STOCK CHANGES in mb/d			
	Aug2011	Sep2011	Oct2011	Nov2011	Dec2011*	Dec2008	Dec2009	Dec2010	1Q2011	2Q2011	3Q2011	4Q2011
North America												
Crude	484.1	466.7	477.5	475.0	468.7	448.7	447.4	476.2	0.25	0.02	-0.36	0.02
Motor Gasoline	246.2	250.6	243.1	254.5	262.6	242.9	253.4	252.4	-0.03	-0.01	0.02	0.13
Middle Distillate	229.6	227.8	218.1	216.7	220.0	216.6	239.4	238.7	-0.24	-0.04	0.16	-0.09
Residual Fuel Oil	46.1	42.4	44.4	47.2	44.1	44.1	44.4	49.5	-0.05	-0.01	-0.02	0.02
Total Products[3]	709.7	707.3	689.1	697.9	700.8	683.2	695.9	705.1	-0.58	0.29	0.30	-0.07
Total[4]	1360.5	1341.8	1334.4	1332.8	1325.9	1281.7	1286.0	1330.7	-0.39	0.49	0.03	-0.17
Europe												
Crude	310.5	308.3	299.6	303.5	288.2	342.0	332.6	322.4	0.01	-0.05	-0.11	-0.22
Motor Gasoline	90.8	89.0	90.9	94.3	93.4	101.3	100.8	96.6	0.04	-0.09	-0.03	0.05
Middle Distillate	273.7	265.4	260.0	262.9	267.7	276.8	287.0	277.8	0.09	-0.13	-0.09	0.03
Residual Fuel Oil	67.7	64.1	63.1	63.1	60.5	79.7	71.8	68.4	-0.01	-0.03	0.00	-0.04
Total Products[3]	552.9	538.6	535.1	538.3	539.3	574.2	572.2	555.9	0.11	-0.22	-0.08	0.01
Total[4]	929.6	911.3	900.6	911.3	895.7	990.6	971.7	948.5	0.06	-0.24	-0.23	-0.17
Pacific												
Crude	155.2	157.0	155.1	155.8	156.0	162.6	160.5	158.0	0.00	0.01	-0.03	-0.01
Motor Gasoline	25.1	24.4	24.0	23.4	21.8	20.6	22.9	23.2	0.01	0.01	-0.01	-0.03
Middle Distillate	70.0	67.8	66.6	68.3	60.6	64.8	62.2	59.7	-0.06	0.14	0.01	-0.08
Residual Fuel Oil	19.4	20.2	19.9	19.7	19.1	20.0	18.6	18.9	0.02	0.01	-0.01	-0.01
Total Products[3]	180.7	181.0	180.5	178.0	163.3	174.0	160.9	162.7	-0.09	0.18	0.10	-0.19
Total[4]	409.7	411.5	407.1	407.6	389.2	406.6	383.2	390.4	-0.10	0.26	0.07	-0.24
Total OECD												
Crude	949.8	932.1	932.2	934.3	912.9	953.4	940.5	956.6	0.26	-0.02	-0.49	-0.21
Motor Gasoline	362.1	363.9	358.0	372.1	377.8	364.9	377.1	372.2	0.02	-0.09	-0.02	0.15
Middle Distillate	573.4	561.1	544.6	547.8	548.2	558.2	588.6	576.1	-0.21	-0.03	0.07	-0.14
Residual Fuel Oil	133.1	126.7	127.4	129.9	123.8	143.8	134.9	136.8	-0.04	-0.04	-0.03	-0.03
Total Products[3]	1443.3	1426.9	1404.7	1414.3	1403.4	1431.4	1429.1	1423.6	-0.56	0.25	0.33	-0.26
Total[4]	2699.8	2664.6	2642.0	2651.6	2610.8	2679.0	2640.9	2669.6	-0.43	0.50	-0.13	-0.58

OECD GOVERNMENT-CONTROLLED STOCKS[5] AND QUARTERLY STOCK CHANGES

	RECENT MONTHLY STOCKS[2] in Million Barrels					PRIOR YEARS' STOCKS[2] in Million Barrels			STOCK CHANGES in mb/d			
	Aug2011	Sep2011	Oct2011	Nov2011	Dec2011*	Dec2008	Dec2009	Dec2010	1Q2011	2Q2011	3Q2011	4Q2011
North America												
Crude	696.5	696.0	696.0	696.0	696.0	701.8	726.6	726.6	0.00	0.00	-0.33	0.00
Products	0.0	0.0	0.0	0.7	0.7	2.0	2.0	2.0	-0.02	0.00	0.00	0.01
Europe												
Crude	183.1	183.0	182.8	184.2	185.7	186.8	184.2	186.5	-0.01	-0.01	-0.02	0.03
Products	236.5	235.9	235.5	235.5	234.0	228.6	240.8	234.9	-0.03	0.05	-0.01	-0.02
Pacific												
Crude	390.6	390.7	391.1	392.6	393.5	387.2	389.0	389.6	0.02	0.00	0.00	0.03
Products	18.7	18.7	20.0	20.0	20.0	19.2	20.0	20.0	0.00	0.00	-0.01	0.01
Total OECD												
Crude	1270.2	1269.6	1269.9	1272.7	1275.2	1275.9	1299.8	1302.5	0.01	-0.01	-0.36	0.06
Products	255.2	254.6	255.5	256.1	254.7	249.7	262.8	256.9	-0.05	0.05	-0.03	0.00
Total[4]	1526.8	1525.6	1526.7	1530.1	1531.2	1526.6	1564.1	1560.7	-0.03	0.04	-0.38	0.06

* estimated

1 Stocks are primary national territory stocks on land (excluding utility stocks and including pipeline and entrepot stocks where known) and include stocks held by industry to meet IEA, EU and national emergency reserve commitments and are subject to government control in emergencies.

2 Closing stock levels.

3 Total products includes gasoline, middle distillates, fuel oil and other products.

4 Total includes NGLs, refinery feedstocks, additives/oxygenates and other hydrocarbons.

5 Includes government-owned stocks and stock holding organisation stocks held for emergency purposes.

Table 5

TOTAL STOCKS ON LAND IN OECD COUNTRIES[1]

('millions of barrels' and 'days')

	End December 2010		End March 2011		End June 2011		End September 2011		End December 2011 [3]	
	Stock Level	Days Fwd[2] Demand	Stock Level	Days Fwd Demand	Stock Level	Days Fwd Demand	Stock Level	Days Fwd Demand	Stock Level	Days Fwd Demand
North America										
Canada	196.5	86	185.2	84	189.7	80	188.6	-	-	-
Mexico	44.5	22	45.0	22	46.5	22	46.1	-	-	-
United States[4]	1796.1	94	1769.5	94	1807.6	96	1780.9	-	-	-
Total[4]	2059.2	87	2021.7	87	2065.9	88	2037.8	87	2022.5	87
Pacific										
Australia	38.1	39	39.1	39	39.5	39	38.2	-	-	-
Japan	588.3	121	575.4	147	593.2	137	601.1	-	-	-
Korea	165.4	70	170.2	83	175.2	79	173.6	-	-	-
New Zealand	8.2	51	8.0	53	8.2	56	7.9	-	-	-
Total	800.0	96	792.7	111	816.0	106	820.9	99	802.7	94
Europe[5]										
Austria	19.7	77	19.4	77	19.6	70	18.0	-	-	-
Belgium	33.6	50	37.0	59	38.1	58	36.7	-	-	-
Czech Republic	21.2	117	21.5	106	21.7	109	20.1	-	-	-
Denmark	26.8	171	21.4	132	21.5	134	22.4	-	-	-
Finland	27.8	127	26.9	133	27.0	130	27.0	-	-	-
France	168.2	91	167.4	94	166.7	89	160.0	-	-	-
Germany	286.8	122	289.4	124	290.8	114	282.6	-	-	-
Greece	34.3	92	33.9	106	32.6	99	30.9	-	-	-
Hungary	15.9	119	17.4	124	17.3	118	16.2	-	-	-
Ireland	9.8	63	10.8	79	10.2	73	11.3	-	-	-
Italy	133.3	93	131.8	90	130.0	88	130.1	-	-	-
Luxembourg	0.6	10	0.5	9	0.6	9	0.7	-	-	-
Netherlands	125.8	129	125.7	124	117.8	114	114.3	-	-	-
Norway	20.8	81	21.1	93	23.5	96	24.5	-	-	-
Poland	65.5	123	62.8	109	64.6	105	65.2	-	-	-
Portugal	22.9	89	23.5	87	23.3	86	21.9	-	-	-
Slovak Republic	8.3	109	9.0	111	8.9	104	8.3	-	-	-
Spain	133.2	93	132.9	97	130.1	94	131.2	-	-	-
Sweden	32.4	94	33.7	101	32.5	101	32.6	-	-	-
Switzerland	36.8	156	36.6	168	37.2	150	37.0	-	-	-
Turkey	58.5	101	58.3	85	56.6	73	56.4	-	-	-
United Kingdom	88.8	55	92.8	57	84.9	53	84.1	-	-	-
Total	1371.1	97	1374.0	97	1355.4	92	1331.5	94	1316.8	96
Total OECD	4230.3	91	4188.5	94	4237.3	92	4190.2	92	4142.0	91
DAYS OF IEA Net Imports[6]	-	147	-	146	-	147	-	145	-	-

1 Total Stocks are industry and government-controlled stocks (see breakdown in table below). Stocks are primary national territory stocks on land (excluding utility stocks and including pipeline and entrepot stocks where known) they include stocks held by industry to meet IEA, EU and national emergency reserves commitments and are subject to government control in emergencies.
2 Note that days of forward demand represent the stock level divided by the forward quarter average daily demand and is very different from the days of net imports used for the calculation of IEA Emergency Reserves.
3 End December 2011 forward demand figures are IEA Secretariat forecasts.
4 US figures exclude US territories. Total includes US territories.
5 Data not available for Iceland.
6 Reflects stock levels and prior calendar year's net imports adjusted according to IEA emergency reserve definitions (see www.iea.org/netimports.asp). Net exporting IEA countries are excluded.

TOTAL OECD STOCKS

CLOSING STOCKS	Total	Government[1] controlled	Industry	Total	Government[1] controlled	Industry
	Millions of Barrels			*Days of Fwd. Demand*[2]		
4Q2008	4206	1527	2679	90	33	57
1Q2009	4278	1547	2731	96	35	61
2Q2009	4306	1561	2745	95	35	61
3Q2009	4327	1564	2763	94	34	60
4Q2009	4205	1564	2641	92	34	57
1Q2010	4241	1567	2675	94	35	59
2Q2010	4319	1562	2757	93	33	59
3Q2010	4296	1549	2747	92	33	59
4Q2010	4230	1561	2670	91	34	58
1Q2011	4188	1558	2631	94	35	59
2Q2011	4237	1561	2676	92	34	58
3Q2011	4190	1526	2665	92	33	58
4Q2011	4142	1531	2611	91	34	57

1 Includes government-owned stocks and stock holding organisation stocks held for emergency purposes.
2 Days of forward demand calculated using actual demand except in 4Q2011 (when latest forecasts are used).

Table 6

IEA MEMBER COUNTRY DESTINATIONS OF SELECTED CRUDE STREAMS[1]

(million barrels per day)

	2008	2009	2010	4Q10	1Q11	2Q11	3Q11	Sep 11	Oct 11	Nov 11	Year Earlier Nov 10	Year Earlier change
Saudi Light & Extra Light												
North America	0.70	0.52	0.69	0.75	0.71	0.72	0.47	0.31	0.67	0.96	0.81	0.15
Europe	0.70	0.59	0.66	0.69	0.70	0.79	0.93	0.82	0.90	0.89	0.81	0.08
Pacific	1.22	1.28	1.21	1.26	1.33	1.14	1.21	1.27	1.22	1.26	1.50	-0.24
Saudi Medium												
North America	0.64	0.40	0.36	0.36	0.33	0.36	0.40	0.45	0.35	0.44	0.35	0.09
Europe	0.05	0.02	0.00	-	-	0.02	0.05	0.03	0.01	0.02	-	-
Pacific	0.39	0.34	0.34	0.37	0.39	0.38	0.43	0.45	0.33	0.46	0.47	0.00
Saudi Heavy												
North America	0.07	0.03	0.02	0.01	0.02	0.03	0.03	0.07	0.02	0.02	-	-
Europe	0.09	0.02	0.00	-	0.00	0.00	0.03	0.02	0.02	0.03	-	-
Pacific	0.24	0.15	0.22	0.21	0.20	0.21	0.23	0.25	0.08	0.23	0.24	-0.01
Iraqi Basrah Light[2]												
North America	0.60	0.40	0.36	0.29	0.21	0.41	0.31	0.23	0.01	0.31	0.33	-0.02
Europe	0.21	0.12	0.09	0.08	0.03	0.10	0.19	0.19	0.13	0.13	0.09	0.04
Pacific	0.15	0.24	0.29	0.38	0.40	0.26	0.38	0.35	0.32	0.33	0.39	-0.05
Iraqi Kirkuk												
North America	0.08	0.06	0.03	0.04	0.11	0.07	0.05	0.00	0.03	0.03	0.02	0.01
Europe	0.23	0.31	0.27	0.23	0.21	0.31	0.32	0.26	0.29	0.20	0.29	-0.09
Pacific	-	-	-	-	-	-	-	-	-	-	-	-
Iranian Light												
North America	-	-	-	-	-	-	-	-	-	-	-	-
Europe	0.23	0.15	0.24	0.18	0.24	0.28	0.20	0.17	0.20	0.23	0.16	0.08
Pacific	0.08	0.07	0.04	0.01	0.06	0.03	0.04	0.02	0.02	0.02	0.01	0.01
Iranian Heavy[3]												
North America	-	-	-	-	-	-	-	-	-	-	-	-
Europe	0.49	0.40	0.49	0.43	0.34	0.59	0.73	0.71	0.58	0.60	0.30	0.30
Pacific	0.61	0.57	0.52	0.52	0.63	0.41	0.51	0.53	0.51	0.48	0.48	0.01
Venezuelan Light & Medium												
North America	0.62	0.39	0.14	0.16	0.06	0.30	0.24	0.24	0.32	0.06	0.26	-0.20
Europe	0.06	0.07	0.02	0.01	0.03	0.01	0.02	0.02	-	0.05	-	-
Pacific	-	-	-	-	-	-	-	-	-	-	-	-
Venezuelan 22 API and heavier												
North America	0.65	0.75	0.86	0.75	0.89	0.77	0.70	0.51	0.68	0.72	0.82	-0.10
Europe	0.07	0.07	0.06	0.05	0.04	0.05	0.06	0.05	0.04	0.05	0.03	0.02
Pacific	-	-	-	-	-	-	-	-	-	-	-	-
Mexican Maya												
North America	1.02	0.93	0.91	0.92	0.82	0.80	0.84	0.76	0.84	0.89	0.97	-0.08
Europe	0.14	0.10	0.11	0.09	0.14	0.12	0.12	0.11	0.11	0.11	0.06	0.06
Pacific	-	-	-	-	-	-	-	-	-	-	-	-
Mexican Isthmus												
North America	0.01	0.01	0.04	0.09	0.05	0.08	0.06	0.07	0.07	0.07	0.11	-0.04
Europe	0.01	0.01	0.02	0.05	0.01	0.02	0.00	-	0.01	-	0.02	-
Pacific	-	-	-	-	-	-	-	-	-	-	-	-
Russian Urals												
North America	0.05	0.15	0.08	0.03	0.01	-	-	-	0.05	-	-	-
Europe	1.81	1.72	1.80	1.71	1.76	1.87	1.52	1.56	1.57	1.64	1.57	0.07
Pacific	-	-	-	-	-	-	-	-	-	-	-	-
Nigerian Light[4]												
North America	0.68	0.54	0.60	0.58	0.62	0.60	0.43	0.22	0.75	0.33	0.45	-0.12
Europe	0.29	0.32	0.34	0.49	0.40	0.40	0.54	0.55	0.39	0.51	0.59	-0.08
Pacific	-	0.00	-	-	0.05	0.04	0.06	0.06	0.06	0.05	-	-
Nigerian Medium												
North America	0.27	0.21	0.25	0.22	0.20	0.18	0.18	0.17	0.17	0.07	0.23	-0.17
Europe	0.14	0.13	0.09	0.11	0.14	0.17	0.11	0.14	0.10	0.08	0.10	-0.02
Pacific	-	-	-	-	-	-	-	-	-	-	-	-

1 Data based on monthly submissions from IEA countries to the crude oil import register (in '000 bbl), subject to availability. May differ from Table 8 of the Report.
IEA North America includes United States and Canada.
IEA Europe includes all countries in OECD Europe except Hungary. The Slovak Republic and Poland is excluded through December 2007 but included thereafter.
IEA Pacific data includes Australia, New Zealand, Korea and Japan.

2 Iraqi Total minus Kirkuk.

3 Iranian Total minus Iranian Light.

4 33° API and lighter (e.g., Bonny Light, Escravos, Qua Iboe and Oso Condensate).

Table 7
REGIONAL OECD IMPORTS[1,2]
(thousand barrels per day)

	2008	2009	2010	4Q10	1Q11	2Q11	3Q11	Sep-11	Oct-11	Nov-11	Year Earlier Nov-10	Year Earlier % change
Crude Oil												
North America	8076	7353	7343	6625	6571	6928	6793	6569	6825	6381	6478	-2%
Europe	9776	8893	9072	9110	8901	8903	9390	9283	8871	9286	9344	-1%
Pacific	6605	6082	6249	6479	6645	6086	6255	6271	6217	6436	6708	-4%
Total OECD	24457	22329	22664	22213	22117	21917	22437	22124	21913	22103	22686	-3%
LPG												
North America	31	13	8	6	20	4	4	5	6	2	10	-81%
Europe	268	260	270	299	313	284	304	336	344	356	346	3%
Pacific	589	529	558	567	569	547	580	573	508	519	594	-13%
Total OECD	887	802	836	872	903	836	888	914	858	877	949	-8%
Naphtha												
North America	56	22	36	35	34	51	43	45	40	59	45	32%
Europe	298	352	390	382	292	336	285	282	284	233	421	-45%
Pacific	776	841	900	893	917	830	906	910	809	898	892	1%
Total OECD	1130	1215	1326	1309	1243	1217	1234	1237	1133	1190	1358	-12%
Gasoline[3]												
North America	1077	878	788	712	669	981	703	591	612	749	709	6%
Europe	215	193	174	127	223	221	216	207	192	250	111	126%
Pacific	90	96	64	67	71	61	70	63	83	86	76	13%
Total OECD	1383	1167	1025	907	963	1262	989	862	887	1086	895	21%
Jet & Kerosene												
North America	64	62	76	89	62	86	81	64	65	99	112	-12%
Europe	401	452	417	396	320	367	451	455	451	562	425	32%
Pacific	34	53	40	46	58	43	45	61	65	59	49	20%
Total OECD	500	567	532	531	440	497	578	581	580	720	586	23%
Gasoil/Diesel												
North America	74	55	49	14	46	30	32	48	5	52	5	863%
Europe	871	1035	1045	1235	1078	931	934	1096	1155	1095	1412	-22%
Pacific	119	87	97	92	99	153	123	135	146	117	101	16%
Total OECD	1064	1177	1191	1340	1224	1114	1089	1279	1306	1265	1518	-17%
Heavy Fuel Oil												
North America	288	270	277	254	345	304	193	195	206	250	297	-16%
Europe	458	534	529	502	505	582	651	614	657	591	429	38%
Pacific	125	113	117	101	147	111	156	169	142	184	95	94%
Total OECD	871	917	923	857	997	997	1001	978	1005	1025	822	25%
Other Products												
North America	1078	870	805	906	855	896	903	872	747	832	883	-6%
Europe	734	770	666	737	683	776	724	639	665	634	713	-11%
Pacific	298	325	335	352	383	252	343	394	316	301	402	-25%
Total OECD	2110	1964	1806	1996	1921	1924	1970	1905	1728	1767	1999	-12%
Total Products												
North America	2667	2171	2038	2017	2033	2355	1960	1820	1681	2044	2062	-1%
Europe	3245	3595	3491	3678	3415	3497	3566	3630	3749	3722	3856	-3%
Pacific	2032	2045	2111	2118	2244	1995	2223	2306	2068	2164	2209	-2%
Total OECD	7944	7810	7639	7812	7691	7847	7749	7756	7498	7930	8127	-2%
Total Oil												
North America	10743	9524	9381	8641	8604	9283	8753	8390	8506	8424	8697	-3%
Europe	13022	12488	12562	12788	12316	12401	12955	12913	12620	13008	13200	-1%
Pacific	8637	8127	8360	8596	8888	8081	8478	8577	8285	8600	8917	-4%
Total OECD	32401	30139	30302	30025	29808	29765	30186	29879	29412	30032	30813	-3%

1 Based on Monthly Oil Questionnaire data submitted by OECD countries in tonnes and converted to barrels.
2 Excludes intra-regional trade.
3 Includes additives.

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User's Guide and Glossary to the IEA *Oil Market Report*

For information on the data sources, definitions, technical terms and general approach used in preparing the *Oil Market Report (OMR)*, *Medium-Term Oil and Gas Markets (MTOGM)* and *Annual Statistical Supplement* (current issue of the Statistical Supplement dated 10 August 2011), readers are referred to the *Users' Guide* at www.oilmarketreport.org/glossary.asp. It should be noted that the spot crude and product price assessments are based on daily Platts prices, converted when appropriate to US$ per barrel according to the Platts specification of products (© 2012 Platts - a division of The McGraw-Hill Companies, Inc.).

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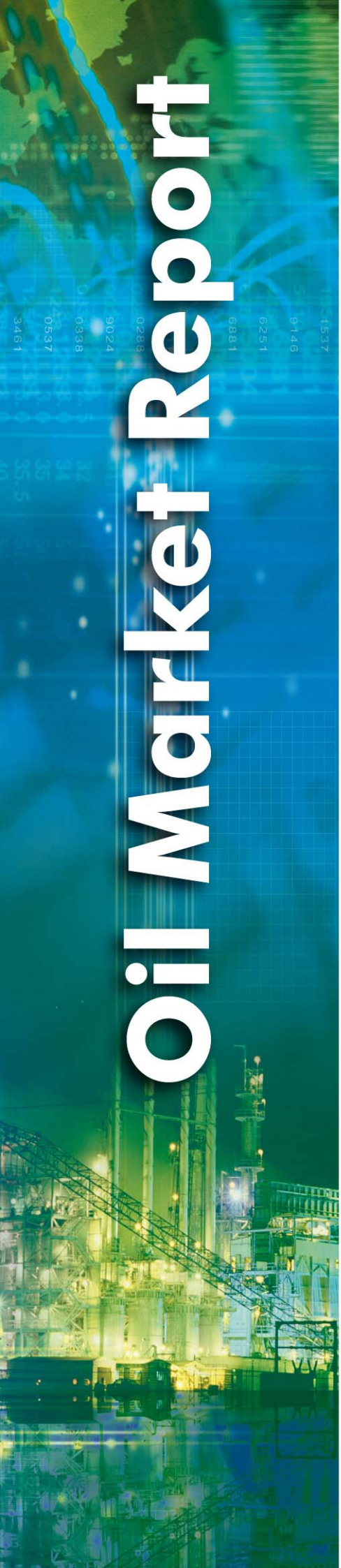

International Energy Agency

14 March 2012

HIGHLIGHTS

- **Oil futures prices moved higher in tandem with escalating supply-side risks.** Geopolitical tension and unplanned outages in non-OPEC countries dented oil supply, while potential additional losses relating to Iran add more uncertainty for the crude outlook. Futures prices were last trading around $125/bbl (Brent) and $106/bbl (WTI).

- **Global demand is expected to grow by 0.8 mb/d (+0.9%) in 2012 to 89.9 mb/d, unchanged from last month's projection.** The relatively subdued economic backdrop – with a global GDP expansion of 3.3% foreseen for 2012 (3.8% in 2011) – and high oil prices both restrain any upside momentum for consumption.

- **Non-OPEC supply grew by only 0.3 mb/d annually for 1Q12, as geopolitical and technical outages dented growth.** Unplanned outages in the North Sea and Canada as well as geopolitical disputes in Africa and the Middle East reduced output. The Americas and the Former Soviet Union support overall growth for 2012 at 0.7 mb/d.

- **OPEC crude supply rose by 315 kb/d February, led by a three-decade peak in Saudi output** and a sharp recovery in Libyan production. Output of 31.42 mb/d was the highest level since mid-2008. The 'call on OPEC crude and stock change' for 2012 is raised by 0.2 mb/d for 2Q12 and 3Q12, to average of 30.1 mb/d, due to lower forecast non-OPEC supplies.

- **Global refinery crude throughputs are largely unchanged for 1Q12,** as weaker-than-expected non-OECD readings were offset by a counter-seasonal increase in US runs in February. 4Q11 runs, however, were a sizable 300 kb/d lower, falling 120 kb/d y-o-y. Runs should rise 180 kb/d in 1Q12 and 600 kb/d in 2Q12, to 74.9 mb/d and 74.5 mb/d, respectively.

- **OECD industry oil stocks increased by a muted 13.6 mb to 2 614 mb** in January, remaining below the five-year average for a seventh consecutive month. Forward demand cover rose to 57.8 days. February preliminary data indicate a seasonal 12.6 mb drop in OECD industry stocks.

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International Energy Agency

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- Advise Governments on recent trends in the global oil market and medium-term developments and analysis on the role of physical and financial markets in oil price formation, particularly highlighting policy-related issues and recommending appropriate action; plan and coordinate meetings of the Standing Group on the Oil Market.
- Supervise the work of professional and support staff and consultants.
- Develop and maintain close contacts with government officials on important policy developments, as well as with oil companies and consultants.
- Co-operate with other Divisions in the IEA on, inter alia, oil industry aspects of their work, country reviews, the development of long-range energy outlooks and environmental issues.
- Provide market information and expertise during oil emergencies and support and participate in exercises related to maintaining emergency response capabilities.

The ideal candidate will possess:

- An advanced university degree in economics, science, engineering, or a related discipline.
- Ten to fifteen years' experience in the international oil industry with experience in the field of oil and energy policy. Specific areas of expertise include any or all of the following: oil production, refining and distribution, oil trade, oil stock policy or product quality issues.
- Strong analytical, communication and interpersonal skills, political sensitivity and ability to establish and maintain effective working relations with senior government and industry officials.
- Proven ability in team-building as well as in planning, co-ordinating and supervising team work. Strong achievement orientation and personal initiative, as well as the ability to work under pressure, often to tight deadlines.
- An excellent level of oral and written communication skills and excellent drafting ability in English; working knowledge of French and other languages would be an advantage.

The IEA operates as an autonomous agency within the Organisation for Economic Co-operation and Development (OECD).

The full vacancy note and on-line application form is available on the OECD website at **www.oecd.org**. Click on *Job Vacancies* - ***Head of Division: Oil industry & Markets Division*** - Job Reference No. **08112**. The position will start 1 July 2012.

On-line applications (in English or French) from nationals of OECD member countries should be submitted *by no later than midnight (CET)* on **25 March 2012**.

The OECD is an equal opportunity employer offering an attractive remuneration package and encourages applications from all qualified candidates.

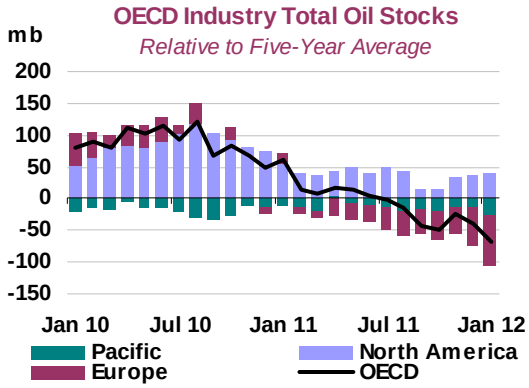
OECD OCDE

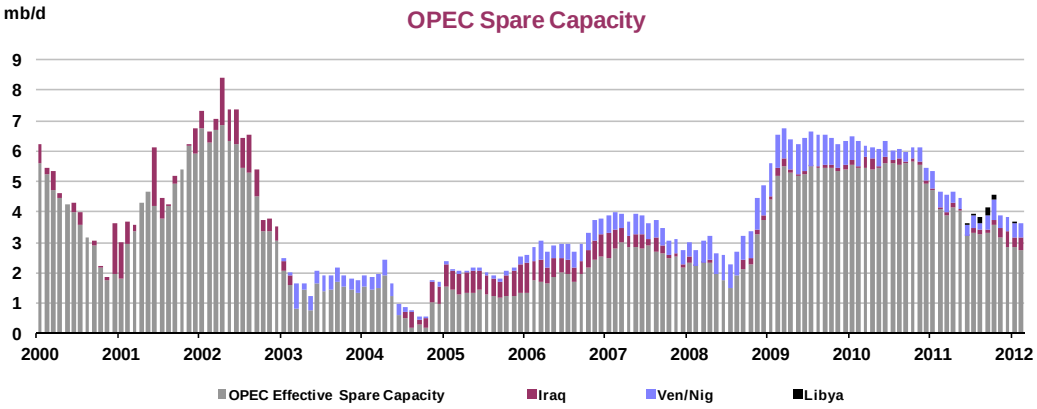
ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT
Organisation de coopération et de développement économiques

A HEADY BREW

Geopolitical risks are ever-present in the oil market, and prompt fierce debate about the degree of risk premium in prevailing price levels. However, quantifying a risk premium is a lot harder than surmising that one exists. Current market dynamics are highly complex, and include a heady brew of both real and anticipated supply-side risks, alongside a very evident tightening in actual market fundamentals that has been underway since mid-2010. Concerns over dislocations to normal inter-regional trade deriving from the economic measures taken against Iran, and this more prosaic ongoing tightening in the supply/demand balance, have combined to lead prices higher by 20% since December. Last month, we focused on some of the midstream and downstream 'micro' factors currently at play in the oil market, and which are influencing price differentials and arbitrage flows. This month, it seems appropriate to stand back and acknowledge a big picture that, arguably, explains more of the price strength seen in recent months than does 'speculation' about real and perceived geopolitical risks.

Put simply, a post-recession OECD industrial stock overhang has gradually been whittled away. Inventories, notably crude in Europe and the Pacific, look very tight in absolute terms. Some analysts identify 58 days of OECD forward stock cover as painting a less troubling picture than implied by absolute stocks. That argument falls down on three counts, as a) absolute stocks provide a better measure of the system's flexibility to adjust to supply or demand shocks, b) excluding North America, OECD cover stands two days below the five-year average, and c) stock cover itself has fallen by around a day in the last six months. Perhaps more importantly, while China and other emerging consumers are building new strategic and industrial storage capacity, their actual holdings provide less domestic demand cover than those in the OECD. So the global 'cushion' is smaller than the OECD metric suggests.





Market focus shifted some time ago from demand to supply (as demand growth in 2011 and 2012 will likely average only 30% of 2010's 2.7 mb/d). There may be no actual physical supply disruption at present deriving from the Iranian 'issue'. But there are ongoing non-OPEC outages totalling around 750 kb/d, as a slew of technical and political factors continue to hobble non-OPEC supply, otherwise expected to rebound after a feeble 2011. Demand growth will likely remain stunted by weaker economic prospects (the more so if prices stay high), but a real risk of another year of underperforming non-OPEC supply shines a spotlight once more on OPEC spare capacity. It is no coincidence that the last time effective spare capacity headed south of 3 mb/d, prices too were on a sustained rise. Temperatures surrounding the Iranian issue may well cool, and non-OPEC output *should* recover as 2012 progresses. Until then, the market's relatively slim 'buffer' suggests a bumpy ride in the months ahead.

DEMAND

Summary

- **High oil prices and a subdued global economic backdrop are expected to contain demand for oil in 2012**. Global oil consumption is seen reaching 89.9 mb/d in 2012, a gain of 0.8 mb/d (or 0.9%) on 2011. Estimates for absolute demand and growth for 2011 and 2012 are largely unchanged compared to last month's report.

- **The preliminary data series for January indicates global oil demand of 88.4 mb/d,** 0.7 mb/d more than assumed last month. Significantly stronger data from China (up 475 kb/d on our month earlier estimate), Germany (+115 kb/d) and Japan (+110 kb/d) lead the revision, although higher prices limit feed through to the rest of 2012.

- **OECD demand growth continues to lag that in the non-OECD.** Oil consumption in the OECD fell by 0.5 mb/d in 2011 to 45.6 mb/d, whereas non-OECD demand rose by 1.3 mb/d, to 43.5 mb/d. Partly a consequence of the OECD's weaker macroeconomic underpinnings, the divergent trend is magnified by the presence of subsidies in the non-OECD. The *IMF* assumes OECD GDP growth of 1.1% in 2012 (1.6% in 2011) versus 5.7% in the non-OECD (6.2% in 2011). OECD demand is expected to fall by a further 0.4 mb/d to 45.2 mb/d in 2012. Non-OECD consumption should rise further in 2012, up by 1.2 mb/d to 44.7 mb/d.

Global Oil Demand (2010-2012)

(million barrels per day)

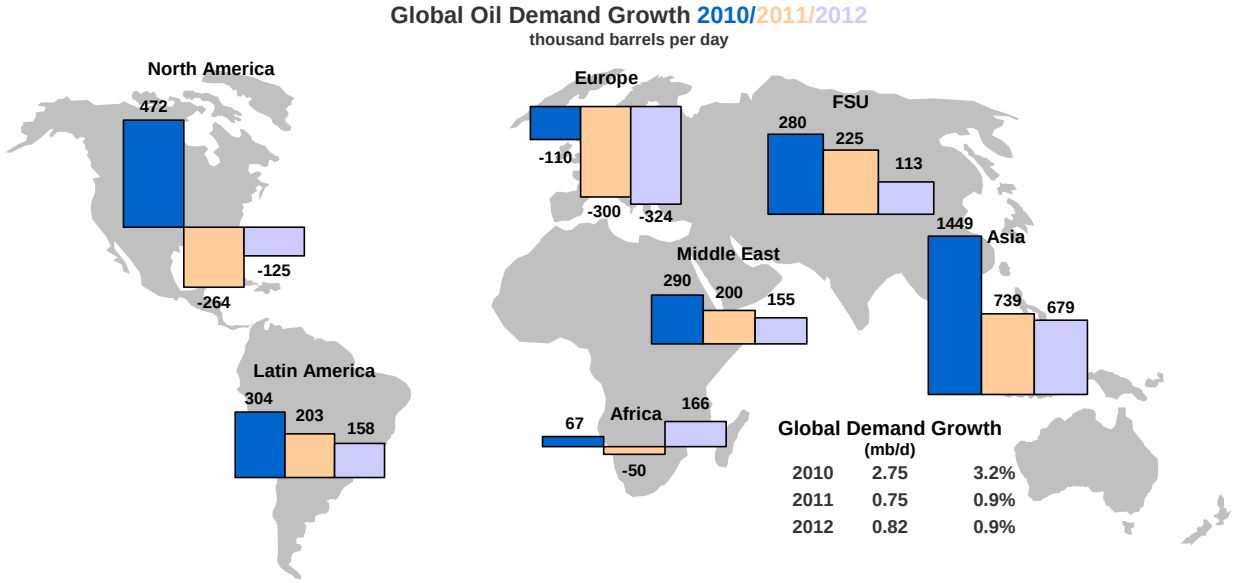
	1Q10	2Q10	3Q10	4Q10	2010	1Q11	2Q11	3Q11	4Q11	2011	1Q12	2Q12	3Q12	4Q12	2012
Africa	3.3	3.4	3.4	3.4	3.4	3.4	3.3	3.3	3.4	3.3	3.5	3.5	3.5	3.5	3.5
Americas	29.5	30.0	30.6	30.2	30.1	30.1	29.8	30.2	29.9	30.0	29.7	29.7	30.4	30.3	30.0
Asia/Pacific	27.2	27.0	26.7	28.3	27.3	28.6	27.3	27.4	28.9	28.1	29.3	28.2	28.0	29.4	28.7
Europe	15.0	14.9	15.6	15.5	15.3	14.9	14.8	15.4	14.8	15.0	14.4	14.3	15.0	14.8	14.6
FSU	4.4	4.3	4.6	4.6	4.5	4.5	4.6	4.8	4.8	4.7	4.6	4.7	4.9	4.9	4.8
Middle East	7.4	7.8	8.3	7.7	7.8	7.6	8.0	8.5	8.0	8.0	7.7	8.2	8.6	8.1	8.2
World	**86.8**	**87.5**	**89.1**	**89.8**	**88.3**	**89.0**	**87.9**	**89.6**	**89.8**	**89.1**	**89.3**	**88.7**	**90.5**	**91.1**	**89.9**
Annual Chg (%)	2.6	3.2	3.5	3.5	3.2	2.6	0.5	0.5	0.0	0.9	0.3	0.9	1.0	1.4	0.9
Annual Chg (mb/d)	2.2	2.7	3.0	3.0	2.8	2.3	0.4	0.4	0.0	0.8	0.3	0.8	0.9	1.3	0.8
Changes from last OMR (mb/d)	0.00	0.00	-0.01	0.00	0.00	0.03	0.01	0.01	-0.03	0.01	0.19	-0.04	-0.03	-0.09	0.01

Global Overview

The world is likely to see a relatively modest expansion in oil product consumption in 2012, as a subdued economic backdrop coincides with relatively high oil prices. The IMF, in January's *World Economic Outlook*, assumed that global economic growth would decelerate to 3.3% in 2012, from 3.8% in 2011 and 5.2% in 2010. Having risen to 89.1 mb/d in 2011, global oil consumption is forecast to rise by 0.8 mb/d (0.9%) in 2012, to 89.9 mb/d. The 2011 estimate is largely unchanged on last month's view, revised up only 10 kb/d.

Asia is projected to dominate global oil demand growth in 2012, expanding by an unchanged 0.7 mb/d to 28.7 mb/d (comprising both non-OECD and OECD). China is expected to be the greatest individual contributor, with its demand forecast to rise by 370 kb/d in 2012, to 9.9 mb/d. Our analysis implies that total Asian demand growth will be over 80% of the predicted global expansion, with China accounting for 45% of the world number. Such shares imply a lesser contribution than in 2011, when Asia accounted for nearly 90% of the expansion and China contributed nearly 60% of the total growth. This diminished Asian share is predicted to occur as other regions, such as Africa, recover. Significant gains in demand are also predicted in the oil-rich regions of the world, such as the Middle East, the former Soviet Union, Africa and Latin America. Although for most countries high oil prices act as a disincentive to consume, they often have the opposite effect in resource-rich nations, encouraging additional expenditure

programmes. Oil consumption can be stimulated either directly through subsidising domestic oil prices, indirectly through investment in relatively oil-intensive projects or may simply increase in line with rising incomes. The Middle East is a prime example, notably Saudi Arabia, as numerous infrastructural and social spending programmes have been confirmed for 2012.



Slow-growth Europe, compounded by record European oil prices, is expected to see the weakest demand trend in 2012, with consumption forecast to decline by 0.3 mb/d (-2.2%) to 14.6 mb/d (includes non-OECD Europe). A decline of 0.1 mb/d (-0.5%) to 23.3 mb/d is assumed for North America, as oil demand continues long-term structural decline, augmented by the impact of high international prices on a US market which is not shielded by either subsidies or taxes.

OECD

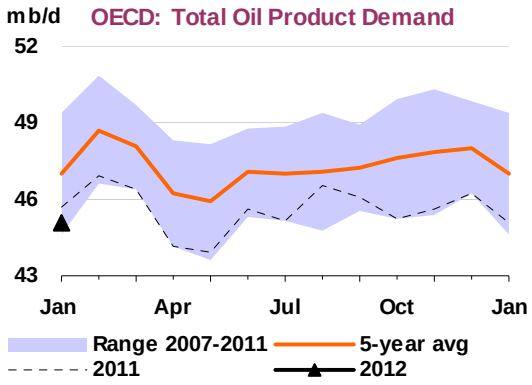
The preliminary data series for January implies total oil product demand in the OECD falling by 0.7 mb/d (-1.4%) on a year-on-year basis, to 45.1 mb/d. Leaving aside the specific regional drivers (analysed in detail later), it is apparent that the relative strength of industry supported consumption of LPG (1.8% higher) and diesel (+0.7%). Gasoline (-1.3%) consumption lagged behind, as weak consumer confidence in Europe and rising pump prices depressed demand.

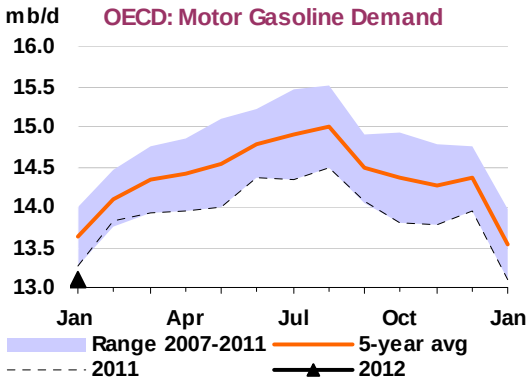
OECD Demand based on Adjusted Preliminary Submissions - January 2012
(million barrels per day)

	Gasoline		Jet/Kerosene		Diesel		Other Gasoil		RFO		Other		Total Products	
	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa
OECD North America*	**9.74**	**-1.8**	**1.52**	**-3.0**	**3.76**	**-0.1**	**1.02**	**-20.2**	**0.91**	**-6.7**	**6.16**	**-0.56**	**23.11**	**-2.5**
US50	8.21	-2.5	1.32	-4.0	3.19	-0.7	0.52	-31.3	0.57	-11.3	4.81	0.3	18.63	-3.0
Canada	0.72	1.6	0.10	2.4	0.21	-0.6	0.35	-7.8	0.10	-11.3	0.70	-5.5	2.19	-3.1
Mexico	0.76	2.7	0.06	9.3	0.31	6.0	0.13	6.0	0.15	16.2	0.60	-1.8	2.01	3.1
OECD Europe	**1.90**	**-1.5**	**1.14**	**-3.4**	**3.84**	**1.5**	**1.69**	**-6.5**	**1.23**	**-5.7**	**3.40**	**-6.3**	**13.20**	**-3.2**
Germany	0.44	6.4	0.17	3.5	0.61	9.0	0.37	7.7	0.17	5.4	0.59	-2.7	2.35	4.5
United Kingdom	0.31	-2.1	0.34	-1.7	0.45	3.9	0.09	-5.4	0.07	-5.6	0.31	-5.7	1.57	-1.5
France	0.15	-4.6	0.14	-1.6	0.66	2.8	0.28	-22.7	0.08	10.0	0.39	-7.9	1.70	-5.6
Italy	0.21	0.3	0.08	-2.8	0.40	-3.4	0.10	-3.2	0.08	-15.3	0.39	-10.4	1.27	-5.9
Spain	0.11	-4.5	0.09	-7.2	0.41	-2.5	0.21	-5.7	0.17	-9.5	0.32	-5.3	1.31	-5.1
OECD Pacific	**1.46**	**2.5**	**1.20**	**-6.6**	**0.97**	**1.1**	**0.58**	**-2.4**	**1.02**	**20.7**	**3.51**	**7.3**	**8.74**	**4.3**
Japan	0.91	0.9	0.84	-4.9	0.36	-3.7	0.46	-1.3	0.68	58.3	2.05	10.1	5.31	7.8
Korea	0.19	7.6	0.21	-19.0	0.24	1.1	0.12	-7.1	0.31	-21.0	1.30	4.9	2.36	-2.6
Australia	0.30	1.6	0.13	1.4	0.32	5.7	0.00	0.0	0.02	2.4	0.15	-5.2	0.92	1.8
OECD Total	**13.10**	**-1.3**	**3.86**	**-4.3**	**8.57**	**0.7**	**3.30**	**-10.6**	**3.16**	**1.1**	**13.07**	**-0.2**	**45.06**	**-1.4**

* Including US territories

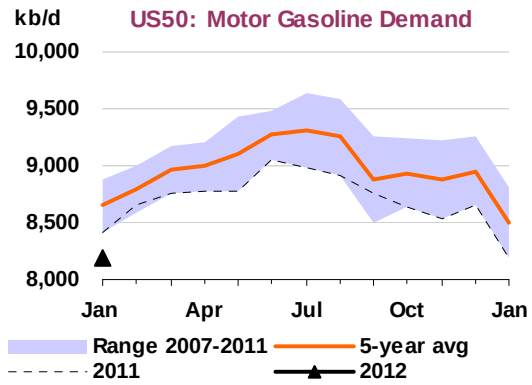
For 2012 as a whole, OECD demand is expected to contract by 0.4 mb/d (-0.9%), to 45.2 mb/d. Fuel oil demand is predicted to display the greatest relative decline, down 1.6% on the year, as tighter environmental regulations and ongoing fuel substitution curb demand and outweigh the nuclear-replacement gains envisaged in Japan. Near 1% declines are expected in gasoline and jet/kerosene, as transport markets particularly suffer on the weaker economic backdrop. OECD economic growth of 1.1% is projected for 2012, down sharply on 2011's 1.6% expansion, encouraging consumers to rationalise personal transport choices. Car pooling and increased use of public transport are again on the agenda on both sides of the Atlantic.

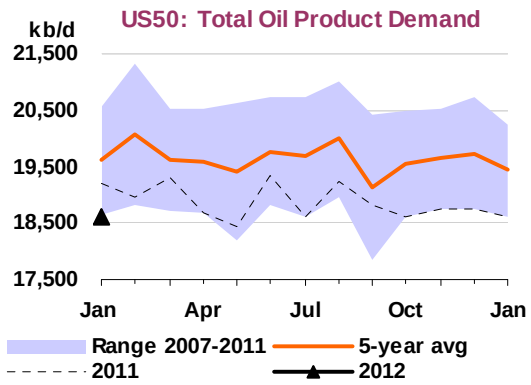




North America

The preliminary data series for January indicates North American oil product demand of 23.1 mb/d, a decline of 0.6 mb/d (-2.5%) on the corresponding month last year. We are forecasting a moderation in the pace at which North American demand falls, -125 kb/d (-0.5%) for the year as a whole, to 23.4 mb/d. Gasoline will lag, falling by 80 kb/d (-0.7%) to 10.2 mb/d, as high prices impact demand. The **US** will likely lead the gasoline reversal, as demand is projected to fall by 80 kb/d (-0.9%) in 2012 to 8.7 mb/d, its fourth fall in five years. US gasoline demand appears to have embarked upon the early stages of a long-term structural decline. This forecast is based on an assumption that lower miles travelled and a more efficient vehicle fleet, particularly in light of high prices, outweigh the likely growth in driver numbers, which will be limited by demographic trends to around 1% per annum. Total US oil product demand is forecast to fall by 0.1 mb/d (-0.6%) to 18.8 mb/d, on par with last month's projections.





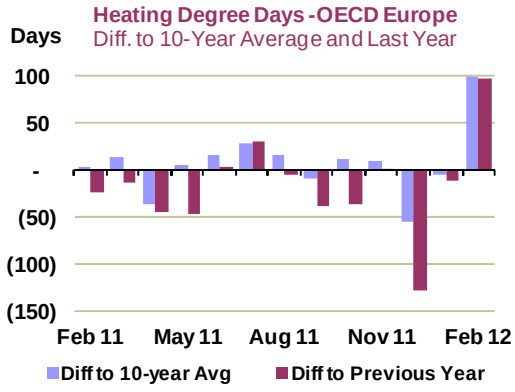
Bucking the falling trend in overall US demand however is our forecast that diesel, LPG and naphtha all rise in 2012. Diesel should add nearly 30 kb/d (0.8%), to 3.5 mb/d, supported by the relative strength of the manufacturing sector.

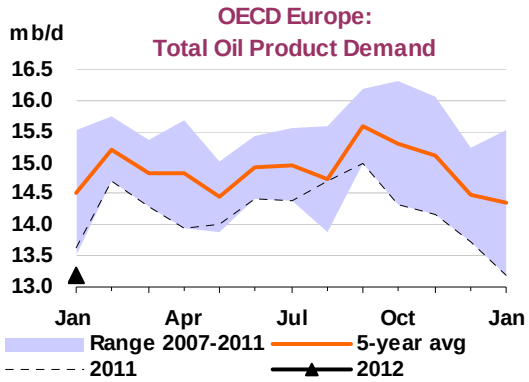
In **Mexico**, oil demand grew by 3.1% y-o-y in January. Strong growth in industrial activity and high levels of consumer confidence gave support to all products, bar LPG and naphtha. Despite this, demand in 2012 is forecast to remain flat versus 2011 overall, at 2.1 mb/d, with downside risks associated with an economic slowdown in the US.

Europe

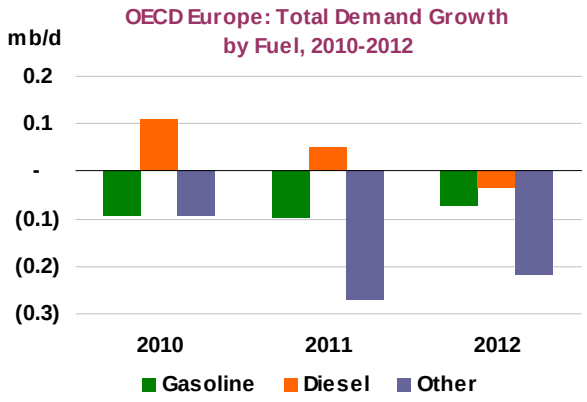
European debt concerns escalated throughout 2011, depressing consumer and business confidence alike, resulting in falling GDP in much of Europe in 4Q11. A prevailing European oil demand decline accelerated, with 0.8 mb/d of consumption removed in 4Q11 (down 5.1% on 4Q10), to 14.1 mb/d. The greatest falls were in the more heavily indebted economies of southern Europe, with 4Q11 demand down by 14.4% year-on-year in Greece, 7.2% lower in Spain and 8.2% down in Italy. For 2011, European oil consumption in total fell by 0.3 mb/d (-2.2%) to 14.3 mb/d.

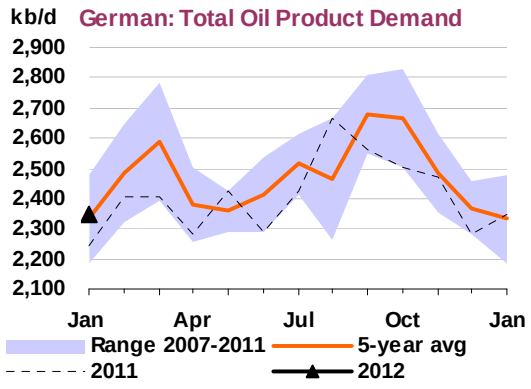
Despite a reprieve in February – as colder-than-normal weather stimulated heating oil demand – the boost in demand is expected to be temporary, as normal temperatures are assumed for the remainder of 2012. European oil demand is therefore forecast to fall to 13.9 mb/d in 2012, a further 0.3 mb/d contraction (-2.3%).





Even relatively robust economies like **Germany**, which have provided an element of economic support to Europe as a whole, saw demand fall in the second half of 2011, with year-on-year declines of 0.1 mb/d in both 3Q11 and 4Q11. Preliminary January data depicted a 4.5% year-on-year gain of 0.1 mb/d, to 2.3 mb/d, but the forecast for 2012 German demand remains on a downward trend, down by 0.4% to 2.4 mb/d.



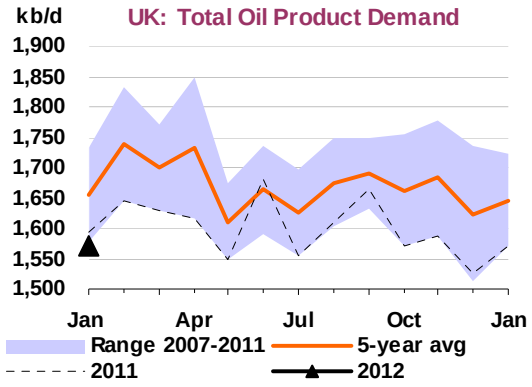


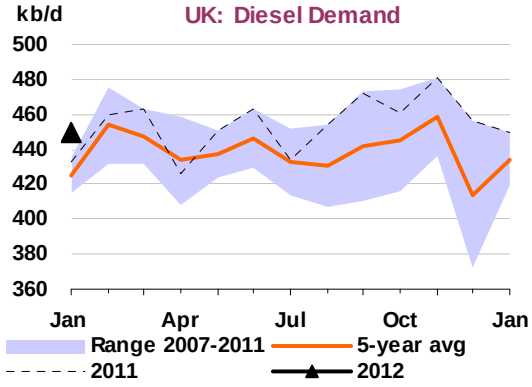
Consolidated data for **Spain** in December showed a 7.5% year-on-year demand contraction, to 1.3 mb/d. Consumption fell as the unemployment rate rose to a 15-year high of 21.5% in the same month. All the major product categories saw sharp declines, although the key transportation fuel markets fared the

worst. Gasoline demand fell 6.6% y-o-y, while consumption of diesel dropped 5.4%. Reports of warmer-than-normal weather in December further curtailed heating oil demand, which was down 11.3%.

Other Mediterranean economies, such as **Italy**, **Portugal** and **Greece,** also saw sharp drops in demand. The preliminary series for Italy fell by 6% y-o-y in January, to 1.3 mb/d. Big falls in naphtha (-19.8%), gasoil (-3.4%) and jet/kerosene (-2.8%) outweighed gains in LPG (3.4%) and gasoline (0.3%). A slight moderation in weakening Italian demand is expected for 2012, averaging -4.8%, as the worst of the economic malaise eases running from the first to the second half of the year. Portuguese demand fell by 19.7% in December and Greek demand by 14.1%. The preliminary data series for **France** depicted a 5.6% decline in January, to 1.7 mb/d, as unseasonably warm early winter weather resulted in a 22.7% decline in heating oil.

December saw limited gains in demand in the **UK**, **Turkey** and the **Netherlands**, with UK consumption up 0.5% y-o-y to 1.5 mb/d, having fallen in eight of the preceding ten months. UK diesel consumption (+13.5% y-o-y) provided the majority of the momentum, as the seasonal dip in diesel demand in December proved much less steep than usual. As the UK economy struggles with near-recessionary conditions and record high oil prices however, demand is forecast to fall by 2.2% (-34 kb/d) in 2012, to 1.6 mb/d.

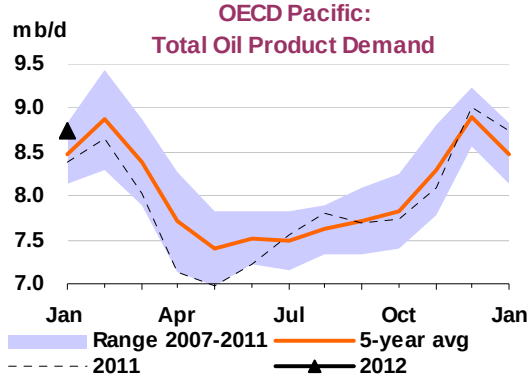


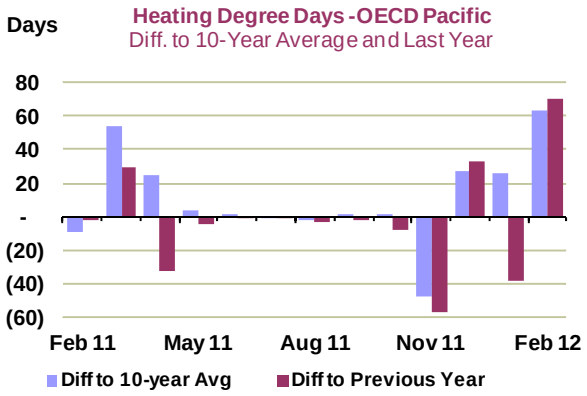


Demand for oil products in the Netherlands in December returned to the rising trend that has predominated since 2Q11, up 4.3% on a year earlier to 1.0 mb/d. Underpinning stronger Dutch demand were the sharp gains in the transportation fuel markets, with diesel demand up 13.5% and gasoline surpassing this, rising by 14.6%. These rises were, however, largely attributable to the particularly pronounced lows a year earlier. Turkish demand also held up remarkably well in December, gaining 9.3% to 0.7 mb/d, although once again very low consumption a year earlier flattered the annual trend. All told, exceptionally mild December European temperatures, while limiting heating demand, may have stimulated transport fuel demand relative to weather-affected December 2010 levels.

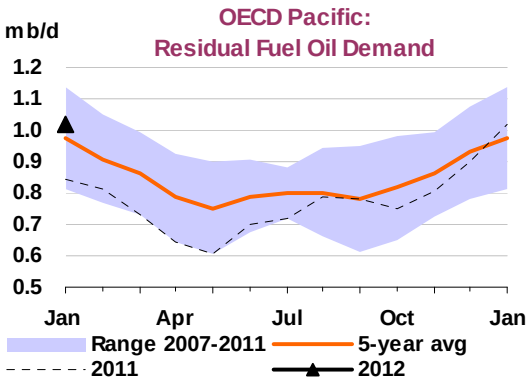
Pacific

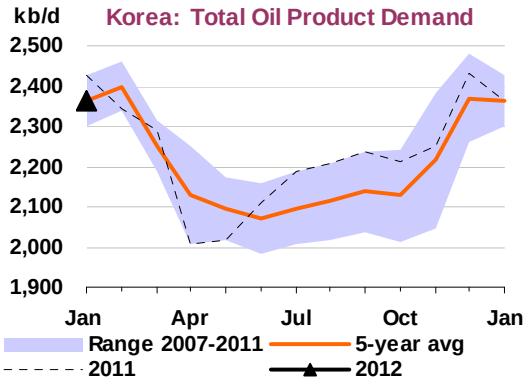
Preliminary data for the OECD Pacific in January highlighted the region's buoyancy, as year-on-year demand growth came in at 4.3%, to average 8.7 mb/d. Big gains in fuel oil (+20.7%), 'other products' (+20.4%) and LPG (+10.7%) outweighed contractions in jet/kerosene (-6.6%) and the heating oil category (-2.4%). Ongoing closures in the Japanese nuclear sector continue to support demand for fuel oil and 'other products' (which includes crude oil for direct burn), acting as replacement fuels (alongside coal and natural gas) in the electricity sector.





Although warmer temperatures than a year earlier suppressed heating oil demand in January, the onset of colder conditions in February likely saw growth resume. Demand growth of around 60 kb/d (0.9%) is envisaged for 2012, taking consumption in the OECD Pacific region to 7.9 mb/d in 2012.





South Korean consumption fell by 2.6% in January, according to preliminary data, continuing the declining trend into a third month. It is important to put these falls in context, as they represent a decline on the previous year's exceptionally strong demand, and potentially signal moves by cost-conscious Korean consumers towards greater efficiency gains in the face of relentlessly high prices. Weaker manufacturing sentiment – as depicted by *HSBC's South Korean Manufacturing PMI* falling to 49.2 (whereby a number below 50 implies a contraction) – has undermined Korean consumption of gasoil (-1.7%), fuel oil (-21.0%) and jet/kerosene (-19.0%) in January. Robust domestic demand continued to support gasoline, with growth up to a six-month high of 7.6%. Oil demand growth is expected to resume for the year as a whole, up by 0.5% to 2.2 mb/d in 2012, as the underlying economic picture remains supportive, with real GDP growth of around 3.5% envisaged.

Japanese oil product demand rose by 0.4 mb/d, or 7.9% year-on-year, in December on the back of strong gains in residual fuel oil (+170 kb/d), 'other products' (+250 kb/d) and LPG (+60 kb/d). Partially offsetting these gains were the big declines seen in naphtha, gasoil and diesel. Japanese oil demand in 2012 is expected at 4.5 mb/d with annual growth of 40 kb/d or 0.9%. The power sector has dominated Japanese oil demand growth since mid-March 2011's nuclear closures, burning 165 kb/d of crude oil in 2011 (up 135.5%) and 160 kb/d of fuel oil (+48.3%).

Non-OECD

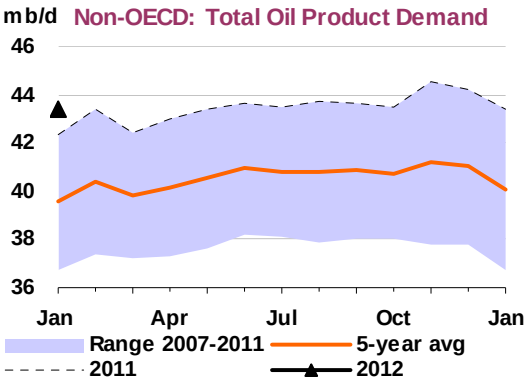
Leading the world's growth momentum, as has been the case since the mid-1990s, non-OECD oil demand is forecast to outpace the OECD, supported by stronger economic underpinnings and a generally higher income elasticity. Economic growth of 5.7% is foreseen in the non-OECD in 2012 (6.2% in 2011), whilst the

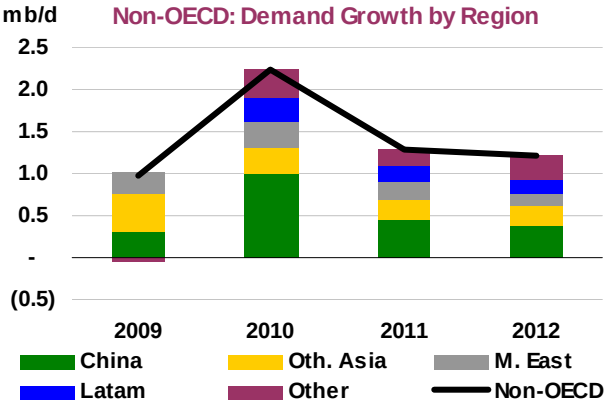
OECD estimate is a more modest 1.1%. Coupled with an assumed greater dependence upon economic growth in the non-OECD, oil product demand is expected to rise by 2.8% (or 1.2 mb/d) to 44.7 mb/d.

Non-OECD: Demand by Product
(thousand barrels per day)

	Demand			Annual Chg (kb/d)		Annual Chg (%)	
	2010	2011	2012	2011	2012	2011	2012
LPG & Ethane	4,734	4,973	5,112	238	140	5.0	2.8
Naphtha	2,680	2,651	2,671	-29	20	-1.1	0.8
Motor Gasoline	8,081	8,364	8,608	283	243	3.5	2.9
Jet Fuel & Kerosene	2,637	2,725	2,782	88	57	3.3	2.1
Gas/Diesel Oil	12,944	13,525	13,969	581	444	4.5	3.3
Residual Fuel Oil	5,480	5,514	5,604	33	90	0.6	1.6
Other Products	5,601	5,699	5,917	99	218	1.8	3.8
Total Products	**42,157**	**43,450**	**44,663**	**1,293**	**1,213**	**3.1**	**2.8**

A similar growth structure is assumed for 2012 as was seen in 2011, although a stronger expansion in Africa (+5.0% against the Libyan-induced 1.5% contraction seen in 2011) counteracts weaker growth elsewhere. The potential for further growth in vehicle ownership levels will continue to support the transportation fuel markets in 2012, with gasoline demand forecast to rise by 2.9% (to 8.6 mb/d) and gasoil by 3.3% (to 14.0 mb/d). The 'other products' category will similarly thrive, forecast to rise by 3.8% in 2012, to 5.9 mb/d, supported by strong gains in crude oil for direct burn and bitumen (benefiting from the buoyant road building programmes).





The preliminary non-OECD data series for December implies a deceleration in momentum towards the end of 2011, albeit measured against exceptionally strong growth at the end of 2010. Having averaged 3.1% growth in 2011, and forecast to rise by 2.8% in 2012, demand growth dipped to 0.8% in December. Weak demand from the petrochemical sector, a direct consequence of the economic slowdown, caused naphtha demand to fall by 7.4% in December. Early indicators for January imply a recovery, as demand is estimated to have risen by 2.4%.

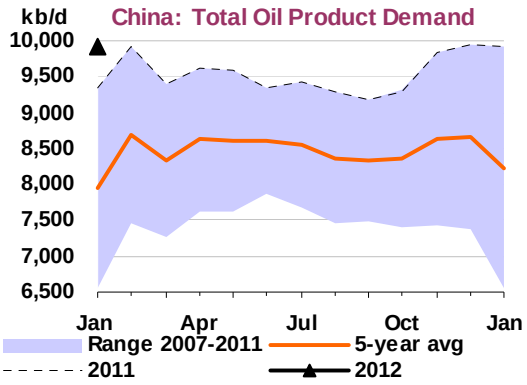
Non-OECD: Demand by Product
(thousand barrels per day)

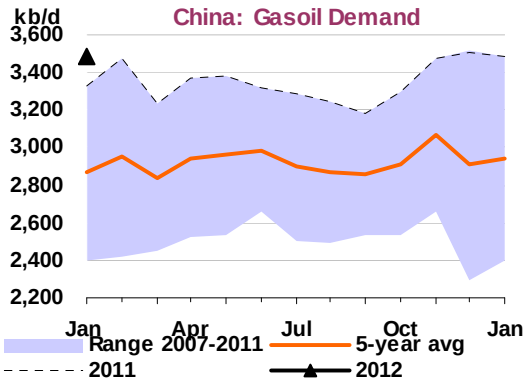
	Demand			Annual Chg (kb/d)		Annual Chg (%)	
	Nov-11	Dec-11	Jan-12	Dec-11	Jan-12	Dec-11	Jan-12
LPG & Ethane	5,061	5,120	5,072	266	164	5.5	3.3
Naphtha	2,798	2,590	2,734	-208	-87	-7.4	-3.1
Motor Gasoline	8,547	8,797	8,338	340	359	4.0	4.5
Jet Fuel & Kerosene	2,879	2,774	2,792	32	57	1.2	2.1
Gas/Diesel Oil	14,080	13,723	13,281	-56	321	-0.4	2.5
Residual Fuel Oil	5,519	5,672	5,526	51	-187	0.9	-3.3
Other Products	5,693	5,561	5,618	-57	400	-1.0	7.7
Total Products	**44,577**	**44,238**	**43,362**	**366**	**1,028**	**0.8**	**2.4**

China

Having slowed dramatically towards the end of 2011 **Chinese** demand growth returned to a seven-month high in January. Apparent demand for oil products, i.e. net product imports plus refinery output, rose by 6.0% y-o-y to 9.9 mb/d. This relative gain, however, is largely technical, as late-2011 data suffered in comparison to 2010 when the ban on coal burning supported higher oil demand. Furthermore, official refinery throughput statistics tend to be distorted in January and February, interrupted by the Lunar New Year holidays, and rendering comparisons difficult. All the same, strong gains were seen in gasoline, up 10.6% on the corresponding month a year earlier to 1.8 mb/d. The earlier Lunar New Year holiday (January 2012 as opposed to February in 2011) temporarily supported gasoline demand with additional journeys made, but suppressed industrially important naphtha (-0.7%) and fuel oil (-15.8%) as many businesses closed for the holidays.

From its end-2011 low-point, Chinese demand growth is forecast to accelerate through 2012, as the economic outlook is expected to improve as the year progresses, and as the depressant effect on growth of high early-2011 oil demand levels diminishes. For the year as a whole, consumption growth of 3.9% is envisaged, taking apparent demand to 9.9 mb/d, albeit this is lower than some third-party estimates which envisage growth of as much as 5.5% for 2012. Underpinning our relatively cautious Chinese growth estimate is the assumption that economic growth will fall below 8.5% for the year as a whole. The weaker outlook gains support from reports that the Chinese government has decided on a lower growth target, of 7.5%, as opposed to the 8% target previously assumed. It is worth noting that historically the government target has tended to act as a floor, with for example, 2011 GDP growth exceeding 9% despite an earlier stated intention of 8%.





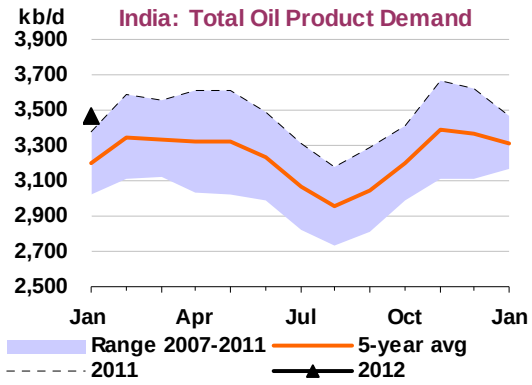
China: Demand by Product

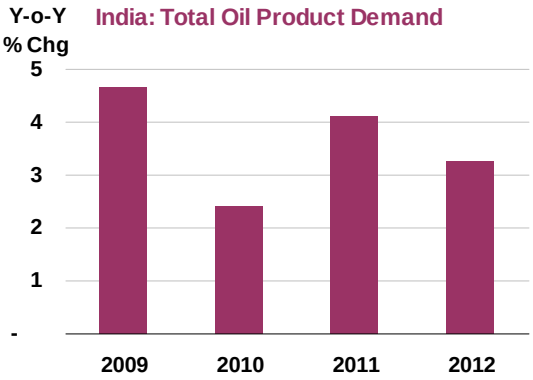
(thousand barrels per day)

	Demand			Annual Chg (kb/d)		Annual Chg (%)	
	2010	2011	2012	2011	2012	2011	2012
LPG & Ethane	668	693	697	26	3	3.9	0.5
Naphtha	1,129	1,163	1,179	34	16	3.0	1.4
Motor Gasoline	1,546	1,655	1,721	109	66	7.1	4.0
Jet Fuel & Kerosene	368	402	414	33	12	9.0	3.0
Gas/Diesel Oil	3,143	3,341	3,465	198	125	6.3	3.7
Residual Fuel Oil	531	541	544	10	3	1.8	0.5
Other Products	1,685	1,717	1,863	32	145	1.9	8.5
Total Products	**9,069**	**9,511**	**9,882**	**442**	**370**	**4.9**	**3.9**

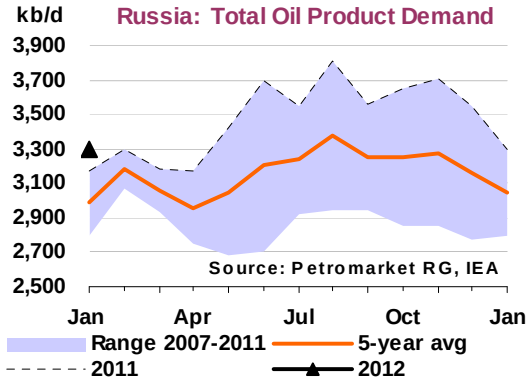
Other Non-OECD

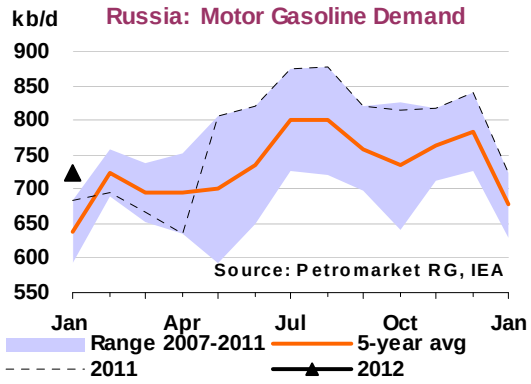
Preliminary estimates for **Indian** oil product demand in January point towards demand growth of 2.7% on a year-on-year basis. The demand expansion has subsided to its weakest pace since July 2011, as big declines in fuel oil (-16.9%), naphtha (-4.0%) and jet/kerosene (-3.2%) outweighed the persistent gains seen in gas/diesel oil (+7.6%) and gasoline (+1.6%). Gas/diesel oil is outpacing gasoline – a trend embedded since mid-2011 – as the relative subsidies now strongly favour diesel propulsion. The gasoline price in Mumbai, as of mid-February, was 70 rupees/litre ($1.42/litre) whereas diesel cost Rs45.3/litre. Within our 2012 forecast for total Indian oil demand growth of 3.2%, we are assuming diesel growth will outpace gasoline by 5.0% to 4.1%. Fuel oil demand will fall by 0.4% in 2012, as bunker demand from the shipping industry falls back, partly due to a ban on iron ore exports.





Early indicators of **Russian** demand in 2012 depict a resilient year-on-year growth rate of nearly 4% for January, with demand for motor gasoline dominating, up by 5.8%. The Russian demand picture is far from clear, as large declines were seen in gasoil (-4.5%), naphtha (-4.5%) and jet/kerosene (-4.3%). Such wide discrepancies place an additional uncertainty burden on forecasts, but based on GDP growth of 3.5%, Russian oil product demand is expected to rise by 2.6% (+90 kb/d) in 2012 to 3.6 mb/d.

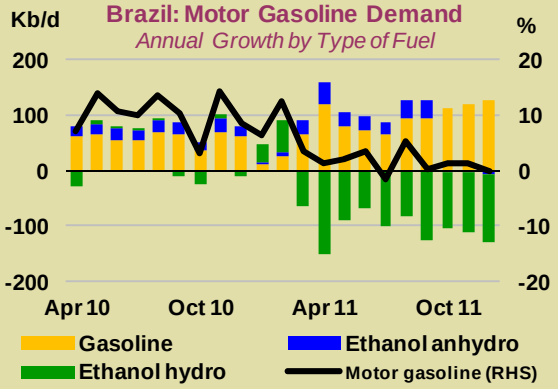


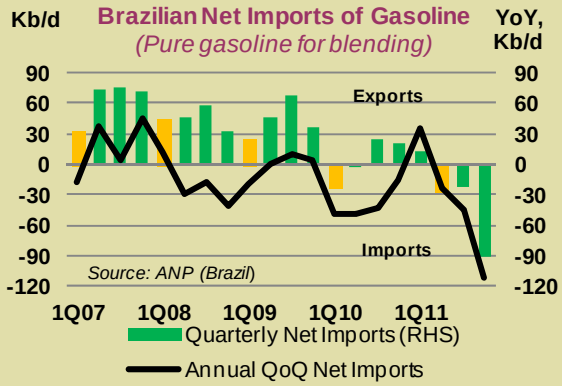


In **Brazil**, oil demand grew by 1.5% year-on-year in December, led by jet fuel/kerosene (+8.3%) and gasoil (+2.9%). Motor gasoline remained flat during the month, masking offsetting movements from anhydrous ethanol to unblended gasoline (as the government reduced the ethanol requirement in the gasoline blend, from 25% to 20%). The Brazilian economy slowed at the end of 2011, bringing annual GDP growth to 2.7%, not far off the 2.5% gain seen in oil product demand. Demand is expected to rise by a further 1.3% in 2012, to 2.8 mb/d on an assumption of 3.4% GDP growth.

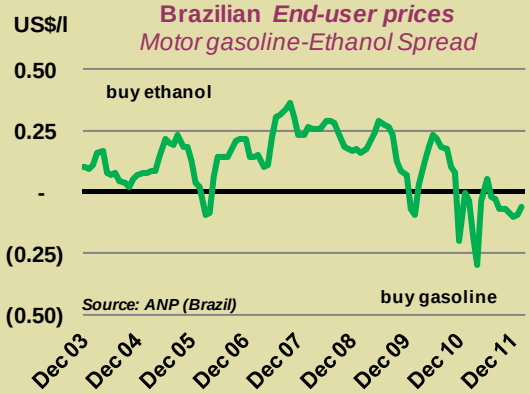
Brazilian Gasoline: A Bitter Mix

Having risen by an annual average of 8.4% in the five years through to 2010, growth of Brazilian gasoline demand slowed to 2.7% in 2011, taking total gasoline consumption to 810 kb/d. A further deceleration is forecast to 1.6% in 2012, to 830 kb/d. Since the oil crisis of the 1970s Brazil has incorporated ethanol – traditionally a by-product from its burgeoning domestic sugar crop – into the gasoline mix, at the expense of traditionally imported, refinery-sourced gasoline. Weaker demand overall (amid slower economic growth), masks substantial offsetting movements between components of the gasoline mix. Specifically, 2011 saw a significant drop of 80 kb/d in ethanol demand, partly explained by lower yields from sugarcane plantations, offset by a pickup in the use of unblended gasoline. High runs at Brazilian refineries were unable to satisfy incremental demand for this component during 2011, forcing the country to import gasoline to keep the market supplied.





The Brazilian motor gasoline mix in 2011 was composed of ethanol (23%), anhydrous ethanol (18%) and petroleum refinery-sourced gasoline (59%). Since April, the pool showed offsetting shifts between ethanol and gasoline. The former saw demand decrease due to higher prices, triggered by a relative ethanol scarcity. Structural underinvestment in the ethanol industry, during the recession of 2008/2009, and last year's bad weather conditions (suppressing the sugarcane harvest of 2011/12) were both responsible for higher ethanol prices. Magnifying the problem, sugarcane supply constraints triggered higher prices for sugar than ethanol, causing producers to maximize sugar production at the expense of ethanol output.



Facing inflationary pressures in 2011, the government sought to limit gasoline price pressures by encouraging the use of refined gasoline over more rapidly appreciating ethanol. Specifically, the government used a combination of reducing the mandatory minimum ethanol blend, from 25% to 20%; balancing a complex structure of taxes; and influencing Petrobras' retail prices. Furthermore, the appreciation of the Brazilian currency, versus the US dollar, made gasoline imports relatively cheaper than nationally produced ethanol. In the short term, the policy worked and motor gasoline was supplied to the market at a more affordable price; but for the longer-term, current market signals distort investments in the ethanol industry.

Going forward transport fuel consumption will depend not only on the predicted slowdown in GDP and vehicle sales. It will also depend on sugarcane/ethanol market dynamics and end-user price formation, which are highly susceptible to taxes and blending policies. The 2012 demand outlook looks sluggish, with the share of unblended gasoline in the Brazilian motor gasoline mix expected to remain unchanged and largely dependent on imports. Further ahead, it will depend on the 2012/2013 sugarcane harvest and the commissioning of new refinery projects in 2H13.

SUPPLY

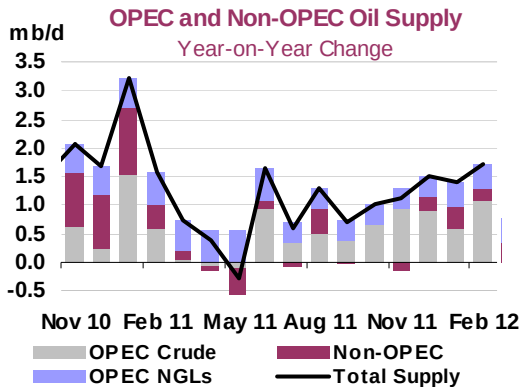
Summary

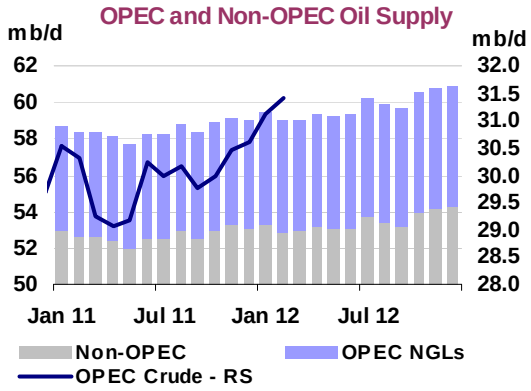
- **Global oil supply fell by 0.2 mb/d to 90.4 mb/d in February, with rising OPEC NGL and crude production only partially offsetting a 0.5 mb/d decline from non-OPEC countries.** Compared to a year ago, global oil production stood 1.7 mb/d higher, 90% of which stemmed from increasing output of OPEC crude and NGLs.

- **Non-OPEC supply fell by 0.5 mb/d to 52.8 mb/d in February.** Supplies declined in all regions last month but most notably in South Sudan and in Latin America. North Sea production continued to falter in 1Q12, falling by 0.3 mb/d from 1Q11, paring annual non-OPEC supply gains to only 0.3 mb/d. Continued violence in Syria and the unresolved transit dispute between Sudan and South Sudan are the primary contributors to a -0.2 mb/d revision to non-OPEC supply this month. This leaves growth for 2012 at 0.7 mb/d, deriving largely from the Americas and the Former Soviet Union.

- **OPEC crude oil supply in February rose for the fifth month running, led higher by Saudi output at a three-decade peak** and a sharp recovery in Libyan production so far this year. Output rose by 315 kb/d to 31.42 mb/d, the highest level since October, 2008. February's high production levels led to a decline in OPEC's 'effective' spare capacity, to 2.75 mb/d from 2.85 mb/d in January. The 'call on OPEC crude and stock change' for 2012 has been raised by 200 kb/d for both 2Q12 and 3Q12, to an average of 30 mb/d, due to lower forecast supplies from non-OPEC.

- **Market attention has been focused on the potential disruption in Iranian crude flows in coming months as the EU's 1 July embargo nears,** with industry analysts expecting exports of Iranian crude to ultimately be curtailed by around 800 kb/d to 1 mb/d from mid-year onwards. However, almost all of Iran's buyers will inevitably scale back volumes in order to avoid falling foul of sanctions.





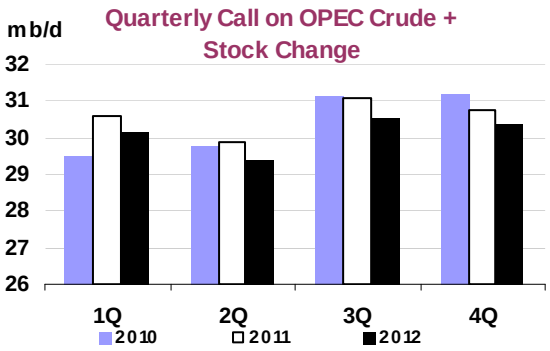
All world oil supply figures for February discussed in this report are IEA estimates. Estimates for OPEC countries, some US states, and Russia are supported by preliminary February supply data.

Note: Random events present downside risk to the non-OPEC production forecast contained in this report. These events can include accidents, unplanned or unannounced maintenance, technical problems, labour strikes, political unrest, guerrilla activity, wars and weather-related supply losses. Specific allowance has been made in the forecast for scheduled maintenance in all regions and for typical seasonal supply outages (including hurricane-related stoppages) in North America. In addition, from July 2007, a nationally allocated (but not field-specific) reliability adjustment has also been applied for the non-OPEC forecast to reflect a historical tendency for unexpected events to reduce actual supply compared with the initial forecast. This totals –200 kb/d for non-OPEC as a whole, with downward adjustments focused in the OECD.

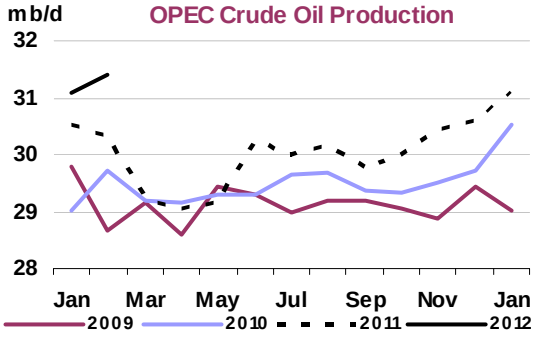
OPEC Crude Oil Supply

OPEC crude oil supply in February rose for the fifth month running, led higher by Saudi output at a near three-decade peak and a sharp recovery in Libyan production so far this year. Output rose by 315 kb/d to 31.42 mb/d, the highest level since October, 2008.

Market attention has been evenly focused on the potential disruption in Iranian crude flows in coming months as the EU's 1 July oil embargo nears and the very real loss of supplies from non-OPEC producers Syria, South Sudan, Sudan and Yemen. The 'call on OPEC crude and stock change' for 2012 has been raised by 200 kb/d for both 2Q12 and 3Q12, to an average of 30 mb/d, due to lower forecast supplies from non-OPEC. For 2012 as a whole, the 'call' is raised by 200 kb/d, to 30.1 mb/d, but still around 0.5 mb/d below the 2011 average.



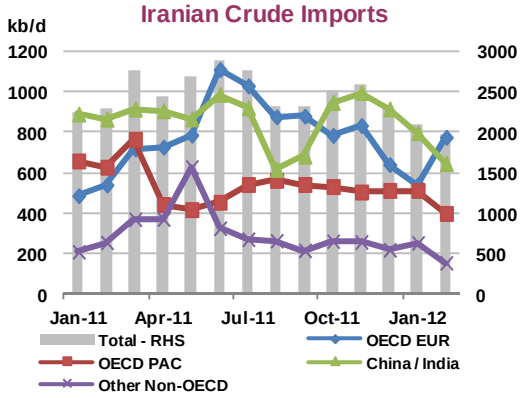
Entire series based on OPEC Composition as of January 2009 onwards (including Angola & Ecuador & excluding Indonesia)

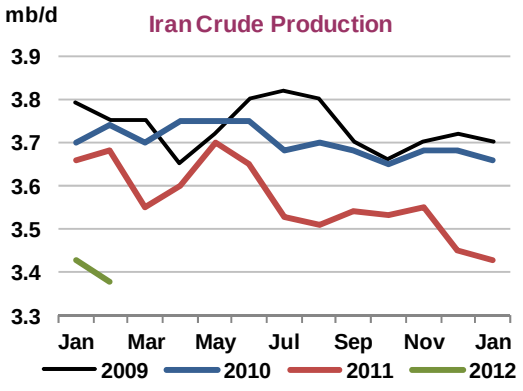


Entire series based on OPEC Composition as of January 2009 onwards (including Angola & Ecuador & excluding Indonesia)

February's three-year-high production levels led to a decline in OPEC's 'effective' spare capacity, to 2.75 mb/d from 2.85 mb/d in January. That said, the group's current sustainable capacity of 35 mb/d is on course to rise by 620 kb/d, to 35.62 mb/d, in 3Q12 as a number of new projects come onstream. Production capacity in Angola, Libya and Nigeria should post a combined increase of 330 kb/d, while Iraq will add a further 130 kb/d.

The increase in OPEC production capacity will likely be well received given the uncertainties surrounding the impact new EU and US sanctions will have on overall Iranian supplies come this summer. **Iranian** crude production edged lower by 50 kb/d, to 3.38 mb/d in February. Already, sanctions of the country's Central Bank are having a pronounced impact on Iranian crude trade patterns.





While a number of European countries have reportedly already halted imports of Iranian crude, latest shipping data show other buyers such as India and South Korea sharply increased purchases in January. China has also halved its imports from Iran, from 550 kb/d in December to 275 kb/d in January, due to a dispute over price terms, which has now been resolved. However, some of Iran's traditional buyers reportedly have been able to secure better credit terms from NIOC, which, in effect, provide a discount

for lifters. Going forward, a number of European buyers have expressed concern that they will have difficulty finding replacement barrels of similar quality to Iran's heavier crudes, especially Italian refiners who process the grades for asphalt. This time a year ago, European refiners were suddenly confronted with similar concerns, but over the loss of light, sweet Libyan crude. Latest data show lighter Libyan crudes were ultimately replaced with more imports of heavier, sour crudes from OPEC's Middle East producers *(see 'European Refiners Tapped Other OPEC Supply to Replace Lost Libyan Barrels'*).

Exports of Iranian crude could ultimately be curtailed by around 800 kb/d to 1 mb/d from mid-year onwards, on the basis of the EU embargo and assuming China, India, Japan and South Korea continue to purchase lower levels of Iranian crude. Almost all of the country's current lifters will inevitably scale back volumes in order to avoid falling foul of US sanctions. The most immediate impact so far has been on the shipping industry, which has seen EU insurance companies announce suspension of coverage for tankers that call at Iranian ports. Chinese vessels are largely the exception. State National Iranian Tanker Co (NITC) has also enlisted its own vessels for deliveries to buyers unable to secure insurance coverage. As a result, the number of NITC vessels available for floating storage has been sharply reduced.

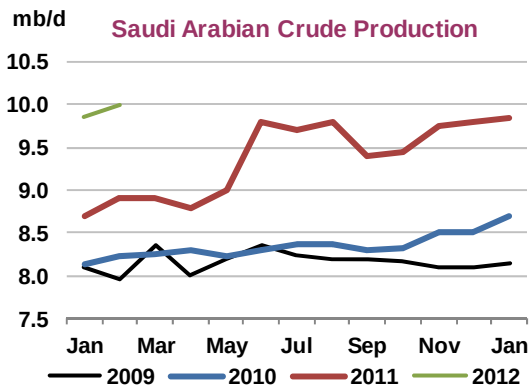
OPEC Crude Production

(million barrels per day)

	Dec 2011 Supply	Jan 2012 Supply	Feb 2012 Supply	Sustainable Production Capacity[1]	Spare Capacity vs Feb 2012 Supply	3Q12 Average Sustainable Production Capacity	3Q12 Production Capacity Versus 1Q12 Capacity
Algeria	1.29	1.29	1.27	1.30	0.03	1.37	0.06
Angola	1.75	1.70	1.76	1.91	0.15	2.10	0.19
Ecuador	0.48	0.48	0.48	0.52	0.04	0.54	0.02
Iran	3.45	3.43	3.38	3.51	0.13	3.56	0.04
Kuwait[2]	2.56	2.65	2.60	2.84	0.24	2.84	0.00
Libya	0.75	1.15	1.30	1.30	0.00	1.37	0.07
Nigeria[3]	2.06	2.04	2.14	2.48	0.34	2.55	0.07
Qatar	0.82	0.82	0.81	0.90	0.09	0.90	0.00
Saudi Arabia[2]	9.80	9.85	10.00	11.88	1.88	11.88	0.00
UAE	2.58	2.58	2.59	2.79	0.20	2.79	0.00
Venezuela[4]	2.38	2.47	2.48	2.60	0.12	2.63	0.03
OPEC-11	**27.92**	**28.46**	**28.81**	**32.02**	**3.21**	**32.51**	**0.49**
Iraq	2.69	2.65	2.61	3.00	0.39	3.13	**0.13**
Total OPEC	**30.61**	**31.11**	**31.42**	**35.02**	**3.60**	**35.63**	**0.62**
(excluding Iraq, Nigeria, Venezuela and Libya					*2.75)*		

1 Capacity levels can be reached within 30 days and sustained for 90 days.
2 Includes half of Neutral Zone production.
3 Nigeria's current capacity estimate excludes some 200 kb/d of shut-in capacity.
4 Includes upgraded Orinoco extra-heavy oil assumed at 410 kb/d in February.

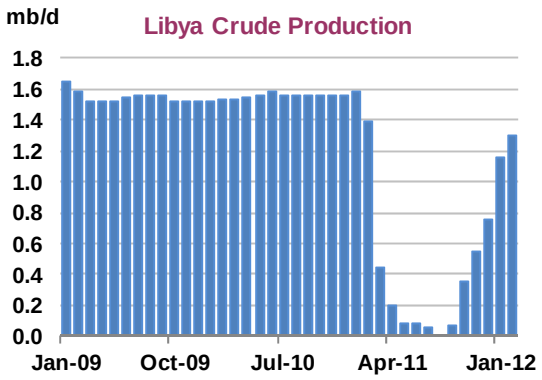
Saudi Arabian crude oil supplies were estimated at a heady 10 mb/d, up 150 kb/d over January levels. Preliminary tanker data show Saudi Aramco increased exports volumes by between 150-300 kb/d in February, with scant sign of any offsetting reduction in domestic refinery use. The increased Saudi volumes in February were heading to Europe and Africa, tanker data indicate. Rather than Asia as might be expected. That said, in early March, China's Sinochem reportedly lifted a Saudi cargo held in storage at Okinawa, Japan due to congestion and shipping delays at the Kingdom's largest export terminal at Ras Tanura. As a result, some of the additional output may be used for replenishing storage tanks. Indeed, market reports suggest Saudi output will increase in coming months based on customer discussions and allocations, although higher April price differentials for sales into Asia suggest incremental volumes might be targeted at Atlantic Basin customers.

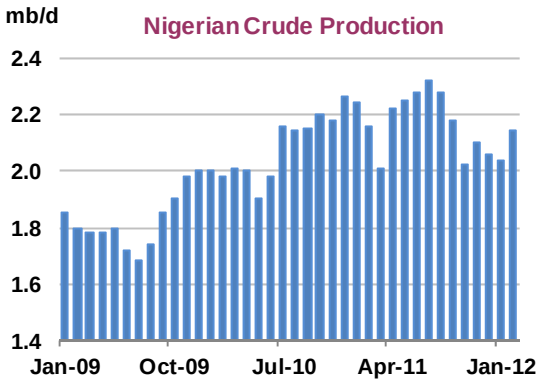


Correspondingly, higher Saudi output in February reduced the country's spare capacity to 1.88 mb/d from 2.03 mb/d in January. Current capacity is estimated 11.88 mb/d. The *OMR* defines spare capacity as production that can be brought on within 30 days and sustained for 90 days. Saudi Oil Minister Ali Naimi has said it would take the state oil company an additional 90 days to bring on a further 700 kb/d. Indeed, Saudi Aramco in January was operating the highest number of rigs in four years as it restarts the country's oldest field, Dammam, and advances plans for the Manifa development. Both Dammam and Manifa produce heavier crudes. Dammam, with a capacity of 100 kb/d, was mothballed 30 years ago. The first 500 kb/d stage of the 900 kb/d project is expected to be brought online in 2013.

February **Iraqi** crude supply was down 35 kb/d to 2.61 mb/d, curbed in part by export constraints. Crude oil exports were off 35 kb/d to 2.07 mb/d, the lowest level since end-2010. Crude shipments from the southern port of Basrah were down by around 10 kb/d to 1.7 mb/d while northern exports of Kirkuk crude from Ceyhan on the Mediterranean fell by 25 kb/d, to 370 kb/d. After months of delays, in early March Iraq loaded its first shipment from the newly inaugurated single point mooring (SPM) export facility in the Gulf. However, it is still unclear the volume of crude that will be exported from the new SPM in the months ahead, with reports the facility still has numerous technical constraints. Nameplate capacity for the SPM is 900 kb/d but it is unlikely to exceed 250 kb/d until the second half of the year.

Libyan production continues to go from strength to strength, up by 150 kb/d to 1.3 mb/d in February. January output was revised 175 kb/d higher on more complete data, to 1.15 mb/d. Output is now only around 300 kb/d below pre-war levels of 1.6 mb/d. IOCs in the country expect production to be maintained at current levels over the next few months due to planned maintenance and other repair work. The Arabian Gulf Oil Company (AGOCO)-operated fields are currently running 125 kb/d below capacity due to technical problems. Electricity problems at some fields, including Messla and Sarir, have curbed output to around 300 kb/d but volumes are expected to ramp-up towards the 425 kb/d target by late April. Meanwhile, unrest in the country's eastern region over calls for autonomy from Tripoli have so far not disrupted production at fields operated by state-owned AGOCO, which is based in Benghazi.



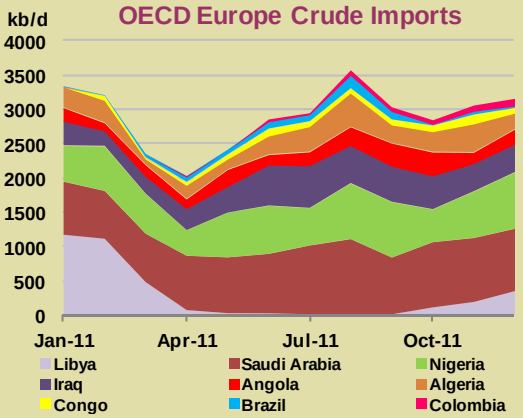


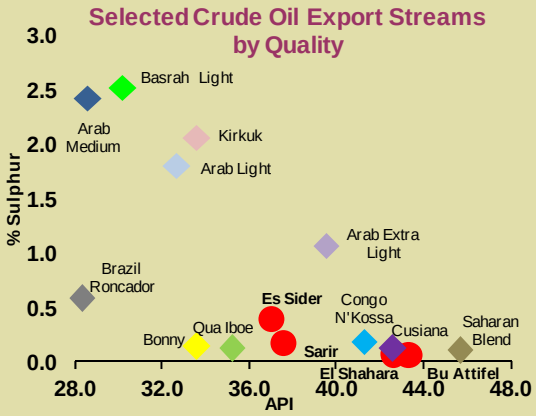
Nigerian output in February rose by 100 kb/d, to 2.14 mb/d, and has now recovered to the highest level in five months, when output reached 2.18 mb/d last September. A wave of militant activity in recent months reduced output to an average 2.05 mb/d for December and January. The start-up of the Total-operated 180 kb/d deepwater Usan field at end of February also boosted supplies. Usan, a medium sweet crude, has an API of 30 degrees and sulphur content of 0.26%. Initial production was much higher than forecast, with several extra cargoes offered for April.

Angolan production in February rose 60 kb/d to 1.76 mb/d. Production is now at the highest level since April 2010, thanks to the steady ramp-up in production from the Total-operated 220 kb/d Pazflor deep-water complex. Start-up of the 150 kb/d PSVM fields is on track for 3Q12.

European Refiners Tapped Other OPEC Supply to Replace Lost Libyan Barrels

Prior to the onset of Libya's civil war, OECD Europe imported over 1.1 mb/d of Libya's total 1.3 mb/d of crude exports, so the loss of supplies hit the region's refiners far harder than elsewhere. With the benefit of a full official 2011 dataset, it is now possible to quantify the impact of the lost Libyan supplies upon crude oil flows into OECD Europe. When the conflict erupted in late-February Libyan exports to OECD Europe declined sharply before drying up from May onwards while incremental supplies from other sources began to arrive in the region from March onwards. Despite the arrival of these alternative supplies, OECD Europe imported on average 150 kb/d less crude in 2011 than in 2010.





The light, sweet nature of Libyan crudes and their high yields of gasoline, low-sulphur diesel and jet fuel limited the options for refiners to directly replace them with similar grades. It was previously noted (see '*Libya's Uprising Sees Oil Supplies Dwindle*' in OMR 15 March 2011) that the closest quality replacements for the lost Libyan streams of Es Sider, Sarir, El Shahara and Bu Attifel were Ekofisk and Brent crudes from the North Sea, BTC Blend from the FSU, Bonny and Qua Iboe from West Africa and Algerian Saharan Blend. However, adding to the tightness in markets, a number of these streams were also hit by production problems in 2011. Notably, after an outage-hit year, North Sea production was 350 kb/d lower in 2011 than a year earlier, while 2H11 Azeri field maintenance constrained supplies of BTC blend by approximately 100 kb/d.

To deal with these extra constraints European refiners turned to OPEC members Saudi Arabia, Nigeria, Iraq and Angola to fill the gap by increasing supplies of many crudes already widely used within the region. By comparing the incremental supplies, which arrived in OECD Europe from April to December 2011 with their 2010 averages, it is apparent that these OPEC members supplied a combined 520 kb/d of extra crude. Saudi Arabia supplied the lion's share of the increment at 200 kb/d (including 160 kb/d of Arab Light) while Nigeria, Iraq and Angola contributed 170 kb/d, 90 kb/d and 60 kb/d, respectively. However, the Saudi and Iraqi crudes were sour and thus not direct replacements for lost Libyan streams; this therefore limited their use as like-for-like replacements within many simple European refineries without desulphurisation capacity.

Incremental Nigerian and Angolan supplies were likely light, low-sulphur grades such as Bonny Light, Qua Iboe and Girassol but these were not imported in quantities sufficient to replace light Libyan streams. Algeria initially upped supplies of the exceptionally high quality Saharan Blend during 2Q11 but volumes had dropped off by 4Q11.

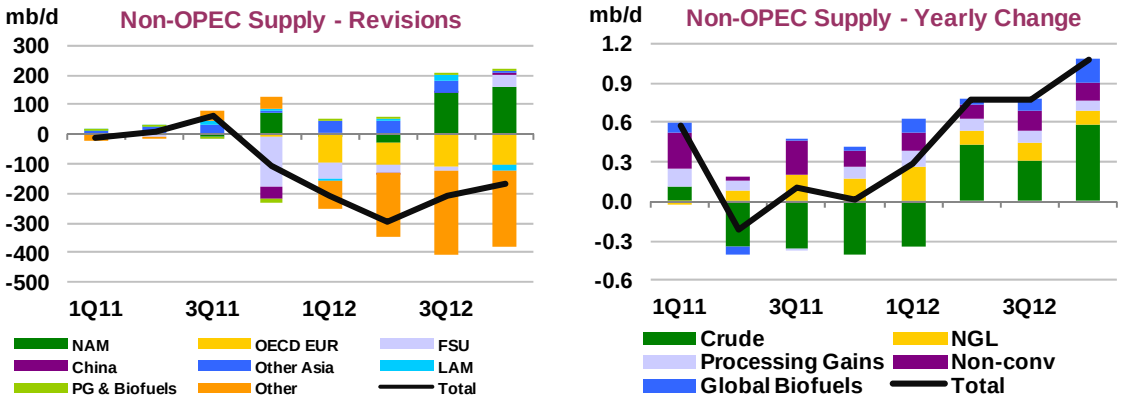
This scarcity of light, sweet crudes and the related increase in sweet-sour differentials drew in unexpected long-haul non-OPEC supplies. For example by the end of the year 80 kb/d of Colombian Cusiana was being imported to Europe whilst previously only the odd spot cargo had been used in the region's refineries. One factor for the increased volumes of Latin American crudes being shipped to Europe, especially during 3Q11 was the IEA Libya Collective Action, as the release of 30 mb of light, sweet US SPR crude likely displaced other sweet crudes from the US Gulf crude slate which were then shipped to Europe.

Now that the Libyan conflict has ended and crude production is being ramped up, flows into Europe are once again looking similar to 2010 as imports of Middle Eastern sour crudes have fallen back to their previous levels. However, it is interesting to note that imports of light, sweet West African and Latin American crudes have held up above their 2010 volumes, signalling that Europe is still seeking distillate-rich grades.

Non-OPEC Overview

Non-OPEC oil production is estimated to have fallen by 0.5 mb/d to 52.8 mb/d in February, largely due to weather and mechanical-related field outages in the North Sea and Canada, continued unrest and additional sanctions in Syria, pipeline sabotage and labour strikes in Colombia and Yemen, and the transit dispute between Sudan and South Sudan. The latter dispute is likely to dent non-OPEC output in 2012 by around 280 kb/d compared to 1H11 levels. These unplanned shut-ins total more than 750 kb/d in 1Q12.

Despite much pessimism about non-OPEC supply growth, production in 1Q12 is still expected to grow by around 300 kb/d and by around 730 kb/d for the entire year. Weather-related and mechanical issues continue to hinder output in the North Sea, especially in Denmark and the UK. New outages at oil sands facilities in Canada as well as pipeline sabotage in Colombia are expected to mitigate the strong growth in other parts of the Americas, especially in light tight oil plays in the US.



But the worsening prospects and high uncertainty concerning South Sudan's and Syria's output will likely have the largest effect on non-OPEC supply in coming months. This outlook assumes that Sudan and South Sudan will still contribute 180 kb/d to non-OPEC output (half of which is from South Sudan) assuming that some production is restarted by 2H12 given severe economic pressures. This outlook now also assumes a gloomier scenario in Syria than last month in which production falls by 150 kb/d to average only 180 kb/d in 2012. A more pessimistic scenario, yet not out of the realm of possibility, which leaves South Sudanese output at minimal levels, shows no improvement for Yemen's outlook in 2012 from current levels, and constrains Syrian production to around 100 kb/d, would cut overall non-OPEC output growth in 2012 by 150 kb/d to 590 kb/d.

Revisions for 2011 centre upon delayed data for Azerbaijan, Indonesia, Malaysia, and Africa. These and other baseline revisions result in an overall downward revision of 90 kb/d in 4Q11 to 53.1 mb/d. 2011 non-OPEC supply growth is revised downwards by less than 10 kb/d to 130 kb/d. In addition to the worsening outlook in the Middle East and Africa, North Sea production continues to underperform expectations in 1Q12 by around 90 kb/d, averaging 3.0 mb/d, and accelerating the year-on-year decline to 330 kb/d. In sum, non-OPEC supply growth is cut by 200 kb/d for 2012 to 53.4 mb/d, with the US as the only bright spot.

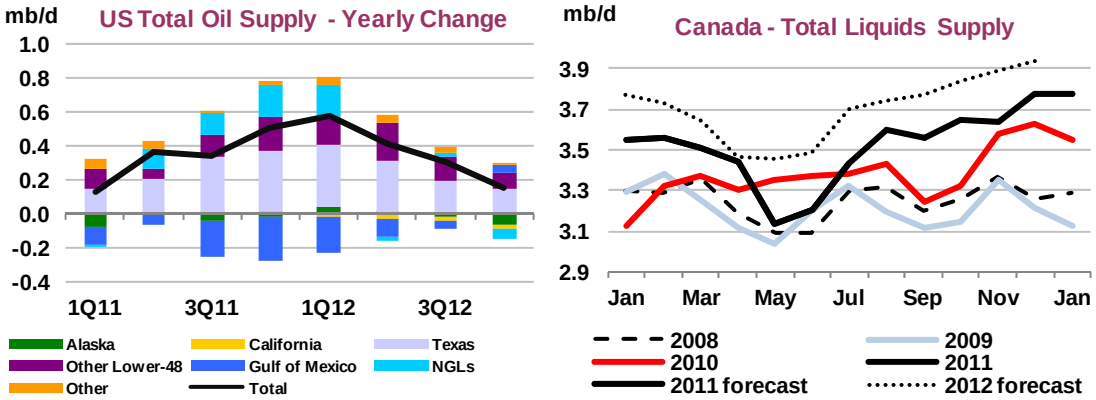
OECD

North America

US – January preliminary, Alaska and North Dakota actual, other states estimated: Based on preliminary weekly data, US crude oil supply fell slightly to 5.8 mb/d in January. A small fire at the Prudhoe Bay field reduced output by around 50 kb/d for a couple days, but output has quickly returned to average levels of 350 kb/d. The decline in Alaska in January was mostly offset by rapidly increasing production in light tight oil plays, especially in North Dakota and Texas. We have revised upwards the

forecast for Texas production to take into account increased drilling activity in the Eagle Ford and Wolfberry plays. The Texas and neighbouring New Mexico plays are being tapped quickly in the current high price environment because the resources have already been comprehensively explored and takeaway capacity is far less constrained than in the Bakken.

Transcanada recently announced that it plans to move ahead with constructing the 700 kb/d southern section of the Keystone XL pipeline, which can begin carrying crude from Cushing, Oklahoma, to the Gulf Coast. Finally, Gulf of Mexico output has been reduced by almost 100 kb/d in this outlook to take into account delayed field start ups at several facilities. On a positive note, Petrobras announced first oil from the Cascade field, which is produced from an FPSO in the Gulf. On the whole, US liquids output should increase by 380 kb/d (of which 310 kb/d is crude) in 2012 to 8.5 mb/d.

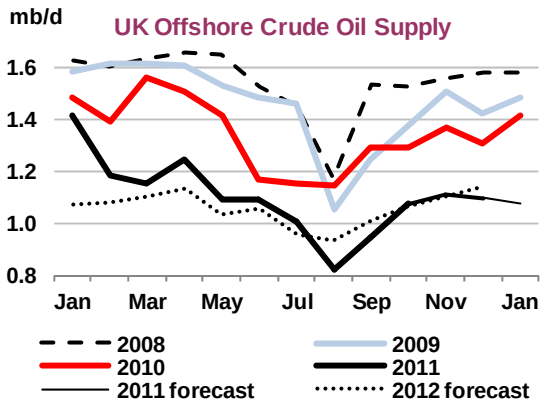


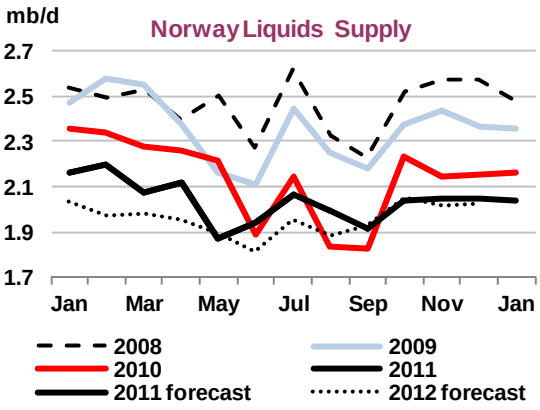
Canada – December actual: Canadian oil output reached an all-time record of 3.8 mb/d in December 2011, but unplanned outages have reduced synthetic crude production by 50 kb/d in 1Q12 from the prior quarter. CNRL's 110 kb/d Horizon upgrader was shut down for repairs and will not return to service until mid to late March (four weeks later than initially expected) according to the operator. In addition, a coking unit at Canadian Oil Sands' Syncrude facility was shut down in February, reducing the 300 kb/d facility's output by around 100 kb/d. Finally, Enbridge idled a 318 kb/d crude oil pipeline for several days after a traffic collision near a pumping station. The line carries Canadian oil to Indiana via the already-backed-up Superior, Wisconsin point. The incident's timing was fortuitous as Canadian synthetic oil flows were already lower because of the unplanned outages mentioned above. These incidents have resulted in a -20 kb/d revision for Canadian oil production for 2012, which now averages 3.7 mb/d, compared to 3.5 mb/d in 2011. Looking forward, Canada's output is assumed to be reduced by an average of 50 kb/d in each month for random supply shortfalls as part of the 200 kb/d non-OPEC supply allowance. In addition, beginning with last month's outlook we assume that on an annual basis mining and in situ project output is otherwise reduced by an additional 35 kb/d for planned and unplanned maintenance.

North Sea

Weather, unplanned and planned maintenance, and other pipeline outages continue to plague North Sea production in 1Q12. During the first half of last year, unplanned outages in the North Sea averaged 90 kb/d curbing output to 3.2 mb/d, its lowest level on record. Many of the problems from that time have now been resolved, which we expect to prop up the annual trend slightly. For the remainder of 2012, field underperformance and some project slippage will reduce North Sea crude and condensate output and have already resulted in deferred loadings in April. Some operators are already announcing summer maintenance plans, but are also indicating that other maintenance will occur in the spring, slightly earlier than expected. With weather-related shut-ins and maintenance in Denmark too, output from the North Sea in 2012 is expected to fall by 0.14 mb/d (or -4.6%) to 2.9 mb/d. These estimates assume that maintenance losses in Norway and the UK in 2Q12 and 3Q12 are around 40 kb/d greater than last year, reducing output levels by 190 kb/d.

Norway – January preliminary, December actual: Production fell by around 10 kb/d in January from December 2011 to average 2.0 mb/d, around 120 kb/d lower year on year. The Gjøa, Tyrihans, Morvin, and Volve fields all turned in lacklustre performances in the last couple months of 2011, and we have adjusted our outlook downwards for those fields in 2012. Unplanned maintenance at Statfjord has cut production by over half to around 20 kb/d in March. Also, shareholders of the 40kb/d Yme field announced yet another 6-12 month delay in start-up to 2013, which contributed to the -40kb/d revision to Norway's 2012 liquids estimate. This now averages 2.0 mb/d in 2012, around 80 kb/d lower than 2011.





UK – December preliminary, November actual: Crude oil production is expected to fall by 14% annually in 1Q12 to 960 kb/d, which is slightly steeper than last year's annual decline from 1Q10. Although we remain three months away from a full set of field-specific data for 1Q12, we assume that Buzzard's production averaged 170 kb/d in 1Q12, which is around 40 kb/d below capacity and is supported by the operator's statements to the media about daily production levels. Because of continuing performance problems at this and other fields, UK liquids production is averaging around 1.1 mb/d in 1Q12, around 10 kb/d less than 4Q11. Planned maintenance is likely to begin in late March and run until the end of the summer, which will keep UK production at an average of 1.1 mb/d for the year, a fall of around 4.4%. Rebounding production from the Forties system (largely Buzzard) and West of Shetlands (from Schiehallion) and the addition of the Athena field in late 2Q12 (after a delayed delivery of the FPSO) will mitigate falling production at mature fields that we assume are declining at rates of 15-22%.

Denmark – January actual: Danish crude oil production fell to 190 kb/d, its lowest levels since the mid-1990s in December 2011 and contributed to overall lower North Sea output. January saw only a small improvement. Production should return to 210 kb/d in 2Q12, which is still an average 11% lower than last year, but will fall again in August as maintenance will shut in the 10 kb/d Tyra East field. The shutdown will also affect around 20 kb/d of production in Norway.

Other OECD

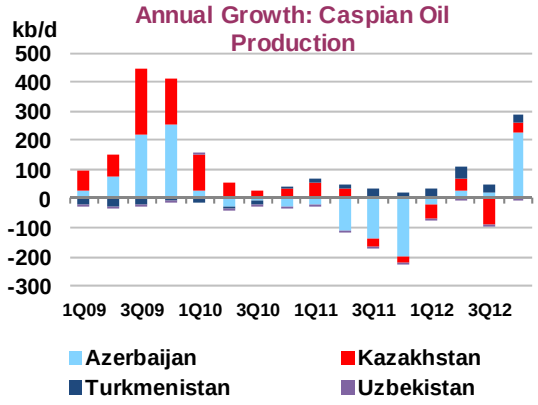
Mexico – January actual: Production at the KMZ and Cantarell fields fell in January, lowering Mexican crude output by 40 kb/d to 2.5 mb/d. These fields sustained and even increased production levels in 2011 through increased drilling onshore and through EOR technologies at shallow water fields, leaving Mexican crude production in 2011 only 0.6% lower. Mature field declines elsewhere and a lack of new projects will reduce production by 3.3% to 2.5 mb/d this year. Pemex plans to increase its drilling activity in the Gulf of Mexico near the Perdido fold belt (close to the Perdido and Great White fields), but the company still lacks experience in drilling for oil at depths beyond 6 400 metres. That is only a little more than half the depth to which the US fields had been drilled. In such a remote area of the Gulf, infrastructure challenges are likely to slow development.

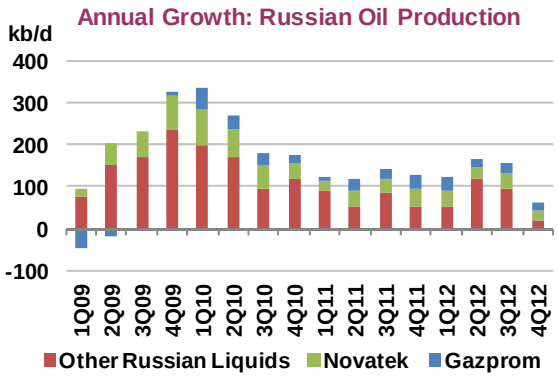
Non-OECD

Former Soviet Union

In the **Caspian,** production fell more sharply than anticipated in **Azerbaijan** in 4Q11 to 760 kb/d, the lowest level since 4Q08, due to maintenance at the Azeri-Chirag-Guneshli (ACG) field. We expect some uptick in production in 1Q11 as this maintenance is completed, but a slower return to normal rates than last month from a lower baseline. As a result, Azerbaijani production in 2012 is revised downwards by 10 kb/d to 990 kb/d, or 60 kb/d higher than 2011. In **Kazakhstan,** TengizChevroil recently indicated it will carry out maintenance at a field processing line during 2Q12 (reducing output by around 80 kb/d) and in August at its 300 kb/d Second Generation Project. Maintenance also reduced output by as much as 70 kb/d at the Karachaganak field. Overall, Kazakhstan's output should fall by around 1.0% or 20 kb/d in 2012 to 1.6 mb/d largely unchanged from the forecast last month.

Russia – February actual: Data for February show liquids production unchanged at January levels of 10.6 mb/d. Gazprom's condensate output fell slightly in February from January, but increased production from Rosneft's Vankor and PSA output offset the decline. The Vankor field is now producing almost 340 kb/d, compared to 280 kb/d at the same time last year. On average, January and February levels are 1.1% higher than the prior year's levels. We maintain that increasing condensate volumes, rising output from Eastern Siberian greenfields, and sustained output at brownfields amid this high price environment will contribute to a 1.2% increase in Russian liquids supply in 2012, averaging 10.7 mb/d versus 10.6 mb/d in 2011.





FSU net exports rose by 440 kb/d to 9.2 mb/d in January driven by a significant 400 kb/d increase in product shipments. Crude volumes rose by a marginal 10 kb/d after a rebound in Caspian exports offset a 20 kb/d decrease in Transneft flows. Deliveries of Turkmen and Azerbaijani oil through the BTC pipeline increased by 50 kb/d to 700 kb/d upon the completion of maintenance at the ACG complex. CPC flows increased by 40 kb/d to 650 kb/d following rising production at the Tengiz field but volumes remain approximately 150 kb/d below peak levels due to constraints resulting from Phase 1 of the CPC expansion project. Increased CPC flows offset declines elsewhere in the Black Sea as the Ukrainian ports fell out of favour with exporters. Cargoes sent via Primorsk rebounded by 50 kb/d after completion of maintenance on the BPS pipeline with the rise being equally split between Russian and Kazakhstani crudes. Elsewhere, Druzhba pipeline flows fell by 40 kb/d after less Russian Urals was delivered to Poland and shipments of ESPO from Kozmino inched down by 20 kb/d.

Increasing refinery runs, coupled with a seasonal dip in demand, were the primary drivers for the exceptional 400 kb/d hike in products shipments, with exports of fuel oil, gasoil and 'other gasoil' growing by 180 kb/d, 150 kb/d and 60 kb/d, respectively. Rebounding domestic demand, additional maintenance at Primorsk, and cold weather likely reduced net product exports in February.

FSU Net Exports of Crude & Petroleum Products

(million barrels per day)

	2010	2011	1Q2011	2Q2011	3Q2011	4Q2011	Nov 11	Dec 11	Jan 12	Latest month vs. Dec 11	Latest month vs. Jan 11
Crude											
Black Sea	2.10	1.93	2.06	1.87	1.87	1.92	2.05	1.85	1.83	-0.02	-0.35
Baltic	1.60	1.50	1.48	1.57	1.37	1.56	1.68	1.48	1.53	0.05	0.11
Arctic/FarEast	0.74	0.67	0.70	0.69	0.65	0.65	0.60	0.63	0.63	0.00	-0.05
BTC	0.77	0.70	0.72	0.76	0.69	0.64	0.61	0.64	0.69	0.05	0.06
Crude Seaborne	**5.22**	**4.80**	**4.96**	**4.89**	**4.58**	**4.77**	**4.94**	**4.60**	**4.68**	**0.08**	**-0.22**
Druzhba Pipeline	1.13	1.17	1.14	1.12	1.18	1.24	1.24	1.28	1.23	-0.04	0.08
Other Routes	0.42	0.53	0.53	0.54	0.54	0.50	0.49	0.52	0.50	-0.02	-0.01
Total Crude Exports	**6.76**	**6.50**	**6.63**	**6.55**	**6.30**	**6.51**	**6.68**	**6.40**	**6.41**	**0.01**	**-0.15**
Of Which: Transneft[1]	4.00	4.18	4.15	4.16	4.09	4.31	4.48	4.22	4.21	-0.02	0.07
Products											
Fuel oil[2]	1.54	1.58	1.43	1.82	1.59	1.46	1.50	1.44	1.62	0.18	0.19
Gasoil	0.88	0.77	0.90	0.79	0.72	0.69	0.69	0.67	0.83	0.15	-0.08
Other Products	0.43	0.43	0.48	0.53	0.36	0.33	0.27	0.37	0.44	0.06	0.00
Total Product	**2.85**	**2.77**	**2.81**	**3.14**	**2.66**	**2.49**	**2.47**	**2.48**	**2.88**	**0.40**	**0.12**
Total Exports	**9.61**	**9.27**	**9.44**	**9.68**	**8.96**	**9.00**	**9.15**	**8.88**	**9.29**	**0.41**	**-0.03**
Imports	0.07	0.09	0.08	0.08	0.10	0.08	0.07	0.11	0.08	-0.03	0.00
Net Exports	**9.55**	**9.18**	**9.37**	**9.60**	**8.86**	**8.91**	**9.08**	**8.77**	**9.21**	**0.44**	**-0.03**

Sources: Argus Media Ltd, IEA estimates

[1]Transneft data exclude Russian CPC volumes.

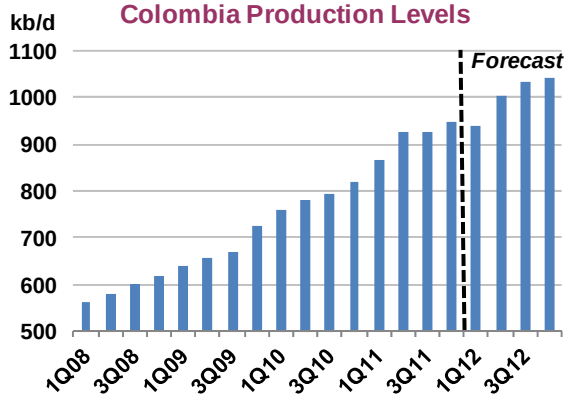
[2]Includes Vacuum Gas Oil

Latin America

Brazil – January actual: Brazilian crude and condensate production rose an additional 15 kb/d to record levels of around 2.2 mb/d in January. New wells lifted Marlim Sul production by 40 kb/d to 310 kb/d. In November 2011, the field's P-40 platform suffered a gas leak, but its production only fell by around 10 kb/d to 65 kb/d in that month. Petrobras announced a second gas leak at the field in early March at the 180 kb/d capacity P-51 platform. The company reported that it was conducting scheduled maintenance at the time. We expect this to have a negligible affect on Marlim Sul's output because of other increases. In addition, at the beginning of February Petrobras announced that oil and gas production at Carioca Nordeste, a pre-salt field, would be down for around 60 days. The field had been producing around 12 kb/d during 4Q11 during an extended well test. These incidents, along with a minor downward revision to Brazil NGL output, have contributed to a -10 kb/d revision to the 2012 outlook.

Colombia – February preliminary: Colombia's production is expected to average around 940 kb/d in 1Q12, 70 kb/d higher than 1Q10. In January, electricity problems on the Caño Limón pipeline and at various oil fields kept production under 950 kb/d. However, production fell sharply below 900 kb/d in February for the first time since September 2011 due to further pipeline sabotage on the Caño Limón pipeline. The 220-kb/d capacity line takes crude from the Caño Limón and other area fields. Operator Occidental is considering declaring a *force majeure* and suspending operations given the persistent damage to the line. Production at Caño Limón alone fell from around 55 kb/d in 2009 to around 20 kb/d in September 2011 (latest available). Taking into account a heightened risk of sabotage, Colombia's oil output growth in 2012 is reduced by 10 kb/d to 90 kb/d and should average around 1.0 mb/d in 2012.

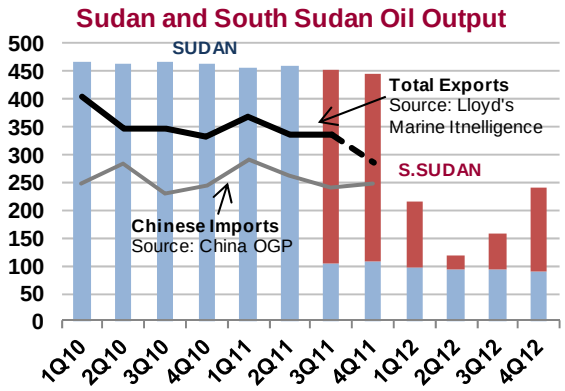
Colombia Production Levels



Asia

Liquids production rose to almost around 690 kb/d in **Malaysia** in January 2012 on rising output from the Kikeh and Sepat fields. The strong output levels from Kikeh have been carried through the formerly more conservative forecast, which has resulted in a 50 kb/d upwards revision. New field additions should raise Malaysian output by around 20 kb/d to 670 kb/d in 2012 after mechanical issues at Kikeh dented the country's output in 2011. **Indonesia's** oil output is expected to decline by 7.1% to 870 kb/d this year, which is a slight improvement from last month's estimate. The +10 kb/d revision to the year-on-year decline stems from a 2011 upwards revision to take into account newly revised government data.

Africa



Sudan & South Sudan: The continuing transit dispute between Sudan and South Sudan has removed almost 350 kb/d from world oil markets, and it is the largest contributor to recent revisions to non-OPEC supply estimates for 2012. The IEA focused on the dispute in last month's *OMR,* (see *Sudan and South Sudan: Over a Barrel Again, OMR* dated 10 February 2012) noting that average production would be reduced by 200 kb/d in 1Q12. Historical and forecast production from these countries are highly uncertain, with only anecdotal information, hearsay, occasional government updates, and third-party export statistics as sources. We revise upwards 4Q11 South Sudan production by 60 kb/d to 340 kb/d from last month's estimate based on updated export figures and higher Block 3/7 production during 2H11. We have also tempered expectations for a restart to this production in 2012, reducing South Sudan's forecast by 90 kb/d. We expect production will fall by 220 kb/d in 1Q12 from the prior quarter. Likewise, production in 2012 is expected to be 280 kb/d lower than 1H11 when output was proceeding normally. News that South Sudan would begin arrangements with its southern neighbours to truck some oil has only slightly mitigated the darkening outlook for the country's oil production. We assume that the country will be able to export increasing volumes of its crude by truck in upcoming months. We acknowledge that the actual outcome could be much worse due to problems obtaining trucks, problems with restarting quickly-shut-in production or further escalation of cross-border conflict. In fact, South Sudan alleged that Sudan had bombed two oil fields in the Unity area in late February. All told, combined production for the countries is now seen averaging 180 kb/d in 2012 compared with 450 kb/d in 2011.

Outside of Sudan and South Sudan, oil production is increasing gradually in non-OPEC countries. In **Ghana**, Tullow recently reported that it had completed Phase 1 development at the Jubilee field in October, bringing production rates to a peak of 88 kb/d, declining to around 70 kb/d by the end of 2011. The Government of Ghana approved the installation of five new producing wells (Phase 1A) early this year. We expect production rates to average around 80 kb/d in 2012, in the middle of the range of the company's forecast, with rates of around 90 kb/d by December 2012 and 105 kb/d in 2013. Tullow also reported that it had finally signed an agreement with the Government of **Uganda** on the continued development of fields in Exploration Area (EA) 1 and at the Kanywataba prospect. The agreement includes the farm-down of 2/3 of its shares to Total and CNOOC. Total will operate EA 1, Tullow will operate EA 2, and CNOOC will operate the Kanywataba Prospect Area and the Kingfisher field. Assuming this production comes online on schedule in 2013, production could reach as high as 140 kb/d by 2016. Production from the Aseng field (in Block I in **Equatorial Guinea**) came online on 6 November 2011, ahead of the planned start-up in 1Q12. The field's production reached around 50 kb/d at the end of 2011 and has increased marginally to 55 kb/d in 1Q12, bringing Equatorial Guinea's production to 290 kb/d.

Middle East

Yemen's output averaged around 180 kb/d in 4Q11, around 120 kb/d below 2010 levels of 300 kb/d. Production fared worse in 1Q12 and especially in February and is estimated to have dropped an additional 20 kb/d to 160 kb/d from the prior quarter. The continued targeting of the Marib oil pipeline, which flows 270 miles to the Red Sea port of Ras Issa, has frequently shut in production at the fields in Block 18 and has required the country to import refined products. In February, a four-day long labour strike at Total's Block 10 compromised 70 kb/d of production, and a nine day long strike in Block 14 shut in 52 kb/d of production according to media reports. These strikes reduced Yemen's monthly average by an additional 40 kb/d to less than 140 kb/d in February. All told, Yemen's liquids production is expected to fall by 50 kb/d to 180 kb/d in 2012 on the assumption that that 2Q12-4Q12 period sees modest improvements compared to first quarter levels.

Syria's liquids production is expected to fall by around 30 kb/d to 170 kb/d by December 2012, in a marked decrease from last month's expectations for a rebound to 2011 levels. The attacks on energy infrastructure around Homs have continued although the government has appeared to gain ground against the opposition. Despite these gains, the opposition is likely to continue to sabotage the energy infrastructure, arguably more so. In the medium to long term, new proposed US sanctions against Syria are likely to tighten the screws on potential investment in the energy sector. The House Foreign Affairs committee unanimously passed the Syria Freedom Support Act (H.R. 2106), which still requires passage by the full House and Senate. The bill

- Orders the US President to impose sanctions on parties making a single petroleum development investment of over $5 million or a series of investments that are at least $2 million (and exceed $5 million in the aggregate).
- Directs the President to sanction entities that invest in the maintenance or expansion of refined product production in quantities of more than $1 million.
- Orders the President to impose sanctions on entities that sell refined products with a value of more than $1 million.
- Sanctions entities that finance or insure any Syrian energy shipments in to or out of the country.

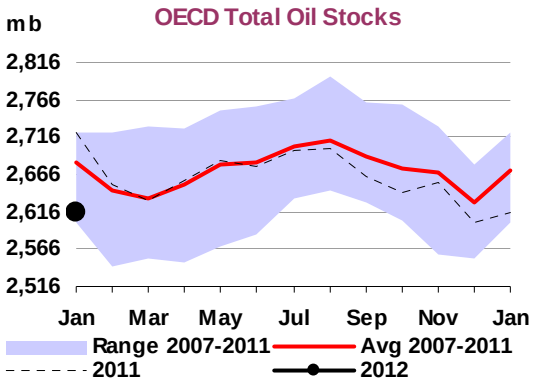
Oman – December preliminary: Oil production in Oman reached around 900 kb/d in December and is expected to average similar levels for 2012 as a whole. Enhanced oil recovery via steam flood at Oxy's Mukhaizna project and PDO's Harwheel miscible gas project will offset declines elsewhere in coming years. In a recent investor presentation, Oxy claimed that additional volumes are soon to come from additional steam flooding. According to newly released data by the Omani Ministry of Oil and Gas, PDO (a consortium led by Shell but with a 60% government share) produced 549 kb/d of crude oil and 94 kb/d of condensate in 2011, roughly 73% of the country's liquids output. PDO recently noted that it would be turning to unconventional resources in order to fulfil the government's requirement to keep production above 550 kb/d for over 10 years.

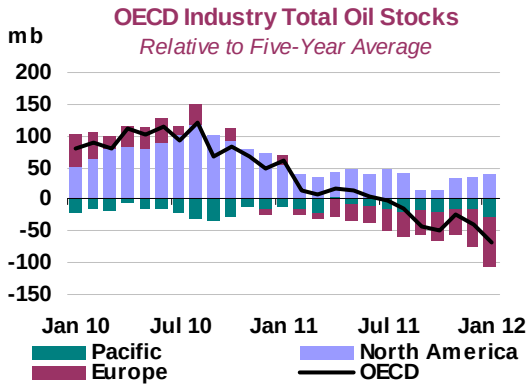
OECD STOCKS

Summary

- **OECD industry total oil inventories rose by a muted 13.6 mb in January, to 2 614 mb.** The deficit of stocks versus the five-year average widened to 68.9 mb, from 39.3 mb in December. As a result, absolute inventory levels have stood below the five-year average for seven successive months, and well towards the lower end of the five-year range. However in terms of days of forward demand cover, OECD commercial oil holdings remained 1.0 day above the five-year average, at 57.8 days, albeit cover has declined by 1.4 days, year-on-year.

- **Preliminary data indicate a 12.6 mb decline in February OECD industry inventories, compared with a five-year average 38.8 mb drop.** Crude oil inventories rose by 5.4 mb while product holdings dropped by 22.5 mb. Middle distillate stocks led the product decline, off by 15.4 mb.





OECD Inventories at End-January and Revisions to Preliminary Data

OECD industry total oil inventories rose by 13.6 mb to 2 614 mb in January, compared with a five-year average 43.2 mb build. With the gains in stocks falling well short of the historical average, the deficit of inventories versus the five-year average widened to 68.9 mb, from 39.3 mb in December. As a result, inventory levels have stood below the five-year average for seven successive months, and now lie close to the bottom of the five-year historical range. However in terms of days of forward demand cover, OECD commercial oil holdings remained 1.0 day above the five-year average, at 57.8 days, albeit cover has declined by 1.6 days, year-on-year. Regionally, the absolute surplus of stocks versus the five-year average in North America rose slightly, while deficits in Europe and the Pacific widened substantially.

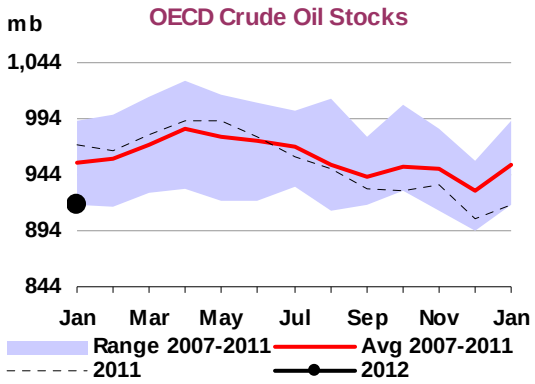
Preliminary Industry Stock Change in January and Fourth Quarter 2011

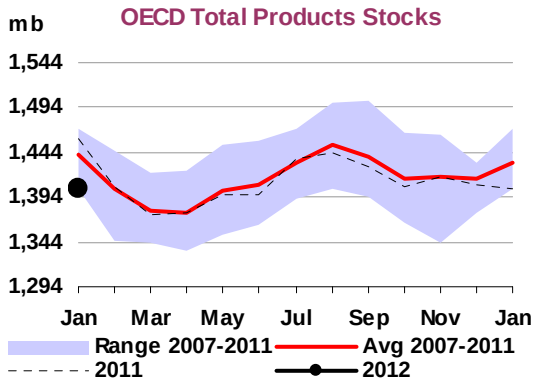
	January (preliminary)								Fourth Quarter 2011			
	(million barrels)				*(million barrels per day)*				*(million barrels per day)*			
	N. Am	Europe	Pacific	Total	N. Am	Europe	Pacific	Total	N. Am	Europe	Pacific	Total
Crude Oil	**10.3**	**8.5**	**-7.6**	**11.2**	**0.33**	**0.27**	**-0.25**	**0.36**	**-0.04**	**-0.24**	**-0.01**	**-0.29**
Gasoline	11.2	1.0	2.8	14.9	0.36	0.03	0.09	0.48	0.09	0.06	-0.02	0.13
Middle Distillates	2.1	-6.5	1.5	-3.0	0.07	-0.21	0.05	-0.10	-0.03	0.10	-0.07	0.00
Residual Fuel Oil	-1.0	0.3	0.7	-0.1	-0.03	0.01	0.02	0.00	-0.02	-0.04	-0.01	-0.07
Other Products	-12.5	-0.6	-4.9	-18.1	-0.40	-0.02	-0.16	-0.58	-0.15	-0.02	-0.07	-0.25
Total Products	**-0.3**	**-5.9**	**0.0**	**-6.2**	**-0.01**	**-0.19**	**0.00**	**-0.20**	**-0.11**	**0.09**	**-0.18**	**-0.20**
Other Oils[1]	5.4	0.5	2.6	8.6	0.18	0.02	0.08	0.28	-0.20	0.03	-0.04	-0.21
Total Oil	**15.4**	**3.1**	**-5.0**	**13.6**	**0.50**	**0.10**	**-0.16**	**0.44**	**-0.35**	**-0.12**	**-0.23**	**-0.70**

1 Other oils includes NGLs, feedstocks and other hydrocarbons.

Crude stocks rose seasonally by 11.2 mb to 917 mb, nonetheless marking a seventh straight month of below average readings. Crude holdings in North America and Europe increased by 10.3 mb and 8.5 mb, respectively while the Pacific showed a drop of 7.6 mb. Lower refinery throughput, affected by a series of refinery closures and scheduled turnarounds, led to a build in crude stocks in North America and Europe.

In the meantime, product inventories fell by 6.2 mb, in stark contrast with a five-year average 23.9 mb build, increasing the deficit against the five-year average to 39.1 mb, from 9.0 mb in December. Most of the product stock draw stemmed from Europe, where middle distillate stocks fell by 6.5 mb. North America showed a modest decline of 0.3 mb while product holdings in the Pacific remained virtually unchanged.





OECD stocks were revised 10.3 mb lower for December, upon receipt of more complete monthly submissions from member countries. This implies a steeper-than-usual 53.4 mb decline in December inventory levels, compared with preliminary estimates of a 40.8 mb drop. Downward adjustments were centred on North American crude oil and 'other oils' stocks, which were revised down by 5.7 mb and 6.7 mb, respectively. Higher-than-initially estimated European middle distillate stocks provided a partial offset.

Revisions versus 10 February 2012 Oil Market Report

(million barrels)

	North America		*Europe*		*Pacific*		*OECD*	
	Nov-11	Dec-11	Nov-11	Dec-11	Nov-11	Dec-11	Nov-11	Dec-11
Crude Oil	**0.6**	**-5.7**	**-0.6**	**-1.6**	**0.0**	**-0.3**	**0.0**	**-7.6**
Gasoline	0.0	-3.6	0.0	0.9	0.0	0.3	0.0	-2.3
Middle Distillates	0.0	5.1	1.5	6.7	0.0	0.5	1.5	12.4
Residual Fuel Oil	0.0	-3.3	0.0	-0.3	0.0	0.0	0.0	-3.6
Other Products	0.0	-1.9	0.0	0.4	0.0	0.2	0.0	-1.2
Total Products	**0.0**	**-3.6**	**1.5**	**7.8**	**0.0**	**1.1**	**1.5**	**5.3**
Other Oils[1]	1.0	-6.7	-0.1	-1.3	0.0	0.0	0.8	-8.0
Total Oil	**1.5**	**-16.1**	**0.8**	**4.9**	**0.0**	**0.9**	**2.3**	**-10.3**

1 Other oils includes NGLs, feedstocks and other hydrocarbons.

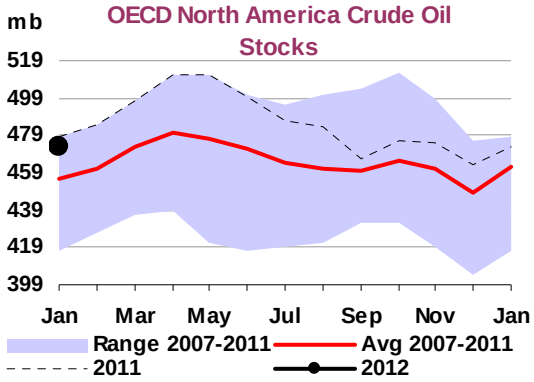
Preliminary data indicate a 12.6 mb decline in February OECD industry inventories, compared with a five-year average 38.8 mb drop. Crude oil inventories rose by 5.4 mb while product holdings plummeted by 22.5 mb. All product stock categories showed declines, albeit focused on middle distillate inventories. This category plunged by 15.4 mb on strong demand for diesel and heating oil. Gasoline, fuel oil and 'other products' holdings also fell by 3.2 mb, 3.0 mb and 0.9 mb, respectively.

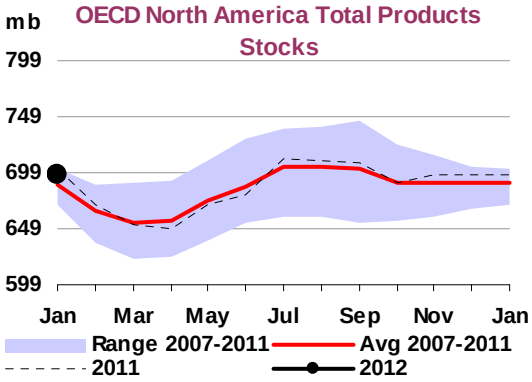
Analysis of Recent OECD Industry Stock Changes

OECD North America

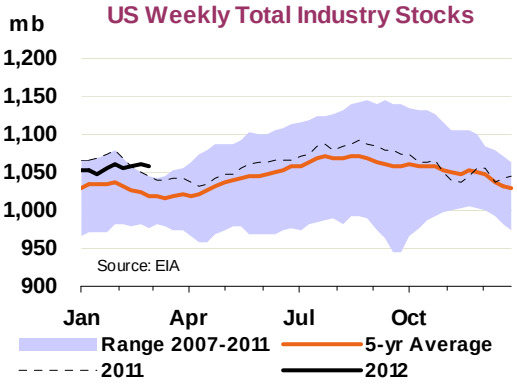
North American industry oil inventories rose by 15.4 mb to 1 325 mb in January, widening the surplus versus the five-year average to 38.0 mb, from 35.2 mb in December. Crude oil and 'other oils' stocks, including feedstocks, led the increase, up by 10.3 mb and 5.4 mb, respectively, due mostly to scheduled refinery maintenance in the US.

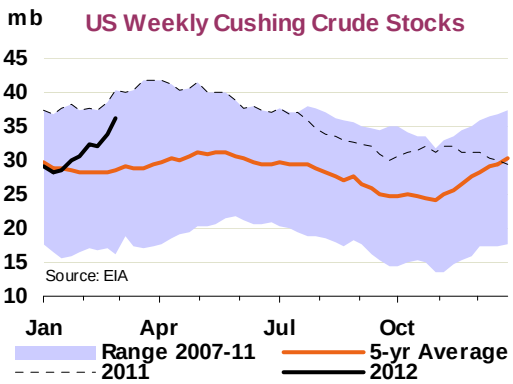
Meanwhile, product inventories edged down by 0.3 mb as a sharp decline in 'other products' holdings outweighed an increase in gasoline stocks. 'Other products' stocks fell by 12.5 mb on the increased use of propane for heating, while gasoline inventories rose by 11.2 mb due to lower demand. US preliminary data show four-week average gasoline demand declined to the lowest level since February 2001. Middle distillate stocks rose by 2.1 mb, as heating oil consumption was depressed by warmer-than-normal temperatures.





US weekly data show oil inventories edged down by 0.2 mb in February, compared with a five-year average 19.7 mb draw. Crude holdings rose by 6.4 mb, most of which stemmed from Cushing, Oklahoma. Crude levels at Cushing surged by 5.5 mb to 35.8 mb, marking their highest level since June 2011 due to the Seaway pipeline purge as well as lower refinery throughputs.





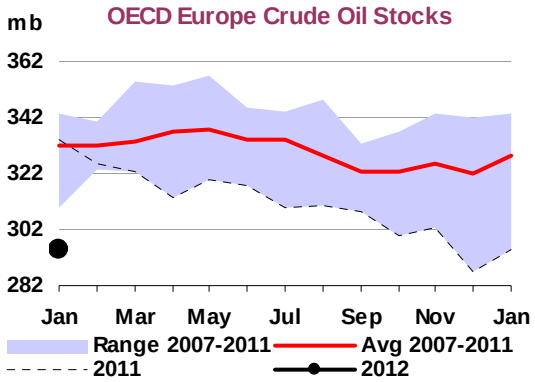
US product inventories fell by 11.9 mb in February on the back of declines across every product category. Middle distillate holdings took the lead, decreasing by 7.5 mb. However, it was diesel stocks that accounted for most of middle distillates' decline, off by 5.9 mb. Heating oil stocks edged down by 0.6 mb on unusually mild weather in the Northeast region. Gasoline inventories declined by 1.7 mb as demand rose month-on-month, despite remaining weak. 'Other products' and fuel oil stocks also fell by 2.4 mb and 0.3 mb, respectively.

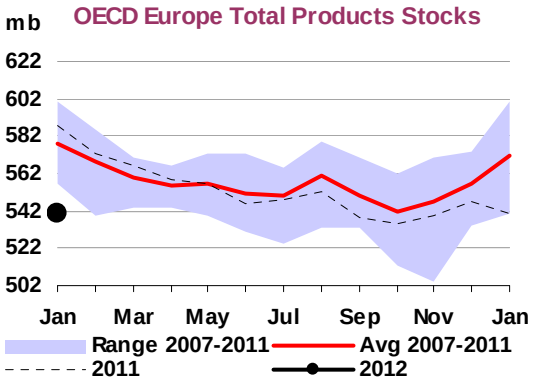
OECD Europe

Industry oil inventories in Europe rose by 3.1 mb in January to 904 mb, a milder increase than the five-year average build of 21.1 mb, thus widening the deficit versus the five-year average to 79.4 mb from 61.5 mb in December. European stocks have therefore set new five-year lows for nine of the last ten months (baring November 2011)

Both lower refinery runs and higher regional output drove crude stocks up by 8.5 mb, to 295 mb. However, they are still at the second lowest level since September 1997, and have stayed under the five-year range for an eleventh straight month. At the same time, scheduled returns on loans from Germany's stockholding agency, EBV, of at least 0.6 mb of North Sea crude in January may have contributed to a downward trend in European industry crude oil inventories.

In the meantime, European refined product holdings fell by 5.9 mb in stark contrast with a five-year average 20.6 mb build. They fell below the five-year range for the first time since November 2007. However, product stocks look comfortable when measured against forward demand, slightly above the five-year average at 39.1 days of forward cover. Middle distillates led the decrease, falling by 6.5 mb on strong demand for diesel and heating oil. Notably, German middle distillate holdings were reported to have fallen by 9.0 mb. In contrast, gasoline and fuel oil holdings rose by 1.0 mb and 0.3 mb, respectively. Meanwhile, German end-user heating oil stocks fell by 3 percentage points to 54% fill at end-January.

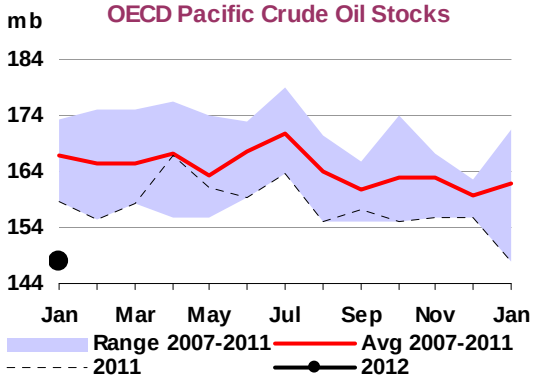


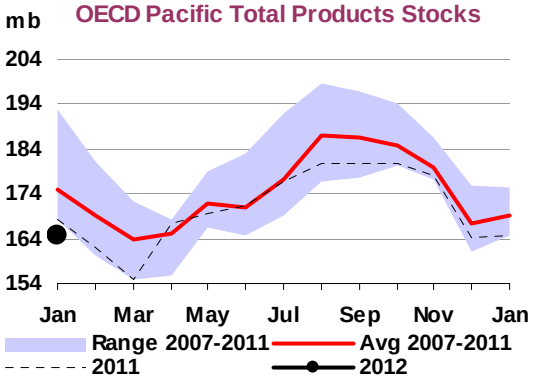


February preliminary data from Euroilstock point to a seasonal 3.9 mb stock draw, compared with a five-year average 10.9 mb fall in the EU-15 and Norway. Both crude oil and product inventories fell by 0.7 mb and 3.3 mb respectively. Middle distillate holdings led the decrease, declining by 2.5 mb. As was the case in January, replenishment of government agency stocks may have contributed to this decrease, with France's agency purchasing 2.3 mb of diesel. A 0.3 mb decrease in industry gasoline stocks and a 1.4 mb decline in fuel oil holdings also contributed to the overall product stock draws. In the meantime, 'other products' inventories rose by 0.9 mb. Refined product stocks held in independent storage in Northwest Europe fell, on sharp draws in gasoline as exports to the United States and other countries rose.

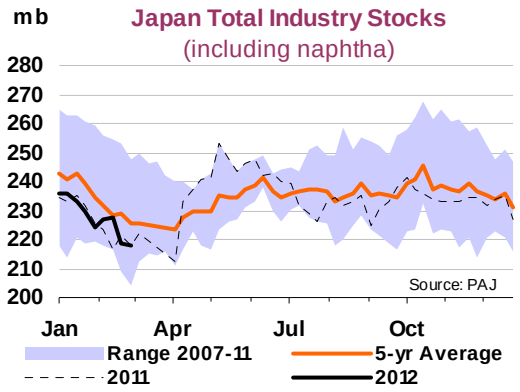
OECD Pacific

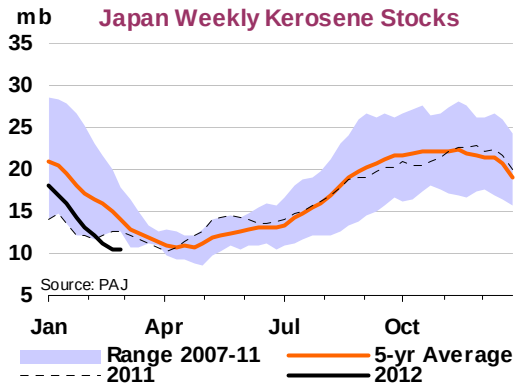
January commercial oil inventories in the Pacific declined by 5.0 mb to 385 mb in contrast with the five-year average increase of 9.5 mb. The deficit of inventories versus the five-year average widened to 27.5 mb from 13.1 mb in December, with oil stocks falling below the five-year range. Crude holdings decreased counter-seasonally by 7.6 mb to 148 mb, remaining under the five-year range for a fourth consecutive month. In the meantime, product stocks remained virtually unchanged, as gains in gasoline, middle distillate and fuel oil stocks were offset by a drop in 'other products' holdings. However, products stocks remain below their five-year range. Gasoline, middle distillate, and fuel oil holdings rose by 2.8 mb, 1.5 mb and 0.7 mb, respectively while 'other products' stocks fell by 4.9 mb.





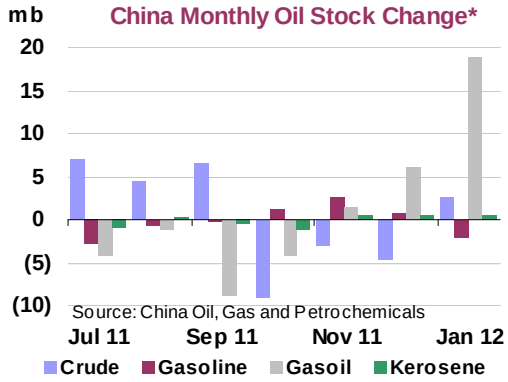
Japanese industry inventories declined seasonally by 8.5 mb in February, according to weekly data from the Petroleum Association of Japan (PAJ). Crude oil stocks fell by 0.3 mb, likely on lower crude oil imports. Product holdings decreased by 7.3 mb, led by a fall in kerosene inventories. An extremely cold winter drove kerosene stocks down by 3.2 mb, to below the five-year range. They have been reduced by more than 50% since November last year, dissipating the gradual stock build observed since the catastrophic earthquake and tsunami in March 2011. Gasoline and fuel oil inventories fell by 1.2 mb respectively, while 'other products' stocks edged up by 0.7 mb.

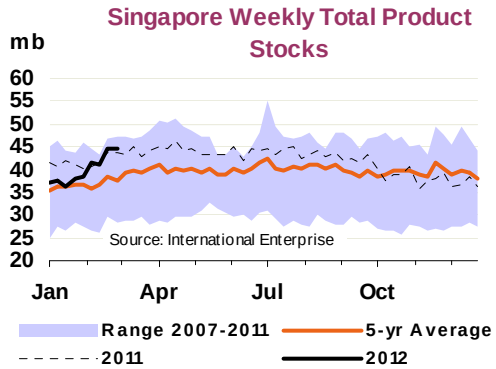




Recent Developments in Singapore and China Stocks

According to *China Oil, Gas and Petrochemicals (OGP)*, Chinese commercial oil inventories surged in January by an equivalent of 19.6 mb (data are reported in terms of percentage stock change). Despite an increase in crude oil throughput, higher imports and strong domestic output drove crude oil holdings up by 1.2% (2.5 mb), putting an end to a three-month decline. Product inventories skyrocketed by 13.1% (17.1 mb), led by a sharp increase in diesel stocks. In the midst of higher refinery throughput boosting the levels of refined product stocks in general, two long holidays (the New Year holiday and the Spring Festival holiday) that lasted 10 days in January had an impact on product demand - gasoline demand rose while diesel demand slumped. Gasoline inventories fell by 4.0% (2.2 mb) while diesel and kerosene inventories increased by 29.1% (18.8 mb) and 4.7% (0.5 mb), respectively.





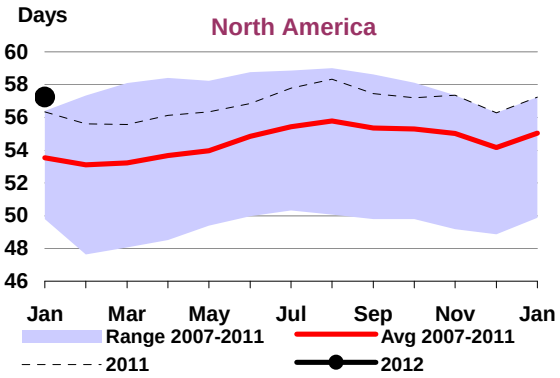
*Since August 2010, COGP only reports percentage stock change

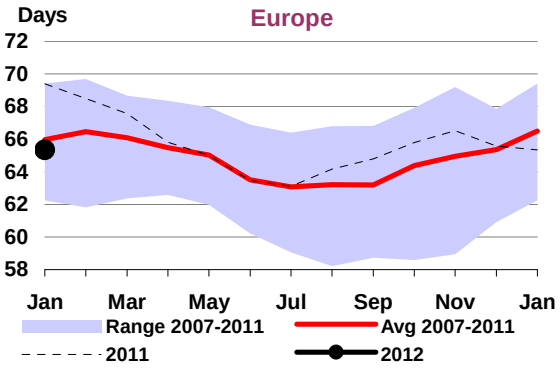
Singapore onshore inventories surged by 6.0 mb to 44.6 mb in February, well above the five-year average of 37.6 mb. Fuel oil stocks rose by 2.3 mb for a second consecutive month. Fuel oil holdings have gained 6.4 mb since their two-and-a-half-year low in the middle of January, due to record-high Western exports. Middle distillate inventories also increased by 2.1 mb on weak demand. Demand for gasoil and jet fuel in Asia remained subdued, while the arbitrage to send products to Europe remained closed. Gasoline holdings rose by 1.6 mb, to above the five-year range, as Malaysia and India, among others, increased gasoline exports to Singapore.

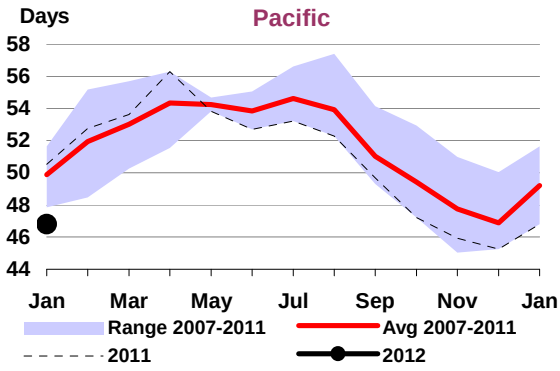
Regional OECD End-of-Month Industry Stocks

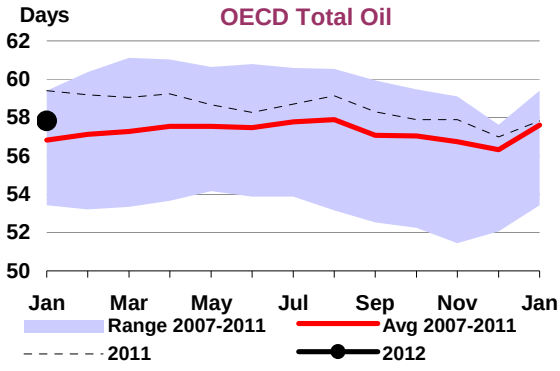
(in days of forward demand and millions barrels of total oil)

Days[1]

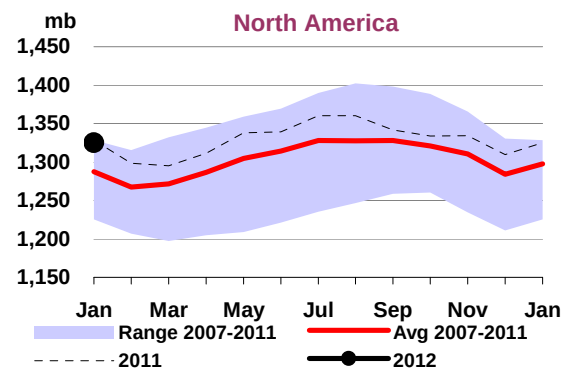


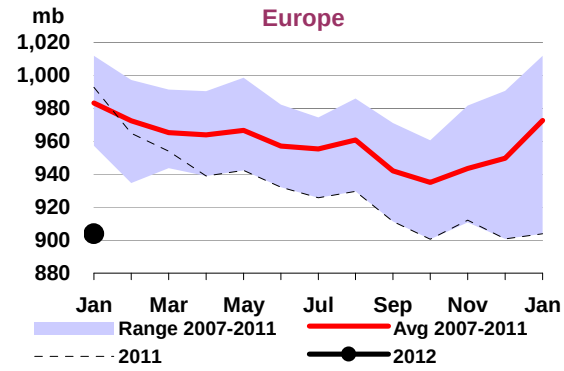


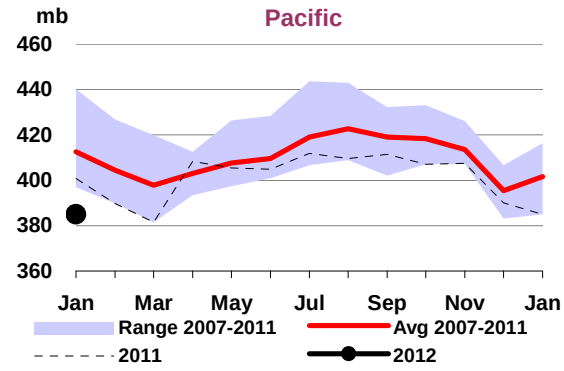


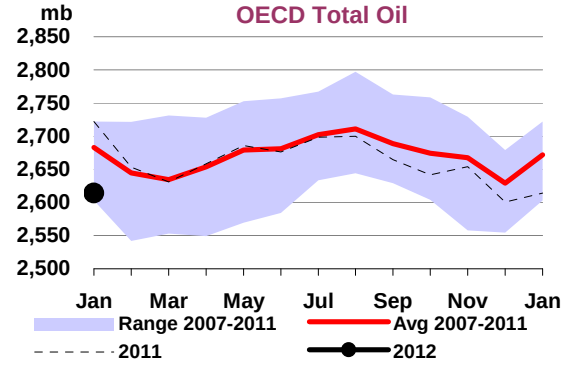


Million Barrels









1 Days of forward demand are based on average demand over the next three months

PRICES

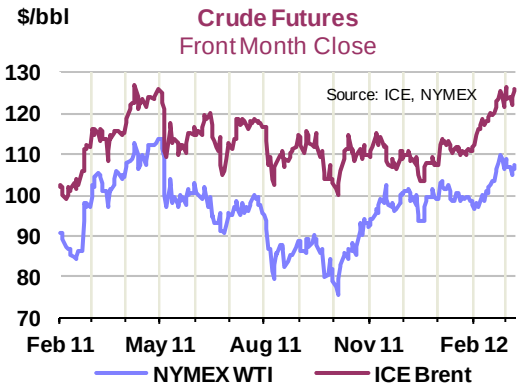
Summary

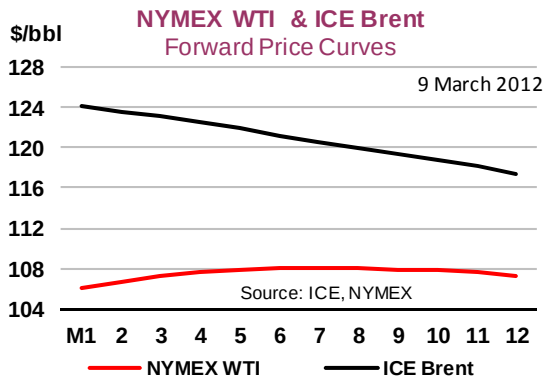
- **Oil futures prices moved higher in tandem with escalating supply side risks to the market in February and early March. Geopolitical problems in Syria, South Sudan and Yemen have led to protracted supply disruptions** from those countries, removing from the market more than 600 kb/d in 1Q this year. The prospect of additional production outages relating to Iran have added yet more uncertainty for the supply outlook in the coming months. Futures prices for Brent were last trading around $125/bbl and WTI at $106/bbl.

- **As tensions in the Middle East spurred prices to a nine-month peak, open interest in oil derivatives increased in February, despite lingering uncertainties regarding the health of the global economy.** Money managers increased their bets on rising oil prices, to the highest levels observed since May 2011, triggered by growing concerns over Iran's nuclear programme.

- **Markets for distillates and fuel oils softened with the end of peak winter season and as earlier tightness on the product supply side eased.** Crack spreads fell for middle distillates and fuel oils in February on weaker fundamentals, with product prices lagging the sharp increase in crude markets. In contrast, gasoline crack spreads continued to show strength, although narrowing from the elevated levels seen in early February.

- **Despite buoyant demand for Middle Eastern crudes in Asia, notably from China, vessel oversupply again weighed heavily, with freight rates on the benchmark Middle East Gulf – Japan route trading flat** from mid February onwards. Although rates remain better than the dire levels seen in 3Q11, surging bunker prices have capped earnings.



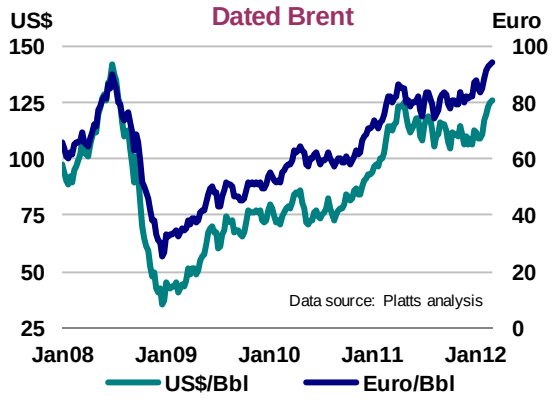


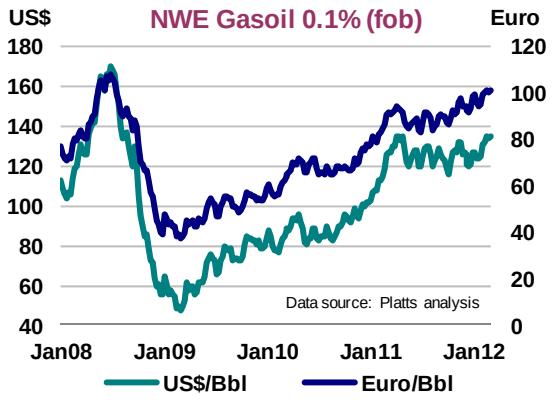
Market Overview

February oil futures prices moved higher in tandem with escalating supply side risks to the market. Formidable geopolitical problems in Syria, South Sudan and Yemen have led to protracted supply disruptions from those countries, removing just over 600 kb/d from the market on average in 1Q. Total non-OPEC unplanned outages, which include the North Sea, equal around 750 kb/d for 1Q12. The prospect of additional supply losses relating to the crisis with OPEC's second largest producer, Iran, have added yet more uncertainty for the supply outlook in coming months.

Oil futures at writing were trading near the 2011 highs posted at the onset of the Libyan crisis in late February, with Brent prices around $125/bbl and WTI about $106/bbl. Month-on-month, Brent futures rose by $7.61/bbl, to an average $119.06/bbl in February, gaining a further $6/bbl in early-March.

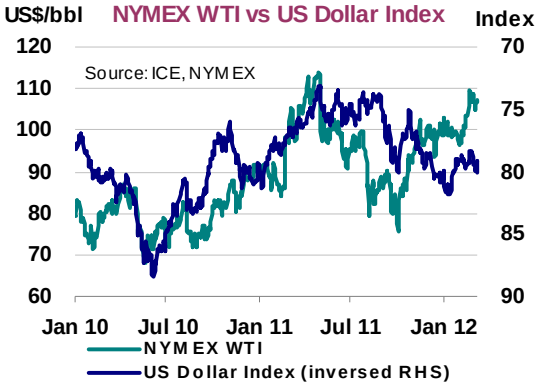
US WTI saw smaller increases over the same period, largely due to rising crude oil stock levels at the Cushing, Oklahoma delivery point for the NYMEX contract, up just under $2/bbl for the month, to an average $102.26/bbl in February.

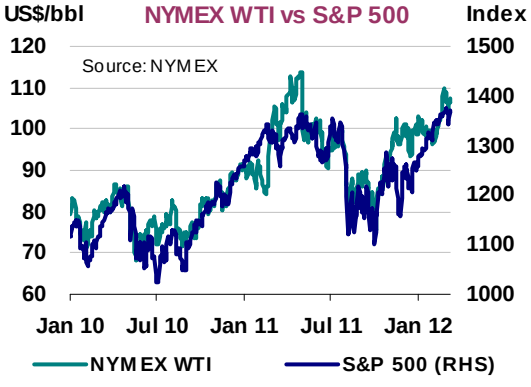




Indeed, crude oil prices posted record highs in euro denominated terms, eclipsing the peak reached during the 2008 price spike. Priced in euros, Brent crude hit a peak of €94.65/bbl in the first week of March, the highest level since mid-2008. Comparatively, since the first week of January 2009 Brent priced in euros have doubled, while prices in dollars moved up by nearly 88%. Spot European gasoil prices during the same period more than doubled in euro terms while in dollars they were higher by almost 89%.

Given the existing major debt issues facing beleaguered euro zone economies, the latest jump in oil prices adds unwelcome inflationary and balance of payments costs with imports of dollar-denominated oil. Sustained higher prices risk further undermining the pace of global economic recovery, both directly and indirectly curbing oil demand growth. Global oil demand growth is largely left unchanged in this month's OMR, at 800 kb/d for 2012, although further macro-economic impacts deriving from sustained higher oil prices are also possible.

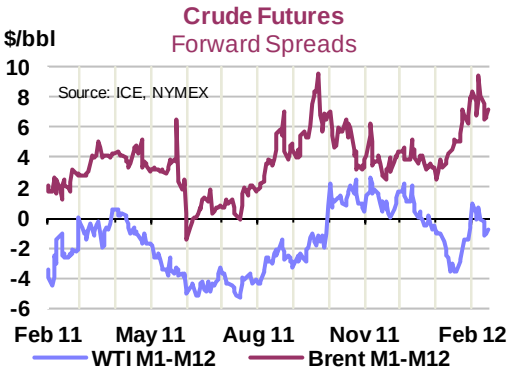




That said, it is supply-side issues that are currently dominating market sentiment. Geopolitical issues in South Sudan, Syria and Yemen combined with weather-related and technical problems in the North Sea and Canada have knocked around 750 kb/d out of the market so far in 2012.

In addition, OECD crude oil inventories are still hovering at the bottom of the five-year average despite the highest levels of OPEC production in more than three years. Indeed, latest data show OECD Europe and Pacific stocks are well below the five-year range. Several OPEC producers have raised supplies in the face of higher prices. In February, Saudi Arabia's output hit the 10 mb/d mark, the highest level in three decades, while Libyan production reached a significant 1.3 mb/d, just 300 kb/d below levels registered prior to last year's civil war.

New international sanctions have so far had a minimal impact on actual Iranian crude supplies to the market, with volumes in the January-February period off only about 75 kb/d from end-2011 levels. However, even before additional sanctions were announced in January, Iranian supplies were around 150-200 kb/d lower since last October/November, largely due to payment issues with customers. Nonetheless, expectations that exports could plummet by between 800 kb/d and 1 mb/d in the second half of the year have injected a high degree of uncertainty over the 2012 supply outlook. Though still considered unlikely at this stage, the threat of disruptions to traffic through the Strait of Hormuz cannot be discounted entirely.



Brent's backwardation widened in February but eased again in early March as tensions over Iran ratcheted a notch lower. The Brent M1-M12 backwardation was running at $7.45/bbl in early March, compared with around $6/bbl in February and $3.65/bbl in January.

The WTI M1-M12 contract briefly moved into backwardation in early March, when prices surged over unfounded rumours about a supply disruption in Saudi Arabia, before easing again under the weight of ample supplies in the US. The WTI M1-M12 spread was averaging about -$0.50/bbl in early March, compared with a monthly average of -$1.85/bbl in February and -$0.18/bbl in January.

Prompt Month Oil Futures Prices

(monthly and weekly averages, $/bbl)

	Dec	Jan	Feb	Feb-Jan Avg Chg	% Chg	Week Commencing: 06 Feb	13 Feb	20 Feb	27 Feb	05 Mar
NYMEX										
Light Sweet Crude Oil	98.58	100.32	102.26	1.94	1.9	98.51	101.80	107.43	107.54	106.31
RBOB	109.14	117.45	126.41	8.96	7.1	124.47	126.54	130.46	133.01	137.94
No.2 Heating Oil	122.13	127.94	134.17	6.23	4.6	133.91	133.69	137.79	135.87	135.73
No.2 Heating Oil ($/mmbtu)	20.97	21.96	23.03	1.07	4.6	22.99	22.95	23.65	23.33	23.30
Henry Hub Natural Gas ($/mmbtu)	3.25	2.71	2.53	-0.18	-7.2	2.48	2.53	2.61	2.51	2.32
ICE										
Brent	107.72	111.45	119.06	7.61	6.4	117.05	118.94	122.74	123.65	124.26
Gasoil	124.05	128.54	134.66	6.11	4.5	133.87	134.27	137.65	137.04	137.71
Prompt Month Differentials										
NYMEX WTI - ICE Brent	-9.15	-11.13	-16.80	-5.66		-18.54	-17.14	-15.31	-16.10	-17.95
NYMEX No.2 Heating Oil - WTI	23.56	27.62	31.91	4.28		35.40	31.89	30.36	28.33	29.42
NYMEX RBOB - WTI	10.57	17.13	24.14	7.01		25.97	24.74	23.03	25.47	31.63
NYMEX 3-2-1 Crack (RBOB)	14.90	20.63	26.73	6.10		29.11	27.12	25.47	26.42	30.89
NYMEX No.2 - Natural Gas ($/mmbtu	17.72	19.26	20.51	1.25		20.50	20.42	21.04	20.82	20.98
ICE Gasoil - ICE Brent	16.32	17.09	15.60	-1.50		16.82	15.33	14.91	13.39	13.44

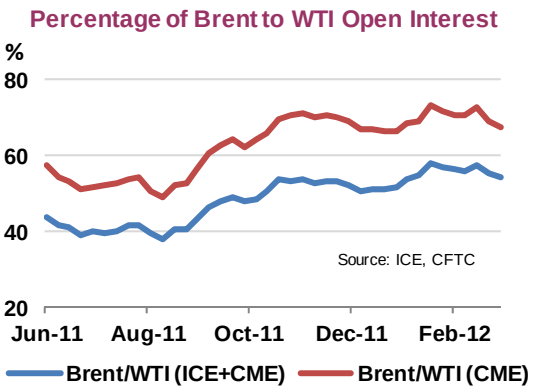
Source: ICE, NYMEX

Futures Markets

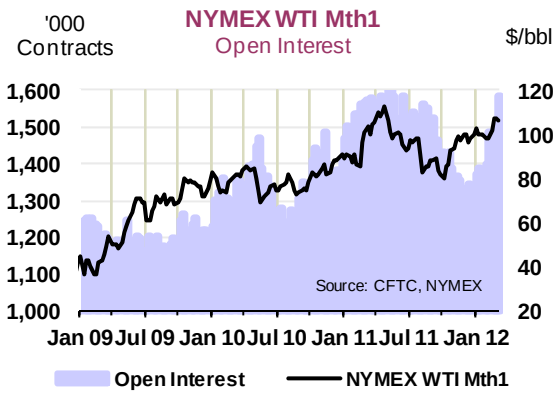
Activity Levels

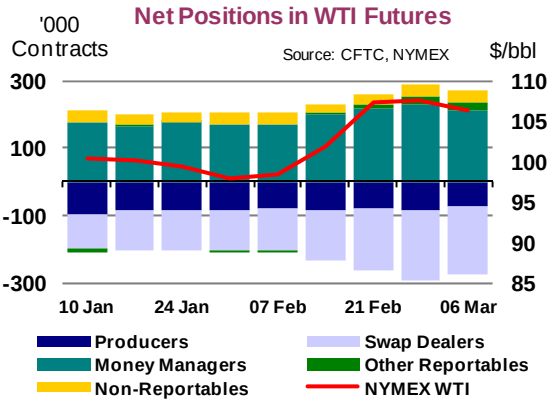
The ratio of Brent futures in London ICE to New York and London WTI oil declined to 54.4% in the week ending 6 March from a historically high of 57.8% observed in January, triggered by a relatively large increase especially in NYMEX WTI open interest. Meanwhile, ICE WTI open interest gained some momentum after declining for six straight months starting in October. The decline in the ratio of Brent to WTI open interest is sharper when ICE WTI contracts are excluded. The ratio of ICE Brent to CME WTI open interest declined to 67.7% from its peak of 73.3% registered on 24 January 2012.

As tensions in the Middle East raised prices to a nine-month peak, open interest in oil derivatives increased in February, despite lingering uncertainties regarding the health of the global economy. Open interest in New York CME WTI futures and options contracts increased by 11.4% from 31 January 2012 to 6 March 2012 to a four-month high of 2.58 million contracts. Meanwhile, open interest in futures-only contracts increased by 13.2% during the same period, from 1.4 million to a seven-month high of 1.58 million. Over the same period, open interest in London ICE WTI contracts increased to 0.39 million and 0.45 million contracts in futures-only and combined contracts, respectively. Meanwhile, open interest in ICE Brent contracts also tested new records in February with 1.07 and 1.25 million contracts after peaking at its highest level of 1.0 and 1.12 million contracts in January in futures-only and combined contracts, respectively.



Amid mounting concern about supply outages as well as sanctions on Iranian oil supply and fears about the Strait of Hormuz, money managers increased their bets on rising WTI crude oil prices by 55 471 contracts to reach 228 392 contracts in February, the highest since May 2011. However, in the week ending 6 March 2012, they reduced their long position by 18 857 to 209 535 contracts in response to the fall in WTI prices from $106.55/bbl to $104.7/bbl, triggered by the announcement of renewed talks between Iran and Western powers over Iran's nuclear programme. Over the same period, money managers also increased their bets on rising Brent prices by 51.7%, from 84 417 to 128 094 futures contracts, the highest level since ICE Futures Europe started publishing information on trading of Brent futures last July.





Producers reduced their net futures short positions from 85 660 to 74 848 contracts from 31 January 2012 to 6 March 2012; they held 20.88% of the short and 16.16% of the long contracts in CME WTI futures-only contracts. Swap dealers, who accounted for 22.69% and 35.23% of the open interest on the long side and short side, respectively, increased their net short position by 71.7% to hold 198 772 net short in February. Producers' trading activity in the London WTI contracts followed an opposite pattern to CME WTI contracts. Producers in the London ICE WTI contracts reduced their net long positions from 20 199 to 12 459 contracts over the same period. Swap dealers also reduced their net short positions during the same period from 47 011 to 30 492 contracts.

Meanwhile, NYMEX RBOB futures and combined open interest increased by more than 14.5% over the same period. Open interest in NYMEX heating oil futures contracts increased by almost 4.1% to 286 118 contracts while open interest in natural gas markets increased by 1.1% to reach 1.22 million contracts.

Index investors' long exposure in commodities in January 2012 increased by $17.1 billion. However, they cut $6.4 billion from WTI Light Sweet Crude Oil, both on and off futures contracts in January. The number of long futures equivalent contracts dipped to 538 000, the lowest since December of 2008, equivalent to $53.2 billion in notional value.

Positions on NYMEX Light Sweet Crude Oil (WTI) Futures Contracts

Thousand Contracts

06 March 2012	Long	Short	Net	Long/Short	Δ Net from Prev. Week	Δ Net Vs Last Month
Producers' Positions	256.0	330.9	-74.8	*Short*	↑ 9.9	↑ 10.8
Swap Dealers' Positions	125.0	323.8	-198.8	*Short*	↑ 8.1	↓ -83.0
Money Managers' Positions	255.3	45.7	209.5	*Long*	↓ -18.9	↑ 36.6
Others' Positions	141.5	114.1	27.4	*Long*	↑ 1.3	↑ 29.6
Non-Reportable Positions	97.2	60.5	36.7	*Long*	↓ -0.3	↑ 5.9
Open Interest			**1584.8**		↑ 67.0	↑ 185.0

Source: CFTC

Market Regulation

As mentioned in the OMR of 10 February, the European Council and Parliament reached an agreement on the final draft of the proposed European Markets Infrastructure Regulation (EMIR), which aims to increase transparency and reduce risk in the over-the-counter derivatives markets and establishes common rules for Central Counterparty Clearing Houses (CCPs) and trade repositories (TRs). The agreed EMIR calls for clearing of all OTC derivatives through CCPs. The rule extends reporting requirements not only to OTC derivatives, but also to other derivatives contracts. The authority to identify the contracts subject to a clearing obligation is delegated to the European Securities and Markets Authority (ESMA). Furthermore, the final version gives public authorities the right to authorise CCP. However, in case of disputes between public authorities over the authorisation of CCPs, ESMA can play a binding negotiator role or may take a final decision on the authorisation of a CCP if asked by public authorities. Also, CCPs from third countries will be recognised in the European Union if the domestic legal regime has an effective equivalent system for the authorisation of CCPs. The final draft of EMIR is still pending approval from the European Parliament and Council. It is expected to be approved by the European Parliament during its 12-15 March session, and then the Council will need to formally adopt the rules. Once adopted by the Council, it will be published in the Official Journal and the rules will enter into force 20 days after the publication. The new rules are expected to be effective by the end of 2012.

On 23 February 2012, the US CFTC re-proposed its rule for determining the appropriate block size for different asset classes. As reported in the January OMR, the rule on appropriate block size was removed from the final rule on real-time reporting of swap trades in December. Several market participants had asked the CFTC to reconsider its rule on timing of public dissemination of details of large trades since they need time to hedge or lay off risk incurred with these large trades before they are reported to trade repositories. The new rule calls for different block sizes for different asset classes. The Commission proposed to adopt a two-period approach to determine the appropriate block size for different asset classes. In the initial period, which would last for a minimum of one year, the appropriate size is set by the Commission. For example, for NYMEX WTI and ICE Brent oil swaps, the initial appropriate minimum block size is set at 100 000 barrels. In the post-initial period, the Commission, based on data collected by trade repositories, will establish the appropriate minimum block size using a 75 percent notional amount calculation to establish and update these sizes in no less than one year.

On 27 February 2012, a federal court declined ISDA and SIFAM's request against the implementation of the CFTC's position limit rule. However, the court expressed concern that the Commission might have overreached its mandate by pre-emptively setting a position limit on commodity derivatives contracts,

without sufficient cost-benefit analysis. The court also declared its intention to rule whether to halt temporarily the implementation of the position limit rule. The court, however, might not need to rule on the position limit until June, since the regulators (CFTC and SEC) failed to reach an agreement on the final rule, which defines what a swap is. The position limit rule will be effective sixty days after the term "swap" is defined by the Commission. The earliest estimate for the final rule on the definition of "swap" is for early April, which implies that the position limit will not be effective until June, even if the federal court did not provide a temporary injunction to stop implementation.

The US CFTC delayed its vote on the final rule defining swap dealer and major swap participants, which will eventually determine which entities face mandatory capital and margin requirements as well as position limits. The vote had been delayed twice by the Commission on 23 February and 9 March but the CFTC may bring the final rule for voting in its 20 March meeting. Some reports suggest that the CFTC may increase the threshold that determines which market participants are deemed swap dealers from the originally proposed level of $100 million in 2010 to $3 billion, based on the notional value of a company's annual swaps trade. The prospective increase in threshold will certainly exempt some energy companies, which have long claimed that their use of swaps is to reduce risks tied to oil and natural gas assets, from being classified as swap dealers.

The International Organisation of Securities and Commissions (IOSCO) issued a consultation paper on functioning and oversight of oil price reporting agencies (PRAs). This follows the mandate from the G20 Cannes Summit Declaration in November 2011 for "IOSCO, in collaboration with the IEF, the IEA and OPEC, to prepare recommendations to improve their functioning and oversight to our Finance Ministers by mid-2012". The consultation paper asked stakeholders' views on the role and operation of oil price reporting agencies, including the impact of PRAs on physical and paper oil markets, the effects of different methodologies used by different PRAs on market prices, the impact of current functions of the PRAs on price transparency in the physical and paper oil markets, the current governance of PRAs without any independent third party oversight, and the need for public oversight of PRAs. IOSCO has requested responses by 30 March 2012. Based on stakeholder responses, IOSCO will then propose a set of recommendations, in collaboration with the IEA, IEF and OPEC, to be submitted to the G20 Finance Ministers meeting in June 2012 in Mexico.

High Frequency Traders: Flash Crashers or Liquidity Providers?

On 6 May 2010, major American stock indices and stock index futures nosedived by more than five percent before sharply recovering in less than 30 minutes. Since that infamous flash crash, high frequency traders (HFTs) have drawn the attention of regulators, exchanges and market participants, despite the fact that the crash was not triggered directly by HFTs, according to an official joint report released by the US CFTC and SEC. Nonetheless, fragmentation of trading venues and the establishment of the US Regulation National Market System and the European Union's Markets in Financial Instruments Directive (MiFID) in 2007 requiring brokerages to find the best execution for customers, have led to the explosive growth of HFTs.

Some studies suggest that a few high-frequency trading (HFT) firms now account for more than 70 and 60 percent of overall trading volume on US equities and futures markets, respectively. HFTs' share in European markets' trading volume is estimated to be smaller than that of in US trading; however, they have continued to ramp up their activities on exchanges on both sides of the Atlantic.

High Frequency Trading in Energy Markets

According to CME's algorithmic trading study (HFT is a subset of algorithmic trading) published on 15 July 2010, 35% of crude oil future trading and 71% of message traffic in the first quarter of 2010 came from algorithmic traders. Compared to other asset classes, algorithmic traders' share in the volume of trade is still low, but in terms of message traffic, crude oil comes second after EuroFX futures. The CME report further suggests that increased algorithmic trading activity correlated with narrower bid/ask spreads, increased market depth and reduced volatility. That is to say, the presence of algorithmic traders substantially improved the quality of market.

High Frequency Traders: Flash Crashers or Liquidity Providers? (continued)

Although HFTs presence in futures markets has been on the rise, they are present in limited commodity markets, such as crude oil due to its higher liquidity. Some market participants argued that as more swaps activity shifts to electronic platforms, we should expect to see HFTs dominate in these markets. However, HFTs' survival depends on the short time delays in trade execution. Therefore, HFTs' arrival relies on the initial liquidity in the market place. That is to say, the survival or even arrival of HFTs onto swap execution facilities (SEFs) solely depends on the success of SEFs and liquidity in these platforms. As noted in the January OMR, the OTC market is different from the futures markets. Instruments (swaps) in the OTC markets can trade infrequently, often in significant sizes. Therefore, we would not expect to see an influx of order flows from HFTs to SEFs.

High Frequency Traders and Their Impacts

Regulators on both side of the Atlantic, while urging new curbs on high frequency trading, are still debating its definition. The Securities and Exchange Commission refers to them as "professional traders acting in a proprietary capacity that engage in strategies that generate a large number of trades on a daily basis. These traders could be organized in a variety of ways, including as a proprietary trading firm. Other characteristics often attributed to proprietary firms engaged in HFT are: (1) the use of extraordinarily high-speed and sophisticated computer programs for generating, routing, and executing orders; (2) use of co-location services and individual data feeds offered by exchanges and others to minimize network and other types of latencies; (3) very short time-frames for establishing and liquidating positions; (4) the submission of numerous orders that are cancelled shortly after submission; and (5) ending the trading day in as close to a flat position as possible (that is, not carrying significant, unhedged positions over-night)." However, the term is still relatively new and there is no consensus yet on the definition of HFT. For example, the US CFTC announced in late January 2012 that it is forming a subcommittee that would be tasked with defining and identifying HFTs trading pattern and its possible impact on futures, swaps and options markets.

HFTs use several different strategies to enter the market. Some HFTs can be considered market makers, where they place buy and sell orders continuously throughout the trading day in order to earn bid and ask spreads. Some other HFTs can act as arbitrageurs to make profit from price discrepancies in certain assets trading simultaneously on separate markets. Most studies found that HFTs add substantially to the price discovery process, as well as eliminating any price differential across trading venues. Furthermore, it is argued that the arrival of HFTs and increased low-latency activity, defined as "strategies that respond to market events in the millisecond environment", substantially improved the quality of markets by adding liquidity, lowering the trading costs (narrowing bid and ask spread), reducing short-term volatility and increasing the limit order book depth during normal and heightened uncertain times.

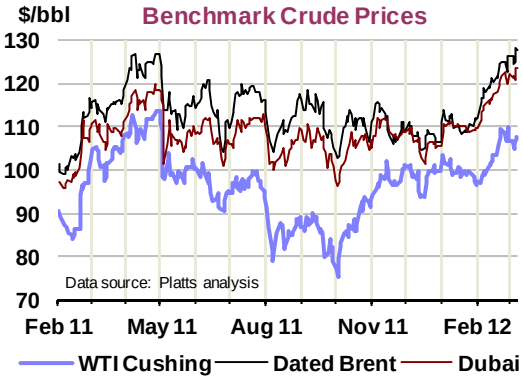
However, some studies suggested that without mandatory obligations to provide liquidity, HFTs may have exacerbated volatility by withdrawing liquidity from the market, especially during severe market episodes such as those experienced during the flash crash. Others also question the liquidity provided by HFTs. Since more than 95% of orders placed by the HFTs are cancelled immediately, some market participants are sceptical that high frequency trading provides liquidity to the markets. Some argue that HFTs provide liquidity when it is not needed. Others further argued that HFTs exhibit trading patterns inconsistent with the traditional definition of market making, in the sense that they aggressively trade in the direction of a price change that does not result in inventory accumulation.

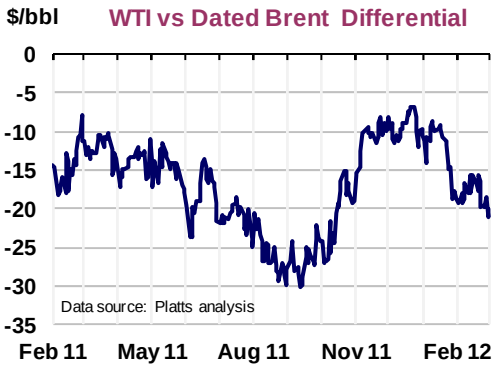
As high frequency trading is becoming increasingly popular, concerns over trading practices and their impact on the quality and volatility of markets have been raised by some regulators and exchanges. For example, US CFTC Commissioner Chilton urges creating a registration category for high-frequency trading firms and imposing new restrictions on their trading practices if necessary. In the meantime, some exchanges in the US and Europe already took some steps by introducing penalties on high-frequency traders who place and cancel large number of bids and offers within milliseconds. Some regulators refer to such practices as parasitic trading. Others however, see HFT simply as a logical and inevitable upshot of both increases in risk-hedging appetite and advances in information technology.

Spot Crude Oil Prices

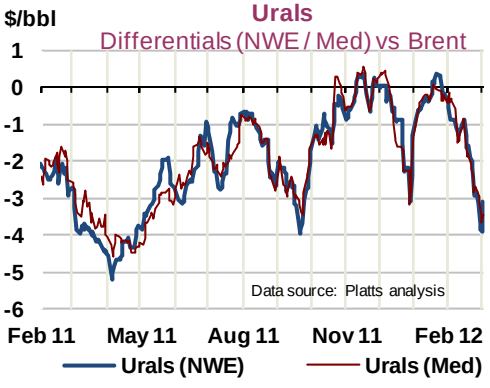
Our usual summary tables of average spot crude oil and products prices, and Table 13, in the subscriber edition of this report have been removed pending further licensing discussions with the data provider.

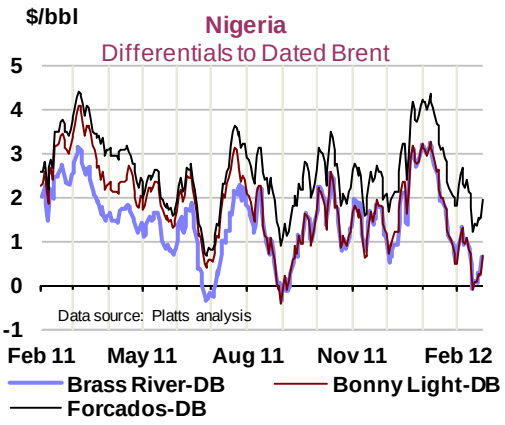
Spot crude oil prices matched the upward moves in futures markets in February and early March. With existing supply disruptions having the biggest impact on European and Asian markets, prices for Brent and Dubai crudes posted the largest increases over the past six weeks. Spot prices for Dated Brent were up in February by just under $9/bbl, to an average $119.50/bbl, while Dubai rose about $6.35/bbl to $116.15/bbl last month. By contrast, US WTI rose by a smaller $2/bbl to around $102.30/bbl on average in February, with higher stock levels at Cushing, Oklahoma tempering price gains.





The price disconnect between the US benchmark crude and global markets saw the price spread between the two benchmark crudes widen to the steepest levels in six months. The spot WTI-Dated Brent differential was averaging around $19.35/bbl in the first decade of March, compared with an average $17.20/bbl in February and $10.10/bbl in January. The steeper WTI/Brent differential follows the surge in crude oil inventories at the Cushing, Oklahoma storage depot. Cushing stocks jumped to the highest level since last June, following a purge of the Seaway pipeline ahead of its planned reversal as well as reduced refinery runs in the region.

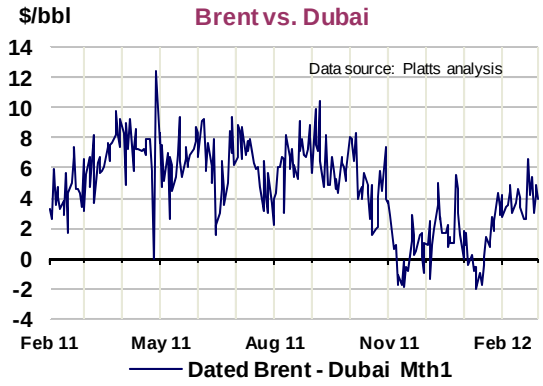




Although European refiners continue to search for replacement grades for heavier Iranian barrels, spot crude markets are currently fairly well-supplied, especially with lighter crudes. However, Brent prices have remained relatively strong given increased demand from Asia, while demand for Urals and light crudes from Nigeria eased on ample supplies and weak refiner demand. The Brent price differential to distillate-rich Nigeria crudes tumbled, with the Brent-Bonny spread falling to just $0.20/bbl in early March compared with $1.10/bbl on average in February and a robust $2.75/bbl in January.

The Brent-Urals premium also collapsed in February, in part due to weaker fuel oil crack spreads. Urals was also supported early in the New Year by higher refiner interest in the grade since it is considered a suitable replacement for Iranian crude in Europe. After posting an unusual premium to Brent for several days at the end of January, Urals in the Mediterranean was trading at a $1.10 /bbl discount to Brent on average in February and a sharp $3.30/bbl discount by early March.

Brent crude's premium to Dubai widened in February on reduced demand for the latter as the northern hemisphere winter drew to a close and on ample supplies of sour grades. The Brent-Dubai differential widened to around -$3.40/bbl in February compared to around -$0.80/bbl in January. Relatively strong Asian demand, however, is keeping a floor under Middle East crude prices, especially given the loss of heavier crude supplies from Syria, South Sudan, Sudan and Yemen.

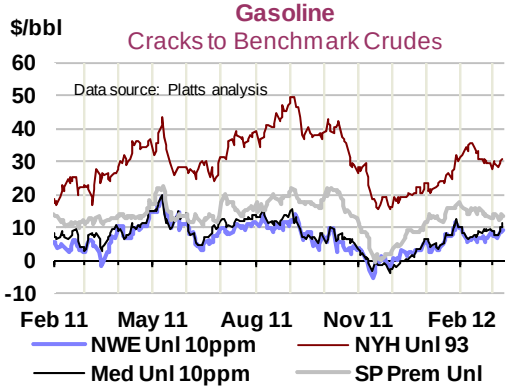


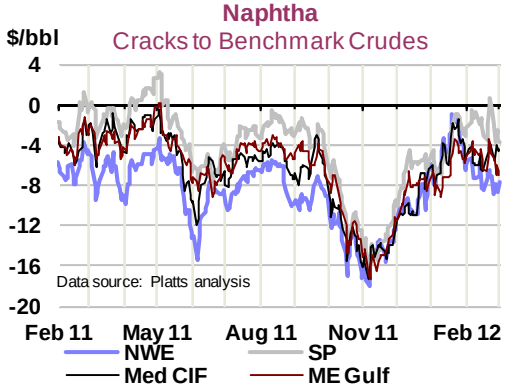
China has reportedly increased purchases of Saudi grades and Russian ESPO crude in recent weeks although there are signs that at least one lengthy pricing dispute that had seen Chinese term purchases of Iranian crude running at half 2011's 550 kb/d has been resolved. New contracts run from April, although it is thought likely that Chinese refiners will continue to seek alternative Middle East supplies in an effort to be seen to be reducing Iranian offtake in 2012. However, unlike European refiners directly affected by the oil embargo on Iran, including a cut-off in insurance coverage for tanker liftings, Chinese companies are able to use the domestic fleet, which is less reliant on European insurance.

Spot Product Prices

Markets for middle distillates and fuel oil softened with the end of the peak winter demand season and as earlier tightness on the supply-side eased. Crack spreads fell for middle distillates and fuel oil in February on weaker fundamentals and as product prices lagged behind the sharp increase in crude prices. In contrast, gasoline crack spreads continued to show strength, although narrowing from the elevated levels seen in early February.

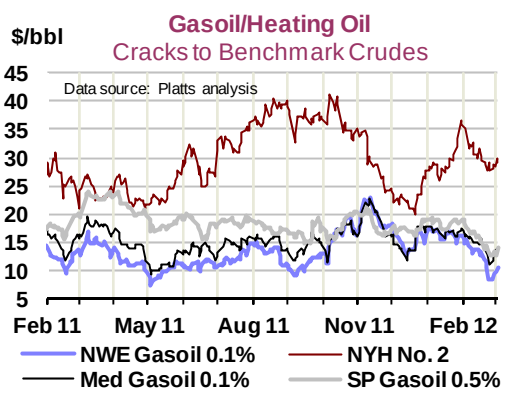
Gasoline crack spreads rose month-on-month in all regions. In the US Gulf, gasoline crack spreads increased by $1.52/bbl versus Mars, and in New York Harbour by $6.66/bbl to WTI. The refinery closures both in Europe and the Caribbean supported markets at the beginning of the month. However, crack spreads narrowed throughout February as low demand readings again came into focus, and with increasing stocks as both US refinery runs were high and the arbitrage from Europe was open.

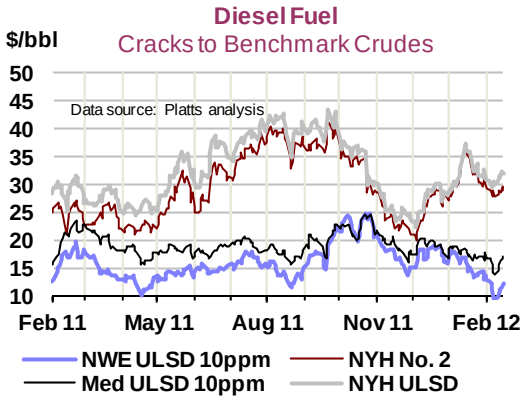




In Europe, gasoline crack spreads widened by $0.69/bbl versus Brent in Northwest Europe, and by $1.32/bbl to Urals in the Mediterranean. Prices were supported by export opportunities to the US, Latin America and the Middle East. Regional supplies were tighter on seasonally lower regional refinery runs, leading to a large stock draw in independent storage in the ARA region. Meanwhile in Asia, gasoline cracks were stable over the month, and strengthened slightly by $0.35/bbl versus Dubai. Robust demand continued to provide a floor to prices as well as the upcoming refinery maintenance season.

Naphtha prices showed diverging trends in February, with markets weakening in Europe while strengthening in Asia. Asian crack spreads increased by $3.12/bbl to Dubai month-on-month, and crack spreads moved into positive territory at end-February for the first time since May 2011. Increased demand from the petrochemical industry in South Korea and Taiwan helped lift cracks, but just as important were fears of tight supplies due to refinery maintenance and lower arbitrage volumes from Europe. In Europe, weak demand and a closed arbitrage to the East pressured crack spreads lower in February.





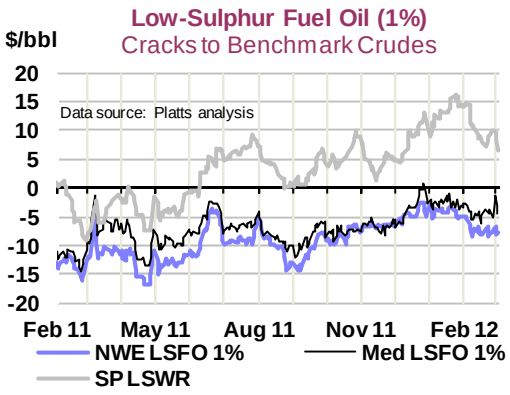
Middle distillate crack spreads trended downwards in February, falling in all regions bar New York Harbour. In Northwest Europe, diesel to Brent fell by $3.42/bbl month-on-month, to an average $14.29/bbl. Demand was generally weaker as the peak winter season came to an end and high flat prices also limited buying. More important, however, was the large stock build seen in the ARA region in February, partly caused by an open arbitrage from the US due to high prices. The cold snap at the beginning of the month had only a marginal impact on the market as icing problems on the Rhine limited distribution to the inland markets. Also, consumers were reluctant to replenish stocks at the end of the winter heating season given the high price level. In the Mediterranean, cracks were better supported by strong demand from North Africa, and less inflows from Russia due to high domestic demand, limiting supplies available for exports.

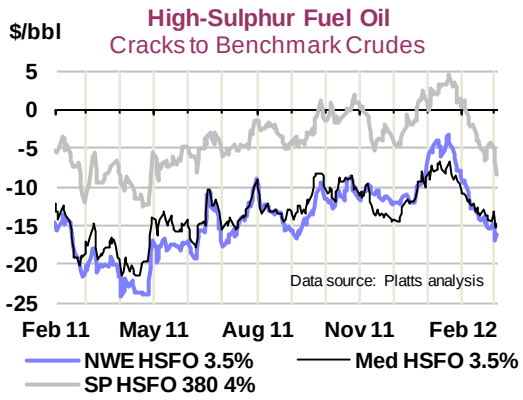
In the US, middle distillate markets also softened in February. Heating oil crack spreads fell by $1.82/bbl to Mars in the US Gulf, whereas the crack spread firmed by $4.09/bbl versus WTI in New York Harbour due to the relative weakness of WTI. Generally, middle distillate markets were supported by arbitrage possibilities, both to Latin America and Europe. However, markets eased as higher regional refinery runs led to stocks building.

In Asia, Singapore gasoil crack spreads narrowed by $1.73/bbl to Dubai month-on-month. High prices slowed demand, and limited arbitrage opportunities due to weaker European prices left supplies stranded in the region. Stocks built considerably in Singapore, and were at month-end above the five-year average for the first time since the end of October.

Fuel oil crack spreads also narrowed in February, with HSFO crack spreads falling in a $3.80-$5.79/bbl range in Europe and Asia, whereas LSFO crack spreads fell a lesser $1.15-$2.62/bbl. In Asia, crack spreads were pressured lower as fuel oil demand in China fell after the Lunar New Year and in Japan with the end

of the peak winter demand season, albeit power sector demand remains supportive. At the same time, fuel oil stocks swelled as large arbitrage volumes continued to arrive from the West.

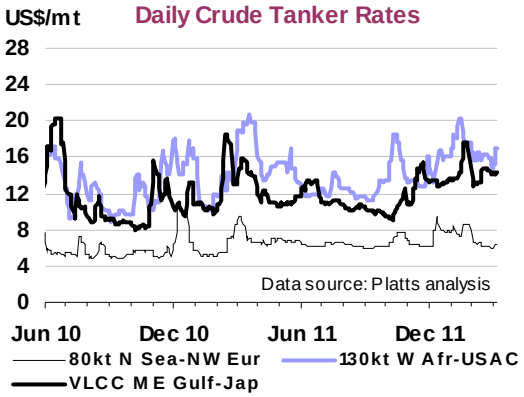


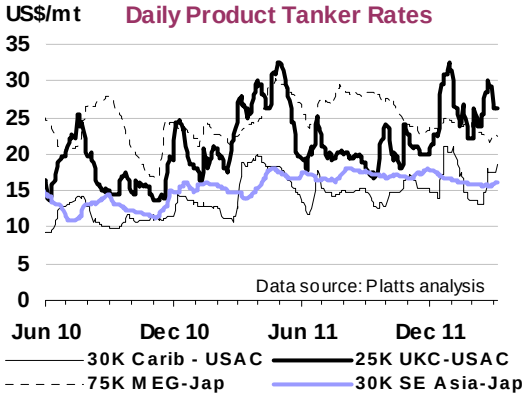


In Europe, fuel oil markets weakened as both demand fell and supplies increased. European utility demand declined with warmer weather throughout February, and inflows from the Black Sea increased in the second half of the month after icing problems reduced exports from ports earlier in February. In addition, a less workable arbitrage to Asia in the second half of the month kept volumes in Europe with stocks building as a result.

Freight

Despite buoyant demand for Middle Eastern crudes in Asia, notably China, vessel oversupply again weighed heavily, with rates on the benchmark Middle East Gulf – Japan route trading flat at close to $14/mt from mid-February onwards. Although rates remain relatively high compared to the dire 3Q11 performance, surging bunker prices have capped earnings. The West Africa Suezmax market was relatively volatile during February with short periods of activity not sustained and ample tonnage further limiting gains. Despite the volatility, by early-March rates stood at close to $17/mt, the same level as a month earlier. The North Sea Aframax market fared the worst out of the benchmark trades as rates stayed close to $6/mt throughout February. The low rates combined with high bunker costs reportedly pushed earnings to their lowest level in over two years.





Diverging trends were reported in product tanker markets, with the Atlantic Basin out performing voyages serving Asian markets. The transatlantic gasoline trade again took off after a wide arbitrage opened up to move product from Europe to the US Atlantic coast, consequently as charters scrambled to find available vessels the rate surged to over $30/mt by late-February. However, as is often the case on this voyage the rate dropped back to $26/mt by early-March as a raft of new vessels entered the market and combined with slowing demand. In the East, all benchmark voyages have been on a steady

downward trend so far this year as a mixture of sluggish demand and vessel oversupply has pressured rates. The Singapore – Japan short-haul route languished at close to $16/mt for much of February but some upward momentum was generated in early-March as increased demand tightened tonnage. An early-March upturn was also evident on the long range Middle East Gulf – Japan route as increased demand was sufficient to soak up excess tonnage.

Market intelligence suggests that our previous assessments of Iranian floating storage at over 30 mb were too high. It is now widely reported that Iranian floating volumes recently sharply declined to 8 mb, stored on 4 vessels after NITC was required to employ more of their tankers to maintain deliveries in the absence of western vessels currently prohibited from calling at Iranian ports due to insurance issues connected to US sanctions. As this situation persists, the potential for a future rise in Iranian floating storage is strongly diminished.

REFINING

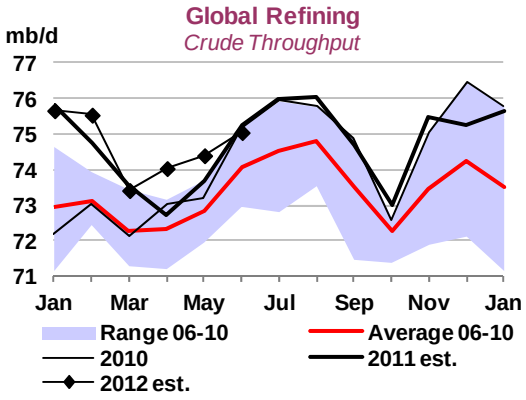
Summary

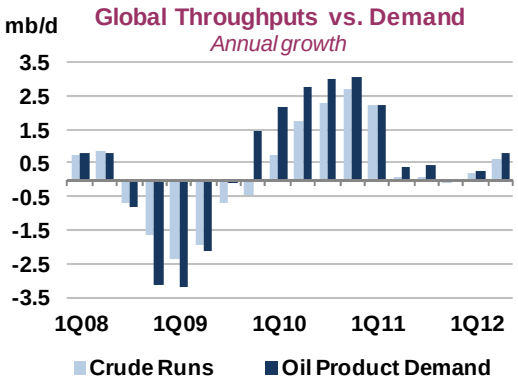
- **Global refinery crude throughputs have been revised slightly lower for 1Q12, on weaker-than-expected non-OECD readings for a number of countries**. A counter-seasonal increase in US runs in February, however, provided partial offset. In all, 1Q12 global runs are estimated to post annual gains of 180 kb/d, to average 74.9 mb/d, or 35 kb/d less than previously forecast.

- **Final data for December for a number of non-OECD countries led to 4Q11 global refinery crude run estimates being adjusted lower by 300 kb/d**, to 74.6 mb/d, or 120 kb/d below year-earlier levels. Annual growth is expected to resume in 1Q12 and 2Q12, with global crude throughputs forecast to rise 180 kb/d and 610 kb/d, respectively, to average 74.9 mb/d and 74.5 mb/d.

- **OECD refinery runs fell seasonally by 220 kb/d in January, to 36.8 mb/d on average.** The start of seasonal maintenance in the US and Europe, and the closure of capacity in Europe brought runs lower in these regions, while Pacific runs inched higher on stronger Japanese throughputs. While preliminary data show US runs rising counter-seasonally in February, after strong margins in January and amid relatively light turnarounds, throughputs are expected to fall seasonally in coming months.

- **Refinery margins plummeted in February,** and reached negative territory for most benchmarks surveyed, after a temporary respite in January. The reported closure of Atlantic Basin capacity had raised margins earlier in the year. Product prices then failed to keep up with crude oil price increases through February, and further downward pressure on margins came from news of the return to operation of capacity (Petroplus) in Europe. Margins on the US West Coast fared better, after a fire and shutdown of BP's Cherry Point plant in February.





Global Refining Overview

Global refinery crude throughputs have been revised down by 35 kb/d for 1Q12 following weaker readings for a number of non-OECD countries for December and January. In fact, December global crude runs were a sizeable 0.6 mb/d weaker than forecast, on lower run estimates for several countries, including Venezuela, Syria, Saudi Arabia, South Africa and Algeria. As a result, global runs contracted by an estimated 1.2 mb/d annually for the month, a level of decline last seen in October 2009.

While January estimates have also been reduced, based on the weaker December readings and some additional outage information, runs are expected to return to year-ago levels before rebounding from March onwards. Growth is seen coming from China, India, Russia, and most recently, the US. US50 crude intake in February was more than 1 mb/d above year-earlier levels. Improved US Gulf Coast refinery

margins in January, and a lighter-than-normal maintenance schedule, helped runs rise counter-seasonally in February. With swelling product inventories and a sharp deterioration of margins through February and into March, runs there are also likely to decline in coming weeks.

In fact, refinery margins plummeted for most benchmarks surveyed in February, after a temporary respite in January. Margins were lifted earlier in the year, by the closure of capacity in the Atlantic Basin and concerns over product supplies. News of the return to operation of capacity in Europe (Petroplus) brought margins sharply lower again in February, and most benchmarks were negative in early March. Margins on the US West Coast fared better, following a fire and shutdown of BP's Cherry Point plant in February.

Selected Refining Margins in Major Refining Centres

($/bbl)

		Monthly Average				Change	Average for week ending:				
		Dec 11	Jan 12	Feb 12		Feb 12-Jan 12	10 Feb	17 Feb	24 Feb	02 Mar	09 Mar
NW Europe	Brent (Cracking)	-0.22	3.01	1.48	↓	-1.53	2.06	0.90	0.89	-0.31	-0.80
	Urals (Cracking)	0.34	3.95	2.20	↓	-1.75	2.67	1.72	1.61	1.47	2.04
	Brent (Hydroskimming)	-1.93	0.87	-1.39	↓	-2.26	-0.34	-2.05	-2.31	-3.60	-4.00
	Urals (Hydroskimming)	-4.51	-0.87	-4.16	↓	-3.30	-2.96	-4.70	-5.38	-5.69	-5.18
Mediterranean	Es Sider (Cracking)	-1.23	2.21	1.41	↓	-0.80	1.62	1.19	1.09	0.34	0.58
	Urals (Cracking)	-1.38	2.16	0.74	↓	-1.42	0.84	0.42	0.29	-0.24	-0.03
	Es Sider (Hydroskimming)	-4.11	-1.31	-2.77	↓	-1.46	-2.01	-3.09	-3.50	-4.11	-3.71
	Urals (Hydroskimming)	-6.70	-3.43	-6.14	↓	-2.71	-5.43	-6.48	-7.18	-7.81	-7.73
US Gulf Coast	Brent (Cracking)	-6.30	-1.85	-3.96	↓	-2.12	-2.74	-4.84	-4.70	-6.75	-7.17
	LLS (Cracking)	-1.65	4.75	1.73	↓	-3.02	4.01	-0.27	-0.16	-0.31	-0.09
	Mars (Cracking)	-3.70	1.06	-0.25	↓	-1.31	0.98	-1.00	-0.99	-2.44	-1.45
	Mars (Coking)	-2.02	2.58	1.13	↓	-1.45	2.06	0.10	0.88	-0.94	0.20
	Maya (Coking)	-8.02	-2.11	1.42	↑	3.53	2.45	0.78	1.56	-0.33	1.22
US West Coast	ANS (Cracking)	-1.32	0.89	2.65	↑	1.76	0.72	1.93	4.59	3.37	3.06
	Kern (Cracking)	1.00	8.61	8.02	↓	-0.59	9.40	8.19	8.30	3.84	6.46
	Oman (Cracking)	-5.20	-0.91	2.37	↑	3.28	0.66	2.07	5.20	2.28	1.60
	Kern (Coking)	2.22	7.25	10.18	↑	2.93	10.68	9.13	12.03	9.24	11.76
Singapore	Dubai (Hydroskimming)	-2.08	0.83	-1.17	↓	-2.00	0.48	-1.32	-2.76	-3.87	-4.60
	Tapis (Hydroskimming)	-7.97	-4.29	-5.85	↓	-1.56	-4.08	-6.02	-7.94	-8.91	-9.91
	Dubai (Hydrocracking)	-0.66	2.08	0.98	↓	-1.10	2.15	0.79	-0.25	-1.05	-2.04
	Tapis (Hydrocracking)	-8.54	-5.05	-6.34	↓	-1.29	-5.05	-6.64	-8.07	-8.83	-10.26
China	Cabinda (Hydroskimming)	-0.07	2.68	0.54	↓	-2.15	2.32	0.60	-2.02	-1.99	-2.40
	Daqing (Hydroskimming)	-0.48	0.93	0.93	↓	-0.01	2.22	1.28	-0.65	-1.60	-2.04
	Dubai (Hydroskimming)	-2.37	0.45	-1.52	↓	-1.97	0.18	-1.71	-3.14	-4.30	-5.00
	Daqing (Hydrocracking)	-0.61	1.12	1.82	↑	0.71	2.18	1.98	0.92	0.44	-0.67
	Dubai (Hydrocracking)	-0.82	1.82	0.79	↓	-1.04	1.99	0.55	-0.46	-1.32	-2.28

For the purposes of this report, refining margins are calculated for various complexity configurations, each optimised for processing the specific crude in a specific refining centre on a 'full-cost' basis. Consequently, reported margins should be taken as an indication, or proxy, of changes in profitability for a given refining centre. No attempt is made to model or otherwise comment upon the relative economics of specific refineries running individual crude slates and producing custom product sales, nor are these calculations intended to infer the marginal values of crudes for pricing purposes.

*The China refinery margin calculation represents a model based on spot product import/export parity, and does not reflect internal pricing regulations.
Sources: IEA, Purvin & Gertz Inc.

In all, 4Q11 global throughputs are now assessed at 74.6 mb/d, 120 kb/d below year-earlier levels, but are seen rising to 74.9 mb/d in 1Q12. Recent months' Chinese and Russian data point to healthy refinery activity in those countries, as do data for Brazil, South Korea and the US. On the other hand, European runs remain depressed, a phenomenon which may persist in months to come if individual refiners struggle to replace Iranian barrels.

2Q12 throughputs are estimated to fall seasonally to 74.5 mb/d, nonetheless returning to annual growth of around 0.6 mb/d. Strength comes from China, the US, and Other Asia, all of which see the

commissioning of new capacity. The start-up of Motiva's expanded Port Arthur plant on the US Gulf Coast adds an additional 325 kb/d to US distillation capacity. China commissioned new capacity during December and January, which will ramp up over coming months. Despite some delays, new Indian capacity is expected to gradually ramp-up from March onwards, including MRPL's Mangalore refinery, the Bathinda grassroots project, Nagarjuna, as well as Essar's expanded Vadinar plant.

Global Refinery Crude Throughput[1]

(million barrels per day)

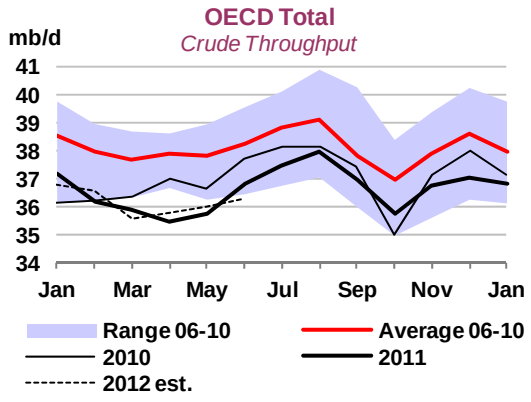
	Nov 11	Dec 11	**4Q2011**	Jan 12	Feb 12	Mar 12	**1Q2012**	Apr 12	May 12	Jun 12	**2Q2012**
North America	18.0	18.0	**17.9**	17.7	17.8	17.4	**17.6**	17.8	18.1	18.3	**18.1**
Europe	12.1	12.3	**12.1**	12.1	11.9	11.7	**11.9**	11.6	11.8	12.1	**11.9**
Pacific	6.6	6.8	**6.5**	7.0	6.9	6.5	**6.8**	6.4	6.1	5.9	**6.1**
Total OECD	**36.7**	**37.0**	**36.5**	**36.8**	**36.6**	**35.6**	**36.3**	**35.8**	**36.0**	**36.3**	**36.0**
FSU	6.6	6.6	**6.6**	6.7	6.8	6.5	**6.7**	6.4	6.7	6.8	**6.6**
Non-OECD Europe	0.6	0.6	**0.5**	0.6	0.5	0.5	**0.5**	0.5	0.6	0.6	**0.6**
China	9.2	9.2	**9.1**	9.3	9.3	9.2	**9.3**	9.4	9.1	9.2	**9.2**
Other Asia	9.1	9.1	**8.9**	9.2	9.2	9.0	**9.2**	9.0	9.1	9.2	**9.1**
Latin America	5.1	4.8	**5.0**	5.0	5.1	4.9	**5.0**	5.0	4.9	4.9	**4.9**
Middle East	6.1	5.9	**6.0**	5.8	5.9	5.5	**5.7**	5.6	5.9	5.9	**5.8**
Africa	2.2	2.0	**2.1**	2.2	2.2	2.2	**2.2**	2.2	2.1	2.1	**2.2**
Total Non-OECD	**38.7**	**38.3**	**38.1**	**38.9**	**38.9**	**37.9**	**38.6**	**38.2**	**38.4**	**38.7**	**38.5**
Total	**75.5**	**75.3**	**74.6**	**75.7**	**75.5**	**73.4**	**74.9**	**74.0**	**74.4**	**75.1**	**74.5**

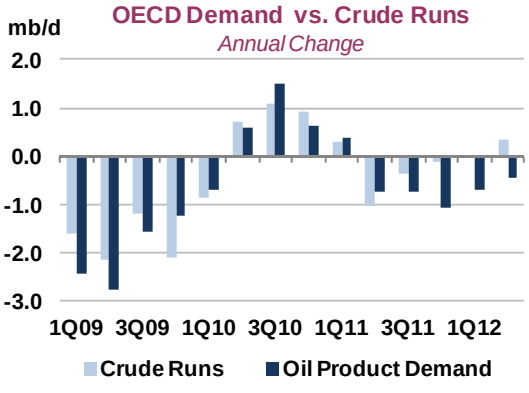
1 Preliminary and estimated runs based on capacity, known outages, economic run cuts and global demand forecast

Note: US Virgin Islands included in North America and not Latin America as previously

OECD Refinery Throughput

OECD refinery crude throughputs declined seasonally in January, to 36.8 mb/d from 37.0 mb/d a month earlier, in line with our previous forecast. Runs declined in North America and Europe, while higher runs in the Pacific provided a partial offset. European runs increased their deficit to year-earlier levels, averaging close to 0.5 mb/d less than the same month in 2011. French and Italian runs in particular were weak compared to year-earlier levels. US50 runs on the other hand, averaging some 140 kb/d more than a year earlier, continued to benefit from better margins and supportive product exports. South Korean throughputs remained near record levels.





Preliminary data for February show total OECD runs slightly lower than January, at 36.6 mb/d, but 350 kb/d higher than previously expected. A counter-seasonal increase in US crude intake offset lower runs in the Pacific. North American crude runs indeed posted a 0.9 mb/d annual increase in February, on

a light seasonal maintenance schedule and relatively healthy refining margins in January, while both European and Pacific throughputs remained at the bottom of their historical range.

Refinery Crude Throughput and Utilisation in OECD Countries
(million barrels per day)

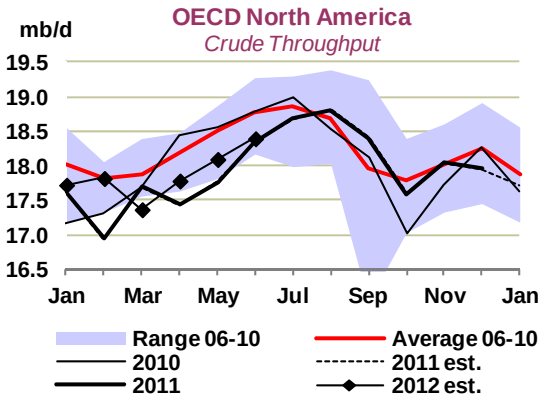
							Change from		Utilisation rate[1]	
	Aug 11	Sep 11	Oct 11	Nov 11	Dec 11	Jan 12	*Dec 11*	*Jan 11*	Jan 12	Jan 11
US[2]	15.59	15.27	14.54	14.96	14.84	14.59	-0.25	0.14	84.8%	82.5%
US Virgin Islands	0.30	0.30	0.27	0.27	0.27	0.30	0.03	0.04	86.3%	75.1%
Canada	1.68	1.74	1.62	1.63	1.68	1.62	-0.06	-0.17	88.4%	97.9%
Mexico	1.24	1.10	1.15	1.18	1.16	1.21	0.06	0.09	73.6%	72.7%
OECD North America	**18.81**	**18.41**	**17.59**	**18.04**	**17.95**	**17.73**	**-0.23**	**0.11**	**85.7%**	**84.4%**
France	1.37	1.33	1.32	1.38	1.41	1.17	-0.23	-0.25	75.0%	81.3%
Germany	2.02	1.91	2.03	1.96	1.95	1.95	0.00	-0.03	91.4%	82.9%
Italy	1.66	1.57	1.55	1.52	1.55	1.57	0.03	-0.20	72.0%	77.9%
Netherlands	1.04	1.04	0.97	0.97	1.03	1.08	0.06	0.06	84.1%	79.1%
Spain	1.07	1.09	1.00	1.10	1.09	1.09	0.00	0.01	71.7%	76.3%
United Kingdom	1.51	1.47	1.39	1.45	1.46	1.48	0.02	0.00	81.7%	81.6%
Other OECD Europe	3.94	3.76	3.64	3.75	3.83	3.77	-0.07	-0.04	76.4%	77.4%
OECD Europe	**12.61**	**12.18**	**11.90**	**12.13**	**12.30**	**12.11**	**-0.19**	**-0.45**	**78.5%**	**79.3%**
Japan	3.37	3.14	2.98	3.20	3.37	3.57	0.20	-0.16	77.7%	79.1%
South Korea	2.43	2.50	2.63	2.64	2.62	2.65	0.03	0.11	96.8%	93.0%
Other OECD Pacific	0.74	0.73	0.63	0.72	0.77	0.74	-0.03	0.02	78.9%	76.3%
OECD Pacific	**6.54**	**6.37**	**6.24**	**6.56**	**6.76**	**6.96**	**0.20**	**-0.03**	**84.1%**	**83.3%**
OECD Total	**37.96**	**36.95**	**35.73**	**36.73**	**37.01**	**36.79**	**-0.22**	**-0.38**	**82.2%**	**81.7%**

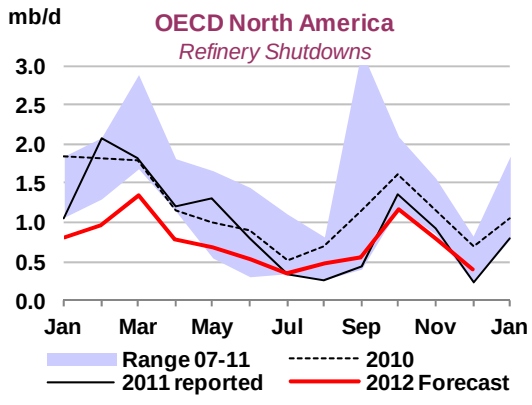
1 Expressed as a percentage, based on crude throughput and current operable refining capacity

2 US50

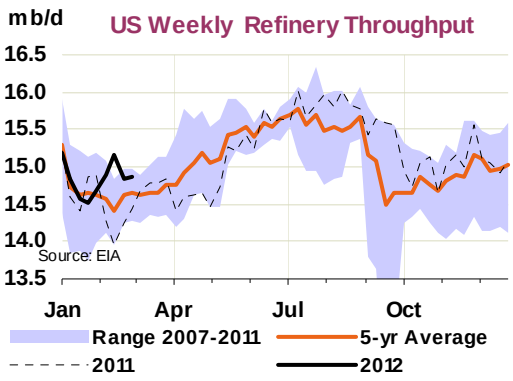
North American crude runs fell by 225 kb/d in January, as seasonal maintenance got underway. Scheduled turnarounds were lighter than normal in the US, leaving regional runs 105 kb/d above year-earlier levels. **US50** runs, which are estimated to have outperformed year-earlier levels by 140 kb/d based on preliminary data, posted gains on the West Coast and in the Midwest, while Gulf and East Coast operations were lower year-on-year.

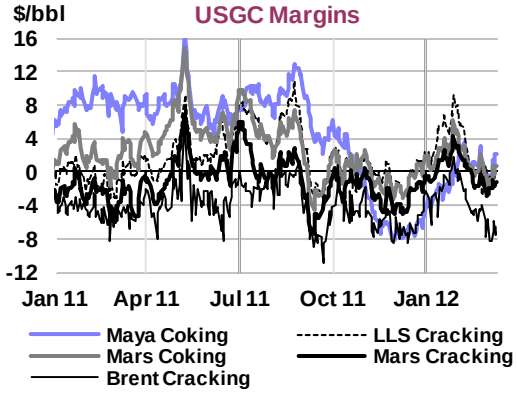
Note: from this month's report we have included the US Virgin Islands in the North American regional breakdown, rather than in Latin America. Hovensa shut its 350 kb/d Caribbean refinery in mid-February after accumulating losses of $1.3 billion in past three years. The plant supplied the US East Coast in particular, but recently also expanded sales to other markets.





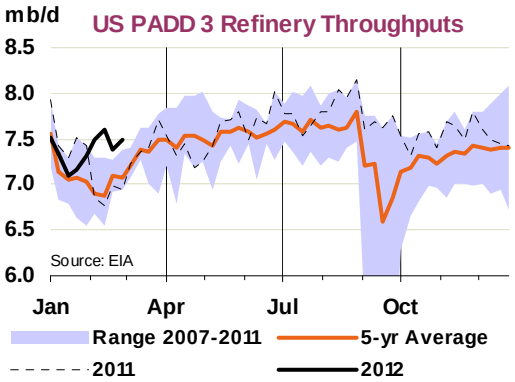
US Gulf Coast margins improved sharply over January, on higher gasoline cracks following the news of reduced capacity on the East Coast and in the US Virgin Islands. Hovensa announced in early January it would halt operations at its Caribbean plant by mid-February, further tightening Atlantic Basin product markets. On the East Coast, Sunoco idled its 178 kb/d Marcus Hook refinery in December 2011 following the shutdown of ConocoPhillips' 185 kb/d Trainer refinery in September 2011. With high throughputs in February, however, margins plummeted on the Gulf Coast again and reached negative territory for all benchmarks surveyed in early March, except for Maya coking. West Coast margins were supported by a 17 February fire at BP's 220 kb/d Cherry Point refinery, which damaged the plant's only crude unit and forced the refinery's shutdown. While the duration of the outage is still not clear, some sources estimated it could be several months before full operations are restored.

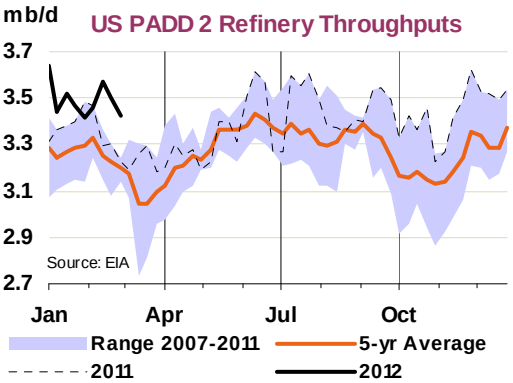




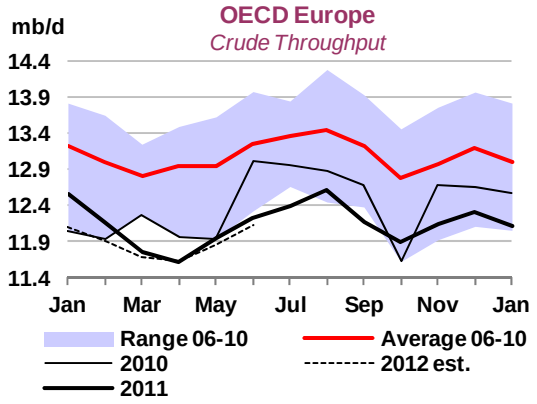
US50 crude runs rose counter-seasonally in February, to an estimated 14.8 mb/d based on adjusted weekly data from the EIA. Higher margins in January and a lighter-than-normal maintenance schedule underpinned higher February throughputs. As a result, it is estimated that North American refiners processed almost 0.9 mb/d more crude than a year earlier. Year-on-year gains were mostly accounted for by Gulf Coast refiners who added 685 kb/d. Midwest and West Coast refiners were also posting gains, of 160 kb/d and 75 kb/d, respectively, with only the East Coast contracting annually due to the shutdowns mentioned above.

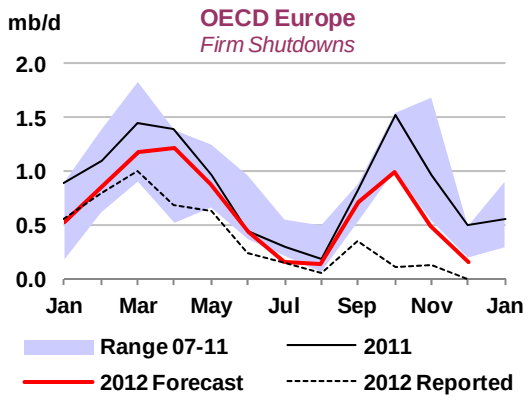
Month-on-month, US Gulf Coast throughputs rose 235 kb/d in February, to 7.4 mb/d on average. The start-up of Motiva's expanded Port Arthur refinery in coming months could further lift runs. The Motiva Port Arthur refinery, which is a 50-50 joint venture between Saudi Aramco and Shell, is near completion of a $7 billion expansion that will make the plant the largest refinery in the US. Operable capacity will increase from 285 kb/d currently to 600 kb/d, and coking capacity will nearly double to 95 kb/d allowing the plant to process heavier crudes. A new hydrocracker will further increase the plant's distillate yields while increased reforming capacity will boost high-octane gasoline component output. We expect the plant to come on stream in 2Q12, but the exact timing of ramp-up has still not been announced.





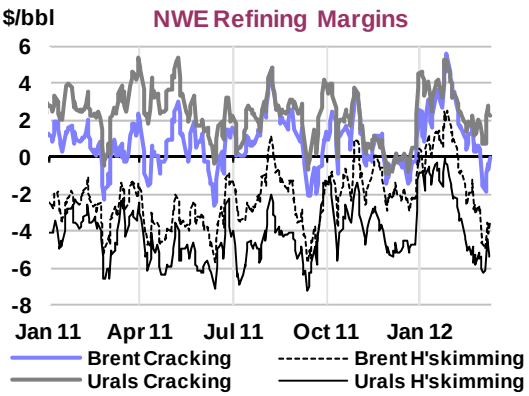
OECD European runs fell by almost 200 kb/d in January to 12.1 mb/d, close to 0.5 mb/d less than a year earlier. Declines were steepest in France, were LyondellBasell halted operations at its 105 kb/d Berre refinery at the beginning of the year and insolvent Petroplus shut the Petit Couronne refinery mid-month when crude supplies ran out. Maintenance work at Total's La Mede plant and Ineos' neighbouring Lavera refinery cut rates further. French throughputs were 230 kb/d lower month-on-month, and 250 kb/d below a year earlier. Runs were also lagging year-earlier levels in Italy, these averaging 200 kb/d less in January, at 1.57 mb/d. Eni's 80 kb/d Porto Marghera refinery remains shut due to poor margins and several other refiners have also had to reduce runs due to weak economics. Italian refiners were particularly hard hit by the loss of Libyan supplies and more recently the Iranian embargo. Italian refiners sourced 23% of their crude from Libya in 2010 and 13% from Iran.

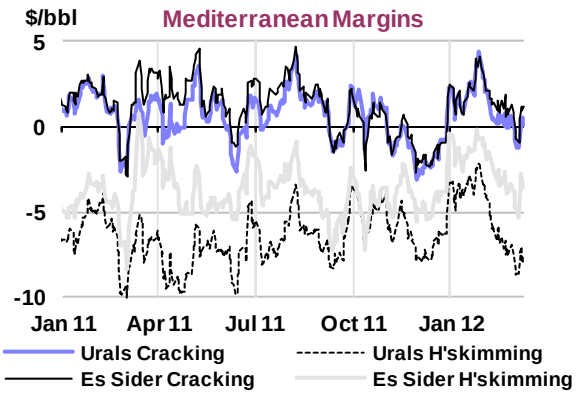




European crude runs are expected to fall further through April, as regional maintenance intensifies. The spring turnaround schedule is nevertheless expected to be lighter than last year, even including the temporary shutdowns of Petroplus' refineries and the economic run cuts at Repsol's Bilbao refinery and Eni's Porto Marghera.

European refining margins deteriorated sharply in February and early March, on ever-rising crude prices and on the news that some Petroplus plants would resume operation. Margins had earlier been given a lift in January on news of the refinery closures in the Atlantic basin. NWE cracking margins fell by $1.53/bbl and $1.75/bbl for Brent and Urals, respectively, in February, with Brent margins dipping into negative territory in early March. Cracking margins in the Med fell by similar amounts and also posted losses in early March. Simple (hydroskimming) margins further deteriorated in both the north and south, reaching losses of up to $8/bbl for refiners processing Urals in the Med.





Petroplus Assets Back in Action

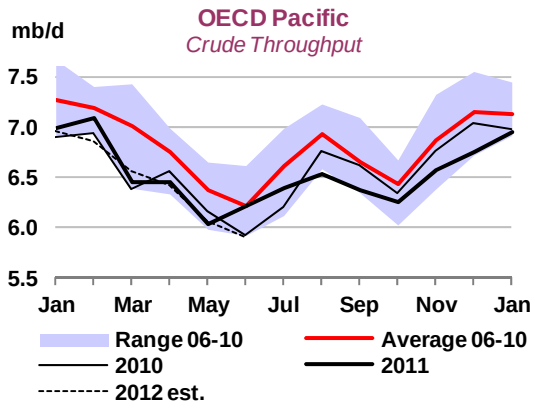
After a rough start to the year, Petroplus shareholders and employees finally received some good news in February. Geneva-based trading group Gunvor agreed to buy the group's Antwerp refinery and to continue to operate the plant on a long-term basis. The 108 kb/d plant was shut in early February when Petroplus had to file for insolvency as lenders withdrew over $1 billion in credit lines (see *Petroplus – Latest Victim of European Downstream Malaise* in OMR dated 18 January 2012). The plant, which is the least complex of the Petroplus portfolio, is expected to restart in mid-May according to a union source. The purchase could bolster the trader's position in the Northwest European product hub, and as the plant provides synergies with its capability to process Urals crude.

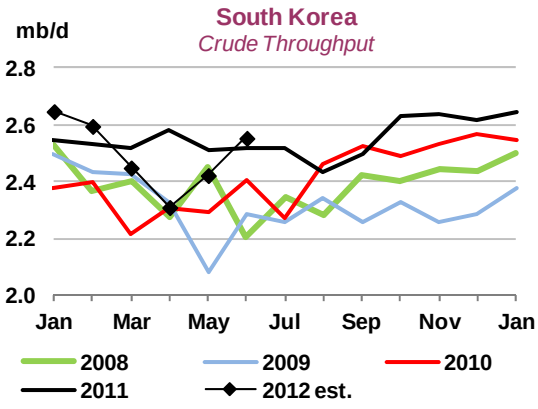
In France, Shell agreed to supply up to 100 kb/d of crude to the Petit Couronne refinery in a tolling agreement allowing the plant to restart before a sale. According to press reports, the restart could take from 6-10 weeks to allow for some maintenance to be undertaken. We assume the plant will start in early May at reduced rates of 100 kb/d.

The company's 220 kb/d Coryton, UK refinery, got a lifeline from Petroplus co-founder Marcel Van Poecke, as the investor teamed up with Morgan Stanley and another private equity firm to provide crude supplies for at least three months. The plant has been running at around 50% utilisation since late December when the company's financing troubles began. Under the tolling agreement, the group will supply crude to the plant, pay a fee for the crude oil to be processed at the refinery, and then take ownership of the refined products from the plant. Proposed throughput rates are not known. The plant, the most sophisticated of the portfolio, with a Nelson complexity factor of 12.0, has attracted a lot of interest from potential buyers, including both Russian and Asian players.

The company's German Ingolstadt plant, however, had to halt operations in February as crude supplies ran out, while the Swiss Cressier unit has been shut since early January. In all, we expect only Coryton to operate until May, when Petit Couronne and Antwerp will gradually restart.

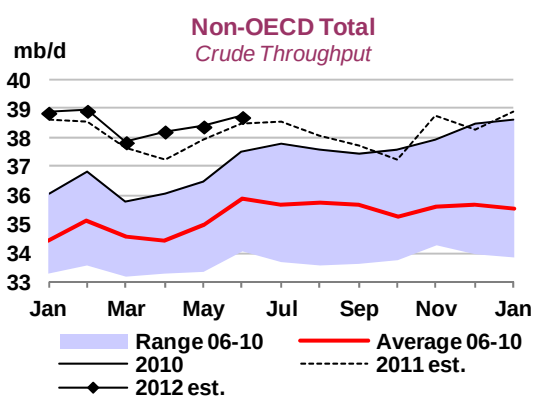
OECD Pacific crude runs were mostly in line with expectations for January, at 6.96 mb/d, up 200 kb/d month-on-month and unchanged from a year earlier, as higher South Korean runs offset weaker Japanese throughputs. Preliminary data from PAJ, however, point to still weaker Japanese crude intake in February, leading to a downward revision of 180 kb/d for the region. Pacific runs are set to fall sharply over coming months, to a low point of 5.9 mb/d in June as regional maintenance intensifies. JX Nippon announced on 9 March it had resumed full operations at its 145 kb/d Sendai refinery, one year after it was damaged in the earthquake and tsunami. The 11 March 2011 earthquake a tsunami shuttered nearly 1.4 mb/d of crude distillation capacity, or 31% of Japan's total. Of this 800 kb/d was restored within 10 days. Now, only Cosmo's 220 kb/d Chiba refinery remains offline following the disaster. The latter is still awaiting permission from local government to resume operations at the first of its two crude distillation units.

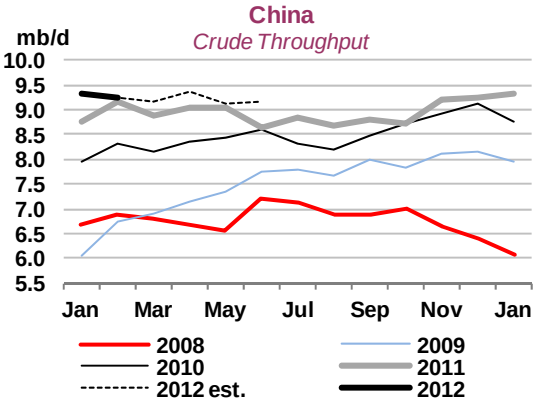




Non-OECD Refinery Throughput

Non-OECD refinery crude runs were revised lower for December and January, based on the most recent available data. 4Q11 non-OECD runs have been lowered by 320 kb/d to 38.1 mb/d, while 1Q12 estimates have been reduced by 155 kb/d, to 38.6 mb/d. Revisions for December came from a number of countries, including South Africa, Egypt, Algeria, Venezuela, Syria and Saudi Arabia. As a result, annual growth in non-OECD throughputs slowed to only 90 kb/d in 4Q11, from an average of 1.4 mb/d over the previous eight quarters. Annual growth is expected to pick up in 2012, to 290 kb/d in 1Q12 and rising to 580 kb/d in 2Q12, on stronger growth in China, Other Asia and the FSU.

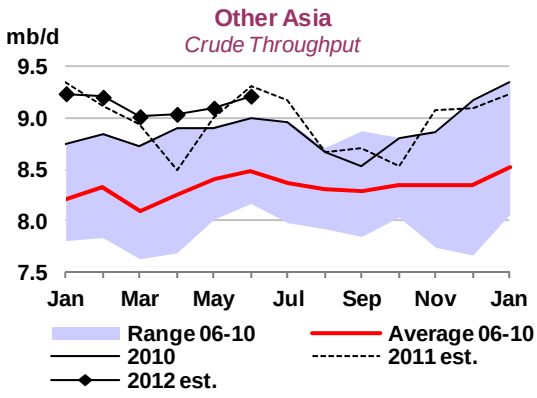


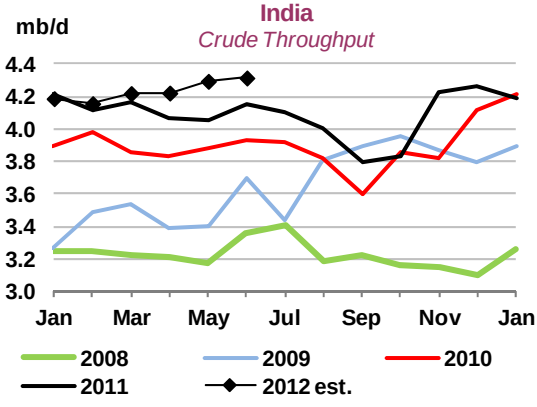


Chinese refinery runs reached another record high in January as refiners ramped up runs to secure adequate product supplies ahead of the Chinese New Year holiday. Throughputs averaged 9.34 mb/d, almost 0.6 mb/d higher than a year earlier, but 50 kb/d less than our previous forecast. As expected, refiners trimmed runs slightly in February, to 9.26 mb/d, with the onset of seasonal maintenance and as increasing crude oil prices cut into operating margins.

CNPC shut a 160 kb/d crude unit at its Zhenhai refinery from mid-February for 50 days, WEPEC were planning slightly lower runs due to maintenance at some secondary units, and Anqing Petrochemical shut a 110 kb/d unit for 45 days from 10 February. Runs have also likely fallen further in March as Sinopec's Maoming refinery also shut a 50 kb/d crude unit and Dalian is planning to shut one crude unit from late March. Chinese refineries are still loosing money due to government price controls on refined product sales.

Other Asian refinery throughputs were largely in line with expectations for December, averaging 9.1 mb/d. January runs, however, were 85 kb/d lower than forecast on weaker-than-expected activity in India. **Indian** crude runs fell by 0.6% monthly and 4.6% annually, to 4.2 mb/d, due to lower year-on-year runs at Reliance's 660 kb/d Jamnagar refinery. The plant's runs nevertheless stood at 709 kb/d, compared to 690 kb/d in December. Reliance shut a 290 kb/d crude unit at the 580 kb/d export plant from mid-February for three weeks of maintenance. This is the first scheduled turnaround at the plant since it was commissioned in 2008.



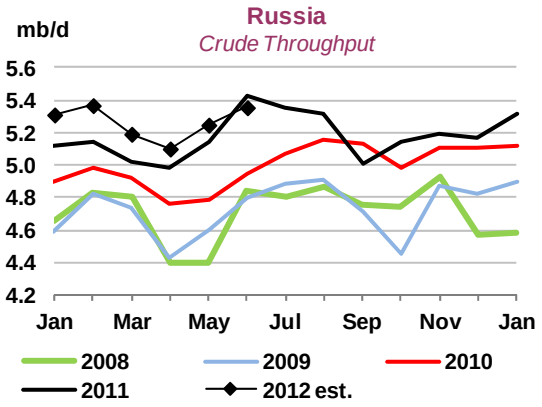


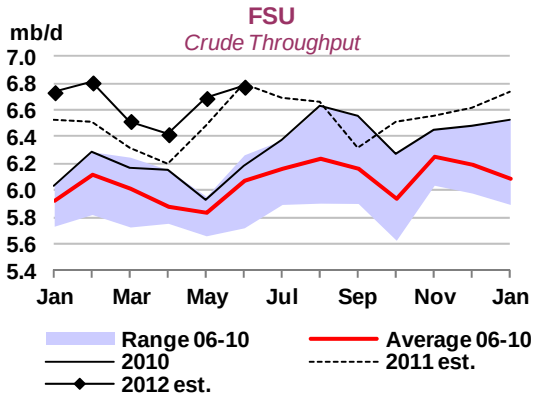
The start-up of the new Nagarjuna refinery, which was to be commissioned on 1 March, has been delayed by most likely three months due to damage caused by January's cyclone Thane. New capacity is still expected to be brought on line in March by MRPL, which is adding a 60 kb/d crude unit to its Mangalore refinery. The company is also adding a 60 kb/d vacuum distillation unit, a diesel hydrotreater, followed by other secondary units, including an FCC, later in the year.

Both Indian and Chinese crude oil imports reached all time highs in January. China imported 5.53 mb/d of crude in January, up 7.4% year-on-year, while India imported 4 mb/d, an 18.7% annual increase according to official data.

Taiwan's crude intake fell to only 706 kb/d in December, the lowest since April 2011, but in line with forecast. Refinery production at Formosa's 540 kb/d Mailiao refinery has yet to recover from a series of fires and outages that hit the plant in 2010/2011. The company is undertaking major safety checks, reducing output to differing degrees until at least May.

Russian refinery crude intake rose 145 kb/d in January to 5.31 mb/d on average, corresponding to 4.4% annual growth. The monthly increase stemmed mostly from the return to service of TNK-BP's Saratov refinery, which halted operations due to maintenance in December. Preliminary data show Russian refinery runs rose further in February, to 5.37 mb/d, up 5.3% annually, and some 140 kb/d above expectations. From March onwards, Russian throughputs are expected to fall sharply as refineries carry out seasonal maintenance. From practically no work in January and February, offline capacity in March is estimated at 335 kb/d, rising to almost 500 kb/d in April. Lukoil's Nizhny Novogrod, TNK-BP's Ryazan, Alliance's Khaborovsk, Slavneft's Yaroslav and Rosneft's Syrzan and Novokyibyshev plants, are among the refineries expected to reduce runs over the March-April period due to maintenance work.





Russian Refinery Runs Boosted by Higher Prices

While European competitors are balking at high crude prices and poor refining margins, Russian downstream operators are currently seeing their profits surge. Record-high crude prices not only mean higher taxes and export duties for the government and increased upstream revenue for operators. Also, the higher the outright crude price, the bigger the incentive for Russian oil companies to refine crude domestically and export products. While higher product exports have not yet materialised, Russian refiners are running at near-record utilisation rates to feed domestic markets and potentially build product inventories. Higher refinery margins in turn support increased investment in the downstream and higher oil product exports in coming years, one of government's main motivations for the "60-66"export duty reform.

Previously, Russian export duties rates were set with a substantial absolute difference between crude and product duties, with the greatest difference between fuel oil and crude, aimed at allowing Russian oil refiners to retain a greater share of their revenue as a means to finance modernisation. In practice, however, the tax rules resulted in higher exports of fuel oil to European refiners and little incentive to invest in upgrading capacity.

Russian Refinery Runs Boosted by Higher Prices (continued)

The 60-66 tax reform that was introduced on 1 October 2011, lowered the marginal tax rate on the export duty for crude oil from 65% to 60% in an attempt to stimulate upstream investments (See Supply and Refining sections in September 2011 *OMR*). At the same time, product export duties were aligned at 66% of the export duty for crude, with the exception of naphtha and gasoline duties, which were set at 90% to prevent domestic shortages. This meant that while the duty on gasoil and jet fuel was reduced from 67% of the rate of crude to 66%, the fuel oil duty was increased from 46.7% to 66%. The difference between crude and product duties were designed to cover the difference between transportation costs for crude oil and oil products.

The main objectives of the tax changes were to reduce the incentive for exporting fuel oil relative to lighter products, and incentivising Russian refiners to upgrade more fuel oil at domestic plants. The reduction of the difference in the duty between crude oil and oil products, in theory reduces the overall incentive for refiners. Current higher flat prices of Urals, however, offset the increase in product export duties.

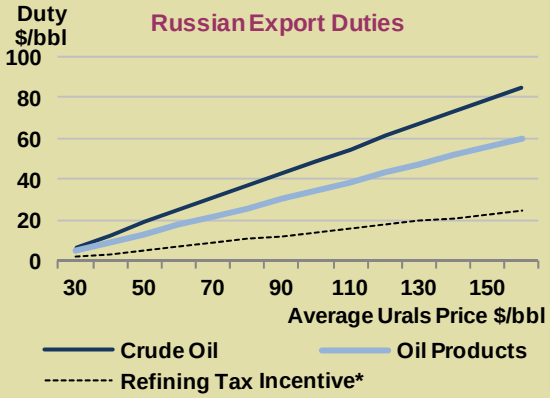
When Prime Minister Vladimir Putin signed the decree introducing the new export duty scheme on 26 August 2011, the price of Urals was $110/bbl. At this price the crude oil export duty was calculated at:

[$110/bbl -25] * 0.6 + $4/bbl = $55/bbl

With recent Urals prices approaching $125/bbl, the export duty increases to:

[$125/bbl -25] * 0.6 + $4/bbl = $64/bbl

Product duties have increased by less, however, from $38.90/bbl to $45.30/bbl (weighted average, based on current average refinery configurations). Therefore, a $15/bbl increase in the price of crude, has translated into a $9/bbl increase in crude oil export duty, but only a $6.40/bbl increase in product export duties. As a result, the increased refining margin (or refining "tax-incentive") increases by $2.60/bbl to $18.70/bbl – by far outweighing any transportation cost differences.

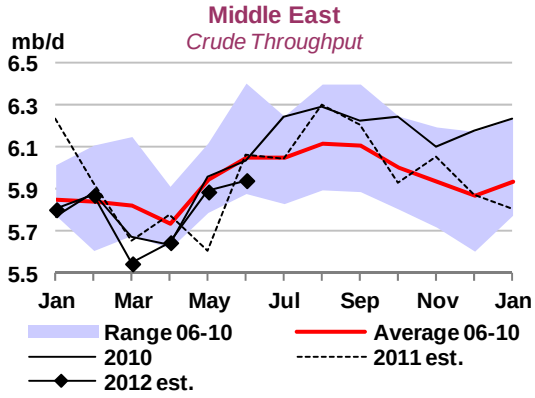


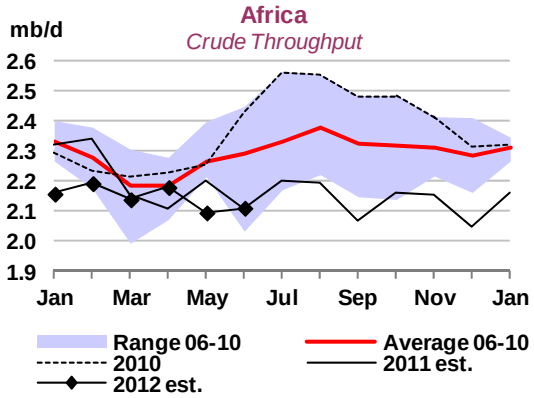
*Oil products export duty and refining tax incentive calculated based on current refining configuration (20% naphtha/gasoline yield, 80% other products). Of course, refineries will higher or lower complexity, will pay different product duties and enjoy varying tax incentives. Also, companies with higher fuel oil yield, incur lower margins than before the introduction of 60-66, though again offset by higher flat prices.

Elsewhere in the **FSU,** TNK-BP announced it would suspend supplies of crude to the 320 kb/d Lysychansk refinery in Ukraine from March, because of continuous operating losses. The duration of the shutdown is not known, but we assume it will be shut for at least a month. Despite nameplate capacity of some 800 kb/d, annual data show Ukraine's refineries were running at very low utilisation rates of around 25% in 2009 (latest available data). Kazakhstani crude runs fell by 27 kb/d in January, to 295 kb/d, down 8.5% from the previous month but 5.8% higher than January 2011. In Lithuania, PKN Orlen's Mazeikiu Nafta refinery will shut in March for maintenance.

Middle Eastern crude runs have been revised lower for 4Q11 following a rare revision to Saudi Arabia's JODI data. October crude runs were 175 kb/d lower than first published, at 1.8 mb/d. Iraqi crude runs are

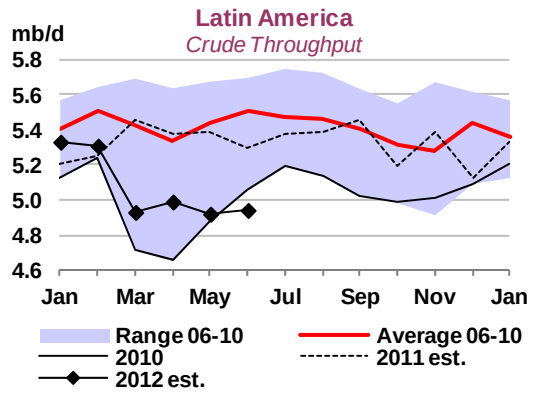
assessed at 592 kb/d in January, down from 600 kb/d in December. In Yemen, the Aden refinery remains shut, more than two months after a pipeline explosion halted crude deliveries to the plant. The country is seeking diesel imports to meet domestic demand. Oman is expected to undertake maintenance lasting 45 days at its 85 kb/d Mina al Hahal refinery starting March. While no data is available for Syria's downstream operations, we assume Homs refinery is running at reduced rates due to pipeline sabotage and reduced domestic production. Current Syrian oil production is estimated at 190 kb/d in 1Q12, all of which is assumed to feed the country's two domestic refineries with a combined capacity of 240 kb/d.





In **Africa,** the restart of Libya's Ras Lanuf plant has again been delayed, due to problems restoring Sarir and Mesla production. We now only expect the plant to resume operations by late-April. Chad's refinery output resumed in February, after the government and its Chinese partner, CNPC, reached an agreement over fuel pricing. While there is no monthly data tracking Sudanese crude runs, we assume that runs at the 100 kb/d Khartoum refinery have been reduced due to the shutting in of oil production.

In **Latin America,** Argentinean runs rebounded in December to 530 kb/d, from only 480 kb/d over the two previous months. January Brazilian runs were unchanged from December, at 1.87 mb/d. Regional runs were nevertheless revised down by 185 kb/d in December based on lower Venezuelan throughputs. A fire at the country's 310 kb/d Cardon refinery in early February could keep runs at reduced levels. We have also lowered our outlook for Aruba after Valero announced it had cut run rates by 50% due to weak margins. As discussed in the North America section, we have moved the US Virgin Islands plant out of the Latin American region and into OECD North America. That said, Hovensa completed the shutdown of its 350 kb/d refinery in mid-February.



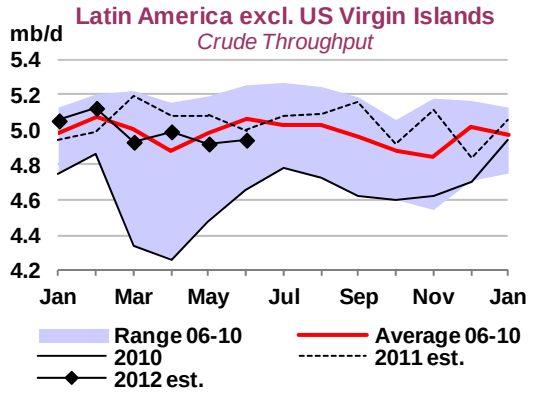


Table 1
WORLD OIL SUPPLY AND DEMAND
(million barrels per day)

	2008	2009	1Q10	2Q10	3Q10	4Q10	2010	1Q11	2Q11	3Q11	4Q11	2011	1Q12	2Q12	3Q12	4Q12	2012
OECD DEMAND																	
North America	24.2	23.3	23.4	23.7	24.1	23.9	23.8	23.8	23.3	23.6	23.4	23.5	23.3	23.1	23.6	23.5	23.4
Europe	15.4	14.7	14.3	14.3	14.9	14.8	14.6	14.2	14.1	14.7	14.1	14.3	13.7	13.6	14.3	14.1	13.9
Pacific	8.1	7.7	8.2	7.3	7.6	8.1	7.8	8.3	7.1	7.7	8.3	7.9	8.6	7.4	7.6	8.1	7.9
Total OECD	47.6	45.6	46.0	45.3	46.7	46.7	46.2	46.3	44.5	45.9	45.7	45.6	45.6	44.1	45.5	45.7	45.2
NON-OECD DEMAND																	
FSU	4.2	4.2	4.4	4.3	4.6	4.6	4.5	4.5	4.6	4.8	4.8	4.7	4.6	4.7	4.9	4.9	4.8
Europe	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
China	7.7	8.1	8.6	9.1	8.9	9.7	9.1	9.5	9.5	9.3	9.7	9.5	9.8	9.9	9.7	10.1	9.9
Other Asia	9.7	10.1	10.4	10.6	10.2	10.6	10.4	10.7	10.7	10.4	10.9	10.7	10.9	11.0	10.7	11.2	10.9
Latin America	6.0	6.0	6.0	6.3	6.5	6.4	6.3	6.3	6.5	6.7	6.6	6.5	6.4	6.6	6.8	6.7	6.7
Middle East	7.3	7.5	7.4	7.8	8.3	7.7	7.8	7.6	8.0	8.5	8.0	8.0	7.7	8.2	8.6	8.1	8.2
Africa	3.3	3.3	3.3	3.4	3.4	3.4	3.4	3.4	3.3	3.3	3.4	3.3	3.5	3.5	3.5	3.5	3.5
Total Non-OECD	38.9	39.9	40.8	42.2	42.5	43.1	42.2	42.7	43.4	43.6	44.1	43.5	43.7	44.6	45.0	45.4	44.7
Total Demand[1]	86.6	85.6	86.8	87.5	89.1	89.8	88.3	89.0	87.9	89.6	89.8	89.1	89.3	88.7	90.5	91.1	89.9
OECD SUPPLY																	
North America[4]	13.3	13.6	14.0	14.0	14.1	14.4	14.1	14.4	14.3	14.6	15.0	14.6	15.0	14.8	15.0	15.3	15.1
Europe	4.8	4.5	4.5	4.1	3.8	4.2	4.1	4.1	3.8	3.6	3.8	3.8	3.8	3.6	3.5	3.8	3.7
Pacific	0.6	0.7	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.6	0.5	0.6	0.6	0.7	0.7	0.6
Total OECD	18.8	18.8	19.1	18.8	18.5	19.1	18.9	19.0	18.6	18.7	19.4	18.9	19.4	19.1	19.3	19.8	19.4
NON-OECD SUPPLY																	
FSU	12.8	13.3	13.5	13.5	13.5	13.6	13.5	13.6	13.6	13.5	13.6	13.6	13.7	13.8	13.7	13.9	13.8
Europe	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
China	3.8	3.9	4.0	4.1	4.1	4.2	4.1	4.2	4.2	4.1	4.0	4.1	4.1	4.2	4.1	4.2	4.2
Other Asia[2]	3.7	3.6	3.7	3.7	3.7	3.7	3.7	3.6	3.5	3.5	3.6	3.6	3.6	3.6	3.5	3.5	3.5
Latin America[2,4]	3.7	3.9	4.0	4.1	4.1	4.1	4.1	4.2	4.2	4.2	4.3	4.2	4.3	4.4	4.5	4.5	4.4
Middle East	1.7	1.7	1.7	1.7	1.7	1.8	1.7	1.8	1.7	1.7	1.5	1.7	1.4	1.4	1.5	1.5	1.5
Africa[2]	2.6	2.6	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.6	2.5	2.4	2.3	2.3	2.4	2.3
Total Non-OECD	28.4	29.1	29.6	29.7	29.8	30.0	29.8	30.1	29.7	29.7	29.7	29.8	29.8	29.8	29.7	30.1	29.9
Processing Gains[3]	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.2	2.2	2.3	2.2	2.2	2.3	2.3
Global Biofuels[4]	1.4	1.6	1.4	2.0	2.1	1.8	1.8	1.5	1.9	2.2	1.8	1.8	1.6	1.9	2.2	2.0	1.9
Total Non-OPEC[2]	50.6	51.5	52.1	52.5	52.6	53.1	52.6	52.7	52.3	52.7	53.1	52.7	53.0	53.1	53.5	54.2	53.5
Non-OPEC: Historical Composition[2]	49.6	51.5	52.1	52.5	52.6	53.1	52.6	52.7	52.3	52.7	53.1	52.7	53.0	53.1	53.5	54.2	53.5
OPEC																	
Crude[5]	31.6	29.1	29.3	29.3	29.6	29.5	29.4	30.0	29.5	30.0	30.4	30.0					
NGLs	4.5	4.9	5.2	5.2	5.4	5.6	5.3	5.7	5.7	5.8	5.9	5.8	6.1	6.2	6.5	6.5	6.3
Total OPEC[2]	36.1	34.1	34.5	34.4	35.0	35.1	34.8	35.7	35.2	35.8	36.3	35.7					
OPEC: Historical Composition[2]	37.1	34.1	34.5	34.4	35.0	35.1	34.8	35.7	35.2	35.8	36.3	35.7					
Total Supply[6]	86.7	85.6	86.6	87.0	87.6	88.2	87.3	88.5	87.5	88.4	89.4	88.5					
STOCK CHANGES AND MISCELLANEOUS																	
Reported OECD																	
Industry	0.3	-0.1	0.4	0.9	-0.1	-0.8	0.1	-0.4	0.5	-0.1	-0.7	-0.2					
Government	0.0	0.1	0.0	-0.1	-0.1	0.1	0.0	0.0	0.0	-0.4	0.1	-0.1					
Total	0.3	0.0	0.4	0.9	-0.2	-0.7	0.1	-0.5	0.5	-0.5	-0.6	-0.3					
Floating Storage/Oil in Transit	0.0	0.3	-0.2	0.1	-0.2	-0.3	-0.2	0.2	-0.2	-0.2	-0.1	-0.1					
Miscellaneous to balance[7]	-0.2	-0.3	-0.4	-1.4	-1.1	-0.6	-0.9	-0.3	-0.7	-0.4	0.3	-0.3					
Total Stock Ch. & Misc	0.2	0.0	-0.2	-0.5	-1.5	-1.7	-1.0	-0.6	-0.4	-1.1	-0.4	-0.6					
Memo items:																	
Call on OPEC crude + Stock ch.[8]	31.5	29.2	29.5	29.8	31.1	31.2	30.4	30.6	29.9	31.1	30.8	30.6	30.1	29.4	30.5	30.4	30.1
Adjusted Call on OPEC + Stock ch.[9]	31.3	28.8	29.1	28.3	30.0	30.6	29.5	30.3	29.2	30.7	31.1	30.3	29.6	28.8	30.0	29.8	29.5

1 Measured as deliveries from refineries and primary stocks, comprises inland deliveries, international marine bunkers, refinery fuel, crude for direct burning, oil from non-conventional sources and other sources of supply.
2 Other Asia includes Indonesia throughout. Latin America excludes Ecuador throughout. Africa excludes Angola throughout.
Total Non-OPEC excludes all countries that were members of OPEC at 1 January 2009. Non-OPEC Historical Composition excludes countries that were OPEC members at that point in time.
Total OPEC comprises all countries which were OPEC members at 1 January 2009. OPEC Historical Composition comprises countries which were OPEC members at that point in time.
3 Net volumetric gains and losses in the refining process and marine transportation losses.
4 As of the July 2010 OMR, Global Biofuels comprise all world biofuel production including fuel ethanol from the US and Brazil.
5 As of the March 2006 OMR, Venezuelan Orinoco heavy crude production is included within Venezuelan crude estimates. Orimulsion fuel remains within the OPEC NGL and non-conventional category, but Orimulsion production reportedly ceased from January 2007.
6 Comprises crude oil, condensates, NGLs, oil from non-conventional sources and other sources of supply.
7 Includes changes in non-reported stocks in OECD and non-OECD areas.
8 Equals the arithmetic difference between total demand minus total non-OPEC supply minus OPEC NGLs.
9 Equals the "Call on OPEC + Stock Ch." with "Miscellaneous to balance" added for historical periods and with an average of "Miscellaneous to balance" for the most recent 8 quarters added for forecast periods.

Table 1A
WORLD OIL SUPPLY AND DEMAND: CHANGES FROM LAST MONTH'S TABLE 1

(million barrels per day)

	2008	2009	1Q10	2Q10	3Q10	4Q10	2010	1Q11	2Q11	3Q11	4Q11	2011	1Q12	2Q12	3Q12	4Q12	2012
OECD DEMAND																	
North America	-	-	-	-	-	-	-	-	-	-	-	-	-0.1	-	-	0.1	-
Europe	-	-	-	-	-	-	-	-	-	-	-0.1	-	-	-	-	-	-
Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-0.1	-
Total OECD	-	-	-	-	-	-	-	-	-	-	-0.1	-	-	-	-	-	-
NON-OECD DEMAND																	
FSU	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-	-	-	0.2	-	-0.1	-0.1	-
Other Asia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Latin America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Middle East	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Non-OECD	-	-	-	-	-	-	-	-	-	-	-	-	0.2	-	-	-0.1	-
Total Demand	-	-	-	-	-	-	-	-	-	-	-	-	0.2	-	-	-0.1	-
OECD SUPPLY																	
North America	-	-	-	-	-	-	-	-	-	-	0.1	-	-	-	0.1	0.2	0.1
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-0.1	-0.1	-0.1	-0.1	-0.1
Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total OECD	-	-	-	-	-	-	-	-	-	-	0.1	-	-0.1	-0.1	-	-	-
NON-OECD SUPPLY																	
FSU	-	-	-	-	-	-	-	-	-	-	-0.2	-	-0.1	-	-	-	-
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Asia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Latin America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Middle East	-	-	-	-	-	-	-	-	-	-	-	-	-0.1	-0.1	-0.1	-0.1	-0.1
Africa	-	-	-	-	-0.1	-	-	-	-	-	0.1	-	-	-0.1	-0.2	-0.1	-0.1
Total Non-OECD	-	-	-	-	-0.1	-	-	-	-	0.1	-0.1	-	-0.1	-0.2	-0.2	-0.2	-0.2
Processing Gains	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Global Biofuels	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Non-OPEC	-	-	-	-	-0.1	-	-	-	-	0.1	-0.1	-	-0.2	-0.3	-0.2	-0.2	-0.2
Non-OPEC: historical composition	-	-	-	-	-0.1	-	-	-	-	0.1	-0.1	-	-0.2	-0.3	-0.2	-0.2	-0.2
OPEC																	
Crude	-	-	-	-0.1	-0.1	-0.1	-0.1	-	-	-	-0.2	-					
NGLs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total OPEC	-	-	-	-0.1	-0.1	-0.1	-0.1	-	-	-	-0.2	-					
OPEC: historical composition	-	-	-	-0.1	-0.1	-0.1	-0.1	-	-	-	-0.2	-					
Total Supply	-	-	-	-0.1	-0.2	-0.1	-0.1	-	-	0.1	-0.2	-					
STOCK CHANGES AND MISCELLANEOUS																	
REPORTED OECD																	
Industry	-	-	-	-	-	-	-	-	-	-	-0.1	-					
Government	-	-	-	-	-	-	-	-	-	-	-	-					
Total	-	-	-	-	-	-	-	-	-	-	-0.1	-					
Floating Storage/Oil in Transit	-	-	-	-	-	-	-	-	-	-	-	-					
Miscellaneous to balance	-	-	-	-0.1	-0.2	-0.1	-0.1	-	-	0.1	-0.1	-					
Total Stock Ch. & Misc	-	-	-	-0.1	-0.2	-0.1	-0.1	-	-	0.1	-0.2	-					
Memo items:																	
Call on OPEC crude + Stock ch.	-	-	-	-	0.1	-	-	-	-	-0.1	0.1	-	0.4	0.2	0.2	0.1	0.2
Adjusted Call on OPEC + Stock ch.	-	-	-	-0.1	-0.1	-0.1	-0.1	-	-	-	-0.1	-	0.3	0.2	0.1	-	0.1

When submitting their monthly oil statistics, OECD Member countries periodically update data for prior periods. Similar updates to non-OECD data can occur.

Table 2

SUMMARY OF GLOBAL OIL DEMAND

	2009	1Q10	2Q10	3Q10	4Q10	2010	1Q11	2Q11	3Q11	4Q11	2011	1Q12	2Q12	3Q12	4Q12	2012
Demand (mb/d)																
North America	23.29	23.41	23.69	24.10	23.85	23.77	23.78	23.31	23.56	23.35	23.50	23.27	23.08	23.60	23.55	23.38
Europe	14.66	14.32	14.26	14.93	14.83	14.58	14.20	14.12	14.69	14.06	14.27	13.73	13.62	14.33	14.08	13.94
Pacific	7.69	8.23	7.35	7.62	8.07	7.82	8.35	7.11	7.68	8.28	7.86	8.62	7.38	7.62	8.06	7.92
Total OECD	45.64	45.95	45.29	46.65	46.75	46.17	46.33	44.55	45.93	45.70	45.63	45.63	44.08	45.54	45.68	45.24
Asia	18.19	18.98	19.65	19.12	20.26	19.50	20.27	20.23	19.70	20.62	20.20	20.72	20.83	20.38	21.35	20.82
Middle East	7.53	7.42	7.83	8.29	7.72	7.82	7.62	8.01	8.46	7.96	8.02	7.75	8.19	8.62	8.11	8.17
Latin America	5.99	6.05	6.29	6.46	6.39	6.30	6.29	6.48	6.67	6.57	6.50	6.45	6.64	6.81	6.73	6.66
FSU	4.18	4.38	4.33	4.55	4.57	4.46	4.46	4.61	4.82	4.84	4.69	4.60	4.71	4.93	4.95	4.80
Africa	3.33	3.33	3.43	3.38	3.43	3.39	3.41	3.34	3.27	3.37	3.34	3.48	3.53	3.49	3.54	3.51
Europe	0.71	0.67	0.68	0.68	0.70	0.68	0.67	0.69	0.72	0.72	0.70	0.68	0.70	0.71	0.72	0.70
Total Non-OECD	39.93	40.84	42.21	42.48	43.08	42.16	42.72	43.35	43.63	44.09	43.45	43.68	44.61	44.95	45.41	44.66
World	85.57	86.79	87.50	89.13	89.83	88.32	89.05	87.90	89.56	89.79	89.08	89.31	88.69	90.49	91.09	89.90
of which: US50	18.77	18.87	19.15	19.47	19.23	19.18	19.17	18.82	18.89	18.71	18.90	18.66	18.62	18.96	18.91	18.79
Europe 5*	8.98	8.87	8.75	9.15	9.01	8.95	8.71	8.57	8.89	8.54	8.68	8.49	8.26	8.63	8.47	8.46
China	8.06	8.63	9.06	8.92	9.66	9.07	9.54	9.52	9.30	9.69	9.51	9.82	9.86	9.72	10.13	9.88
Japan	4.39	4.82	4.07	4.36	4.57	4.45	4.86	3.92	4.32	4.82	4.48	5.13	4.16	4.25	4.55	4.52
India	3.26	3.38	3.45	3.13	3.38	3.34	3.50	3.57	3.26	3.57	3.47	3.59	3.67	3.37	3.71	3.59
Russia	3.03	3.17	3.17	3.40	3.36	3.28	3.21	3.43	3.64	3.63	3.48	3.33	3.51	3.73	3.71	3.57
Brazil	2.54	2.60	2.71	2.82	2.80	2.73	2.69	2.77	2.88	2.86	2.80	2.73	2.80	2.91	2.90	2.84
Saudi Arabia	2.47	2.33	2.73	3.02	2.54	2.66	2.49	2.89	3.15	2.74	2.82	2.60	2.99	3.23	2.83	2.91
Canada	2.16	2.15	2.17	2.29	2.25	2.22	2.25	2.15	2.29	2.22	2.23	2.21	2.13	2.26	2.22	2.21
Korea	2.19	2.31	2.18	2.16	2.35	2.25	2.36	2.04	2.21	2.30	2.23	2.33	2.07	2.22	2.33	2.24
Mexico	2.07	2.07	2.10	2.05	2.07	2.07	2.05	2.06	2.09	2.11	2.08	2.08	2.06	2.08	2.11	2.08
Iran	2.11	2.10	2.08	2.08	2.09	2.09	2.09	2.05	2.03	2.04	2.05	2.07	2.06	2.05	2.06	2.06
Total	60.03	61.31	61.61	62.86	63.31	62.28	62.91	61.80	62.95	63.22	62.72	63.05	62.18	63.43	63.92	63.15
% of World	70.2%	70.6%	70.4%	70.5%	70.5%	70.5%	70.7%	70.3%	70.3%	70.4%	70.4%	70.6%	70.1%	70.1%	70.2%	70.2%
Annual Change (% per annum)																
North America	-3.7	-0.1	3.3	3.6	1.3	2.0	1.6	-1.6	-2.2	-2.1	-1.1	-2.1	-1.0	0.1	0.8	-0.5
Europe	-4.7	-5.1	-1.3	2.3	2.0	-0.5	-0.9	-1.0	-1.6	-5.1	-2.2	-3.3	-3.5	-2.5	0.1	-2.3
Pacific	-4.6	1.2	0.4	4.7	0.6	1.7	1.5	-3.2	0.8	2.6	0.5	3.3	3.7	-0.8	-2.7	0.8
Total OECD	-4.2	-1.5	1.4	3.3	1.4	1.1	0.8	-1.7	-1.5	-2.2	-1.2	-1.5	-1.0	-0.9	0.0	-0.9
Asia	4.4	12.0	7.1	3.5	6.9	7.2	6.8	2.9	3.0	1.8	3.6	2.2	3.0	3.5	3.5	3.1
Middle East	3.5	5.0	3.4	2.9	4.3	3.8	2.7	2.3	2.0	3.2	2.6	1.6	2.3	2.0	1.9	1.9
Latin America	0.0	4.6	5.2	6.0	4.5	5.1	3.9	2.9	3.2	2.8	3.2	2.6	2.6	2.2	2.5	2.4
FSU	-1.2	8.4	6.4	4.9	7.2	6.7	1.8	6.6	5.9	5.8	5.0	3.1	2.2	2.3	2.2	2.4
Africa	1.6	-1.6	2.1	2.3	5.4	2.0	2.2	-2.9	-3.3	-1.8	-1.5	2.1	5.8	6.9	5.1	5.0
Europe	-6.3	-7.5	-6.9	-3.7	1.3	-4.2	-0.2	1.8	5.2	2.6	2.4	1.5	0.8	-0.3	-0.2	0.4
Total Non-OECD	2.5	7.6	5.3	3.7	5.9	5.6	4.6	2.7	2.7	2.3	3.1	2.2	2.9	3.0	3.0	2.8
World	-1.2	2.6	3.2	3.5	3.5	3.2	2.6	0.5	0.5	0.0	0.9	0.3	0.9	1.0	1.4	0.9
Annual Change (mb/d)																
North America	-0.89	-0.01	0.75	0.83	0.31	0.47	0.37	-0.38	-0.54	-0.50	-0.26	-0.51	-0.23	0.03	0.20	-0.12
Europe	-0.73	-0.77	-0.18	0.33	0.29	-0.08	-0.12	-0.14	-0.24	-0.76	-0.32	-0.46	-0.50	-0.36	0.01	-0.33
Pacific	-0.37	0.10	0.03	0.34	0.05	0.13	0.12	-0.23	0.06	0.21	0.04	0.27	0.26	-0.06	-0.23	0.06
Total OECD	-1.98	-0.69	0.60	1.50	0.65	0.52	0.37	-0.75	-0.72	-1.05	-0.54	-0.70	-0.46	-0.39	-0.02	-0.39
Asia	0.77	2.04	1.30	0.64	1.31	1.32	1.29	0.58	0.58	0.36	0.70	0.45	0.60	0.68	0.73	0.62
Middle East	0.25	0.35	0.26	0.24	0.32	0.29	0.20	0.18	0.17	0.25	0.20	0.12	0.18	0.17	0.15	0.16
Latin America	0.00	0.27	0.31	0.36	0.27	0.30	0.24	0.18	0.21	0.18	0.20	0.16	0.17	0.15	0.16	0.16
FSU	-0.05	0.34	0.26	0.21	0.31	0.28	0.08	0.29	0.27	0.27	0.23	0.14	0.10	0.11	0.11	0.11
Africa	0.05	-0.06	0.07	0.08	0.18	0.07	0.07	-0.10	-0.11	-0.06	-0.05	0.07	0.19	0.22	0.17	0.17
Europe	-0.05	-0.05	-0.05	-0.03	0.01	-0.03	0.00	0.01	0.04	0.02	0.02	0.01	0.01	0.00	0.00	0.00
Total Non-OECD	0.98	2.89	2.14	1.51	2.39	2.23	1.88	1.14	1.15	1.01	1.29	0.96	1.25	1.32	1.32	1.21
World	-1.00	2.20	2.74	3.01	3.04	2.75	2.25	0.40	0.43	-0.04	0.75	0.26	0.79	0.93	1.30	0.82
Revisions to Oil Demand from Last Month's Report (mb/d)																
North America	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.01	-0.07	-0.04	-0.01	0.09	-0.01
Europe	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.01	0.00	-0.07	-0.01	0.04	-0.01	0.00	-0.02	0.00
Pacific	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.03	-0.01	0.04	0.00	0.01	-0.08	-0.01
Total OECD	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.01	0.00	-0.07	-0.01	0.00	-0.04	0.00	-0.01	-0.01
Asia	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.15	-0.04	-0.07	-0.07	-0.01
Middle East	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	-0.01	-0.01	0.00	-0.01
Latin America	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.05	0.02	0.03	0.01	0.01	0.02	0.02
FSU	0.00	0.00	0.00	-0.01	0.00	0.00	0.01	0.00	-0.01	-0.02	0.00	0.02	0.04	0.04	-0.02	0.02
Africa	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	0.00	0.00	0.00	0.00	-0.01	0.00
Europe	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Non-OECD	0.00	0.00	0.00	-0.01	0.00	0.00	0.02	0.01	0.01	0.04	0.02	0.19	0.00	-0.03	-0.08	0.02
World	0.00	0.00	0.00	-0.01	0.00	0.00	0.04	0.02	0.01	-0.03	0.01	0.19	-0.04	-0.03	-0.09	0.01
Revisions to Oil Demand Growth from Last Month's Report (mb/d)																
World	0.00	0.01	0.00	-0.01	0.00	0.00	0.03	0.02	0.02	-0.03	0.01	0.15	-0.06	-0.04	-0.06	0.00

* France, Germany, Italy, Spain and UK

Table 2a

OECD REGIONAL OIL DEMAND[1]

(million barrels per day)

	2010	2011	1Q11	2Q11	3Q11	4Q11	Oct 11	Nov 11	Dec 11 [2]	Latest month vs. Nov 11	Latest month vs. Dec 10
North America											
LPG&Ethane	2.95	2.97	3.31	2.71	2.76	3.10	2.92	3.05	3.32	0.27	-0.19
Naphtha	0.37	0.35	0.37	0.36	0.34	0.34	0.36	0.34	0.33	-0.01	0.02
Motor Gasoline	10.57	10.33	10.14	10.45	10.49	10.22	10.21	10.14	10.30	0.16	-0.25
Jet/Kerosene	1.65	1.65	1.60	1.68	1.71	1.59	1.56	1.65	1.57	-0.07	-0.06
Gasoil/Diesel Oil	4.82	4.92	5.04	4.77	4.86	5.03	5.05	5.16	4.87	-0.29	-0.37
Residual Fuel Oil	0.93	0.85	0.97	0.87	0.76	0.82	0.77	0.74	0.94	0.21	0.06
Other Products	2.46	2.43	2.35	2.47	2.64	2.26	2.34	2.31	2.13	-0.18	-0.11
Total	23.77	23.50	23.78	23.31	23.56	23.35	23.21	23.38	23.47	0.08	-0.90
Europe											
LPG&Ethane	0.96	0.98	1.04	0.96	0.94	0.96	0.91	0.98	1.00	0.02	-0.05
Naphtha	1.26	1.16	1.27	1.18	1.13	1.06	1.03	1.08	1.06	-0.02	-0.20
Motor Gasoline	2.21	2.12	2.02	2.18	2.20	2.06	2.09	2.08	2.00	-0.08	-0.07
Jet/Kerosene	1.27	1.25	1.20	1.27	1.35	1.19	1.28	1.15	1.14	-0.01	-0.07
Gasoil/Diesel Oil	6.13	6.03	6.04	5.73	6.17	6.18	6.31	6.22	6.00	-0.22	-0.41
Residual Fuel Oil	1.27	1.24	1.29	1.22	1.25	1.20	1.23	1.14	1.23	0.08	-0.09
Other Products	1.47	1.49	1.33	1.57	1.63	1.42	1.47	1.50	1.29	-0.21	0.01
Total	14.58	14.27	14.20	14.12	14.69	14.06	14.32	14.16	13.72	-0.44	-0.89
Pacific											
LPG&Ethane	0.84	0.83	0.88	0.81	0.79	0.86	0.78	0.83	0.97	0.14	0.03
Naphtha	1.68	1.69	1.78	1.55	1.73	1.71	1.62	1.74	1.77	0.03	-0.01
Motor Gasoline	1.57	1.54	1.51	1.47	1.61	1.57	1.50	1.56	1.66	0.11	0.02
Jet/Kerosene	0.87	0.85	1.18	0.64	0.63	0.96	0.79	0.88	1.20	0.33	-0.01
Gasoil/Diesel Oil	1.62	1.63	1.67	1.53	1.59	1.71	1.64	1.72	1.77	0.06	0.02
Residual Fuel Oil	0.74	0.76	0.80	0.65	0.76	0.82	0.75	0.81	0.90	0.09	0.11
Other Products	0.49	0.55	0.54	0.47	0.56	0.65	0.64	0.57	0.74	0.17	0.22
Total	7.82	7.86	8.35	7.11	7.68	8.28	7.73	8.09	9.02	0.92	0.38
OECD											
LPG&Ethane	4.76	4.78	5.23	4.48	4.49	4.92	4.62	4.86	5.29	0.43	-0.21
Naphtha	3.31	3.21	3.43	3.09	3.20	3.11	3.01	3.16	3.16	0.00	-0.19
Motor Gasoline	14.36	13.99	13.67	14.11	14.31	13.85	13.80	13.78	13.96	0.18	-0.29
Jet/Kerosene	3.80	3.75	3.98	3.58	3.70	3.74	3.63	3.68	3.92	0.24	-0.14
Gasoil/Diesel Oil	12.58	12.58	12.75	12.04	12.62	12.91	13.00	13.10	12.64	-0.46	-0.76
Residual Fuel Oil	2.94	2.85	3.06	2.74	2.77	2.84	2.75	2.69	3.07	0.38	0.07
Other Products	4.42	4.48	4.22	4.51	4.83	4.33	4.46	4.37	4.16	-0.22	0.12
Total	46.17	45.63	46.33	44.55	45.93	45.70	45.26	45.64	46.20	0.56	-1.40

1 Demand, measured as deliveries from refineries and primary stocks, comprises inland deliveries, international bunkers and refinery fuel. It includes crude for direct burning, oil from non-conventional sources and other sources of supply. Jet/kerosene comprises jet kerosene and non-aviation kerosene. Gasoil comprises diesel, light heating oil and other gasoils. North America comprises US 50 states, US territories, Mexico and Canada.

2 Latest official OECD submissions (MOS).

Table 2b

OIL DEMAND IN SELECTED OECD COUNTRIES[1]

(million barrels per day)

	2010	2011	1Q11	2Q11	3Q11	4Q11	Oct 11	Nov 11	Dec 11 [2]	Latest month vs. Nov 11	Latest month vs. Dec 10
United States[3]											
LPG	2.17	2.18	2.47	1.96	1.99	2.31	2.16	2.24	2.54	0.29	-0.14
Naphtha	0.26	0.26	0.27	0.27	0.25	0.26	0.28	0.26	0.25	-0.01	0.02
Motor Gasoline	8.99	8.74	8.61	8.87	8.89	8.61	8.63	8.54	8.66	0.13	-0.25
Jet/Kerosene	1.45	1.44	1.40	1.49	1.50	1.39	1.37	1.44	1.37	-0.07	-0.06
Gasoil	3.80	3.85	3.95	3.75	3.78	3.92	3.95	4.06	3.77	-0.29	-0.41
Residual Fuel Oil	0.54	0.48	0.61	0.51	0.36	0.43	0.40	0.39	0.51	0.12	-0.02
Other Products	1.97	1.93	1.86	1.97	2.12	1.77	1.84	1.83	1.66	-0.17	-0.12
Total	19.18	18.90	19.17	18.82	18.89	18.71	18.62	18.76	18.75	-0.01	-0.97
Japan											
LPG	0.48	0.50	0.54	0.50	0.45	0.52	0.46	0.50	0.61	0.10	0.06
Naphtha	0.77	0.72	0.79	0.65	0.74	0.70	0.66	0.72	0.73	0.00	-0.08
Motor Gasoline	1.00	0.98	0.95	0.92	1.04	1.00	0.95	0.97	1.07	0.10	0.01
Jet/Kerosene	0.55	0.53	0.80	0.36	0.34	0.62	0.47	0.54	0.83	0.30	0.02
Diesel	0.41	0.41	0.41	0.39	0.41	0.43	0.42	0.43	0.45	0.02	0.00
Other Gasoil	0.43	0.41	0.48	0.36	0.36	0.43	0.38	0.41	0.48	0.06	-0.02
Residual Fuel Oil	0.40	0.45	0.42	0.36	0.48	0.53	0.48	0.51	0.59	0.08	0.17
Other Products	0.41	0.49	0.47	0.38	0.51	0.60	0.57	0.54	0.68	0.15	0.25
Total	4.45	4.48	4.86	3.92	4.32	4.82	4.41	4.62	5.43	0.81	0.40
Germany											
LPG	0.10	0.10	0.10	0.10	0.11	0.09	0.08	0.09	0.09	0.00	-0.01
Naphtha	0.41	0.39	0.44	0.40	0.39	0.33	0.33	0.34	0.33	-0.01	-0.08
Motor Gasoline	0.46	0.46	0.43	0.47	0.47	0.46	0.48	0.48	0.43	-0.05	0.02
Jet/Kerosene	0.18	0.18	0.17	0.19	0.19	0.17	0.18	0.17	0.16	-0.01	0.01
Diesel	0.67	0.68	0.63	0.67	0.71	0.68	0.68	0.73	0.64	-0.09	0.04
Other Gasoil	0.43	0.36	0.37	0.23	0.42	0.41	0.47	0.38	0.39	0.01	-0.08
Residual Fuel Oil	0.15	0.15	0.16	0.14	0.15	0.15	0.14	0.14	0.16	0.02	-0.01
Other Products	0.09	0.11	0.05	0.12	0.12	0.13	0.14	0.15	0.10	-0.06	0.05
Total	2.49	2.41	2.35	2.34	2.55	2.42	2.50	2.47	2.28	-0.19	-0.07
Italy											
LPG	0.11	0.10	0.12	0.08	0.08	0.11	0.09	0.10	0.13	0.03	-0.01
Naphtha	0.12	0.09	0.11	0.10	0.08	0.08	0.08	0.08	0.08	-0.01	-0.03
Motor Gasoline	0.24	0.23	0.22	0.24	0.24	0.22	0.23	0.22	0.22	0.01	-0.03
Jet/Kerosene	0.10	0.10	0.09	0.10	0.12	0.09	0.11	0.08	0.09	0.01	0.00
Diesel	0.49	0.49	0.47	0.51	0.50	0.49	0.50	0.49	0.48	-0.01	-0.01
Other Gasoil	0.12	0.11	0.11	0.09	0.10	0.13	0.13	0.13	0.13	0.00	-0.02
Residual Fuel Oil	0.13	0.11	0.10	0.11	0.13	0.10	0.12	0.09	0.10	0.01	-0.04
Other Products	0.23	0.23	0.23	0.24	0.22	0.21	0.21	0.22	0.20	-0.03	-0.04
Total	1.53	1.46	1.45	1.47	1.47	1.43	1.47	1.41	1.42	0.02	-0.19
France											
LPG	0.15	0.14	0.17	0.12	0.12	0.14	0.13	0.14	0.16	0.01	-0.04
Naphtha	0.13	0.13	0.13	0.14	0.13	0.12	0.10	0.12	0.14	0.02	0.03
Motor Gasoline	0.19	0.18	0.17	0.20	0.19	0.17	0.17	0.16	0.16	0.00	-0.01
Jet/Kerosene	0.15	0.15	0.14	0.15	0.16	0.15	0.15	0.14	0.14	0.00	0.00
Diesel	0.69	0.70	0.69	0.71	0.71	0.69	0.70	0.69	0.69	0.00	0.00
Other Gasoil	0.30	0.27	0.35	0.19	0.28	0.27	0.31	0.24	0.26	0.02	-0.16
Residual Fuel Oil	0.09	0.08	0.08	0.08	0.08	0.09	0.09	0.10	0.08	-0.02	-0.04
Other Products	0.17	0.17	0.13	0.19	0.20	0.16	0.16	0.17	0.15	-0.02	0.02
Total	1.86	1.82	1.86	1.79	1.87	1.78	1.81	1.76	1.77	0.01	-0.20
United Kingdom											
LPG	0.14	0.14	0.14	0.15	0.13	0.12	0.12	0.12	0.12	0.00	-0.01
Naphtha	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.03	0.02	0.00	0.00
Motor Gasoline	0.35	0.33	0.34	0.34	0.33	0.33	0.33	0.34	0.32	-0.02	-0.01
Jet/Kerosene	0.33	0.33	0.34	0.32	0.33	0.32	0.33	0.33	0.32	-0.01	-0.02
Diesel	0.45	0.45	0.45	0.45	0.45	0.47	0.46	0.48	0.46	-0.02	0.05
Other Gasoil	0.12	0.12	0.11	0.11	0.13	0.11	0.11	0.12	0.10	-0.02	-0.02
Residual Fuel Oil	0.06	0.06	0.07	0.06	0.06	0.06	0.06	0.06	0.07	0.01	0.01
Other Products	0.14	0.15	0.15	0.16	0.15	0.13	0.14	0.13	0.13	0.00	0.00
Total	1.62	1.60	1.62	1.61	1.61	1.56	1.57	1.59	1.53	-0.06	0.01
Canada											
LPG	0.35	0.36	0.39	0.35	0.36	0.35	0.35	0.37	0.32	-0.05	-0.04
Naphtha	0.08	0.08	0.09	0.08	0.08	0.07	0.06	0.07	0.07	0.00	-0.01
Motor Gasoline	0.74	0.74	0.69	0.74	0.78	0.75	0.74	0.75	0.75	0.01	0.01
Jet/Kerosene	0.11	0.11	0.11	0.10	0.12	0.11	0.10	0.11	0.11	0.00	0.00
Diesel	0.23	0.23	0.22	0.22	0.23	0.24	0.26	0.25	0.22	-0.03	0.00
Other Gasoil	0.31	0.32	0.36	0.28	0.32	0.32	0.30	0.31	0.36	0.05	0.00
Residual Fuel Oil	0.10	0.10	0.11	0.09	0.08	0.11	0.09	0.11	0.13	0.01	0.01
Other Products	0.30	0.29	0.28	0.29	0.32	0.28	0.30	0.26	0.26	0.00	-0.02
Total	2.22	2.23	2.25	2.15	2.29	2.22	2.21	2.23	2.23	0.00	-0.04

1 Demand, measured as deliveries from refineries and primary stocks, comprises inland deliveries, international bunkers and refinery fuel. It includes crude for direct burning, oil from non-conventional sources and other sources of supply. Jet/kerosene comprises jet kerosene and non-aviation kerosene. Gasoil comprises diesel, light heating oil and other gasoils.

2 Latest official OECD submissions (MOS).

3 US figures exclude US territories.

Table 3
WORLD OIL PRODUCTION
(million barrels per day)

	2010	2011	2012	3Q11	4Q11	1Q12	2Q12	3Q12	Dec 11	Jan 12	Feb 12
OPEC											
Crude Oil											
Saudi Arabia	8.05	9.04		9.34	9.37				9.50	9.55	9.70
Iran	3.70	3.58		3.53	3.51				3.45	3.43	3.38
Iraq	2.36	2.67		2.67	2.68				2.69	2.65	2.61
UAE	2.31	2.50		2.53	2.54				2.58	2.58	2.59
Kuwait	2.03	2.21		2.26	2.33				2.26	2.35	2.30
Neutral Zone	0.53	0.59		0.60	0.60				0.60	0.60	0.60
Qatar	0.80	0.82		0.82	0.82				0.82	0.82	0.81
Angola	1.73	1.64		1.69	1.72				1.75	1.70	1.76
Nigeria	2.08	2.18		2.26	2.06				2.06	2.04	2.14
Libya	1.55	0.46		0.04	0.55				0.75	1.15	1.30
Algeria	1.25	1.28		1.28	1.29				1.29	1.29	1.27
Ecuador	0.47	0.50		0.49	0.49				0.48	0.48	0.48
Venezuela	2.53	2.50		2.46	2.40				2.38	2.47	2.48
Total Crude Oil[6]	29.41	29.96		29.97	30.35				30.61	31.11	31.42
Total NGLs[1,6]	5.34	5.78	6.34	5.79	5.91	6.14	6.19	6.49	5.91	6.14	6.14
Total OPEC[6]	34.75	35.74		35.76	36.26				36.52	37.25	37.56
OPEC: Historical Composition[6]	34.75	35.74		35.76	36.26				36.52	37.25	37.56
NON-OPEC[2]											
OECD											
North America	14.10	14.56	15.07	14.55	15.04	15.05	14.84	15.05	15.24	15.08	15.05
United States[5]	7.77	8.11	8.49	8.11	8.43	8.43	8.48	8.45	8.53	8.42	8.42
Mexico	2.96	2.94	2.86	2.92	2.92	2.90	2.89	2.84	2.93	2.90	2.90
Canada	3.37	3.50	3.72	3.53	3.69	3.72	3.47	3.76	3.78	3.77	3.73
Europe	4.14	3.83	3.68	3.62	3.82	3.75	3.63	3.54	3.80	3.77	3.73
UK	1.36	1.11	1.07	0.94	1.11	1.10	1.08	0.97	1.11	1.09	1.09
Norway	2.14	2.04	1.96	1.99	2.05	2.00	1.89	1.92	2.05	2.04	1.97
Others	0.65	0.67	0.65	0.69	0.67	0.66	0.66	0.64	0.64	0.65	0.67
Pacific	0.61	0.52	0.64	0.51	0.55	0.60	0.64	0.66	0.59	0.55	0.63
Australia	0.51	0.43	0.56	0.43	0.47	0.51	0.56	0.58	0.50	0.46	0.55
Others	0.10	0.09	0.08	0.09	0.09	0.09	0.08	0.08	0.09	0.09	0.09
Total OECD	18.86	18.91	19.39	18.68	19.42	19.40	19.10	19.26	19.63	19.41	19.42
NON-OECD											
Former USSR	13.55	13.58	13.78	13.54	13.57	13.72	13.84	13.66	13.44	13.73	13.68
Russia	10.45	10.58	10.71	10.58	10.67	10.64	10.71	10.74	10.62	10.64	10.63
Others	3.10	3.00	3.07	2.96	2.90	3.08	3.13	2.91	2.83	3.08	3.05
Asia	7.80	7.68	7.71	7.60	7.58	7.75	7.70	7.67	7.63	7.77	7.74
China	4.10	4.12	4.17	4.06	4.02	4.14	4.15	4.15	4.05	4.15	4.14
Malaysia	0.72	0.66	0.67	0.65	0.67	0.69	0.67	0.67	0.70	0.69	0.68
India	0.86	0.89	0.90	0.89	0.87	0.90	0.90	0.91	0.87	0.89	0.90
Indonesia	0.97	0.93	0.87	0.94	0.92	0.90	0.88	0.86	0.91	0.92	0.89
Others	1.14	1.08	1.10	1.06	1.09	1.12	1.09	1.09	1.10	1.12	1.13
Europe	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14
Latin America	4.07	4.22	4.43	4.20	4.32	4.33	4.42	4.48	4.36	4.37	4.27
Brazil[5]	2.14	2.19	2.33	2.16	2.25	2.30	2.32	2.35	2.30	2.32	2.29
Argentina	0.69	0.67	0.67	0.67	0.69	0.66	0.67	0.67	0.68	0.67	0.64
Colombia	0.79	0.92	1.00	0.93	0.95	0.94	1.00	1.03	0.93	0.94	0.90
Others	0.45	0.44	0.43	0.44	0.43	0.44	0.43	0.43	0.44	0.44	0.44
Middle East[3]	1.74	1.65	1.45	1.69	1.49	1.44	1.44	1.46	1.49	1.46	1.42
Oman	0.87	0.89	0.90	0.90	0.89	0.89	0.89	0.91	0.90	0.88	0.89
Syria	0.39	0.33	0.18	0.35	0.21	0.19	0.18	0.17	0.21	0.19	0.19
Yemen	0.30	0.23	0.18	0.24	0.18	0.16	0.17	0.18	0.18	0.18	0.14
Others	0.19	0.20	0.19	0.20	0.20	0.20	0.20	0.19	0.20	0.20	0.20
Africa	2.50	2.54	2.35	2.54	2.56	2.37	2.29	2.33	2.56	2.57	2.29
Egypt	0.70	0.69	0.68	0.69	0.68	0.68	0.68	0.67	0.68	0.69	0.68
Gabon	0.25	0.24	0.25	0.24	0.25	0.24	0.24	0.25	0.25	0.25	0.24
Others	1.56	1.61	1.42	1.61	1.63	1.45	1.37	1.40	1.63	1.63	1.36
Total Non-OECD	29.80	29.80	29.86	29.71	29.66	29.76	29.84	29.73	29.61	30.02	29.54
Processing Gains[4]	2.10	2.17	2.26	2.14	2.23	2.28	2.23	2.24	2.23	2.28	2.28
Global Biofuels[5]	1.83	1.83	1.94	2.15	1.80	1.60	1.94	2.24	1.63	1.62	1.59
TOTAL NON-OPEC[6]	52.58	52.71	53.45	52.68	53.11	53.04	53.11	53.47	53.10	53.32	52.83
Non-OPEC: Historical Composition[6]	52.58	52.71	53.45	52.68	53.11	53.04	53.11	53.47	53.10	53.32	52.83
TOTAL SUPPLY	87.33	88.45		88.44	89.37				89.62	90.57	90.39

1 Includes condensates reported by OPEC countries, oil from non-conventional sources, e.g. Venezuelan Orimulsion (but not Orinoco extra-heavy oil), and non-oil inputs to Saudi Arabian MTBE. Orimulsion production reportedly ceased from January 2007.
2 Comprises crude oil, condensates, NGLs and oil from non-conventional sources
3 Includes small amounts of production from Israel, Jordan and Bahrain.
4 Net volumetric gains and losses in refining and marine transportation losses.
5 As of the July 2010 OMR, Global Biofuels comprise all world biofuel production including fuel ethanol from the US and Brazil.
6 Total OPEC comprises all countries which were OPEC members at 1 January 2009. OPEC Historical Composition comprises countries which were OPEC members at that point in time. Total Non-OPEC excludes all countries that were OPEC members at 1 January 2009. Non-OPEC Historical Composition excludes countries that were OPEC members at that point in time.

Table 4

OECD INDUSTRY STOCKS[1] AND QUARTERLY STOCK CHANGES

	RECENT MONTHLY STOCKS[2] in Million Barrels					PRIOR YEARS' STOCKS[2] in Million Barrels			STOCK CHANGES in mb/d			
	Sep2011	Oct2011	Nov2011	Dec2011	Jan2012*	Jan2009	Jan2010	Jan2011	1Q2011	2Q2011	3Q2011	4Q2011
North America												
Crude	466.7	475.6	475.6	463.0	473.3	476.7	462.4	478.7	0.25	0.02	-0.36	-0.04
Motor Gasoline	250.6	243.1	254.5	259.0	270.2	249.9	266.1	269.6	-0.03	-0.01	0.02	0.09
Middle Distillate	227.8	218.1	216.7	225.1	227.1	217.7	237.6	234.4	-0.24	-0.04	0.16	-0.03
Residual Fuel Oil	42.4	44.4	47.2	40.8	39.8	40.8	48.1	47.5	-0.05	-0.01	-0.02	-0.02
Total Products[3]	707.3	689.4	697.9	697.2	696.9	681.7	699.0	703.2	-0.58	0.29	0.30	-0.11
Total[4]	1341.8	1333.9	1334.3	1309.8	1325.3	1308.5	1302.1	1328.4	-0.39	0.49	0.03	-0.35
Europe												
Crude	308.3	299.6	303.0	286.7	295.2	343.4	339.1	334.2	0.01	-0.05	-0.11	-0.24
Motor Gasoline	89.0	90.9	94.3	94.3	95.3	105.9	111.4	104.4	0.04	-0.09	-0.03	0.06
Middle Distillate	265.4	260.0	264.4	274.4	267.9	276.4	305.5	299.9	0.09	-0.13	-0.09	0.10
Residual Fuel Oil	64.1	63.1	63.1	60.3	60.5	79.8	72.0	68.6	-0.01	-0.03	0.00	-0.04
Total Products[3]	538.6	535.1	539.8	547.0	541.1	572.7	600.9	587.9	0.11	-0.22	-0.08	0.09
Total[4]	911.3	900.6	912.1	900.7	903.8	992.9	1012.0	992.7	0.06	-0.24	-0.23	-0.12
Pacific												
Crude	157.0	155.1	155.8	155.7	148.1	171.6	163.5	158.5	0.00	0.01	-0.03	-0.01
Motor Gasoline	24.4	24.0	23.3	22.1	24.9	22.4	27.1	25.1	0.01	0.01	-0.01	-0.02
Middle Distillate	67.8	66.6	68.3	61.1	62.6	64.5	65.3	60.1	-0.06	0.14	0.01	-0.07
Residual Fuel Oil	20.2	19.9	19.7	19.1	19.8	20.7	18.9	18.6	0.02	0.01	-0.01	-0.01
Total Products[3]	181.0	180.6	178.0	164.5	164.5	168.6	169.6	168.4	-0.09	0.18	0.10	-0.18
Total[4]	411.5	407.2	407.5	390.1	385.1	408.7	397.0	400.8	-0.10	0.26	0.07	-0.23
Total OECD												
Crude	932.1	930.3	934.3	905.4	916.5	991.7	964.9	971.4	0.26	-0.02	-0.49	-0.29
Motor Gasoline	363.9	358.1	372.1	375.5	390.4	378.1	404.5	399.1	0.02	-0.09	-0.02	0.13
Middle Distillate	561.1	544.6	549.3	560.6	557.6	558.6	608.4	594.5	-0.21	-0.03	0.07	0.00
Residual Fuel Oil	126.7	127.4	129.9	120.2	120.1	141.2	139.0	134.7	-0.04	-0.04	-0.03	-0.07
Total Products[3]	1426.9	1405.2	1415.8	1408.7	1402.5	1423.0	1469.5	1459.4	-0.56	0.25	0.33	-0.20
Total[4]	2664.5	2641.7	2654.0	2600.6	2614.1	2710.0	2711.0	2721.8	-0.43	0.50	-0.13	-0.70

OECD GOVERNMENT-CONTROLLED STOCKS[5] AND QUARTERLY STOCK CHANGES

	RECENT MONTHLY STOCKS[2] in Million Barrels					PRIOR YEARS' STOCKS[2] in Million Barrels			STOCK CHANGES in mb/d			
	Sep2011	Oct2011	Nov2011	Dec2011	Jan2012*	Jan2009	Jan2010	Jan2011	1Q2011	2Q2011	3Q2011	4Q2011
North America												
Crude	696.0	696.0	696.0	696.0	696.0	703.8	726.6	726.5	0.00	0.00	-0.33	0.00
Products	0.0	0.0	0.7	0.7	0.7	2.0	2.0	2.0	-0.02	0.00	0.00	0.01
Europe												
Crude	183.0	182.8	184.2	186.7	186.7	186.4	184.4	185.8	-0.01	-0.01	-0.02	0.04
Products	235.9	235.5	235.2	234.1	234.1	232.9	240.9	233.6	-0.03	0.05	-0.01	-0.02
Pacific												
Crude	390.7	391.1	392.6	393.6	393.6	389.2	389.0	389.7	0.02	0.00	0.00	0.03
Products	18.7	20.0	20.0	20.0	20.0	19.2	20.0	20.0	0.00	0.00	-0.01	0.01
Total OECD												
Crude	1269.6	1269.9	1272.7	1276.2	1276.2	1279.4	1300.0	1302.0	0.01	-0.01	-0.36	0.07
Products	254.6	255.5	255.9	254.7	254.7	254.0	262.9	255.6	-0.05	0.05	-0.03	0.00
Total[4]	1525.6	1526.7	1529.9	1532.2	1532.2	1534.4	1564.3	1559.0	-0.03	0.04	-0.38	0.07

* estimated

1 Stocks are primary national territory stocks on land (excluding utility stocks and including pipeline and entrepot stocks where known) and include stocks held by industry to meet IEA, EU and national emergency reserve commitments and are subject to government control in emergencies.

2 Closing stock levels.

3 Total products includes gasoline, middle distillates, fuel oil and other products.

4 Total includes NGLs, refinery feedstocks, additives/oxygenates and other hydrocarbons.

5 Includes government-owned stocks and stock holding organisation stocks held for emergency purposes.

Table 5

TOTAL STOCKS ON LAND IN OECD COUNTRIES[1]

('millions of barrels' and 'days')

	End December 2010		End March 2011		End June 2011		End September 2011		End December 2011 [3]	
	Stock Level	Days Fwd[2] Demand	Stock Level	Days Fwd Demand	Stock Level	Days Fwd Demand	Stock Level	Days Fwd Demand	Stock Level	Days Fwd Demand
North America										
Canada	196.5	86	185.2	84	189.7	81	188.6	88	187.8	-
Mexico	44.5	22	45.0	22	46.5	22	46.1	22	44.4	-
United States[4]	1796.1	94	1769.5	94	1807.6	96	1780.9	95	1752.1	-
Total[4]	2059.2	87	2021.7	87	2065.9	88	2037.7	88	2006.4	86
Pacific										
Australia	38.1	39	39.1	39	39.5	39	38.2	38	39.9	-
Japan	588.3	121	575.4	147	593.2	137	601.1	125	588.7	-
Korea	165.4	70	170.2	83	175.2	79	173.6	75	166.8	-
New Zealand	8.2	51	8.0	53	8.2	56	7.9	53	8.3	-
Total	800.0	96	792.7	111	816.0	106	820.9	99	803.6	93
Europe[5]										
Austria	19.7	77	19.4	77	19.6	70	18.0	73	19.4	-
Belgium	33.6	50	37.0	59	38.1	58	36.7	58	36.4	-
Czech Republic	21.2	117	21.5	106	21.7	109	20.1	109	20.7	-
Denmark	26.8	171	21.4	132	21.5	134	22.4	138	22.4	-
Finland	27.8	127	26.9	133	27.0	130	27.0	130	28.9	-
France	168.2	91	167.4	94	166.7	89	160.0	90	165.0	-
Germany	286.8	122	289.4	124	290.8	114	282.6	117	282.8	-
Greece	34.3	92	33.9	106	32.6	99	30.9	95	27.9	-
Hungary	15.9	119	17.4	124	17.3	118	16.2	112	15.4	-
Ireland	9.8	63	10.8	79	10.2	73	11.3	77	10.7	-
Italy	133.3	92	131.8	90	130.0	88	130.1	91	128.3	-
Luxembourg	0.6	10	0.5	9	0.6	9	0.7	11	0.6	-
Netherlands	125.8	129	125.7	124	117.8	114	114.3	115	101.2	-
Norway	20.8	81	21.1	93	23.5	96	24.5	97	25.9	-
Poland	65.5	123	62.8	109	64.6	105	65.2	110	64.5	-
Portugal	22.9	89	23.5	87	23.3	86	21.9	90	21.9	-
Slovak Republic	8.3	109	9.0	111	8.9	104	8.3	103	8.5	-
Spain	133.2	93	132.9	97	130.1	94	131.2	97	132.8	-
Sweden	32.4	94	33.7	101	32.5	101	32.6	104	31.4	-
Switzerland	36.8	156	36.6	168	37.2	150	37.0	153	35.7	-
Turkey	58.5	101	58.3	85	56.6	73	56.4	83	55.8	-
United Kingdom	88.8	55	92.8	57	84.9	53	84.1	54	86.4	-
Total	1371.1	97	1374.0	97	1355.4	92	1331.5	95	1322.7	96
Total OECD	4230.3	91	4188.5	94	4237.3	92	4190.1	92	4132.8	91
DAYS OF IEA Net Imports[6]	-	147	-	146	-	147	-	145	-	148

1 Total Stocks are industry and government-controlled stocks (see breakdown in table below). Stocks are primary national territory stocks on land (excluding utility stocks and including pipeline and entrepot stocks where known) they include stocks held by industry to meet IEA, EU and national emergency reserves commitments and are subject to government control in emergencies.
2 Note that days of forward demand represent the stock level divided by the forward quarter average daily demand and is very different from the days of net imports used for the calculation of IEA Emergency Reserves.
3 End December 2011 forward demand figures are IEA Secretariat forecasts.
4 US figures exclude US territories. Total includes US territories.
5 Data not available for Iceland.
6 Reflects stock levels and prior calendar year's net imports adjusted according to IEA emergency reserve definitions (see www.iea.org/netimports.asp). Net exporting IEA countries are excluded.

TOTAL OECD STOCKS

CLOSING STOCKS	Total	Government[1] controlled	Industry	Total	Government[1] controlled	Industry
	Millions of Barrels			*Days of Fwd. Demand[2]*		
4Q2008	4206	1527	2679	90	33	57
1Q2009	4278	1547	2731	96	35	61
2Q2009	4306	1561	2745	95	35	61
3Q2009	4327	1564	2763	94	34	60
4Q2009	4205	1564	2641	92	34	57
1Q2010	4241	1567	2675	94	35	59
2Q2010	4319	1562	2757	93	33	59
3Q2010	4296	1549	2747	92	33	59
4Q2010	4230	1561	2670	91	34	58
1Q2011	4188	1558	2631	94	35	59
2Q2011	4237	1561	2676	92	34	58
3Q2011	4190	1526	2665	92	33	58
4Q2011	4133	1532	2601	91	34	57

1 Includes government-owned stocks and stock holding organisation stocks held for emergency purposes.
2 Days of forward demand calculated using actual demand except in 4Q2011 (when latest forecasts are used).

Table 6

IEA MEMBER COUNTRY DESTINATIONS OF SELECTED CRUDE STREAMS[1]

(million barrels per day)

	2009	2010	2011	1Q11	2Q11	3Q11	4Q11	Oct 11	Nov 11	Dec 11	Year Earlier Dec 10	Year Earlier change
Saudi Light & Extra Light												
North America	0.52	0.69	0.69	0.71	0.72	0.47	0.85	0.67	0.96	0.93	0.78	0.15
Europe	0.59	0.66	0.83	0.70	0.79	0.93	0.88	0.90	0.89	0.84	0.63	0.21
Pacific	1.28	1.21	1.24	1.33	1.14	1.21	1.27	1.22	1.26	1.35	1.27	0.07
Saudi Medium												
North America	0.40	0.36	0.37	0.33	0.36	0.40	0.40	0.35	0.44	0.42	0.36	0.05
Europe	0.02	0.00	0.02	-	0.02	0.05	0.01	0.01	0.02	0.00	-	-
Pacific	0.34	0.34	0.40	0.39	0.38	0.43	0.40	0.33	0.46	0.42	0.32	0.10
Saudi Heavy												
North America	0.03	0.02	0.02	0.02	0.03	0.03	0.01	0.02	0.02	-	0.02	-
Europe	0.02	0.00	0.01	0.00	0.00	0.03	0.03	0.02	0.03	0.03	-	-
Pacific	0.15	0.22	0.20	0.20	0.21	0.23	0.18	0.08	0.23	0.22	0.20	0.02
Iraqi Basrah Light[2]												
North America	0.40	0.36	0.29	0.21	0.41	0.31	0.21	0.01	0.31	0.32	0.35	-0.03
Europe	0.12	0.09	0.11	0.03	0.10	0.19	0.11	0.13	0.13	0.08	0.04	0.05
Pacific	0.24	0.29	0.34	0.40	0.26	0.38	0.32	0.32	0.33	0.30	0.32	-0.01
Iraqi Kirkuk												
North America	0.06	0.03	0.07	0.11	0.07	0.05	0.06	0.03	0.03	0.11	0.06	0.05
Europe	0.31	0.27	0.27	0.21	0.31	0.32	0.26	0.29	0.20	0.28	0.20	0.09
Pacific	-	-	-	-	-	-	-	-	-	-	-	-
Iranian Light												
North America	-	-	-	-	-	-	-	-	-	-	-	-
Europe	0.15	0.24	0.23	0.24	0.28	0.20	0.21	0.20	0.23	0.18	0.22	-0.03
Pacific	0.07	0.04	0.04	0.06	0.03	0.04	0.03	0.02	0.02	0.05	0.02	0.03
Iranian Heavy[3]												
North America	-	-	-	-	-	-	-	-	-	-	-	-
Europe	0.40	0.49	0.55	0.34	0.59	0.73	0.54	0.58	0.60	0.46	0.43	0.03
Pacific	0.57	0.52	0.51	0.63	0.41	0.51	0.49	0.51	0.48	0.46	0.57	-0.11
Venezuelan Light & Medium												
North America	0.39	0.14	0.18	0.06	0.30	0.24	0.13	0.32	0.06	-	0.13	-
Europe	0.07	0.02	0.02	0.03	0.01	0.02	0.02	-	0.05	-	-	-
Pacific	-	-	-	-	-	-	-	-	-	-	-	-
Venezuelan 22 API and heavier												
North America	0.75	0.86	0.76	0.89	0.77	0.70	0.69	0.68	0.74	0.64	0.74	-0.10
Europe	0.07	0.06	0.05	0.04	0.05	0.06	0.05	0.04	0.05	0.06	0.05	0.01
Pacific	-	-	-	-	-	-	-	-	-	-	-	-
Mexican Maya												
North America	0.93	0.91	0.82	0.82	0.80	0.84	0.84	0.84	0.89	0.78	0.88	-0.10
Europe	0.10	0.11	0.12	0.14	0.12	0.12	0.12	0.11	0.11	0.13	0.05	0.08
Pacific	-	-	-	-	-	-	-	-	-	-	-	-
Mexican Isthmus												
North America	0.01	0.04	0.07	0.05	0.08	0.06	0.07	0.07	0.07	0.07	0.10	-0.03
Europe	0.01	0.02	0.01	0.01	0.02	0.00	0.01	0.01	-	0.03	0.02	0.02
Pacific	-	-	-	-	-	-	-	-	-	-	-	-
Russian Urals												
North America	0.15	0.08	0.01	0.01	-	-	0.02	0.05	-	-	0.02	-
Europe	1.72	1.80	1.69	1.76	1.87	1.52	1.62	1.57	1.64	1.66	1.96	-0.30
Pacific	-	-	-	-	-	-	-	-	-	-	-	-
Nigerian Light[4]												
North America	0.54	0.60	0.53	0.62	0.60	0.43	0.46	0.75	0.33	0.30	0.72	-0.42
Europe	0.32	0.34	0.46	0.40	0.40	0.54	0.48	0.39	0.51	0.56	0.42	0.14
Pacific	0.00	-	0.05	0.05	0.04	0.06	0.05	0.06	0.05	0.04	-	-
Nigerian Medium												
North America	0.21	0.25	0.18	0.20	0.18	0.18	0.14	0.17	0.07	0.19	0.23	-0.05
Europe	0.13	0.09	0.14	0.14	0.17	0.11	0.13	0.10	0.08	0.22	0.13	0.10
Pacific	-	-	-	-	-	-	-	-	-	-	-	-

1 Data based on monthly submissions from IEA countries to the crude oil import register (in '000 bbl), subject to availability. May differ from Table 8 of the Report.
IEA North America includes United States and Canada.
IEA Europe includes all countries in OECD Europe except Hungary. The Slovak Republic and Poland is excluded through December 2007 but included thereafter.
IEA Pacific data includes Australia, New Zealand, Korea and Japan.

2 Iraqi Total minus Kirkuk.

3 Iranian Total minus Iranian Light.

4 33° API and lighter (e.g., Bonny Light, Escravos, Qua Iboe and Oso Condensate).

Table 7
REGIONAL OECD IMPORTS[1,2]
(thousand barrels per day)

	2009	2010	2011	1Q11	2Q11	3Q11	4Q11	Oct-11	Nov-11	Dec-11	Year Earlier Dec-10	Year Earlier % change
Crude Oil												
North America	7353	7343	6703	6571	6928	6793	6519	6825	6381	6347	6324	0%
Europe	8893	9072	8996	8857	8846	9331	8943	8804	9193	8841	9263	-5%
Pacific	6082	6249	6369	6645	6086	6255	6493	6217	6436	6824	6659	2%
Total OECD	22329	22663	22067	22072	21860	22379	21955	21846	22010	22012	22536	-2%
LPG												
North America	13	8	8	20	4	4	3	6	2	1	2	-67%
Europe	260	270	311	313	284	304	341	344	362	317	323	-2%
Pacific	529	558	561	569	547	580	546	508	519	612	528	16%
Total OECD	802	836	879	903	836	888	890	858	882	930	853	9%
Naphtha												
North America	22	36	42	34	51	43	38	40	59	14	12	14%
Europe	352	390	292	292	336	285	257	284	237	248	407	-39%
Pacific	841	900	876	917	830	906	853	809	898	854	837	2%
Total OECD	1215	1326	1210	1243	1217	1234	1147	1133	1194	1116	1257	-11%
Gasoline[3]												
North America	878	788	752	669	981	703	655	612	749	606	660	-8%
Europe	193	174	216	223	221	216	203	193	265	153	193	-20%
Pacific	96	64	73	71	61	70	90	83	86	101	62	62%
Total OECD	1167	1025	1040	963	1262	989	948	887	1101	860	915	-6%
Jet & Kerosene												
North America	62	76	73	62	86	81	64	65	96	31	60	-48%
Europe	452	417	398	320	367	451	450	451	554	349	358	-3%
Pacific	53	40	50	58	43	45	55	65	59	42	45	-6%
Total OECD	567	532	521	440	497	578	569	580	709	423	463	-9%
Gasoil/Diesel												
North America	55	49	33	46	30	32	23	5	52	11	30	-63%
Europe	1035	1045	1001	1078	931	934	1063	1155	1096	940	1081	-13%
Pacific	87	97	129	99	153	123	140	146	117	156	93	68%
Total OECD	1177	1191	1163	1224	1114	1089	1226	1306	1266	1107	1205	-8%
Heavy Fuel Oil												
North America	270	277	266	345	304	193	222	206	250	211	231	-8%
Europe	534	529	579	505	582	651	576	657	548	522	542	-4%
Pacific	113	117	146	147	111	156	169	142	184	182	102	79%
Total OECD	917	923	990	997	997	1001	967	1005	982	915	874	5%
Other Products												
North America	870	805	871	855	896	903	828	747	832	905	873	4%
Europe	770	666	704	683	776	724	632	665	649	582	737	-21%
Pacific	325	335	326	383	252	343	327	316	301	364	362	1%
Total OECD	1964	1807	1901	1921	1924	1970	1787	1728	1782	1851	1972	-6%
Total Products												
North America	2171	2038	2044	2033	2355	1960	1832	1681	2041	1780	1869	-5%
Europe	3595	3491	3500	3415	3497	3566	3522	3748	3712	3111	3642	-15%
Pacific	2045	2110	2161	2244	1995	2223	2181	2068	2164	2311	2029	14%
Total OECD	7810	7639	7705	7691	7847	7749	7535	7498	7917	7203	7539	-4%
Total Oil												
North America	9524	9381	8747	8604	9283	8753	8351	8506	8421	8127	8483	-4%
Europe	12488	12562	12496	12271	12344	12897	12465	12552	12905	11952	12905	-7%
Pacific	8127	8360	8530	8888	8081	8478	8674	8285	8600	9135	8688	5%
Total OECD	30139	30302	29773	29764	29708	30128	29490	29344	29927	29215	30076	-3%

1 Based on Monthly Oil Questionnaire data submitted by OECD countries in tonnes and converted to barrels.
2 Excludes intra-regional trade.
3 Includes additives.

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User's Guide and Glossary to the IEA *Oil Market Report*

For information on the data sources, definitions, technical terms and general approach used in preparing the *Oil Market Report (OMR)*, *Medium-Term Oil and Gas Markets (MTOGM)* and *Annual Statistical Supplement* (current issue of the Statistical Supplement dated 10 August 2011), readers are referred to the *Users' Guide* at www.oilmarketreport.org/glossary.asp. It should be noted that the spot crude and product price assessments are based on daily Platts prices, converted when appropriate to US$ per barrel according to the Platts specification of products (© 2012 Platts - a division of The McGraw-Hill Companies, Inc.).

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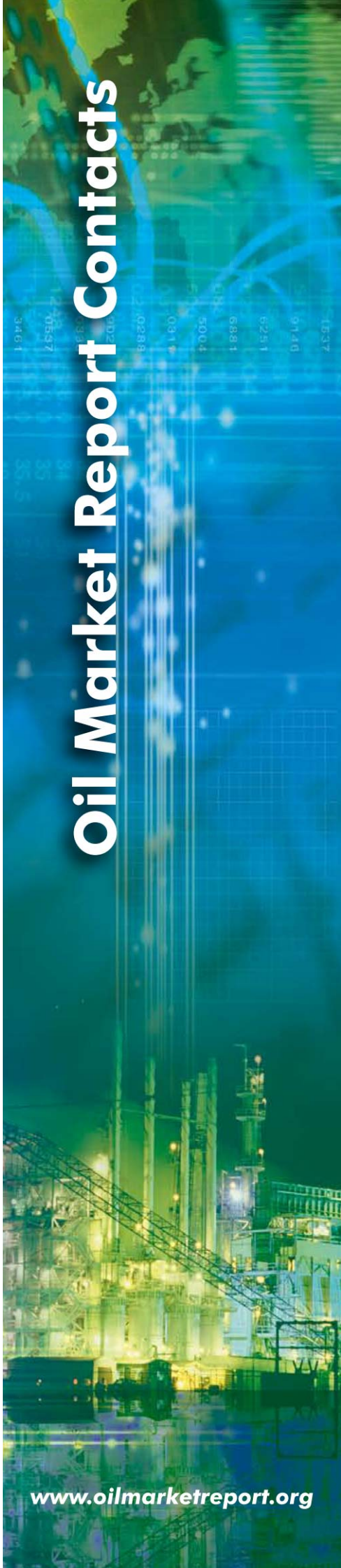

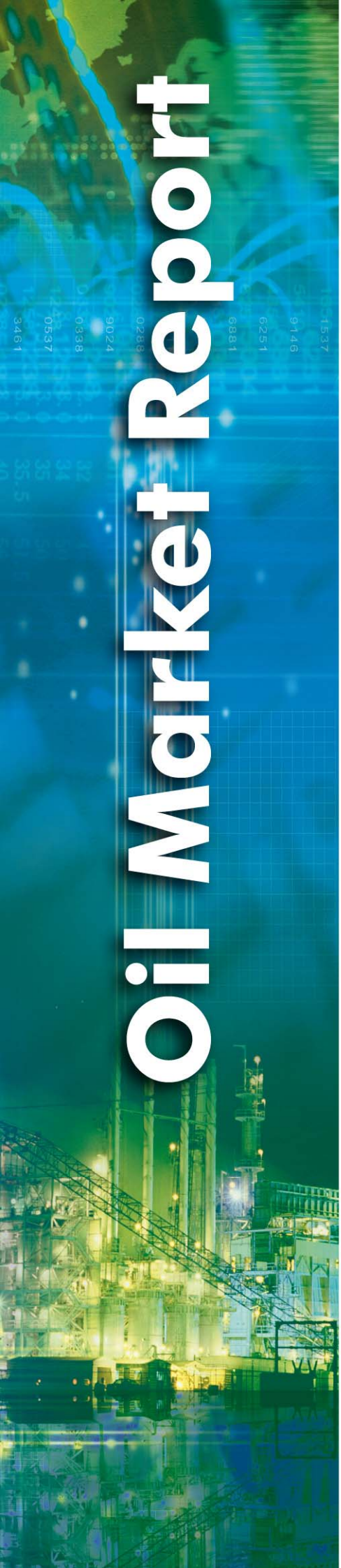

International Energy Agency

12 April 2012

HIGHLIGHTS

- **Crude futures regained early-2011 highs in March, underpinned by concern over current and potential supply disruptions.** However, amid rising actual 1Q12 OPEC production, and a sizeable implied build in global stocks, prices have subsequently eased. Brent futures were last trading near $120/bbl, with WTI at $102/bbl.

- **Global oil demand is expected to rise to 89.9 mb/d in 2012, a gain of 0.8 mb/d (0.9%) on 2011,** largely unchanged from last month. Consumption reaches a 2Q12 low of 88.6 mb/d, as weak seasonal products demand combines with high prices and a stuttering economic recovery. Demand then strengthens through end-2012 as economic growth accelerates.

- **Non-OPEC supply fell by 0.5 mb/d in March to 52.7 mb/d.** Decline was widespread, but notable in the UK and at synthetic crude plants in Canada. Unplanned outages reached 1.1 mb/d in 1Q12, restraining non-OPEC output to 53.2 mb/d, albeit 0.5 mb/d higher than 1Q11. Non-OPEC growth recovers through 2012 to average 0.7 mb/d, taking total output to 53.4 mb/d.

- **March OPEC supply held near three-and-a-half year highs, up by 135 kb/d to 31.43 mb/d.** A list of countries pledging import cuts in coming months suggests Iranian supplies could fall by 0.8-1.0 mb/d versus 2011 levels by mid-summer. The 'call on OPEC crude and stock change' for 2012 remains at 30.1 mb/d, but is raised for 2Q12 and 3Q12 to 29.5 mb/d and 30.7 mb/d respectively.

- **Global refinery crude runs for 1Q12 have been revised down by 90 kb/d**, to 74.8 mb/d. Seasonal maintenance, notably in OECD Pacific, trims global throughputs by 410 kb/d in 2Q12, to 74.4 mb/d. Seasonally higher US runs, and new non-OECD capacity, provide an offset, leaving 2Q12 runs 0.5 mb/d above year-ago, compared to a y-o-y gain of 120 kb/d in 1Q12.

- **OECD industry total oil inventories fell by 12.4 mb in February, to 2 630 mb**, compared with a historical average 38.8 mb draw. The stock deficit vs. the five-year average narrowed to 13.9 mb, from 40.4 mb in January. Forward demand cover rose 1.2 days to 59.6 days. March preliminary data show a 22.6 mb increase in OECD industry inventories.

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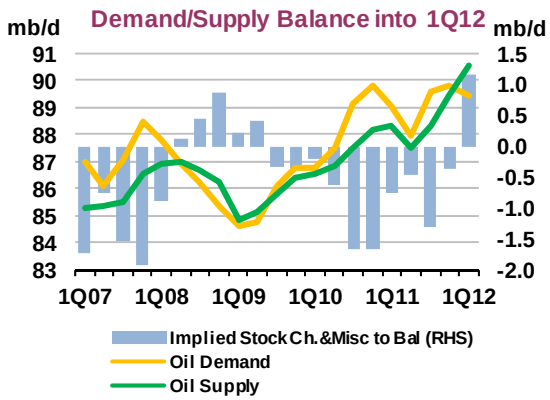
HAS THE TIDE TURNED?

Acknowledging that data remain preliminary, first quarter 2012 fundamentals nonetheless show a clear shift from the seemingly relentless tightening evident over the prior ten quarters (3Q09 to 4Q11). An increase of 1.2 mb/d in OPEC crude and gas liquids supply versus 4Q11, alongside sluggish oil demand, imply a potential global build in stocks of over 1 mb/d, despite patchy non-OPEC supply performance.



Together with Saudi supply assurances, market speculation on a potential strategic stock release and hopes pinned on multilateral talks over Iran's nuclear programme, easing 1Q12 fundamentals have seen prices recently lose most of the $5/bbl they gained in March. The muted impact so far is partly because much of this extra supply has been stockpiled on land or at sea. Our own data for 1Q12 suggest that total OECD industry stocks built by around 0.5 m/d, even if absolute stock levels in Europe and Asia remain below the five-year average. Preliminary indications are that crude stockpiling by Saudi Arabia and China may amount to a combined 0.7 mb/d for 1Q12. The Saudi Arabian oil minister recently acknowledged a build-up of stocks within the Kingdom and at facilities in Japan, the Netherlands and Egypt. In a recent *OMR* we also noted that new strategic storage capacity in China could accommodate 150-200 kb/d of crude, over and above expected Chinese products demand growth, if spread evenly over 2012. 1Q12 trade and refining data for China, while incomplete, nonetheless suggest that crude stocks may have built by at least that amount. And Iran is also likely storing cargoes shut out of Asia and Europe amid tightening sanctions.

So the cycle of repeatedly tightening fundamentals evident since 2009 has been broken for now. March and April habitually represent a seasonal low point in global crude demand, so it is perhaps not surprising that extra supply has been channelled into producer or strategic storage. That said, with prevailing backwardation in the Brent market, it is clear that stockpiling so far has been driven more by concerns on supplies for the upcoming summer, after sanctions on Iran fully take effect, than by favourable storage economics. While some of this extra oil is now well positioned to meet rising summer demand from May onwards, its impact on prompt prices has been blunted by ongoing geopolitical uncertainties. Refiners have made the point that they will happily replace Iranian volumes with alternative supplies, so long as they can do so economically. As the world's key marginal supplier, Saudi Arabia has not traditionally been keen to heavily discount its prices, although it likely recognises that a degree of price flexibility is usually required when trying to replace base load supplies for new customers.

Latest information suggests that offtake of Iranian crude by traditional buyers could drop by 0.8-1.0 mb/d this summer. Key OPEC producers have already shown that they can step into the breach to replace lost volumes, with total output now testing 31.5 mb/d. With demand-side risks looking evenly balanced, market direction over the rest of 2012 will hinge largely on the prospects for supply. We retain a fairly cautious view on the recovery in non-OPEC production from recent outages, but nonetheless see growth accelerating in the second half of 2012. This too could have more of a calming effect on prices as the year progresses. Arguably, with Iranian exports already 200-300 kb/d below the 2011 average, a pessimistic case might see overall OPEC supply fall by 600 kb/d from recent highs if no further offsetting increases from other producers materialise. Extrapolating this conservative supply scenario forward through end-2012, and against a backdrop of normal seasonality in demand, this paints a picture of fairly balanced OECD industry stocks, albeit at the cost of a sub-3 mb/d margin of OPEC spare capacity. We cannot discount the possibility that prices will remain high so long as geopolitical uncertainties remain. Further surprises almost inevitably lurk around the corner for both demand and supply. But for now at least, the earlier tide of remorseless market tightening looks to have turned.

DEMAND

Summary

- **Global oil demand is forecast at 89.9 mb/d for 2012, a rise of 0.8 mb/d (0.9%) versus 2011.** The outlook remains largely unchanged from last month, as the negative influence of a higher price assumption counteracts stronger baseline demand.

- **Preliminary estimates for February imply global oil demand hit a seasonal peak of 91.1 mb/d in that month, 0.6 mb/d higher than last month's estimate for February.** Notably higher indications for demand were reported in Japan, Russia, India and South Korea.

- **The underlying crude price assumption has been raised. Based on the prevailing futures strip,** Brent crude now averages $115/bbl for 2012, nearly $10 more than assumed for 2012 in 4Q11.

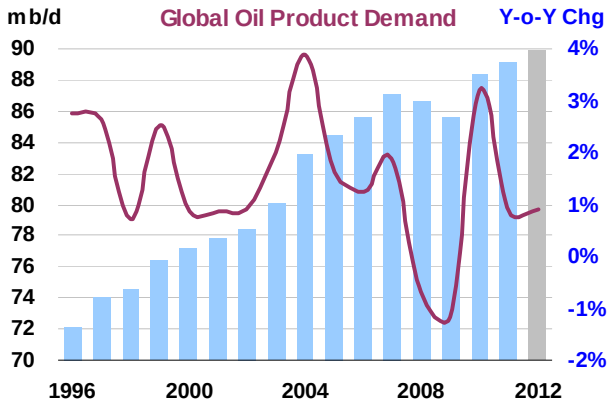
Global Oil Demand (2010-2012)

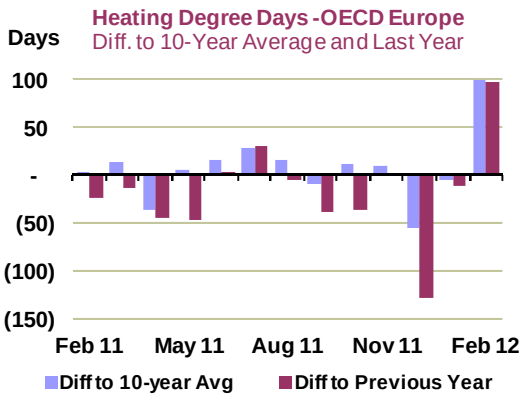
(million barrels per day)

	1Q10	2Q10	3Q10	4Q10	2010	1Q11	2Q11	3Q11	4Q11	2011	1Q12	2Q12	3Q12	4Q12	2012
Africa	3.3	3.5	3.4	3.5	3.4	3.4	3.4	3.3	3.4	3.4	3.5	3.6	3.5	3.6	3.5
Americas	29.5	30.0	30.6	30.2	30.1	30.1	29.8	30.2	29.9	30.0	29.6	29.7	30.3	30.2	30.0
Asia/Pacific	27.2	27.0	26.7	28.3	27.3	28.6	27.3	27.4	28.9	28.0	29.4	28.1	28.0	29.4	28.7
Europe	15.0	14.9	15.6	15.5	15.3	14.9	14.8	15.4	14.8	15.0	14.4	14.3	15.1	14.7	14.6
FSU	4.4	4.3	4.5	4.6	4.4	4.4	4.6	4.8	4.8	4.7	4.6	4.7	4.9	4.9	4.8
Middle East	7.4	7.8	8.3	7.7	7.8	7.6	8.0	8.5	8.0	8.0	7.9	8.2	8.7	8.2	8.2
World	**86.8**	**87.5**	**89.1**	**89.8**	**88.3**	**89.1**	**87.9**	**89.6**	**89.8**	**89.1**	**89.4**	**88.6**	**90.6**	**91.0**	**89.9**
Annual Chg (%)	2.6	3.3	3.5	3.5	3.2	2.6	0.5	0.5	0.0	0.9	0.4	0.7	1.1	1.3	0.9
Annual Chg (mb/d)	2.2	2.8	3.0	3.1	2.8	2.3	0.4	0.5	0.0	0.8	0.3	0.6	1.0	1.2	0.8
Changes from last OMR (mb/d)	0.00	0.01	0.02	0.01	0.01	0.04	0.04	0.05	0.02	0.03	0.10	-0.14	0.10	-0.14	-0.02

Global Overview

Total global consumption of oil products is forecast to average 89.9 mb/d in 2012, a rise of 0.8 mb/d (0.9%) on 2011. The projected gain is the same as in last month's report, as changes in two explanatory variables have cancelled each other out. Firstly, given the recent gains seen in oil prices, the demand projections now incorporate a higher underlying price assumption, acting to constrain consumption. Secondly, more robust than expected preliminary February data equate to a higher base, or starting point, for the 2012 consumption estimate, thereby supporting demand.





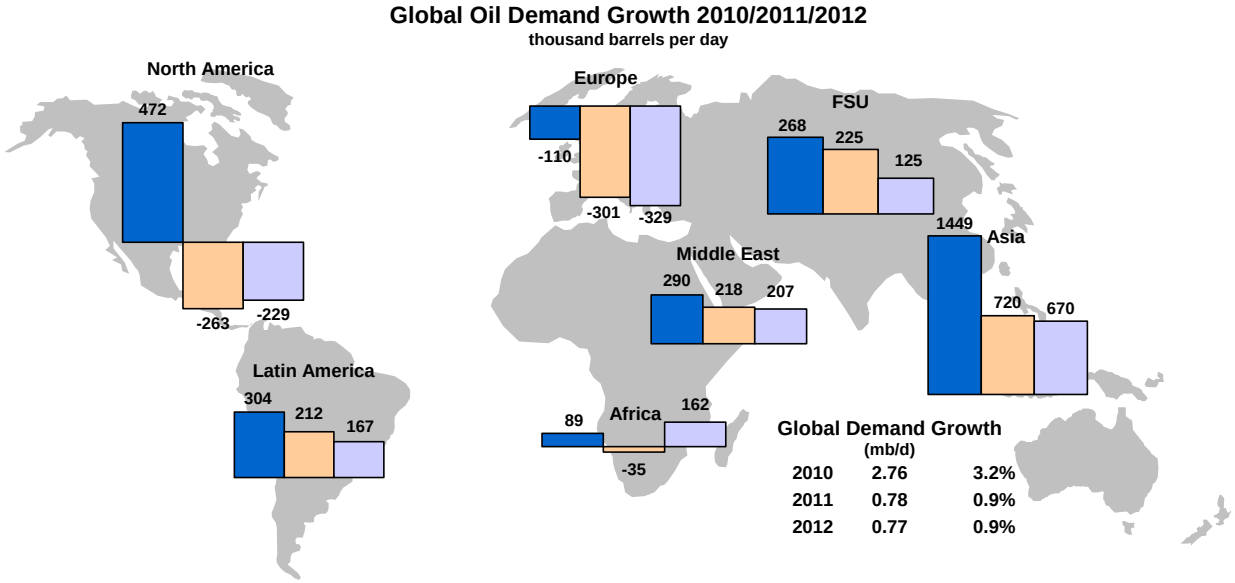
Early estimates of global oil demand in February, at 91.1 mb/d, are nearly 0.6 mb/d higher than assumed in last month's *OMR*. Japan accounted for more than half of the global revision, as adverse weather conditions increased the pressure on a power sector already struggling with post-tsunami nuclear

closures (see *Japanese Power Sector Demand: One Year After Fukushima)*. Other large upwards amendments – 0.1 mb/d – in Russia, South Korea and India, have arisen because of the cold weather and/or robust industrial demand.

The *OMR* does not forecast oil prices, but instead utilises a three-month rolling average for the futures curve in its projections for demand. Re-calculated in March, this methodology results in a Brent Blend price averaging around $115/bbl in 2012, a near $10 premium on late-2011's expectation. *Ceteris paribus*, a higher price for oil would equate to lower demand.

Although the estimate of global oil demand growth for 2012, at 0.8 mb/d, is exactly in-line with the increase in 2011, the quarterly patterns for the two years are very different. Last year started with year-on-year (y-o-y) growth of 2.3 mb/d (or 2.6%) in 1Q11 before falling into negative territory by 4Q11, down by 30 kb/d, as rising prices and the weakening economic backdrop undermined consumers' appetite for oil. Modest demand growth is anticipated to have returned in 1Q12, with y-o-y growth of 0.3 mb/d (or 0.4%), in spite of high prices and subdued economic conditions and largely due to significantly higher Japanese demand. Growth is then forecast to accelerate, albeit very moderately, through 2012 as the global economic backdrop slowly improves.

The regional breakdown of demand is little changed, with Asia continuing to dominate, accounting for 0.7 mb/d of the global 0.8 mb/d expansion predicted in 2012. The only significant change from last month is the stronger growth now foreseen in oil-rich nations such as the Middle East (+205 kb/d, as opposed to +155 kb/d last month) and the former Soviet Union (+125 kb/d, previously +115 kb/d). More price sensitive regions, such as North America (-230 kb/d), correspondingly have had demand estimates revised lower.



It is important to note that the global demand forecast, of 89.9 mb/d in 2012 and a rise of 0.8 mb/d on 2011, is only the base case projection and is heavily dependent upon two key explanatory variables – the underlying price assumption (the futures curve) and assumptions for economic growth that result in a global expansion of 3.3%. A weaker economic backdrop and/or higher prices, with all else being held equal, would equate to a lower demand projection.

OECD

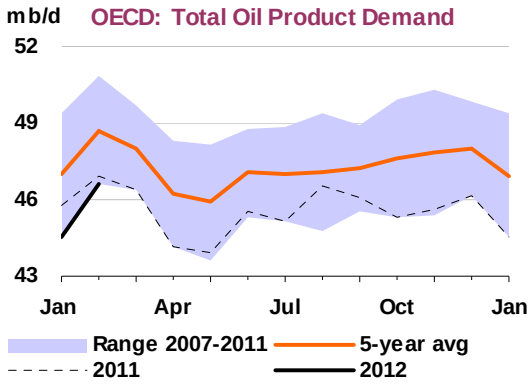
The OECD region continues to lag the global picture in general, with a predicted y-o-y decline in oil demand of 0.7% in February, to 46.6 mb/d versus an expansion of 0.8% for the world. Even this clouds a clear dichotomy that exists within the OECD, with western hemisphere OECD demand falling heavily but

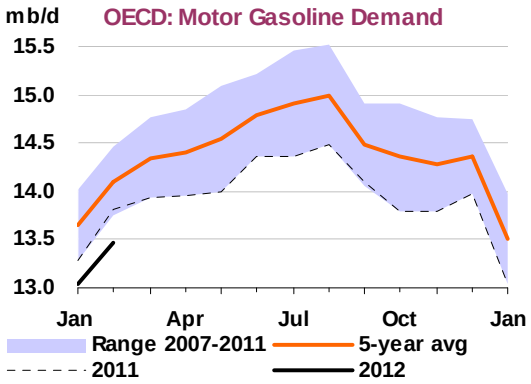
the OECD Pacific region posting very strong gains, up 7.4% to 9.3 mb/d. As already suggested, a lot of this additional demand is due to substitution in the Japanese power sector, with total Japanese oil demand up by 10.6% y-o-y in February to 5.6 mb/d. Resurgent Korea also played a role, with demand up by 2.6% to 2.4 mb/d, buttressed by recuperating industrial activity.

OECD Demand based on Adjusted Preliminary Submissions - February 2012
(million barrels per day)

	Gasoline		Jet/Kerosene		Diesel		Other Gasoil		RFO		Other		Total Products	
	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa
OECD North America*	**9.90**	**-2.6**	**1.58**	**-1.6**	**3.82**	**-3.0**	**0.94**	**-10.3**	**0.68**	**-32.2**	**6.14**	**5.54**	**23.06**	**-2.2**
US50	8.38	-3.2	1.37	-2.0	3.23	-3.8	0.44	-14.6	0.36	-43.0	4.75	8.0	18.53	-2.2
Canada	0.69	2.4	0.11	-1.3	0.23	-2.4	0.34	-10.5	0.11	2.1	0.73	-1.2	2.22	-1.7
Mexico	0.78	0.0	0.06	6.3	0.32	4.8	0.14	4.8	0.13	-29.5	0.61	-3.6	2.04	-2.6
OECD Europe	**1.96**	**-4.6**	**1.14**	**-4.6**	**4.24**	**-2.2**	**2.15**	**1.3**	**1.25**	**-2.9**	**3.52**	**-5.2**	**14.27**	**-3.0**
Germany	0.44	1.3	0.16	-4.6	0.66	0.7	0.45	3.8	0.15	-8.4	0.49	-13.0	2.34	-2.8
United Kingdom	0.33	-3.0	0.31	-5.6	0.46	0.5	0.11	-2.2	0.06	-10.0	0.30	-5.8	1.59	-3.3
France	0.15	-10.5	0.14	-1.6	0.68	-3.7	0.43	7.3	0.09	15.3	0.47	3.6	1.96	0.6
Italy	0.18	-23.0	0.08	-9.7	0.41	-17.9	0.13	0.3	0.13	23.0	0.41	-19.8	1.33	-14.5
Spain	0.11	-5.8	0.11	-0.5	0.47	-1.0	0.24	-1.6	0.18	-8.2	0.33	-1.4	1.44	-2.5
OECD Pacific	**1.61**	**1.5**	**1.27**	**5.8**	**1.15**	**2.2**	**0.67**	**0.0**	**1.02**	**24.6**	**3.57**	**9.8**	**9.27**	**7.4**
Japan	0.98	0.1	0.91	8.8	0.44	0.2	0.54	-0.3	0.68	50.0	2.08	13.0	5.63	10.6
Korea	0.20	0.8	0.20	-6.7	0.28	3.4	0.13	0.9	0.30	-7.8	1.30	7.3	2.41	2.6
Australia	0.35	0.9	0.13	2.2	0.37	3.3	0.00	0.0	0.02	1.0	0.17	-5.8	1.04	0.8
OECD Total	**13.47**	**-2.4**	**3.99**	**-0.3**	**9.21**	**-2.0**	**3.75**	**-2.1**	**2.95**	**-5.2**	**13.23**	**3.5**	**46.61**	**-0.7**

Transport fuel demand in the OECD remains weak, with gasoline demand down by 2.4% in February to 13.5 mb/d and consumption of diesel 2.0% lower at 9.2 mb/d. The Western hemisphere-Pacific separation also exists for transport fuels, with growth seen in the Pacific versus significant declines in the west, but the sheer scale of western consumption leaves a declining global trend. *Other* product demand, as it includes crude for direct burn, rose by 3.5% in 2012 to 13.2 mb/d, with Japan providing the greatest upside momentum, up 13.0% to 2.1 mb/d.



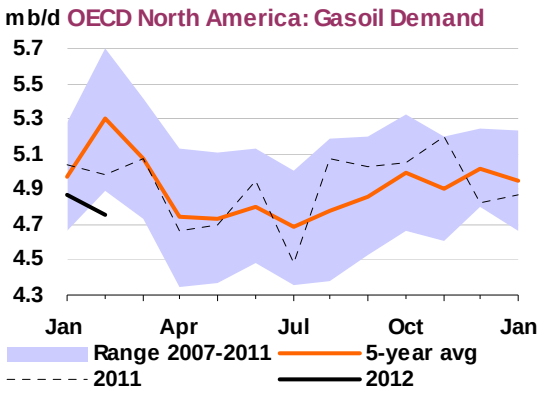


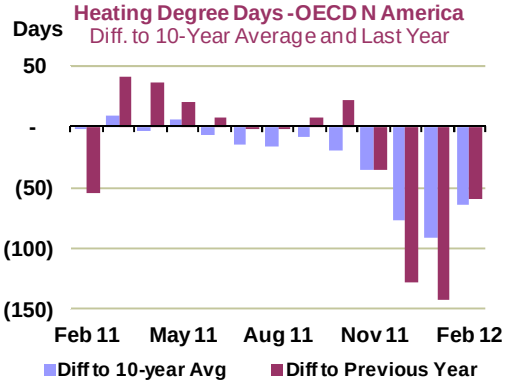
Looking further afield, the weak economic underpinnings and relatively high prices are forecast to restrain total OECD demand to 45.1 mb/d in 2012, a decline of 1.1% on 2011. GDP growth in the OECD is estimated at 1.1% in 2012, down from 2011's 1.6% expansion. The y-o-y demand contraction, evident throughout, is nonetheless forecast to lessen as 2012 unfolds; -1.7% in 1Q12, -1.4% in 2Q12, -0.8% in 3Q12 and -0.5% in 4Q12. The relative demand declines ease each quarter as the economy is assumed to recover in the later stages of 2012, with OECD GDP growth rising to 1.9% in 2013.

North America

Demand for oil products continues to fall sharply in North America, with the latest preliminary estimates pointing towards a 2.2% (0.5 mb/d) y-o-y contraction in February to 23.1 mb/d. Decline came in less steep than the average 3.7% contraction seen in both December and January. Gasoline demand remains

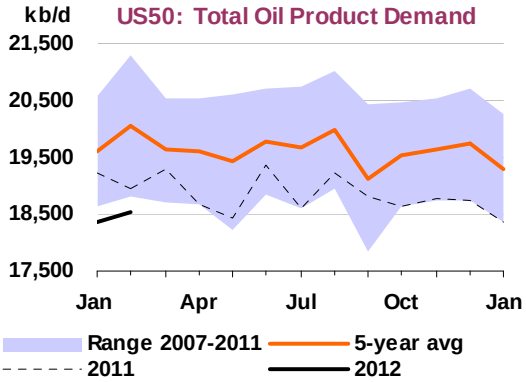
on a sharply falling trend, down 2.6% in February to 9.9 mb/d, its twelfth consecutive month in negative territory. Falling gasoil demand however has triggered concerns about the medium-term health of North American demand. Having risen through most of 2010 and 2011, the three months through to February saw gasoil demand decline by 8.0% in December, 3.4% in January and 4.5% in February. Warmer winter weather and low natural gas prices accounted for much of the decline, via reduced heating oil use (down 10.3% in February to 0.9 mb/d), although other sectors such as road, industry and agricultural also showed signs of weakening, as escalating prices suppressed consumption.

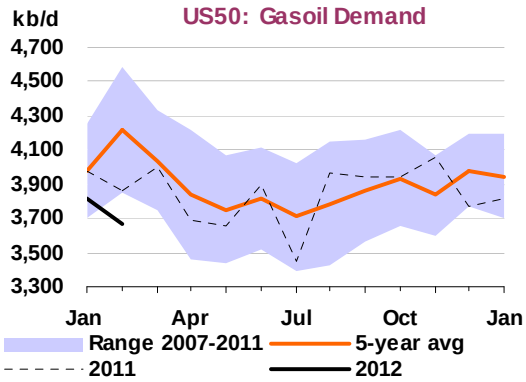




Revised January data for the **US** shows a dramatic 0.9 mb/d y-o-y decline (-4.4%) in total US consumption to 18.4 mb/d, in line with the -4.7% rate implied in the *EIA's Weekly Petroleum Status Report*.

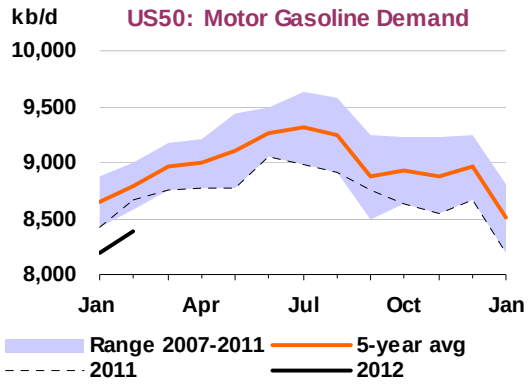
Having led the pace of the total decline in 2011, US gasoline demand is shadowing total oil demand, down 2.7% in January to 8.2 mb/d. The majority of the decline derives from reductions in miles travelled (as opposed to a more efficient vehicle fleet) as the Federal Highway Administration reported that US miles travelled fell by 2% in the 12 months through to January. Amid more direct price feed-through, near-$4/gallon gasoline is constraining demand as well as having become a major political issue ahead of this year's Presidential election.

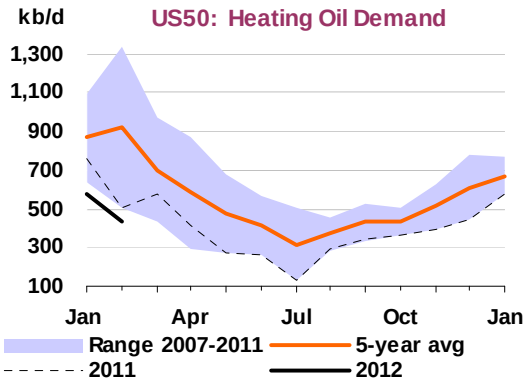




Preliminary estimates for February point towards a moderation in the projected y-o-y decline, to -2.2%, taking US oil demand (excluding territories) to 18.5 mb/d. Despite slowing decline, consumption is still 425 kb/d less than a year earlier. Residual fuel oil demand led the downside as consumers looked to capture the relative price advantages available by switching to natural gas.

Warm winter weather has added to the recent US demand weakness, with gasoil demand (which includes heating oil) down by around 4.0% y-o-y in January to 3.8 mb/d and 5.2% in February to 3.7 mb/d.

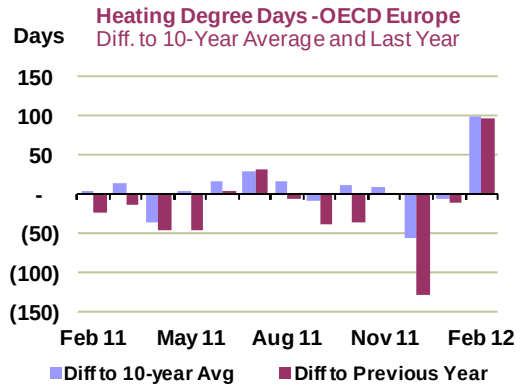


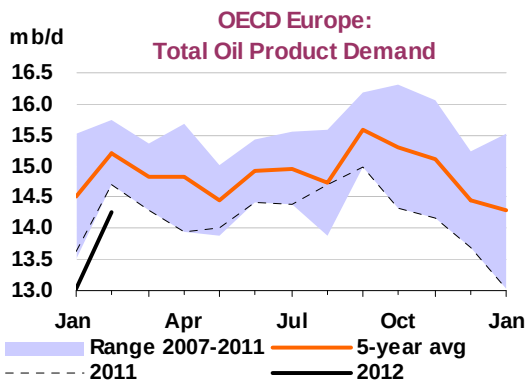


A decline of around 0.2 mb/d (-1.1%) to 18.7 mb/d is foreseen in US demand in 2012. Demand in the key gasoline sector is expected to fall by 0.1 mb/d to 8.6 mb/d, on a combination of further efficiency gains and reduction in US miles travelled. The University of Michigan, for example, recently published a report citing that the average fuel economy of new vehicle sales in the US is 14% higher than four years earlier.

Europe

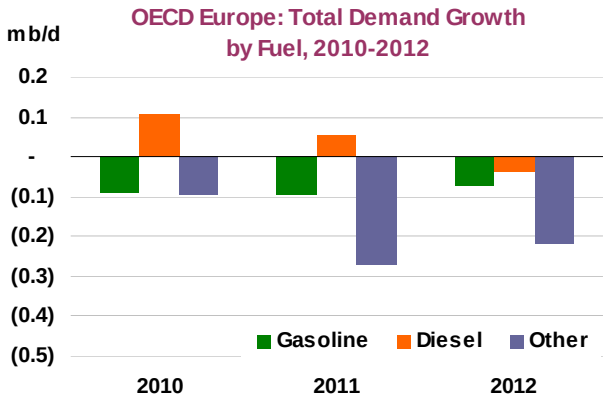
Y-o-y decline in European oil demand slowed to 3% in February, compared to 6.2% in December, on exceptionally cold temperatures. Heating oil demand posted a rare y-o-y gain in February, up 1.3%, and only the second such monthly gain in fourteen months. Transportation fuels maintained their heavy recent pace of decline however, with gasoline demand down 4.6% in February to 2.0 mb/d and road diesel down 2.2% to 4.2 mb/d.

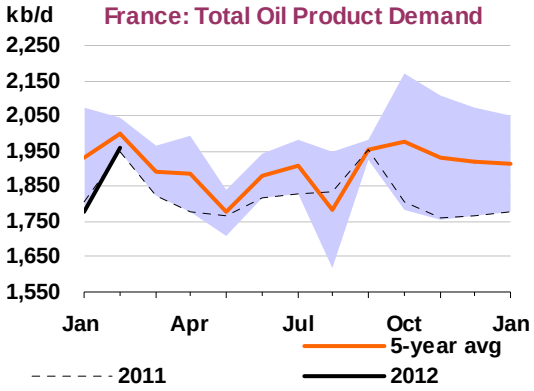




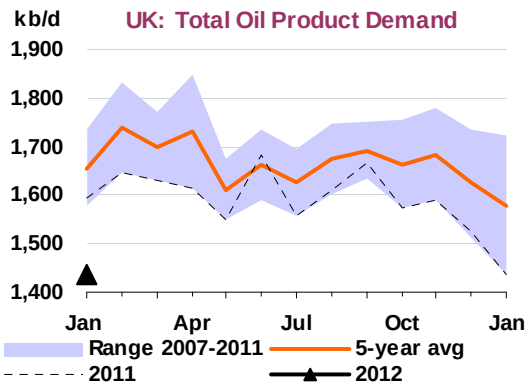
Having fallen by 5.2% in 4Q11, to 14.1 mb/d, the relative pace at which European demand contracts is forecast to abate sharply, averaging 3.5% in 1Q12, 3.4% in 2Q12 and 2.1% in 3Q12, easing further to a contraction of 0.2% in 4Q12, supported by the assumed recuperation in the economy. European GDP growth of around 1.1% is foreseen in 2013, after a decline of 0.2% in 2012, with an assumption that economic growth resumes from 2Q12.

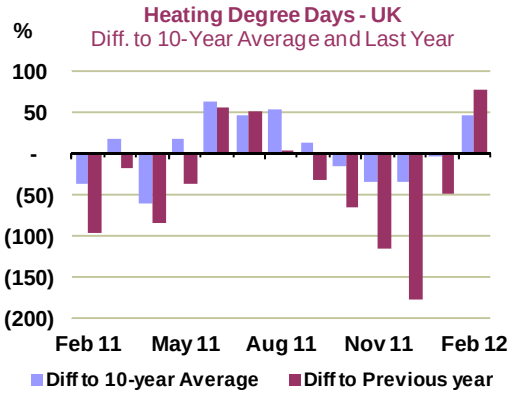
French demand growth resumed in February, as the preliminary data series depicted a 0.6% y-o-y gain to 2.0 mb/d – its highest level since December 2010. Heating oil led the French recovery, having fallen heavily through the three previous months, with a 7.3% y-o-y gain on unusually cold temperatures. Domestic transportation fuel demand continues to struggle, however, as cash-strapped consumers resist higher prices, with gasoline demand down 10.5% and road diesel down 3.7%. All told, French oil consumption is now seen declining by 2.0% in 2012, to 1.8 mb/d.





Given the paucity of recent **German** data (no data yet exists for February), the demand outlook for 2012 has been downgraded on a higher underlying price assumption. A decline rate of -0.8% to 2.4 mb/d is now assumed, compared with 0.4% decline last month. A more dramatic reduction would have been applied had it not been for the upturn posted in domestic business sentiment, as the *Ifo Institute's* rating rose for a fifth consecutive month in March to 109.8. The Munich-based research institute's index is based on around 7,000 monthly survey responses from firms in manufacturing, construction, wholesaling and retailing, and is normalised to 100 in 2005.



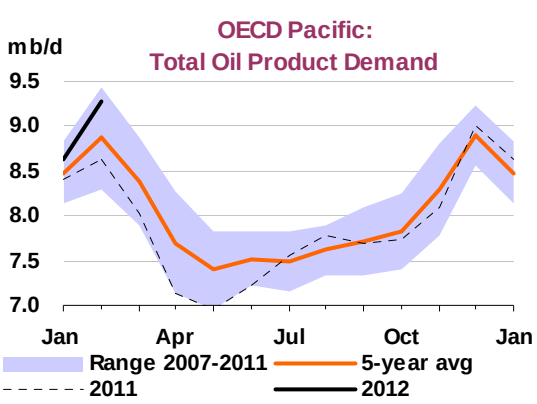


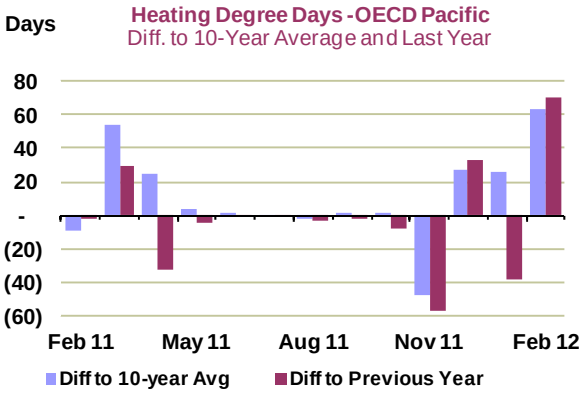
The **UK** saw a sharp contraction in consumption in January, with preliminary data depicting a 10% y-o-y drop to 1.4 mb/d. Not only is this the lowest level of UK demand since the mid-1960s, but it is also the weakest y-o-y trend since December 2009. Demand stalled as the economy moved close to a technical recession (i.e. two consecutive quarters of negative GDP growth) – the OECD claims this has already occurred, while the consensus of opinion elsewhere is that a UK recession has only just been avoided. Warmer January weather also contributed, as did sharply higher retail prices for both gasoline and diesel. Diesel, for example, saw demand fall by 6.0% to 410 kb/d, a significant slowdown after five consecutive months of growth. For the year as a whole, an annual oil demand contraction of around 2.5% is expected, to 1.6 mb/d. Threatened strike action by tanker drivers in 2Q12 could further affect motor fuel demand.

Italian demand saw a fairly modest seasonal February peak. Prior to 2008, Italian oil demand enjoyed a five-year average m-o-m expansion of around 10%, but in February 2012 the gain was a more-muted 5.1%. Compared to the year earlier, the story is even bleaker with Italian demand down 14.5% to 1.3 mb/d. A combination of austerity public budget cuts and record retail prices, which curbed transportation fuel demand (gasoline down 23.0% y-o-y in February and diesel -17.9%), is suppressing demand, with an average forecast decline of 5% for the year as a whole, to 1.4 mb/d.

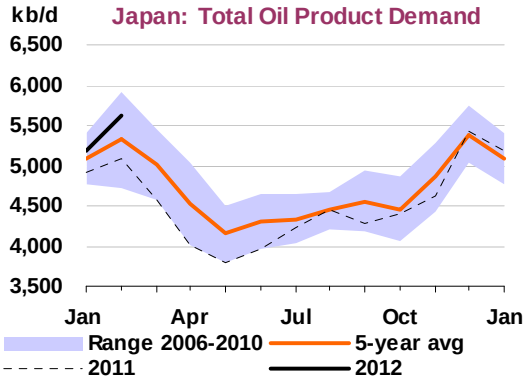
Pacific

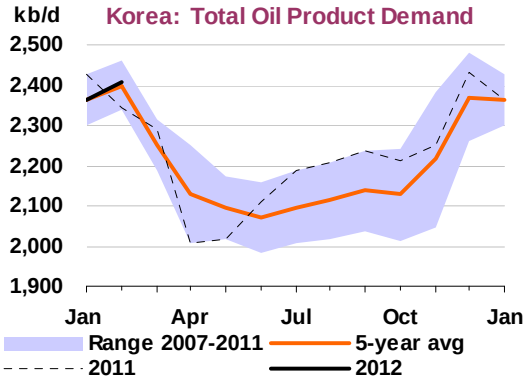
Demand in the OECD Pacific region looks stronger than that in the Atlantic Basin, with preliminary estimates for February demand at 9.3 mb/d amounting to a 7.4% (0.6 mb/d) y-o-y gain. February saw the third successive month of absolute growth and the fastest rate of expansion since June 2003. Extremely cold weather is the key determinant for higher demand, an impact magnified in Japan where the post-tsunami nuclear closures meant that swing power sector demand came from LNG, residual fuel oil and crude oil for direct burning (see *Japanese Power Sector Demand: One Year After Fukushima*).





Japanese demand continues to rise strongly, as nuclear closures stimulate additional demand for oil products. Since the tsunami hit last March, Japanese oil demand has transformed from steep decline to strong growth. Having risen by over 5% y-o-y in January to 5.2 mb/d, all the indicators are for an even faster expansion in February (10.6% growth), as extremely cold temperatures triggered additional demand for residual fuel oil, crude for direct burn and kerosene. Naphtha demand bucked the generally rising trend, with consumption falling as alternative ethylene cracking feedstocks looked better value.



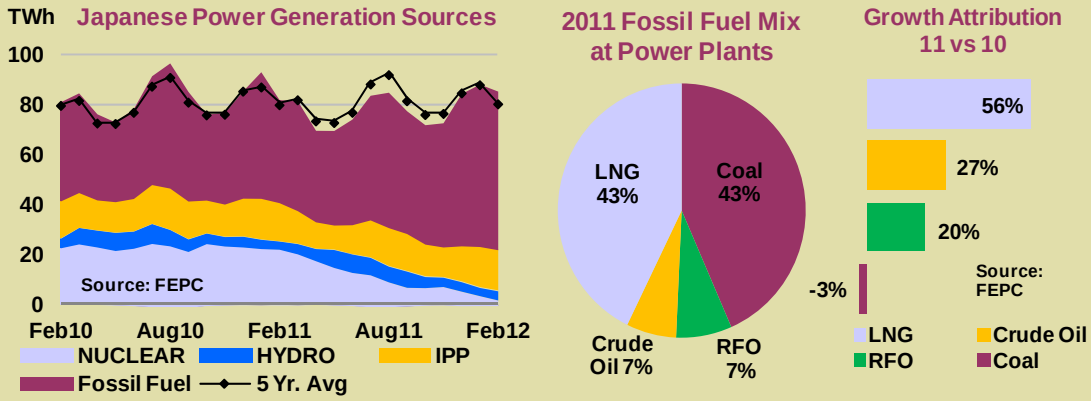


Early indicators of **South Korean** oil demand in February point towards 2.4 mb/d of consumption, a 2.6% y-o-y gain as cold February weather stimulated, in particular, LPG consumption (+13.9%). Demand for naphtha (+7.0%) and diesel (+3.4%) also rose sharply as manufacturing activity improved in February for the first time since July 2011. *HSBC's* South Korean Manufacturing PMI rose to 50.7 in February, up from 49.2 in January. Nonetheless, a modest gain, of less than 1%, is foreseen in 2012 demand, as persistent price pressures and efficiency gains reduce South Korea's dependence upon imported oil.

Japanese Power Sector Demand: One Year After Fukushima

Incremental Japanese oil demand for power generation in 2011 due to Fukushima was around 145 kb/d, or around half earlier estimates, as a result of the higher than expected ratio of LNG to oil and significant power demand constraints. The outlook for 2012 depends on the reactivation of idled nuclear capacity, with incremental power sector oil demand of 250-300 kb/d versus normal nuclear generation.

In 2011, Japan generated 937 TWh of electricity, a decline of 4.7% y-o-y. The drop is a consequence of the Fukushima Daiichi nuclear meltdown, which triggered the closure of all nuclear plants and demands for more safety assurances at the nuclear complexes. Thanks to reconstruction measures and rationing of supplies to industry and households, the power sector faced mitigated demand in 2011. According to the Federation of Electric Power Companies (FEPC) of Japan, the power mix saw nuclear generation drop from a five-year average of 28% to 17%, while thermal plants powered by fossil fuels rose from a five-year average of 50% to 60%. The thermal generation fuel mix in 2011 was split: LNG (43%), coal (43%), crude oil (7%) and residual fuel oil (RFO, 7%). As a generalisation, the first two are used as inputs for base load electricity generation, while oil products are burned for peak electricity demand. As flagged in this report, although coal generation capacity remained largely unchanged, bar some 3% decrease imputable to plants damaged after March's tsunami, growth in fossil fuel demand for power generation was split LNG (56%), direct crude burning (27%) and RFO (20%).

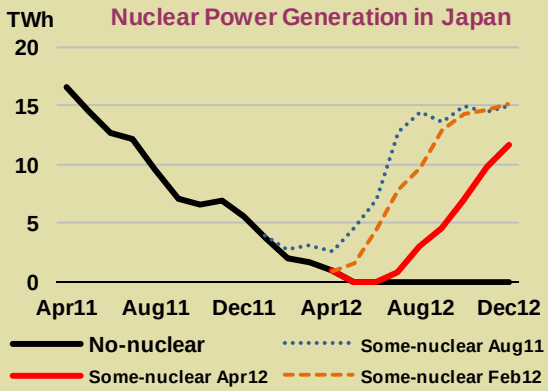


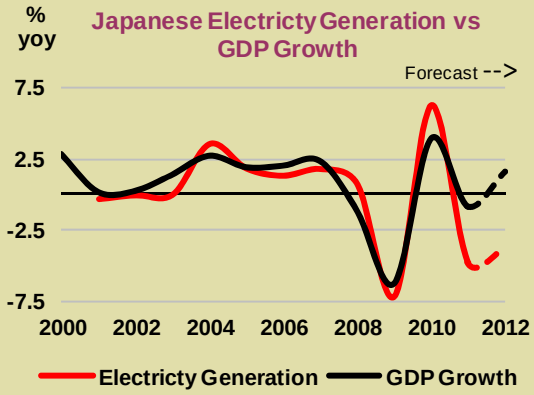
In conjunction with the IEA's Gas, Coal and Power (GCP) Division, we have analysed two scenarios of nuclear outages going forward, acknowledging that a range of possibilities exists. Our base case scenario is that some nuclear plants will be allowed to re-enter service as soon as governmental approval from national and local authorities is obtained. We expect some nuclear reactors to come back in August, with the most likely ones to receive authorisation Kansai-EPCO Ohi (reactors 3 and 4) and Shikoku-EPCO Ikata (reactor 3). These plants passed the computer stress test in March, and the Kansai-EPCO reactors were authorised by the National Safety Commission soon afterwards. In addition, these reactors are located in the southern region of Japan, where electricity demand is highest, due to a dense network of industry and households. Meanwhile, the national government is juggling its priorities: economic growth, electricity generation and popular demands for greater safety. After the tsunami, economic output fell by 0.9% in 2011 while power generation fell by an even larger 4.7%. For 2012, as reconstruction of the affected areas remains pending, the no-nuclear scenario would imply further electricity rationing and end-user prices exceeding 2011's records, calling into question the assumed 1.7% growth in national GDP and risking a price stand off between users and power utilities. Nevertheless, a no-nuclear scenario cannot be ruled out, as public opinion channelled through local governments currently remains sceptical concerning the nuclear industry, despite the apparent economic imperatives supporting nuclear capacity re-starts.

Taking into consideration capacity constraints and last year's final data, oil now looks to have generated 35% of incremental fossil-generated electricity rather than our previously assumed 60%. For 2012, we expect gas constraints to put an effective cap on LNG usage forcing the oil and LNG split to move slightly to 40/60 as more oil is pulled into the system. The 2012 split remains sensitive to change and it will depend on how the Japanese government manage electricity demand and how the nuclear generation comeback is spread in time.

Japanese Power Sector Demand: One Year After Fukushima (continued)

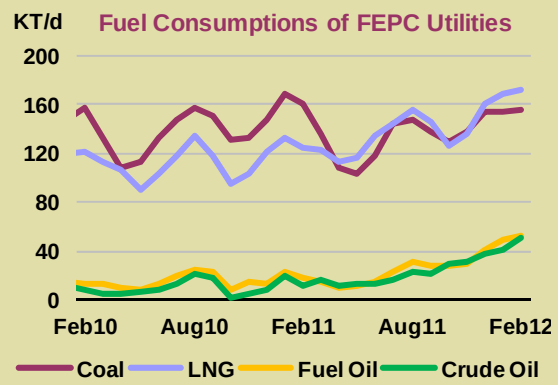
On one hand, the ability of LNG to cover any shortfalls is limited by capacity constraints, with capacity usage prior to the disaster close to 80%. Japan also only has an annual import (regasification) capacity of 250 bcm, while the North East area, severely affected by the tsunami and the Fukushima Daiichi disaster, can only take minimal amounts of LNG at Sendai City (0.4 bcm) in the West coast and at Niigita (12.2 bcm) in the East coast. On the other hand, the region's oil power plants are operated by TOHOKU-EPCO (1 300 MW) and TEPCO (12 000 MW), which prior to the disaster were used marginally for peak demand. Therefore, North East Japan heavily relies on LNG and oil products to make up the loss of nuclear plants in Fukushima.

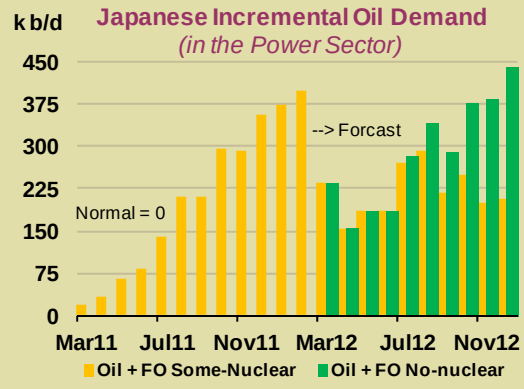




Under normal conditions, nuclear power generation averages 22 TWh per month or 264 TWh per year, and oil and LNG incremental demand is zero. 2011 saw shut downs in most nuclear plants, effectively bringing nuclear generation to an average of 13 TWh per month or 156 TWh for the year. Our previous base-case projection for incremental oil demand in 2011 and 2012 was 280 kb/d and 320 kb/d respectively versus normal conditions. After incorporating historical data and looking into the patterns of actual oil and LNG use, we revised down our figure of incremental demand for oil in 2011 by 135 kb/d to 145 kb/d and LNG by 1 bcm to 11 bcm y-o-y. For 2012, we revised down our expectations of incremental oil demand to 250 kb/d and LNG to 19 bcm y-o-y versus a normal nuclear power generation. This forecast considers the uncertainty surrounding the impending return of the nuclear capacity, as public opinion is far from convinced nuclear should return, hence the alternative no-nuclear scenario. For 2012, we factor in that oil and LNG would substitute 200 TWh of generation if some nuclear comes back and 235 TWh if no nuclear comes back. The incremental demand from the no-nuclear forecast has been trimmed to 300 kb/d of oil products and 23 bcm year-on-year of LNG in 2012. Total annual electricity generation for 2012 is assumed to drop under this no-nuclear scenario, by 3.4% to 905 TWh, as stringent energy conservation measures are required.

An outcome for 2012 of decreasing power generation and increasing economic growth seems unsustainable. The Japanese government will certainly push forward in the next months its efforts to bring back two or three nuclear reactors ahead of the peak summer demand season, although stringent safety measures will be a prerequisite.





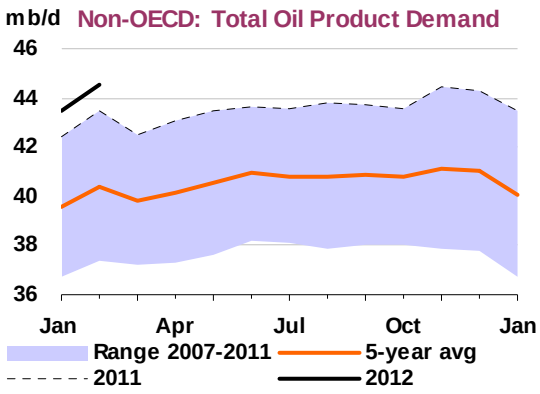
Non-OECD

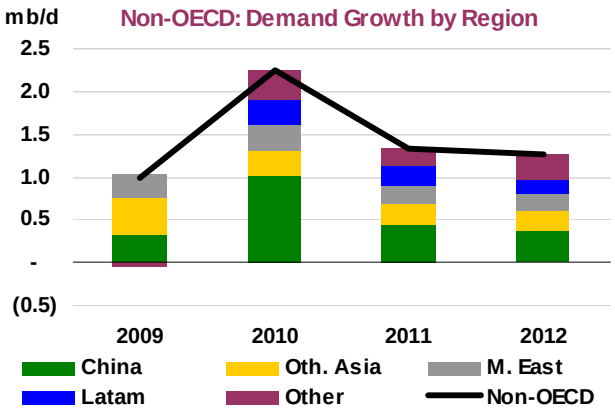
Preliminary estimates of non-OECD oil consumption came in at 44.5 mb/d for February, a gain of 2.4% (or 1.1 mb/d) on the corresponding month of 2011. Rapidly expanding car ownership levels lead the way, as gasoline consumption is estimated to have grown by 5.7% to 8.7 mb/d and gasoil by 3.0% to 13.8 mb/d. The *others* category is also assumed to have posted strong February growth, of 3.6% to 5.8 mb/d, as extensive road building programmes require additional bitumen while crude oil for direct burn rises in many countries.

Non-OECD: Demand by Product
(thousand barrels per day)

	Demand			Annual Chg (kb/d)		Annual Chg (%)	
	Dec-11	Jan-12	Feb-12	Jan-12	Feb-12	Jan-12	Feb-12
LPG & Ethane	5,111	4,990	5,071	83	66	1.7	1.3
Naphtha	2,589	2,725	2,729	-96	-129	-3.4	-4.5
Motor Gasoline	8,789	8,526	8,674	547	467	6.9	5.7
Jet Fuel & Kerosene	2,777	2,784	2,718	48	-37	1.8	-1.4
Gas/Diesel Oil	13,804	13,488	13,796	505	399	3.9	3.0
Residual Fuel Oil	5,657	5,409	5,730	-308	90	-5.4	1.6
Other Products	5,576	5,528	5,808	282	202	5.4	3.6
Total Products	**44,302**	**43,450**	**44,527**	**1,061**	**1,057**	**2.5**	**2.4**

A combination of slower economic growth – with the non-OECD forecast to post GDP growth of 5.7% in 2012, down from 6.2% in 2011 – and further price gains has nonetheless slowed the pace at which non-OECD oil demand is growing. Not only is February's estimated 2.4% y-o-y growth rate, the fifth slowest growth rate in nearly three years but it is also down by more than a third of the five-year average y-o-y non-OECD global demand gain of 3.8%.





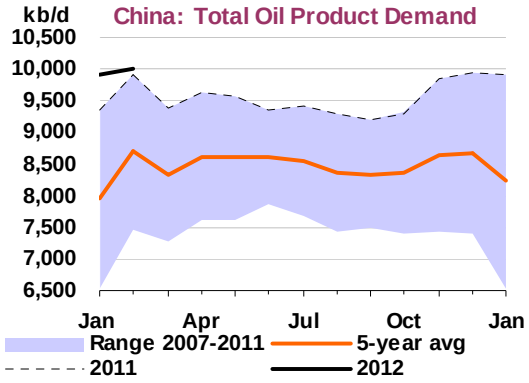
Non-OECD: Demand by Product
(thousand barrels per day)

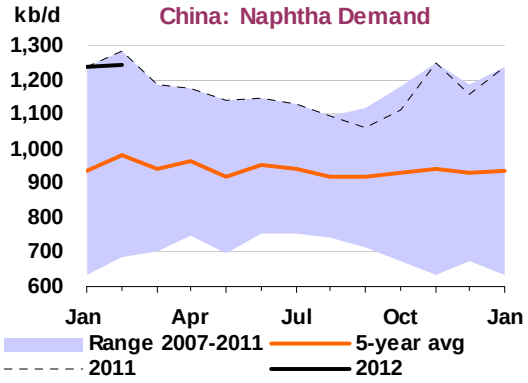
	Demand			Annual Chg (kb/d)		Annual Chg (%)	
	2010	2011	2012	2011	2012	2011	2012
LPG & Ethane	4,734	4,969	5,095	235	126	5.0	2.5
Naphtha	2,680	2,651	2,670	-29	19	-1.1	0.7
Motor Gasoline	8,081	8,365	8,636	284	271	3.5	3.2
Jet Fuel & Kerosene	2,637	2,726	2,781	89	56	3.4	2.1
Gas/Diesel Oil	12,944	13,547	14,035	604	487	4.7	3.6
Residual Fuel Oil	5,469	5,505	5,577	36	72	0.7	1.3
Other Products	5,621	5,725	5,955	104	230	1.8	4.0
Total Products	**42,167**	**43,488**	**44,750**	**1,322**	**1,261**	**3.1**	**2.9**

Non-OECD demand growth is forecast to slowly accelerate through to the end of the year, as the economic outlook brightens moving into 2013 (+6.1% GDP). In 1Q12 oil demand growth is assumed to be 2.5%, accelerating up to 3.1% by 4Q12. For the year as a whole, non-OECD oil product demand is forecast at 44.7 mb/d, a gain of 2.9% – the weakest expansion since 2009. The strongest expansions are generally reserved for the road transportation markets, as gasoil demand rises by 3.6% to 14.0 mb/d and gasoline gained 3.2% to 8.6 mb/d; indeed even the *others* category (up 4.0% to 6.0 mb/d) includes a heavy transportation relationship as it includes bitumen.

China

Early indicators of Chinese apparent demand, i.e. net product imports plus refinery output, in February point towards consumption at around 10.0 mb/d. Despite the passing of this double-digit landmark, growth fell to around 1% on the corresponding month a year earlier. Leading the Chinese slowdown were the naphtha (-3%) and diesel (+1%) categories, as previously thriving Chinese industrial activity eased.





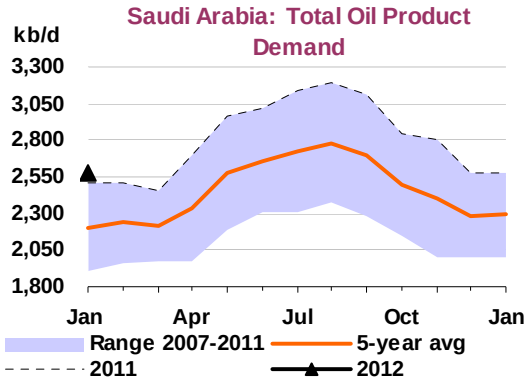
Traditionally strong 2Q demand (with diesel demand supported by the spring ploughing season) should be restrained in 2Q12, as retail gasoline and diesel prices were hiked by 6-7% on 20 March. This takes the average diesel price to $1.22 per litre and 90-octane gasoline to $1.17 per litre higher than recent US levels. Higher retail prices, on top of sluggish manufacturing indicators (*HSBC's* flash PMI fell to a five-month low of 48.1 in March – whereby any reading below 50 implies contraction), tend to back-up the *OMR's* cautious outlook for Chinese 2012 oil demand. Demand growth of 3.8% is foreseen in 2012, to a total of 9.9 mb/d, compared with some third party estimates as strong as 5.5%. Despite the projected slowdown, the domestic transportation fuel market – i.e. gasoline and diesel – is forecast to maintain growth at around 4%, as car ownership levels continue to rise briskly. New car sales rose by 26.5% y-o-y in February, according to *China Association of Automobile Manufacturers*, to 1.21 million cars. That said, patterns of vehicle use remain less intensive than in western markets, while vehicles tend to be smaller and more fuel efficient than their western counterparts.

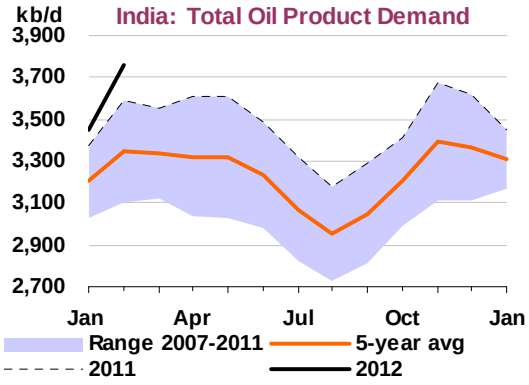
China: Demand by Product
(thousand barrels per day)

	Demand			Annual Chg (kb/d)		Annual Chg (%)	
	2010	2011	2012	2011	2012	2011	2012
LPG & Ethane	668	693	698	26	5	3.9	0.7
Naphtha	1,129	1,163	1,179	34	16	3.0	1.4
Motor Gasoline	1,546	1,655	1,720	109	65	7.1	3.9
Jet Fuel & Kerosene	368	402	406	33	4	9.0	1.1
Gas/Diesel Oil	3,143	3,341	3,465	198	124	6.3	3.7
Residual Fuel Oil	531	541	545	10	4	1.8	0.8
Other Products	1,685	1,717	1,858	32	141	1.9	8.2
Total Products	**9,069**	**9,511**	**9,871**	**442**	**360**	**4.9**	**3.8**

Other Non-OECD

The preliminary data series for **Saudi Arabia** points towards a 3% y-o-y gain in January oil demand to 2.6 mb/d. Persistent high oil prices support consumption across most sectors of the economy, in particular domestically subsidised transportation fuel demand with gasoline up 7.5% and diesel 5.9% higher. Saudi consumption is forecast to rise by 3.8% in 2012 to 2.9 mb/d, a notable deceleration on the prior year's 6.1% expansion, as additional gas-fired power generation capacity comes on-stream. Supporting Saudi demand in 2012 however will be the big predicted infrastructure spend, as outlined in Saudi Arabia's ninth development plan, which will be particularly supportive of diesel with a near 4% gain foreseen in 2012. Through to 2014, 117 new hospitals, 750 primary health care centres, 400 emergency centres, 25 new colleges of technology, 28 higher technical institutes and 50 industrial training institutes will be built. In addition a doubling of Saudi Arabia's desalination plants (from 1.05 billion to 2.07 billion cubic metres) is intended.





Indian demand rose by 4.9% y-o-y in February, according to preliminary estimates, to 3.8 mb/d although an additional note of caution needs to be applied to these numbers following the recent spate of downwards revisions. December growth was revised to 2.2% from an initial estimate of 3.5%, with January reduced to +2.1% from a preliminary figure of +2.7%. Having risen by 4.1% in 2011 to 3.5 mb/d, demand growth is forecast to decelerate to around 3% in 2012, taking consumption to 3.6 mb/d. Talk of lowering diesel subsidies in the fiscal year 2012/2013 adds a downside risk to our diesel demand outlook.

Latest estimates for **Russia** point towards an accelerating demand trend, as growth reached 7.9% y-o-y in February to 3.5 mb/d, after gains of 3.0% in December and 3.2% in January. February's growth rate is magnified, however, by the previous February low when demand declined on a y-o-y basis for the first time in sixteen months on account of depressed driving activity. Tracking forward, we envisage a moderating expansion, to around 3% for the year as a whole. The big unknown concerning Russian demand is the level of export duties on gasoline and naphtha. In May 2011, the administration introduced export duties at 90% of the crude oil duty, but since then media reports have suggested an imminent reduction in this duty. Lower export duties would potentially restrict volumes available to meet domestic Russian demand, forcing them to import potentially higher priced products.

SUPPLY

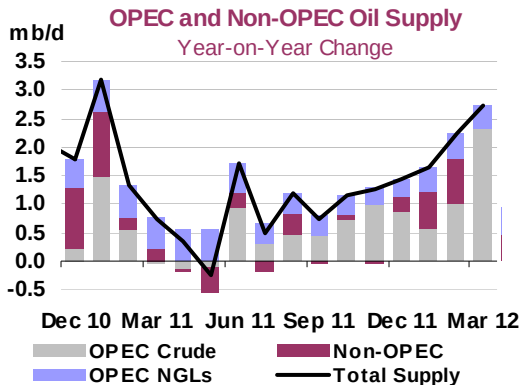
Summary

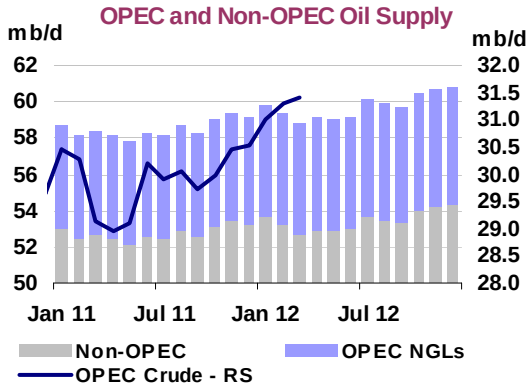
- **Global oil supply fell by 0.4 mb/d to 90.3 mb/d in March, with higher OPEC NGL and crude production only partially offsetting a 0.5 mb/d decline from non-OPEC countries.** Compared to a year ago, global oil production stood 2.8 mb/d higher, all of which stemmed from increasing output of OPEC crude and NGLs.

- **Non-OPEC supply fell by 0.5 mb/d to 52.7 mb/d in March from the prior month.** Supplies declined in all regions but most notably in the UK North Sea and at synthetic crude plants in Canada. Non-OPEC supplies are expected to grow by 0.7 mb/d in 2012 to 53.4 mb/d, 50 kb/d lower than last month. The revision would have been greater had it not been offset by a 110 kb/d upward revision to US crude and NGL supplies.

- **March OPEC supply held near three and a half-year highs, rising by 135 kb/d, to 31.43 mb/d. Higher output from Iraq, Libya and the UAE** more than offset reduced Iranian and Angolan supplies. Saudi production was unchanged at a lofty 10 mb/d. The 'call on OPEC crude and stock change' for 2012 is unchanged at 30.1 mb/d, but has been raised for 2Q12 and 3Q12, by 0.1 mb/d and 0.2 mb/d respectively, to an average 30.1 mb/d due to further downward revisions in non-OPEC supplies.

- **Recently enacted EU and US sanctions on Iran's oil and banking sectors are already affecting shipping and trade flows, while at the same time undermining Iran's crude production outlook.** March production is estimated down by a further 50 kb/d to 3.3 mb/d, or about 250 kb/d below end-2011 levels. However, the long roster of countries planning to implement import cuts in coming months suggests Iranian output could fall to 2.6-2.8 mb/d by the 1 July deadline when sanctions go into full force unless markets for displaced crude can be found.





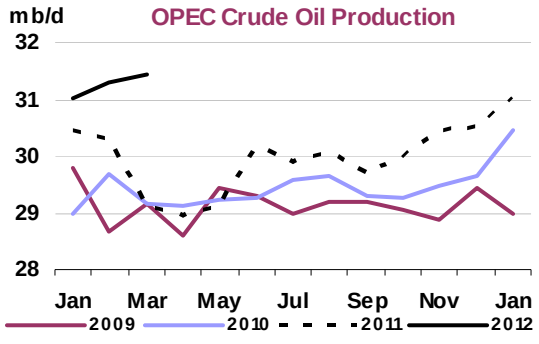
All world oil supply figures for March discussed in this report are IEA estimates. Estimates for OPEC countries, some US states, and Russia are supported by preliminary March supply data.

Note: Random events present downside risk to the non-OPEC production forecast contained in this report. These events can include accidents, unplanned or unannounced maintenance, technical problems, labour strikes, political unrest, guerrilla activity, wars and weather-related supply losses. Specific allowance has been made in the forecast for scheduled maintenance in all regions and for typical seasonal supply outages (including hurricane-related stoppages) in North America. In addition, from July 2007, a nationally allocated (but not field-specific) reliability adjustment has also been applied for the non-OPEC forecast to reflect a historical tendency for unexpected events to reduce actual supply compared with the initial forecast. This totals –200 kb/d for non-OPEC as a whole, with downward adjustments focused in the OECD.

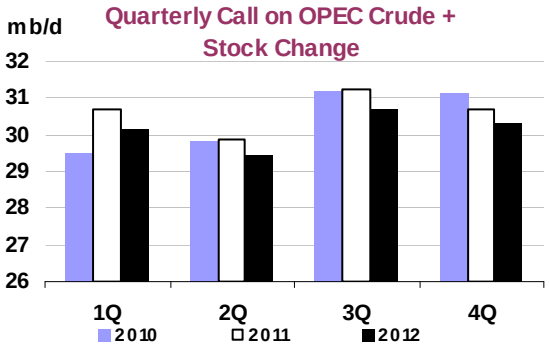
OPEC Crude Oil Supply

OPEC supply hovered at three and a half-year highs again in March, rising by 135 kb/d, to 31.43 mb/d. Increased output by Iraq, Libya, Kuwait and the UAE more than offset declines in Iran, Angola and Nigeria. OPEC is now producing 1.4 mb/d above its collective target of 30 mb/d but the higher output largely offsets exceptionally reduced non-OPEC supplies. Non-OPEC supply outages are estimated at 1.2 mb/d for 2Q12 due to a combination of political turmoil in Sudan, Syria and Yemen and technical issues in the North Sea, Canada and Australia disrupting output (*see Non-OPEC Supply*).

The 'call on OPEC crude and stock change' for 2012 is unchanged at 30.1 mb/d but has been raised for 2Q12 and 3Q12, by 0.1 mb/d and 0.2 mb/d respectively, also to an average 30.1 mb/d for the six-month period, due to further downward revisions in non-OPEC supplies.



Entire series based on OPEC Composition as of January 2009 onwards (including Angola & Ecuador & excluding Indonesia)

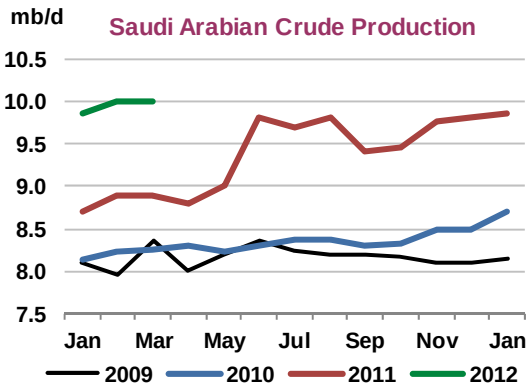


Entire series based on OPEC Composition as of January 2009 onwards (including Angola & Ecuador & excluding Indonesia)

OPEC's 'effective' spare capacity declined to an estimated 2.54 mb/d from 2.75 mb/d in February. The lower spare capacity estimate partly reflects the removal of Iranian spare production capacity from the calculation on the assumption that sanctions will now progressively cap the country's ability to raise output amid diminishing export markets. A baseline downward adjustment to Algerian supplies of an average 70 kb/d for 2010-2012 also contributed to the revision.

The group's sustainable capacity for 2Q12 is now estimated at 34.91 mb/d. For 3Q12, capacity is forecast to increase by 360 kb/d, to 35.27 mb/d, largely due to increased supplies from Iraq as well as smaller incremental volumes from Angola, Nigeria, Libya, the UAE and Kuwait.

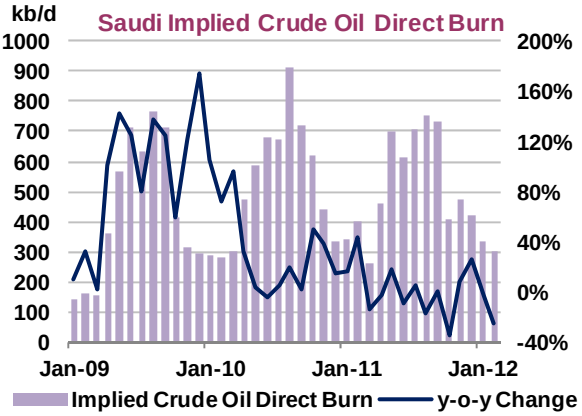
Saudi production was unchanged at a lofty 10 mb/d in March. Output is expected to trend higher over the next few months judging by customer nominations and tanker loading forecasts. In addition, an armada of tankers has recently been moving to the US Gulf Coast to supply Saudi Aramco's joint venture Motiva refinery, which has doubled its capacity to 600 k/d.



Saudi Oil Minister Ali al-Naimi reported in March that stocks inside the Kingdom are now at full capacity and Saudi Aramco's storage facilities in Rotterdam, Okinawa and Sidi Kerir are at their peak level of 10 mb. With storage now full, the Kingdom is well placed to meet incremental global refiner demand from May onwards after April's seasonal low in throughputs. Saudi Arabia also reduced official selling prices for benchmark Arab Light for May liftings for Europe and Asia while raising them slightly to the US. European customers saw the sharpest reductions, down by $2.60/bbl

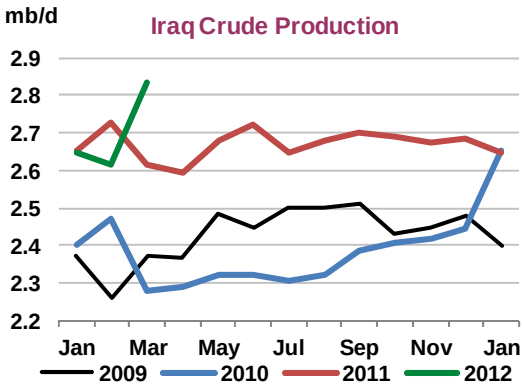
while prices for Asian buyers were off by $0.35/bbl. The price cuts partly reflected currently well-supplied markets amid reduced OECD demand from refiners during the seasonally weaker March to May period.

The rise in crude and associated gas supply, coupled with increased gas production from the non-associated Karan gas field, is expected to reduce domestic demand for direct crude burn at power and water plants this year. The April-September peak demand period for direct burn averaged 660 k/d in 2011 but is forecast to decline by about 100 kb/d over the same period this year. Saudi Arabia's oil minister said around 500 million cubic feet a day more gas, or around 90 kb/d of oil equivalent, would be made available for three or four months this summer.

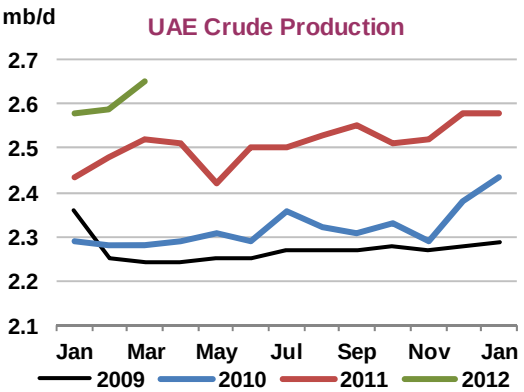


Iraqi crude oil production in March rose by 220 kb/d to 2.835 mb/d, the highest level since May 2001. Crude oil exports rose by 240 kb/d to 2.32 mb/d. The jump in exports follows the start-up, albeit intermittently, of the new Single Point Mooring (SPM) facility in the Middle East Gulf. Officials are reporting volumes should trend higher in April, but traders report a shortage of operational storage tanks may cap exports near term.

Northern exports of Kirkuk crude from Ceyhan on the Mediterranean in March rose to 400 kb/d, up by 25 kb/d. However, around 50 kb/d of crude exports from the Kurdish region, which feed into the Kirkuk stream, were halted in early April due to ongoing payment disputes between Baghdad and the Kurdish Regional Government (KRG). Kurdish authorities suspended exports because the federal government in Baghdad had not made a payment to operating companies in the region for crude exports in ten months. Oil ministry officials countered that the Kurdish authorities owe for revenue collected in past years that has not been shared with Baghdad and that it had failed to meet its obligation of supplying 175 kb/d as per the 2012 budget. Estimates for exports from the region are closer to 50 kb/d on average this year. Baghdad also said production from the region was being illegally smuggled to neighbouring countries, especially Iran. Tensions between Baghdad and the KRG have escalated following the withdrawal of US troops at end-2011.



Moreover, April exports may be further reduced by the bombing of one of the twin northern pipelines running to Ceyhan on 5 April, which destroyed a section of the line in Turkish territory. The bombing was unrelated to the ongoing dispute between Baghdad and Kurdish authorities, with the Kurdish separatist group PKK claiming responsibility for the pipeline attack.



UAE production in March increased by 60 kb/d to 2.65 mb/d, the highest level since June 2008. Output from **Kuwait** rose by 20 kb/d to 2.72 mb/d.

OPEC Crude Production

(million barrels per day)

	Jan 2012 Supply	Feb 2012 Supply	Mar 2012 Supply	2Q12 Sustainable Production Capacity[1]	Spare Capacity vs March 2012 Supply	3Q12 Average Sustainable Production Capacity	3Q12 Production Capacity Versus 2Q12 Capacity
Algeria	1.20	1.14	1.14	1.18	0.04	1.23	0.05
Angola	1.70	1.76	1.68	1.90	0.22	2.00	0.10
Ecuador	0.48	0.48	0.48	0.52	0.04	0.54	0.02
Iran	3.30	3.35	3.30	3.51	0.21	3.45	(0.07)
Kuwait[2]	2.75	2.70	2.72	2.84	0.12	2.89	0.05
Libya	1.15	1.29	1.32	1.39	0.07	1.40	0.01
Nigeria[3]	2.04	2.10	2.05	2.55	0.50	2.59	0.04
Qatar	0.82	0.81	0.81	0.86	0.05	0.86	0.00
Saudi Arabia[2]	9.85	10.00	10.00	11.88	1.88	11.88	0.00
UAE	2.58	2.59	2.65	2.75	0.10	2.79	0.04
Venezuela[4]	2.47	2.46	2.44	2.53	0.09	2.53	0.00
OPEC-11	**28.34**	**28.67**	**28.59**	**31.90**	**3.31**	**32.14**	**0.24**
Iraq	2.65	2.62	2.84	3.01	0.17	3.13	**0.12**
Total OPEC	**30.99**	**31.29**	**31.43**	**34.91**	**3.48**	**35.27**	**0.36**
(excluding Iraq, Nigeria, Libya and Iran)					*2.54)*		

1 Capacity levels can be reached within 30 days and sustained for 90 days.
2 Includes half of Neutral Zone production.
3 Nigeria's current capacity estimate excludes some 200 kb/d of shut-in capacity.
4 Includes upgraded Orinoco extra-heavy oil assumed at 370 kb/d in March.

Libyan production rose on average by 35 kb/d to 1.32 mb/d in March. Production levels have essentially reached a plateau for now, with much needed maintenance and repair work planned over the next several months. A key constraint holding capacity below pre-war levels is the allocation of a budget for the National Oil Company (NOC) and its regional arm in Benghazi, the Arabian Gulf Oil Company (AGOCO). The transitional government has so far not set a timeline for approval of a national budget, hindering the award of contracts for supplies and services.

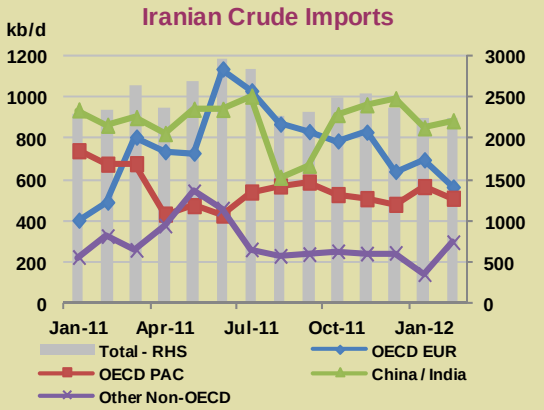
Angolan production was down by 80 kb/d to 1.68 mb/d, the lowest level in eight months, despite the start-up of the Pazflor field. The reduced output partly reflects lower production from the troubled Greater Plutonio offshore complex, according to reports. However, output looks on track to recover in April and May judging by export schedules, with production from the Total-operated 220 kb/d Pazflor deep-water complex adding around 190 kb/d.

Nigerian supplies in March were down by 50 kb/d, to 2.05 mb/d. Volumes look set to increase in April and May however, on the steady ramp-up in output from the 180 kb/d Usan field. First cargoes of medium sweet Usan crude were lifted in April. In March, state-owned Nigerian National Petroleum Corporation (NNPC) also launched its tender process for annual crude oil term contracts. In what has been viewed as a positive step in battling charges of corruption, this year Nigeria has sharply tightened the contract terms to quell criticism of the tendering process. The number of small, unknown indigenous companies awarded contracts in the past has led to allegations of cronyism. For 2012, companies are required to have at least 10 years experience in trading and substantial capital resources on their books. Nigeria sells around 1.5 mb/d via term deals with traders, with the new contracts taking effect in June.

Crude supply from **Algeria** in March was unchanged from February's downwardly revised 1.14 mb/d. A review of official data is behind a baseline revision of crude production, and the adjustment averaged 70 kb/d for 2010-2011. The country's oil sector has only partially recovered from the massive corruption scandal that rocked the state oil company, Sonatrach, in January 2010, which has led to, among other problems, protracted delays in awarding contracts for enhanced oil recovery and expansion projects.

Iranian Crude Supplies Tumble Under The Weight of Sanctions

Recently enacted EU and US sanctions on Iran's oil and banking sectors are affecting shipping and trade flows as well as undermining Iran's crude production outlook. March production was down a further 50 kb/d to 3.3 mb/d, or about 250 kb/d below pre-sanction, end-2011 levels, but the long list of countries planning to implement import cuts in coming months suggests Iranian output could plummet to 2.6-2.8 mb/d by mid-summer, unless alternative buyers can be found. The 27 EU countries agreed to an embargo on Iranian crude oil imports on 23 January and the phasing out of existing contracts by 1 July.



Iran's traditional crude buyers are struggling to arrange payment mechanisms, secure ships to lift the oil and insurance companies to underwrite the trade. The EU tightened the stranglehold on 17 March by banning key Iranian banks from using one of the most important financial institutions for transferring and receiving funds, the Society for Worldwide Interbank Financial Telecommunication (SWIFT). The latest ban effectively severs all trade between EU and Iranian entities. The US is also crafting an amendment that would halt SWIFT transactions with Iran.

The US sanctions essentially mean any company/countries trading with Iran will be cut-off from the US financial system unless they can show they have taken steps to substantially reduce their reliance on Iranian oil. In mid-March the US granted waivers to Japan and 10 EU countries (Belgium, the UK, the Czech Republic, France, Germany, Greece, Italy, the Netherlands, Poland and Spain) which the State Department deemed to have cut back on purchases. As a result, banks in the 11 countries have been granted a six-month waiver from being cut off from the US financial system. Absent from the list were Iran's two largest buyers, China and India, as well as other major buyers Turkey, South Korea and South Africa. Since the list was published in mid-March a number of countries have announced plans to reduce purchases or halt liftings altogether, including Turkey and South Africa. The US will next review compliance with sanctions at the end of June.

- **Japan** was singled out for being the most aggressive in reducing imports from Iran. Japanese refiners are aiming to reduce Iranian crude imports further in April as they opt not to renew annual contracts.
- **Turkey** announced 30 March that it would comply with the US request to curb its 30% dependence on Iranian oil imports. The country has already increased purchases of Libyan crude, which it said would replace Iranian barrels. Turkish refiner Tupras confirmed in early April that the company plans to reduce imports by 20%.
- **South Africa's** Engen, which is majority owned by Malaysia's Petronas, reportedly stopped imports in March. Petrochemical producer Sasol has also said it halted Iranian imports of around 10 kb/d, which were easily replaced by other suppliers given the small volumes.
- **South Korea,** which bought an average 230 kb/d in 2011, has been actively working with US officials to reach an agreement, with official data suggesting January/February Iranian imports some 15% below equivalent 2011 levels.
- **Greece's** largest refiner, Hellenic Petroleum, announced in early April that it was no longer buying Iranian crude because of payment problems. Instead the refiner plans to buy Iraqi and Saudi crudes.
- **Sri Lanka,** which was singled out by the US as one of the 12 countries that could face sanctions if it failed to reduce Iranian imports, has signed a term contract with Oman to replace some of the Iranian supplies.

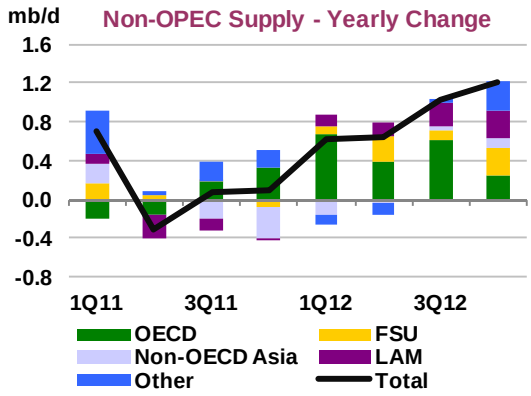
Securing insurance for tankers willing to lift Iranian crude has become ever more challenging. In a move that took the market by surprise, the China P&I Club, which provides coverage to more than 1 000 vessels, announced it will cease underwriting tankers operating from Iran. Protection and Indemnity (P&I) clubs are owned by their ship-owner customers and set-up to provide insurance coverage against costly personal injury or environmental clean-up claims. Around a dozen of the Group of International P&I Clubs provide liability cover for 95% of the world's tanker fleet. Japanese P&I clubs have already said they would adhere to new regulations set out by the US and EU. That said, the EU, Japan and South Korea are still asking for exemptions.

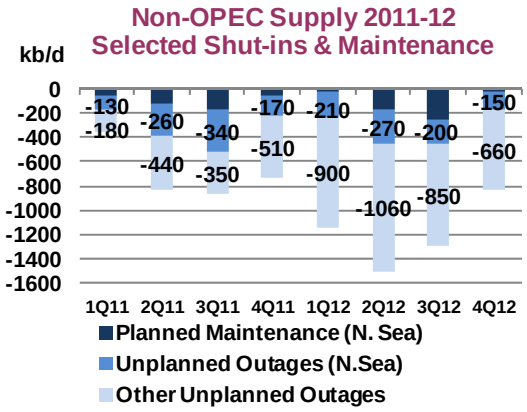
Non-OPEC Overview

Non-OPEC oil production is estimated to have fallen by 0.5 mb/d to 52.7 mb/d in March, for the same reasons that it fell in February: weather-related and mechanical problems at fields in the North Sea, Canada, and Australia; continued unrest and additional sanctions in Syria; pipeline sabotage and labour strikes in Colombia and Yemen; and the transit dispute between Sudan and South Sudan. Field problems in Brazil added to the monthly decline in non-OPEC supplies, and tensions worsened markedly in the Sudans. Revisions to our data series for the US, UK, Canada and Egypt in 2011 from newly available data largely offset one another and lead to a 10 kb/d downward revision for 2011 non-OPEC supplies.

Despite prevailing widespread pessimism about non-OPEC supply growth in 2012, preliminary data for 1Q12 showed annual growth of around 510 kb/d. With historical data now available for most large producers through February, it is apparent that production growth in the Americas, especially from light tight oil basins in the US, is indeed supporting an otherwise bleak non-OPEC supply picture. Supplies should grow by around 690 kb/d to 53.4 mb/d in 2012, 50 kb/d lower than last month's estimate.

Unplanned outages are expected to mount in the second quarter of this year, and North Sea outages have already exerted influence on global benchmark oil prices. The chart below shows that unplanned outages are expected to reach 1.3 mb/d in the second quarter, much higher than any quarterly reading in 2011 and 200 kb/d higher than 1Q12. The outages are assumed to abate slightly in the third and fourth quarter of 2012, but they do not disappear altogether and constrain non-OPEC supply growth to below 900 kb/d in 2H12. Outages in Syria, Yemen, Sudan, and a hurricane allowance in the US comprise the majority of the 1.1 mb/d in unplanned outages that are forecast for 3Q12.



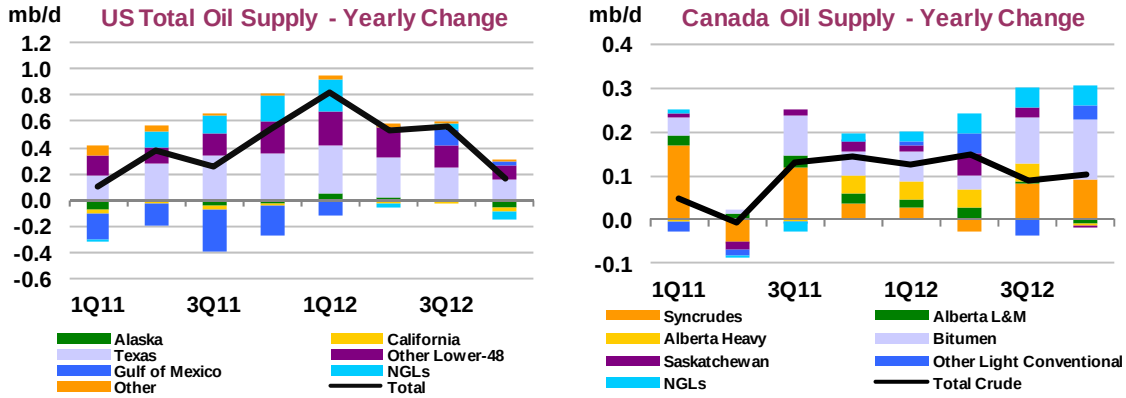


OECD

North America

US – February preliminary, Alaska actual, other states estimated: Oil production in the US increased by around 11% in 1Q12 on an annual basis to 6.4 mb/d, on par with levels from the mid-1990s. In the same quarter, light tight oil plays in Texas increased the state's production by over 28% compared to 1Q11 to 1.6 mb/d. This month, the US Energy Information Administration (EIA) published historical revisions to its crude oil production series, resulting in an upwards revision in onshore production and a downward revision to the Gulf of Mexico. On the whole, US oil production was revised down by 27 kb/d for 2011. The 2012 forecast was revised down slightly due to a fire at the Prudhoe Bay field in March, which reduced production by around 20 kb/d to 290 kb/d from February levels. However, rapidly increasing production of light tight oil in North Dakota, New Mexico, Oklahoma, and Texas has caused a +110 kb/d revision to our outlook for US oil supply. An earlier-than-expected field start up at Anadarko's Caesar/Tonga in the Gulf of Mexico mitigates other adjustments to field development timelines. Furthermore, NGL production is showing record performance levels of around 2.4 mb/d in recent months as petrochemical producers expand their ethane cracking capacity and utilization rates to take advantage of the natural gas-oil price ratio. Based on current price levels, making ethylene from naptha

rather than from ethane, is more than twice as costly. NGL takeaway capacity is near or at peak utilisation rates until more pipelines are brought online in 2013.



Canada—January actual: Canadian oil output fell from its record high 3.8 mb/d in December 2011 to 3.7 mb/d in January, and unplanned outages will reduce output by almost 400 kb/d in upcoming months. Production is stabilising from Alberta Light and Medium output as well as from Saskatchewan, but this is not nearly enough to offset falling syncrude output. In mid-March, Suncor announced unplanned maintenance for fractionator performance issues which would reduce output by 220 kb/d to 140 kb/d for 3-5 weeks. At the Horizon facility, operator Canadian Natural Resources announced in mid-March that it would restart its facilities after a month-long unplanned shut-in at its fractionator. A baseline revision to NGL and crude output, now matching Statistics Canada's estimates, has also been carried through the forecast. From 2003-2007 Shell's Scotford output is included in the Syncrude category even though Statistics Canada treated this output as 'Alberta Bitumen' at that time. The historical revisions result in a roughly 20 kb/d downward revision to total oil output from 1994 to present. This has little effect on the forecast, which has been revised downwards slightly by 10 kb/d to 3.7 mb/d, but is nonetheless 200 kb/d higher than 2011.

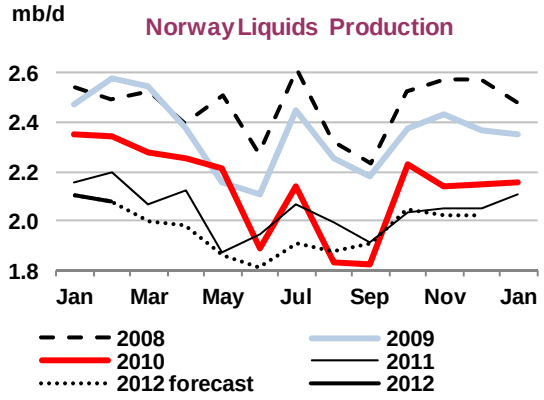
North Sea

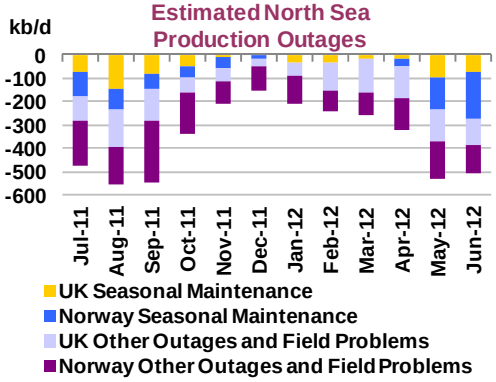
Adverse weather and maintenance outages continue to plague North Sea production in 1Q12. Production is expected to fall by 300 kb/d in 2Q12 on an annual basis to average 2.7 mb/d as seasonal maintenance begins and in light of other unplanned outages that are explained in further detail below. Since last month, North Sea production in 2012 has been revised down by around 80 kb/d to 2.8 mb/d, due to the natural gas leak at the Elgin/Franklin field, new project slippage, and field underperformance.

UK—February preliminary, January actual: The UK government revised 2011 crude production data slightly, with upwards revisions to 1Q11 offsetting downwards revisions to 4Q11. 1Q12 offshore crude production is revised downwards by 30 kb/d to average 1.0 mb/d, which is around 40 kb/d lower than the prior quarter and 17% lower y-o-y. The inclusion of December field level data has indicated even more fields are experiencing performance issues of one kind or another, and we have in several cases carried through lower expectations for 2012 to take this into account. The Elgin/Franklin outage discussed in further detail below, comprises around 40% of the reduction in 2012's output since our last projection. In addition a project slippage at the Huntington field and lower expectations from the Erskine, Tweedsmuir, Schiehallion, Lochranza, and Callanish fields, reduce production further. In sum, UK oil output should average around 970 kb/d in 2012, around 13% below 2011.

Norway—February preliminary, January actual: Crude oil production averaged 2.1 mb/d in 1Q12, posting a 20 kb/d gain from 4Q11 but a fall of 80 kb/d compared to the prior year. In late March, BP shut in production at its Valhall and Hod fields (a total capacity of around 35 kb/d) due to unplanned maintenance at a compressor unit. No date for a restart was announced, although trading sources expected the field to be out for at least half of April. We have assumed that the field returns to around 20 kb/d in May. Seven cargoes of Ekofisk blend crude have been delayed due to the field's shutdown. A

new platform at the field is expected in June, which should raise output further to 40 kb/d, but this compressor problem could delay the installation. Power supply unreliability also curbed liquids output to 10 kb/d in April at the 30 kb/d Ormen Lange gas field. On the positive side, BG brought on the Gaupe field in April, which we expect to ramp to around 10 kb/d by the end of the year from two production wells.

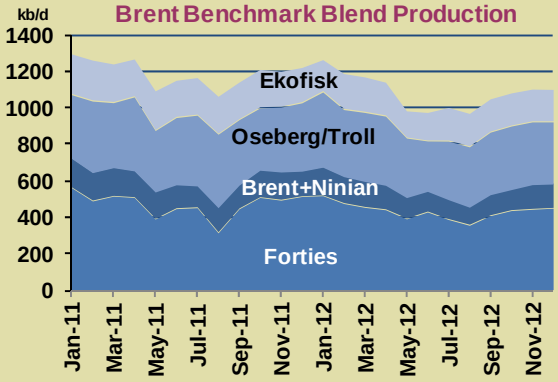




Elgin/Franklin Gas Leak: The Tip of the Decommissioning Iceberg

In late March, Total shut in the Elgin/Franklin gas and gas condensate field due to a gas leak. Shell also shut in its nearby Shearwater field, which in sum has reduced UK Forties output in 2Q12 by around 60 kb/d to 420 kb/d. Several cargoes from the Forties programme were delayed, further reducing supplies and liquidity from the beleaguered Forties blend, and the loading programme delays led to an increase in Brent futures prices. The outage is likely to constrain Brent, Forties, Ekofisk, and Oseberg (BFOE) supplies, the four major streams that comprise the Brent benchmark, to below 1 million b/d in the second and third quarter of 2012. The incident highlights the impact that even small outages can have on Brent. In the medium term, the outage is likely to impact Total's Elgin/Franklin complex development plans, and outages are likely to continue in upcoming years when operators decommission infrastructure at mature fields.

Outage impacts Brent benchmark prices. Most importantly, the outage impacted Brent futures prices because of the quality differences in the composition of the Brent benchmark. Since 1990, the Brent benchmark definition has been progressively widened through the addition of new grades of various qualities. The start up of the under-performing Buzzard field in 2007 and its incorporation within the Forties blend increased blend viscosity and sulphur content, making it the least valuable of the BFOE benchmark. Since any of the four varieties can be delivered in fulfilment of a BFOE contract, Forties can frequently set the price for BFOE. Thus, the sensitivity of BFOE pricing becomes even more acute when unplanned maintenance occurs at fields in the Forties stream.



Total provides hazy outlook for field's return. The Elgin/Franklin complex, which produced more than 100 kb/d in the early 2000s, is one of the UK's highest temperature and highest pressure fields, with a well-documented history of operational difficulties. Total had been managing pressure fluctuations at the G4 well since it was plugged in January 2011, and the pressure had stayed within a safe operational range. Workers indicated rising pressure on 25 February, and heavy mud was pumped in to kill the well when the blowout occurred. A gas and condensate leak was identified at the platform level. Total indicated during a recent conference call that the platform was shut down under normal procedures, four days before planned maintenance, meaning that damage to other infrastructure or the reservoir is likely to remain limited. To stop the gas leak, it has begun the process of acquiring infrastructure to drill two relief wells, which would be used in case a quicker top-kill procedure is not effective. The relief wells could take three to six months. The outage is likely to also impact on the West Franklin field expansion, which had been slated to add around 20 kb/d through three new wells and should increase condensate production in late 2013.

Elgin/Franklin Gas Leak: The Tip of the Decommissioning Iceberg (continued)

The tip of the iceberg? The problem that Total encountered as it decommissioned an old well at the field is likely to portend difficulties at other mature fields for the medium term. Over the next decade, the UK Continental Shelf (UKCS) can expect to see a number of fields and installations cease production and commence decommissioning. Long term, over the next 30 years, almost 500 platforms, 8,000 wells, 4 million tons of steel and several hundred subsea wells, manifolds and pipelines will need to be decommissioned in the North Sea area, according to a recent report by Douglas-Westwood and Deloitte's Petroleum Services Group. The report estimated that the industry faces more than $100 billion in decommissioning costs in the timeframe. In light of producer concerns that the UK's recent tax changes had not adequately addressed the financial burden that producers face, the UK government has broadened the number of fields eligible for tax relief and has promised a contract system in order to create more certainty on cost levels.

As Total loses around $1.5 million per day as the Elgin/Franklin complex remains offline, other companies are sure to look towards Total's experience as an indicator of problems that might occur when routine maintenance becomes problematic for an entire field complex. As decommissioning accelerates in the medium term, analysts should not discount the price impacts that can occur when things go awry.

Other OECD

Australia—January actual: Oil production in Australia fell to 410 kb/d in January, its lowest level since January 2006, and slightly lower than year-ago and prior-month levels. Cyclones reduced Australia's output by around 40 kb/d in 1Q12 after at least three storms lowered output from the Vincent, Stybarrow, Cossack, Hermes and Wanaea fields. Woodside has restarted most of the fields that were shut in except for the 30 kb/d Vincent field. The slow restart to production following the cyclones and field-level analysis for 4Q11 based on recently released data have reduced our estimate by 60 kb/d in 2012. Adjustments are centred in the Carnarvon and Gippsland basins. These revisions temper Australia's contribution to overall non-OPEC supply to 500 kb/d, or a growth of only 70 kb/d versus 2011.

Non-OECD

Former Soviet Union

Russia—March actual: Data for March show liquids production unchanged from January and February at levels of 10.6 mb/d, a rise of 1.0% compared to 1Q11 levels. A 10 kb/d monthly decline in condensate output was offset by upticks at Verkhnechonskoye in Eastern Siberia and an increase at Gazrpromneft. We have tempered our outlook by one percentage point to 1.1% growth as a result of yet another delay to Gazprom's offshore, Arctic Prirazlomnoye field. The oft-delayed field is now expected to come online in 2013, although we remain sceptical of Gazprom's timelines. The inability of TNK-BP and Lukoil to maintain brownfield production remains the downside risk to the outlook for continued 1+% growth in 2012. The data shows the companies have been successful in 1Q12, with TNK-BP stemming the annual decline rate at Samotlor to -7% (on par with 2011 levels) and with Lukoil's Western Siberian output declining by -0.6% compared to -4% in 2011.

Middle East

Production from **Oman** fell by 20 kb/d in January to 880 kb/d, but is expected to grow in coming months with additional output from several EOR projects. Overall output is tweaked slightly higher in 2012 due to an earlier-than-expected ramp up of EOR projects, but our forecast still assumes that Oman will fall short of the government's 1 mb/d target for the foreseeable future as water shortages hinder the amount of steam that can be used for steam-flooding. Oman is forecast to increase crude and condensate production by 20 kb/d to 910 kb/d in 2012.

Yemen's output fell victim to further sabotage and labour unrest in 1Q12 and April as labour strikes in Block 14 reduced export capacity. First, in February Total was forced to reduce production by 70 kb/d for four days at its Block 10 assets during a Petro Masila labour strike. The government created this new company in November to take over the role of Nexen, whose license was not renewed. Next, an Al-Qaida

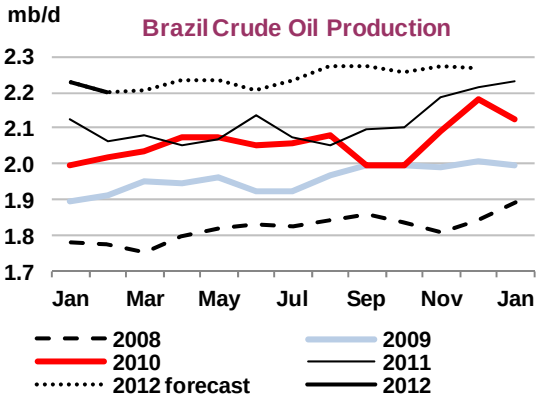
affiliate took credit for the bombing of the 130-mile and 135-kb/d capacity Shabwa-Bir Ali pipeline compromising around 5 kb/d of KNOC's exports. In a worsening sign of the chaos in Yemen, Al-Qaida has started to retaliate for drone attacks on its members by attacking oil and LNG pipelines and terminals in the country. Canada's Calvalley had been trucking around 10 kb/d of its crude from Block 9's Hiswah and Ras Nowmah fields to Block 51, where it is loaded into the Masila-Ash-Shahir pipeline. The company's output also fell victim to a blockade at its central processing facility during 1Q12. Finally, the continued rebel targeting of the 270-mile Marib oil pipeline has shut in production in Block 18, and Oxy is threatening a pullout if the government cannot guarantee security. Exports have increased from 110 kb/d in January to 170 kb/d in February but have proceeded only from the Ash Shahir terminal. The output forecast for 2012 is lowered by 10 kb/d to 170 kb/d to take into account these additional disruptions.

Africa

Sudan and **South Sudan** called off peace talks after military tensions escalated in the Sudanese Heglig oil producing area. GNPOC produced around 120 kb/d in 2011 from Blocks 1 and 2 on both sides of the border. We have only slightly lowered our outlook since last month, and still expect that oil production in South Sudan will remain below 100 kb/d in 2H12, averaging 250 kb/d lower than 2H11. There is downside risk to this outlook if output from Petrodar's Block 3/7 and White Nile's Block 5A cannot be restarted and exported via truck on existing and newly constructed roads. Also, if the Heglig field sustained damage and cannot be restarted, this would dent Sudan's output too.

Based on new data for **Egypt** for Fiscal Year 2010/2011, we have revised upwards our baseline estimates for supply in 2011 by around 20 kb/d to 710 kb/d. The higher baseline results in a revision of around +30 kb/d for 2012. Despite announcements that several small fields have come online, we do not expect any change in production levels in 2012 compared to 2011. Production should remain steady in 2012 at 710 kb/d.

Latin America



Brazil – February actual: Brazilian crude and condensate production fell slightly by 30 kb/d to 2.2 mb/d in February. The FPSO that was producing 20 kb/d from the BM-S-9 concession at the Carioca Nordeste deposit was shut in at the end of January for around 60 days. Chevron also recently identified a leak next to its Frade field at the neighbouring Petrobras-operated, 260-kb/d Roncador field. No shut ins were announced, but as a conservative measure, we have reduced output by 20 kb/d to 230 kb/d in 2Q12. If the entire field must be shut in, the impact could be much larger. A more likely scenario is that only some of the 29 wells or one of the three FPSOs would be shut in at the massive field. The 25-kb/d Tiro-Sidon field was declared commercial under the name Baúna this month and should increase output to 30 kb/d this year. Brazilian crude and condensate production in 2012 is increased by 20 kb/d to 2.3 mb/d on field level analysis (see box below), increasing output growth to 160 kb/d.

Brazil Field and Basin Level Reporting to Improve Field-level Database and Forecast

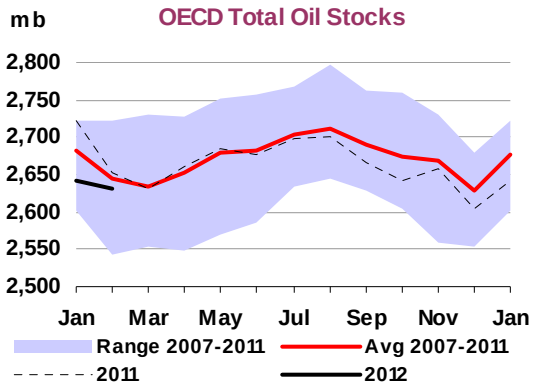
Brazil is a primary contributor to non-OPEC supply growth in the medium term, but in recent months field level problems have dented output growth necessitating field level analysis. In the past, the IEA reported three sub-levels of production by state in the Monthly Oil Data Service. Beginning this month and with data starting in January 2000, the first year that data is available from Brazil's ANP, we are now reporting data for major basins and for some of Brazil's largest fields including Roncador, Marlim Sul, Lula, and Marlim. The switch will improve forecast granularity and will add more accurate detail for users of the field level database. While not all of the ANP's field level data will be published, since much of it is available free on the ANP's website, the IEA will collect well-level production data as the basis for the forecast and history. In preparation for the *Medium-Term Oil Market Outlook,* the data collection will help refine our mid-term projections.

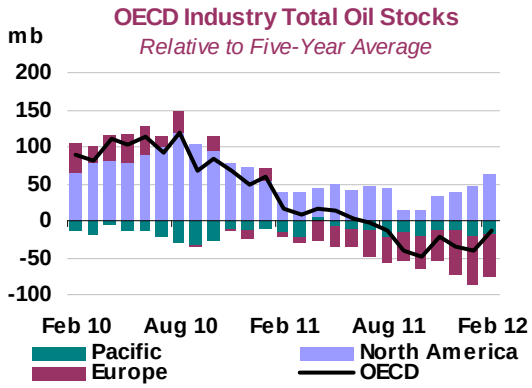
OECD STOCKS

Summary

- **OECD industry total oil inventories fell by 12.4 mb in February, to 2 630 mb,** compared with a five-year average decline of 38.8 mb. With this weaker-than-average draw, the deficit of inventories versus the five-year average narrowed to 13.9 mb, from 40.4 mb in January. Days of forward demand cover rose by 1.2 days to 59.6 days, 2.5 days above the five-year average.

- **Preliminary data indicate a 22.6 mb increase in March OECD industry inventories,** in contrast with a five-year average 10.0 mb draw. Crude oil and product stocks rose by 16.7 mb and 4.9 mb, respectively. 'Other products', fuel oil and middle distillate holdings rose by 6.1 mb, 3.8 mb and 1.6 mb, respectively while gasoline stocks fell by 6.6 mb.





OECD Inventories at End-February and Revisions to Preliminary Data

OECD industry total oil inventories fell by 12.4 mb to 2 630 mb in February, compared with a five-year average 38.8 mb draw. Inventory levels have stood below the five-year average for nine successive months. However, with the stock draw shallower than the historical average, the deficit of inventories versus the five-year average narrowed to 13.9 mb from 40.4 mb in January. Moreover, in terms of forward demand cover, OECD commercial oil holdings remained 2.5 days above the five-year average, at 59.6 days, a 1.2 day increase from the previous month and a 0.4 day rise on a year-on-year basis. Regionally, the absolute surplus of stocks versus the five-year average in North America rose substantially, while deficits in Europe and the Pacific narrowed slightly.

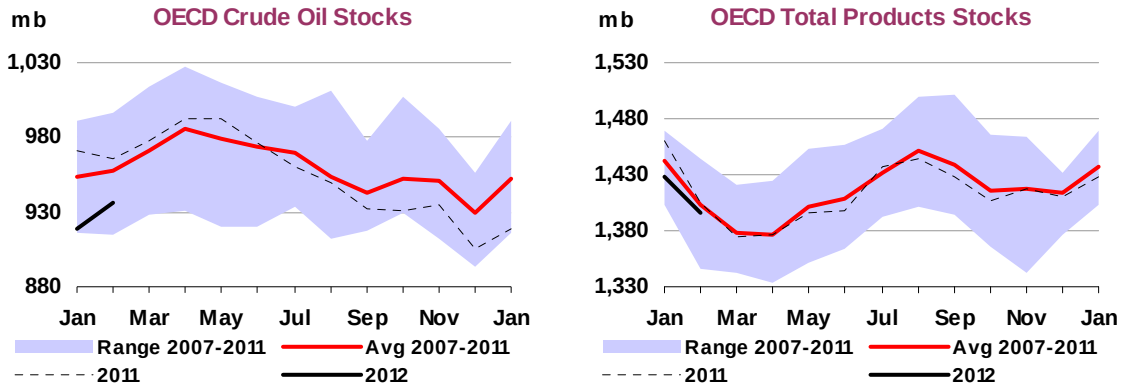
Preliminary Industry Stock Change in February and Fourth Quarter 2011

	February (preliminary)								Fourth Quarter 2011			
	(million barrels)				*(million barrels per day)*				*(million barrels per day)*			
	N. Am	Europe	Pacific	Total	N. Am	Europe	Pacific	Total	N. Am	Europe	Pacific	Total
Crude Oil	**5.2**	**7.5**	**4.3**	**17.0**	**0.18**	**0.26**	**0.15**	**0.59**	**-0.03**	**-0.24**	**-0.01**	**-0.29**
Gasoline	-3.2	-3.8	-0.4	-7.4	-0.11	-0.13	-0.01	-0.26	0.09	0.06	-0.03	0.13
Middle Distillates	-8.0	-5.2	-6.7	-19.9	-0.28	-0.18	-0.23	-0.69	-0.03	0.11	-0.08	0.00
Residual Fuel Oil	-0.2	-1.0	-0.1	-1.2	-0.01	-0.03	0.00	-0.04	-0.02	-0.04	-0.01	-0.07
Other Products	-2.6	-0.6	-0.9	-4.2	-0.09	-0.02	-0.03	-0.14	-0.15	-0.02	-0.07	-0.25
Total Products	**-14.0**	**-10.5**	**-8.2**	**-32.7**	**-0.48**	**-0.36**	**-0.28**	**-1.13**	**-0.11**	**0.11**	**-0.19**	**-0.19**
Other Oils[1]	5.3	-1.0	-1.0	3.4	0.18	-0.03	-0.03	0.12	-0.19	0.03	-0.04	-0.20
Total Oil	**-3.5**	**-4.0**	**-4.8**	**-12.4**	**-0.12**	**-0.14**	**-0.17**	**-0.43**	**-0.33**	**-0.11**	**-0.24**	**-0.67**

1 Other oils includes NGLs, feedstocks and other hydrocarbons.

Crude stocks rose seasonally by 17.0 mb to 936 mb in February, nonetheless marking an eighth straight month of below average readings. Crude holdings in North America, Europe and the Pacific increased by 5.2 mb, 7.5 mb and 4.3 mb, respectively. Firm global supply and rising OPEC exports, amid muted refining activity, built OECD crude oil stocks.

In the meantime, product inventories fell by 32.7 mb, in line with a five-year average 38.5 mb draw, reducing the deficit against the five-year average to 7.3 mb, from 13.1 mb in January. Most of the product stock draw centred on middle distillates, falling by 19.9 mb. Strong global diesel demand drove middle distillate stocks down in every region. North America showed the largest decline of 8.0 mb, while the Pacific and Europe saw 6.7 mb and 5.2 mb reductions, respectively.



OECD stocks were revised 28.6 mb higher for January, upon receipt of more complete monthly submissions from member countries. This implies a 39.2 mb build in January inventory levels, compared with preliminary estimates of a 13.6 mb increase. Upward adjustments were centred on European middle distillates, Pacific crude oil and North American 'other products' stocks, which were revised up by 19.1 mb, 6.2 mb and 6.1 mb, respectively. Lower-than-initially estimated European crude oil holdings provided a partial offset.

Revisions versus 14 March 2012 Oil Market Report

(million barrels)

	North America		*Europe*		*Pacific*		*OECD*	
	Dec-11	Jan-12	Dec-11	Jan-12	Dec-11	Jan-12	Dec-11	Jan-12
Crude Oil	**1.0**	**1.4**	**-0.7**	**-4.8**	**0.1**	**6.2**	**0.3**	**2.7**
Gasoline	0.0	1.2	0.5	2.3	0.0	0.3	0.5	3.8
Middle Distillates	0.1	-1.5	0.9	19.1	0.0	0.5	1.0	18.1
Residual Fuel Oil	0.0	1.3	0.1	-1.3	0.0	-0.1	0.1	-0.1
Other Products	0.0	6.1	0.0	-0.6	0.0	-1.1	0.0	4.4
Total Products	**0.1**	**7.1**	**1.5**	**19.4**	**0.0**	**-0.4**	**1.6**	**26.1**
Other Oils[1]	1.0	0.1	0.0	-0.1	0.0	-0.3	1.0	-0.3
Total Oil	**2.0**	**8.6**	**0.8**	**14.5**	**0.1**	**5.5**	**2.9**	**28.6**

1 Other oils includes NGLs, feedstocks and other hydrocarbons.

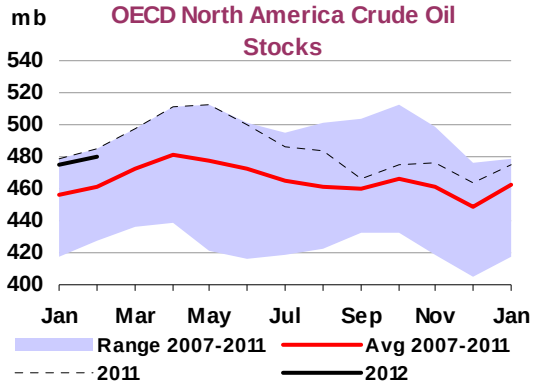
Preliminary data indicate a 22.6 mb increase in March OECD industry inventories, in contrast with a five-year average 10.0 mb draw. Crude oil, refined product and 'other oils' stocks rose by 16.7 mb, 4.9 mb and 1.0 mb, respectively. 'Other products', fuel oil and middle distillate holdings rose by 6.1 mb, 3.8 mb and 1.6 mb, respectively while gasoline stocks fell by 6.6 mb.

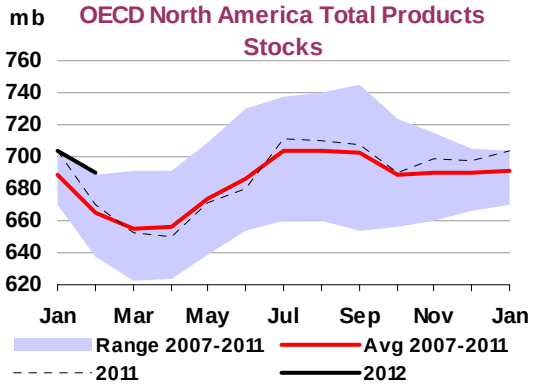
Analysis of Recent OECD Industry Stock Changes

OECD North America

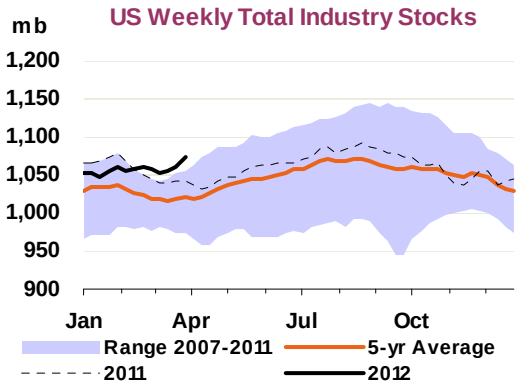
North American industry oil inventories fell by 3.5 mb to 1 330 mb in February, a milder decline than the five-year average drop of 19.7 mb, thus widening the surplus versus the five-year average to 62.8 mb, from 46.6 mb in January. Commercial oil stocks in North America have stood above the five-year range for a second consecutive month. Crude oil and 'other oils' stocks, including feedstocks, led the increase, up by 5.2 mb and 5.3 mb, respectively. Most of crude oil stock build stemmed from the US, where higher onshore production and rising imports from the Canadian oil sands have inflated midcontinent holdings.

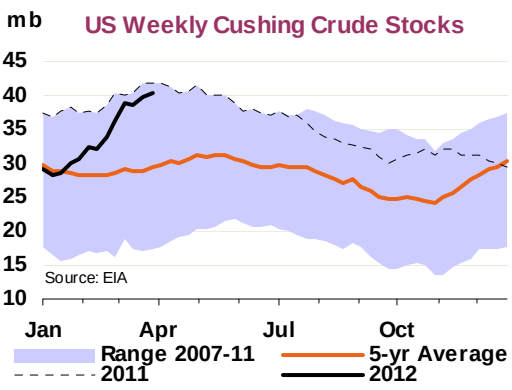
Meanwhile, product inventories fell by 14.0 mb on the back of declines across every product category. Middle distillate stocks led the decline, falling by 8.0 mb. Record high US distillate exports in the midst of firm domestic demand drove US middle distillate stocks down by 7.4 mb. Gasoline holdings decreased by 3.2 mb overall, as a sharp fall in gasoline imports lowered US gasoline stocks by 1.8 mb in spite of continued weak demand. 'Other products' and fuel oil holdings fell by 2.6 mb and 0.2 mb, respectively.





US weekly data show oil inventories rose by 15.6 mb in March, compared with a five-year average 3.8 mb build. Strong imports and rising domestic production in the midst of lower refinery runs drove crude oil stocks up by 16.8 mb. Most of the stock build centred on the Gulf Coast or PADD 3, due to a rapid increase in crude imports. In the meantime, crude stock levels at Cushing, Oklahoma increased by 4.5 mb to 40.3 mb with a continued influx from North Dakota and Canada as well as from the purging of Seaway pipeline in anticipation of the line's reversal. Crude holdings at Cushing have increased by 12.0 mb since mid-January 2012, marking their highest level since May 2011. Although Cushing inventories are now approaching record high levels again, storage capacity is much higher than a year ago after significant recent expansions.





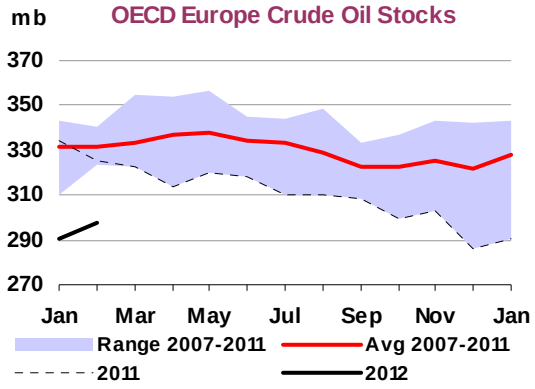
US product inventories fell by 2.0 mb in March as declines in both gasoline and middle distillate holdings outweighed increases in 'other products' and fuel oil stocks. Gasoline inventories declined by 7.7 mb as demand rose month-on-month, albeit remaining weak on an annual basis. Middle distillate also decreased by 4.7 mb on the combination of lower production, firm domestic demand and strong exports. Among middle distillate stocks, diesel and kerosene holdings declined by 3.9 mb and 0.8 mb, respectively while heating oil stocks were virtually unchanged due to relatively warmer weather. In the meantime, 'other products' and fuel oil inventories rose by 9.0 mb and 1.3 mb, respectively.

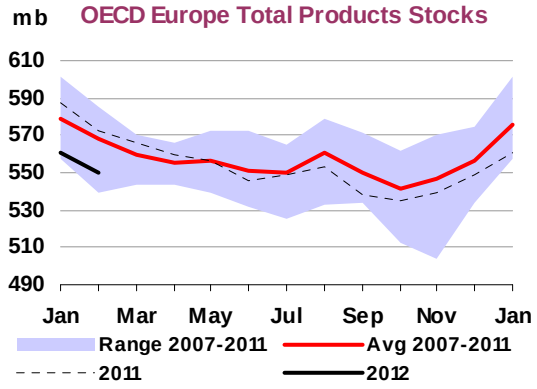
OECD Europe

Industry oil inventories in Europe fell by 4.0 mb in February to 914 mb, a shallower decline than the five-year average draw of 10.8 mb, thus narrowing the deficit versus the five-year average to 58.1 mb from 64.9 mb in January. Nonetheless, European oil stocks have stood below the five-year range for ten of the last eleven months. However, in terms of days of forward demand cover, total oil holdings in Europe have been above the five-year average for seven successive months, a more comfortable position than suggested by absolute stock levels.

Crude oil inventories rose by 7.5 mb to 298 mb compared with a five-year average 0.2 mb build, due to lower refinery runs. However, they are still at the third lowest level since December 2002 (after falling lower in December and January), and have stayed under the five-year range for a twelfth straight month. Even when measured against days of forward demand cover, crude stocks have been below the five-year average for a fifth consecutive month.

In the meantime, European refined product inventories fell by 10.5 mb to 550 mb on lower refinery runs, in line with a five-year average 10.0 mb draw. Product holdings have fallen by approximately 40 mb since the beginning of 2011. However, product stocks look much more comfortable when measured against forward demand, way above the five-year average at 40.5 days of forward cover, and approaching the higher end of the five-year range. Middle distillates led the decrease, falling by 5.2 mb on strong demand for diesel and heating oil. Gasoline, fuel oil and 'other products' holdings also rose by 3.8 mb, 1.0 mb and 0.6 mb, respectively. Meanwhile, German end-user heating oil stocks fell by 2 percentage points to 52% fill at end-February.



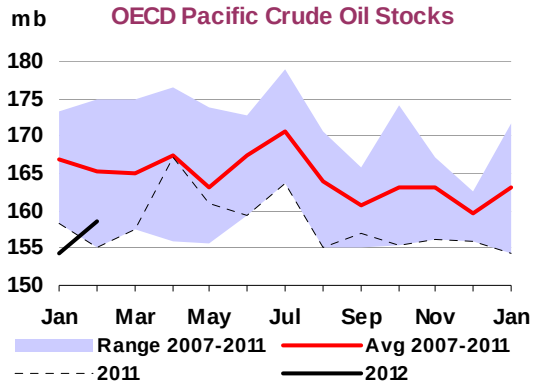


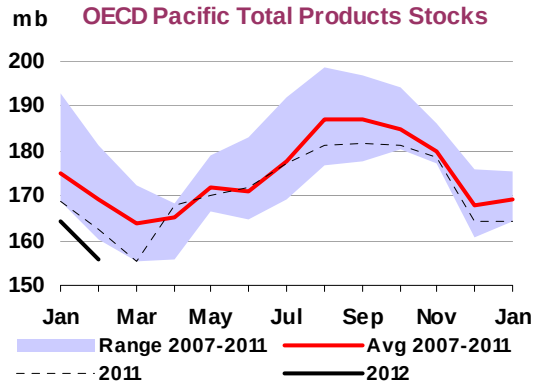
March preliminary data from Euroilstock point to a 7.6 mb stock build, in contrast with a five-year average 7.2 mb fall in the EU-15 and Norway. Both crude oil and product inventories rose by 1.1 mb and 6.5 mb respectively. Middle distillate holdings led the product increase, rising by 6.4 mb. Fuel oil inventories also increased by 1.8 mb while gasoline and 'other products' stocks edged down by 0.8 mb and 0.9 mb, respectively. Refined product stocks held in independent storage in Northwest Europe rose, led by increases in both gasoline and gasoil stocks as traders stored summer quality grades in anticipation of the seasonal switch.

OECD Pacific

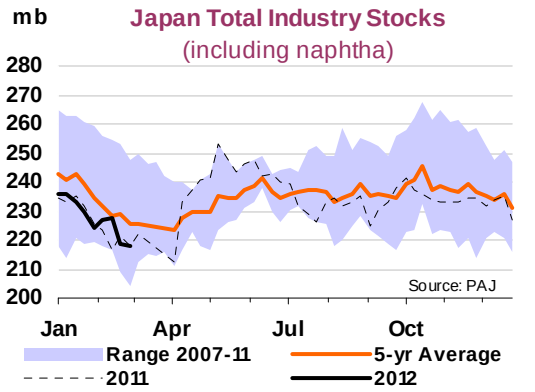
February commercial oil inventories in the Pacific declined by 4.8 mb to 386 mb in line with the five-year average decrease of 8.3 mb. Although the deficit of inventories versus the five-year average narrowed to 18.7 mb from 22.1 mb in January, oil stocks stayed below the five-year range for a second consecutive month. Crude holdings increased counter-seasonally by 4.3 mb to 159 mb, finally regaining the lower end of the five-year range after four months running outside the range. In the meantime, product stocks declined by 8.2 mb in line with the five-year average decrease of 6.0 mb and remained below the five-

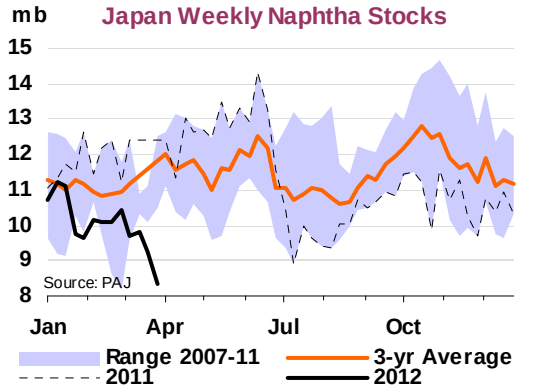
year range. Middle distillate holdings fell most sharply, by 6.7 mb. Gasoline, fuel oil and 'other products' holdings rose by 0.4 mb, 0.1 mb and 0.9 mb, respectively.





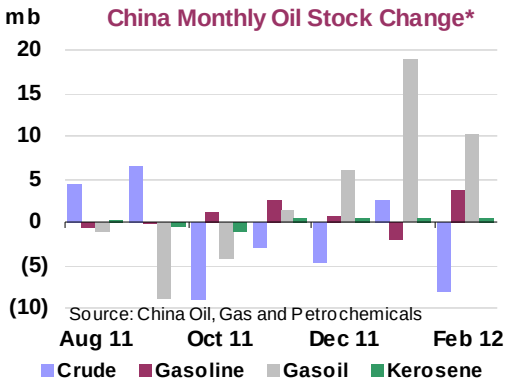
Japanese industry inventories edged down by 0.5 mb in March, according to weekly data from the Petroleum Association of Japan (PAJ). Crude oil stocks fell by 1.6 mb, likely on lower crude imports. Product holdings rose by 0.8 mb, as increases in gasoline, middle distillate and fuel oil holdings outweighed a fall in naphtha stocks. Naphtha stocks declined by 2.0 mb, marking their lowest level since February 2010. In the meantime, gasoline, middle distillate and fuel oil holdings rose by 1.8 mb, 0.2 mb and 0.8 mb, respectively.

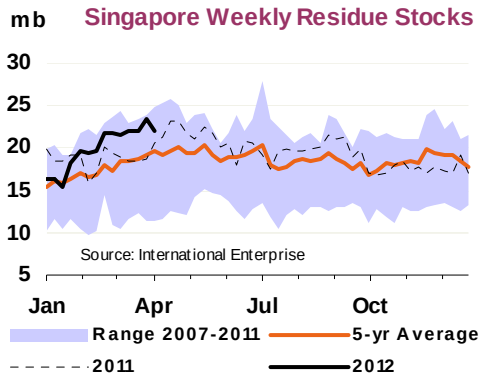




Recent Developments in Singapore and China Stocks

According to *China Oil, Gas and Petrochemicals (OGP)*, Chinese commercial oil inventories rose in February by an equivalent of 6.5 mb (data are reported in terms of percentage stock change). Commercial crude oil holdings were down by 3.8% (8.0 mb), although as noted elsewhere, lower refinery crude runs and higher imports suggest there may have been a build in strategic stocks. Commercial product inventories rose by 10.0% (14.5 mb), with every major product category showing an increase. Although slightly lower than January, February crude oil throughput was still strong enough to boost the levels of refined product stocks in general. Gasoline, diesel and kerosene inventories rose by 7.2% (3.8 mb), 12.3% (10.2 mb) and 3.8% (0.5 mb), respectively. Gasoil stocks showed another sharp increase as companies built up inventories with the spring ploughing season drawing near.





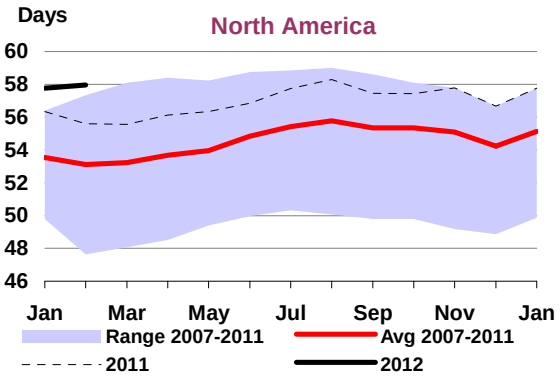
*Since August 2010, COGP only reports percentage stock change

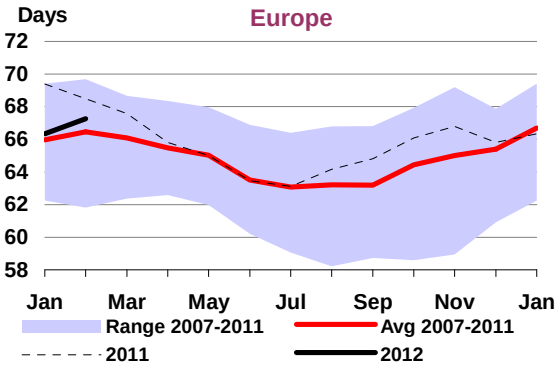
Singapore onshore inventories fell by 1.8 mb to 42.8 mb in March, driven by decreases in both light and middle distillate stocks. Light and middle distillate holdings declined by 1.3 mb and 1.6 mb, respectively as heavy refinery maintenance in South Korea and the Middle East limited the supply of light and middle distillates amid firm regional demand. In the meantime, fuel oil stocks rose for a third consecutive month, by 1.1 mb to their highest in almost two years, as fuel oil imports from the West and the Middle East surged and high prices suppressed demand. Fuel oil holdings have gained 7.5 mb since their two-and-a-half-year low in the middle of January.

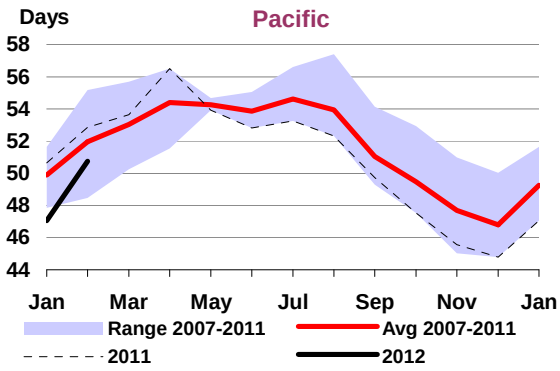
Regional OECD End-of-Month Industry Stocks

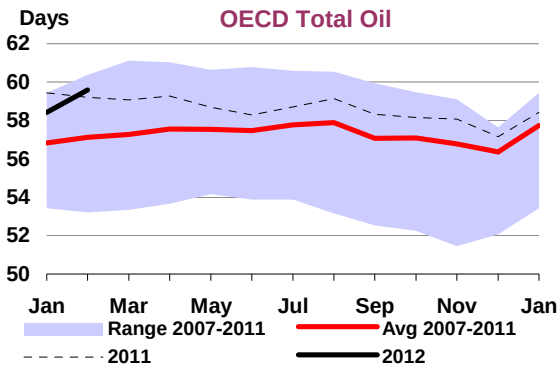
(in days of forward demand and millions barrels of total oil)

Days[1]

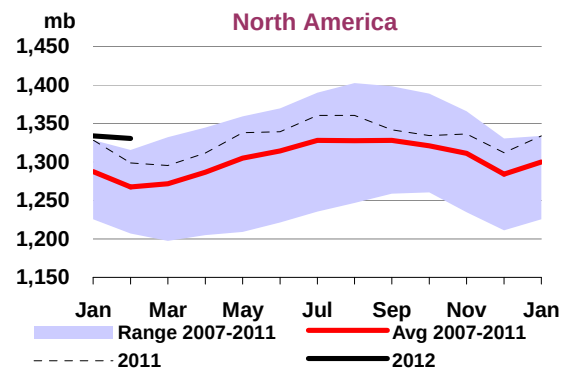


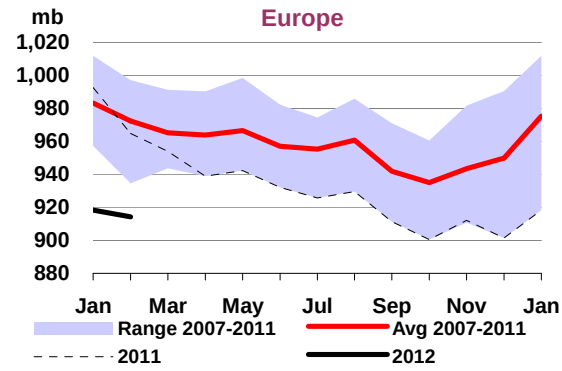


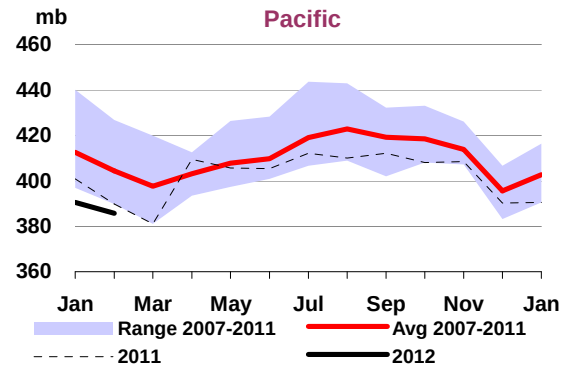


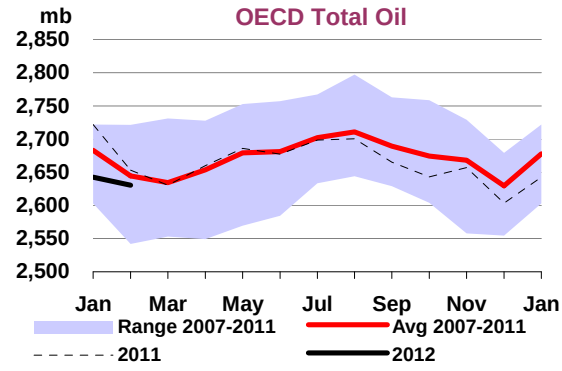


Million Barrels









1 Days of forward demand are based on average demand over the next three months

PRICES

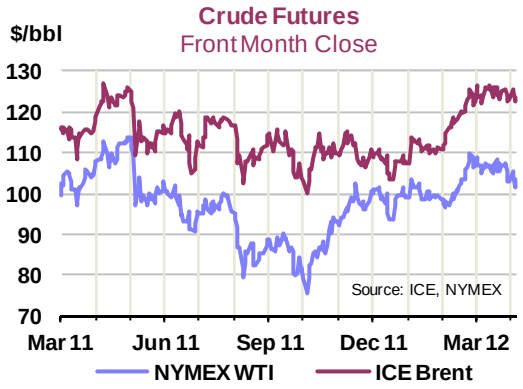
Summary

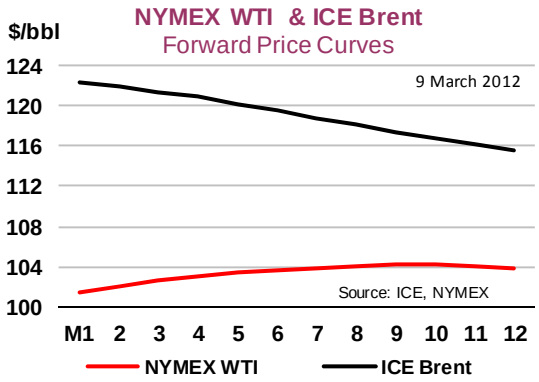
- **Crude oil futures reclaimed 2011 highs in March, underpinned by market concerns over current and potential supply disruptions**. North Sea outages continue to mount while the impact on Iranian crude oil export flows from recently enacted EU and US sanctions has become far-reaching, with key banking facilities already choked off. However, amid signs of rising 1Q12 supplies and hopes for talks between Iran and the international community, prices have subsequently eased. Futures prices for Brent were last trading around $120/bbl and WTI at $102/bbl.

- **Money managers cut their bullish bets on rising crude prices in the week ending 3 April 2012 as a response to rising crude stocks in the US, the Fed's decision to hold off on additional monetary policy easing,** as well as discussions between the US, UK and France on a possible release of strategic oil reserves.

- **Product crack spreads trended upwards for most products in March as the refining maintenance season limited supply.** For middle distillates and fuel oils elevated price levels in early February limited the month-on-month increase. In Asia, the upside was further constrained by comfortable stock levels in Singapore in early March.

- **Following strong demand for Middle Eastern and West African grades, benchmark VLCC and Suezmax crude tanker rates surged to their highest levels since mid-2010,** while gains in the product tanker sector were muted.





Market Overview

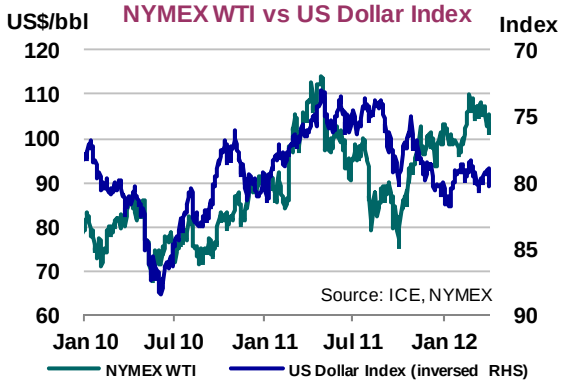
Crude oil futures were up by around $4.00-5.50/bbl in March, underpinned by market concerns over current and potential supply disruptions. The impact on Iranian crude oil export flows from recently enacted EU and US sanctions set to take effect 1 July has already become far-reaching, with key banking facilities and insurance for the shipping market already choked off or severely constrained (see OPEC Supply, '*Iranian Crude Supplies Tumble Under The Weight of Sanctions*'). UK North Sea production is expected to average below the 1 mb/d mark in 2Q12 and 3Q12, following the latest shut-in of the Elgin/Franklin complex, this time due to a gas leak.

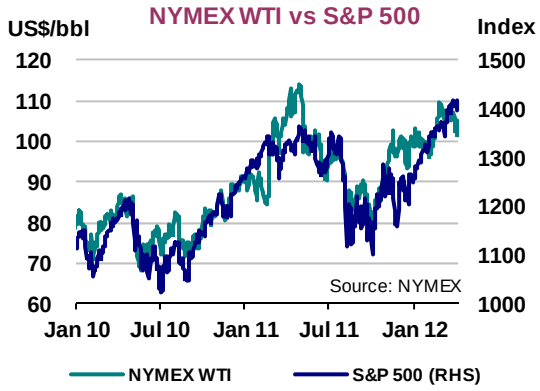
Markets were also supported in March by robust demand growth in non-OECD Asia and the Middle East, including increased crude burn at utilities in Japan and Saudi Arabia. Brent crude rose $5.48/bbl in March to $124.54/bbl, the highest monthly average since July 2008. By early April Brent prices were trading lower at around $120/bbl on cautious optimism that the stalled talks with Iran over its nuclear

programme would resume. Iran is now slated to hold talks with G-6 members on 14 April but already there is little optimism the next round will be a success. Officials are also casting about for the location for another round of talks. US WTI futures were up by just under $4/bbl in March to an average $106.21/bbl and were last trading at about $102/bbl.

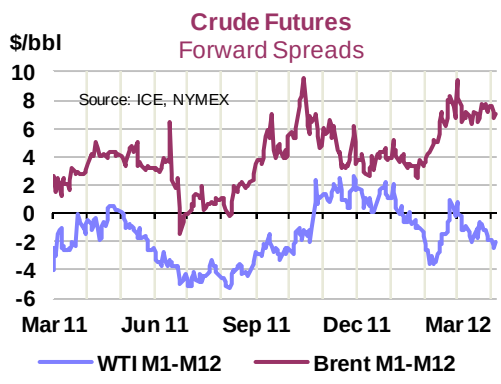
Higher prices triggered by supply outages in the North Sea, political turmoil in Syria, Sudan and Yemen and residual fears over replacements for Iranian supplies were countered by resurgent worries over the fragile euro zone economies. However, the loftier oil price levels have already been built into our demand estimates, with global oil demand for 2012 unchanged at 89.9 mb/d. 2Q12 demand is forecast to fall to a seasonally weak 88.6 mb/d, before sharply rebounding to an average 90.8 mb/d for second-half of the year.

That said, however, there is a growing consensus among analysts that high crude prices have already undermined fragile economic recovery, and with it oil demand growth prospects. Most recent manufacturing data for China and Europe were weaker than expected, prompting fears that the slowdown will further restrain oil demand growth. A mid-March press conference by Saudi Arabian officials aimed at calming high prices was followed by unfounded press reports of imminent strategic stock releases. Neither appeared to have an immediate impact, but may be playing in to weaker prices now, especially amid evidence of sharply higher 1Q12 supplies overall.





While relatively robust Asian and European markets are supporting Dubai and Brent-related crudes, US WTI prices are relatively depressed under the weight of swelling supplies at both the US Gulf Coast and Cushing. US crude imports have posted sharp increases in recent weeks, with Saudi crude making its way to US Gulf Coast refineries and Canadian and US onshore crude into the US Midcontinent. This fuelled WTI's relative weakness to Brent; the price spread between the two benchmark grades widened to more than -$20/bbl in early April, compared with -$18.34/bbl in March, -$16.80/bbl in February and -$11.13/bbl in January.



Underscoring the tight market for prompt Brent, the M1-M12 backwardation increased to around $7.15/bbl in March compared with just under $6/bbl in February and $3.65/bbl in January. Relatively weaker prompt WTI prices saw the WTI M1-M12 contract move deeper into contango in early April, to around -$2.10/bbl in the week of 2-6 April, compared with -$1.15/bbl in March, -$1.85/bbl in February and -$0.18/bbl in January.

Prompt Month Oil Futures Prices

(monthly and weekly averages, $/bbl)

	Jan	Feb	Mar	Mar-Feb Avg Chg	% Chg	Week Commencing: 05 Mar	12 Mar	19 Mar	26 Mar	02 Apr
NYMEX										
Light Sweet Crude Oil	100.32	102.26	106.21	3.94	3.7	106.31	106.13	106.64	105.11	103.51
RBOB	117.45	126.41	140.39	13.98	10.0	137.94	140.03	141.23	142.87	141.24
No.2 Heating Oil	127.94	134.17	135.55	1.38	1.0	135.73	136.75	135.27	134.25	134.48
No.2 Heating Oil ($/mmbtu)	21.96	23.03	23.27	0.24	1.0	23.30	23.48	23.22	23.05	23.09
Henry Hub Natural Gas ($/mmbtu)	2.71	2.53	2.30	-0.23	-10.0	2.32	2.29	2.32	2.18	2.14
ICE										
Brent	111.45	119.06	124.54	5.48	4.4	124.26	125.18	124.46	124.12	124.02
Gasoil	128.54	134.66	138.19	3.53	2.6	137.71	139.26	138.69	137.82	137.47
Prompt Month Differentials										
NYMEX WTI - ICE Brent	-11.13	-16.80	-18.34	-1.54		-17.95	-19.05	-17.82	-19.01	-20.51
NYMEX No.2 Heating Oil - WTI	27.62	31.91	29.34	-2.56		29.42	30.62	28.63	29.14	30.97
NYMEX RBOB - WTI	17.13	24.14	34.18	10.04		31.63	33.90	34.59	37.75	37.74
NYMEX 3-2-1 Crack (RBOB)	20.63	26.73	32.57	5.84		30.89	32.81	32.60	34.88	35.48
NYMEX No.2 - Natural Gas ($/mmbt	19.26	20.51	20.97	0.47		20.98	21.19	20.90	20.87	20.94
ICE Gasoil - ICE Brent	17.09	15.60	13.64	-1.95		13.44	14.08	14.23	13.69	13.46

Source: ICE, NYMEX

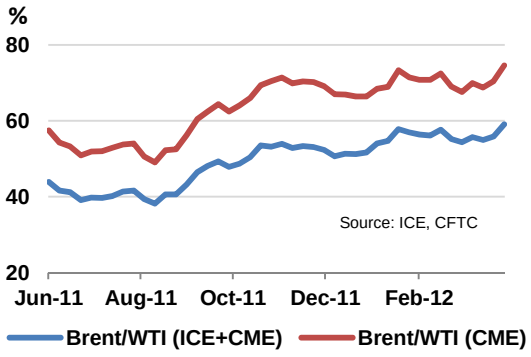
Futures Markets

Activity Levels

The ratio of Brent futures in London ICE to New York and London WTI oil positions is up about 4%, to a peak of 59.1% in March, triggered by a relatively large increase in Brent open interest compared to NYMEX WTI open interest. Meanwhile, ICE WTI open interest increased for two months in a row after declining for six straight months since October. The increase in the ratio of Brent to WTI open interest is sharper when ICE WTI contracts are excluded. The ratio of ICE Brent to CME WTI open interest increased by more than 5.5% to reach a peak of 74.6%.

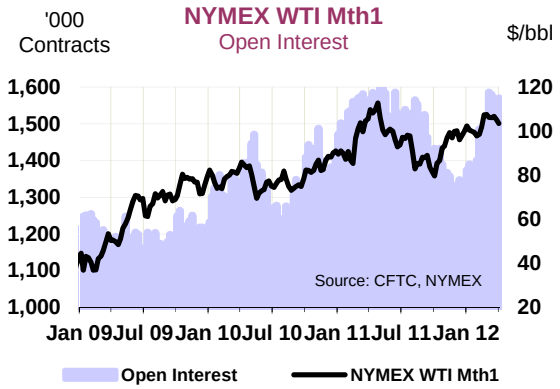
Open interest in all major oil derivatives contracts increased in March. Open interest in New York CME WTI futures and options contracts increased by 1.4% from 28 February 2012 to 3 April 2012 to 2.53 million contracts. Meanwhile, open interest in futures-only contracts increased by 3.4% during the same period from 1.52 million to a seven-month high of 1.57 million. Over the same period, open interest in London ICE WTI contracts increased to 0.41 million and 0.48 million contracts in futures-only and combined contracts, respectively. Meanwhile, open interest in ICE Brent contracts also tested fresh records in March, with 1.17 and 1.37 million contracts in March in futures-only and combined contracts, respectively.

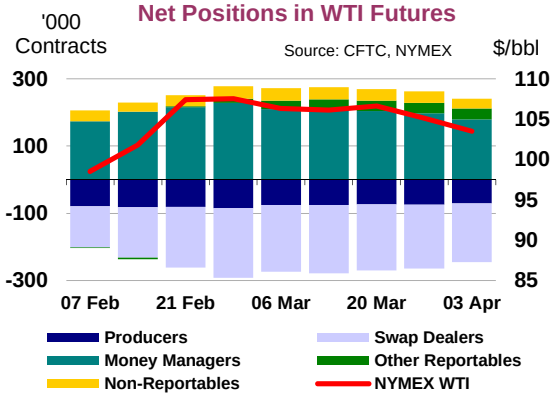
Percentage of Brent to WTI Open Interest



Money managers followed opposite trading patterns in WTI and Brent futures contracts. They cut their bets on rising WTI crude oil prices by 48 891 contracts in March, to reach the lowest level since early February, at 179 501 as a response to rising crude stocks at Cushing, as well as to the expectation that

the Federal Reserve will refrain from more monetary stimulus unless the US economic expansion falters. In contrast, money managers increased their bets on rising Brent prices by 45% from 122 288 to 138 365 futures contracts from 28 February to 27 March; the highest level since ICE Futures Europe started publishing information on trading of Brent futures last July. Here, traders responded to ongoing uncertainty over global oil supply fuelled by tension between Iran and the western powers. However, they also cut their bullish bets on Brent prices in the week ending 3 April by 13 289 to 125 076 futures contracts as a response to cautious optimism over the resumption of stalled nuclear talks between Iran and the six nations, expected to take place in Istanbul on 14 April. The decline in bullish bets on Brent was also triggered by some reports of discussions between the US, UK and France on a possible release of strategic oil reserves.





Producers reduced their net futures short positions from 84 706 to 70 974 contracts over the same period; they held 21.15% of the short and 16.63% of the long contracts in CME WTI futures-only contracts. Swap dealers, who accounted for 23.88% and 34.99% of the open interest on the long side and short side, respectively, reduced their net short position by 15.7% to hold 174 408 net short in March. Both producers and swap dealers' trading activity in the London WTI contracts followed similar patterns to CME WTI contracts. Producers in the London ICE WTI contracts increased their net long positions from 11 521 to 25 040 contracts over the same period. Swap dealers, on the other hand, reduced their net short positions from 33 574 to 24 407 contracts.

NYMEX RBOB futures and combined open interest increased by more than 1.7% over the same period. Open interest in NYMEX heating oil futures contracts declined by almost 5.4% to 285 433 contracts while open interest in natural gas markets stayed flat at 1.23 million contracts.

Index investors' long exposure in commodities in February 2012 increased by $24.6 billion to reach a six-month high of $310 billion in notional value. They added $5.9 billion to WTI Light Sweet Crude Oil, both on and off futures contracts in February. The number of long futures equivalent contracts increased to 553 000 from the lowest level since December 2008 of 538 000 observed in January, equivalent to $59.1 billion in notional value.

Positions on NYMEX Light Sweet Crude Oil (WTI) Futures Contracts

Thousand Contracts

03 April 2012	Long	Short	Net	Long/Short	Δ Net from Prev. Week	Δ Net Vs Last Month
Producers' Positions	260.9	331.9	-71.0	*Short*	↑ 3.5	↑ 13.7
Swap Dealers' Positions	141.2	315.6	-174.4	*Short*	↑ 15.1	↑ 32.4
Money Managers' Positions	227.9	48.4	179.5	*Long*	↓ -17.9	↓ -48.9
Others' Positions	148.0	111.9	36.1	*Long*	↑ 4.0	↑ 9.9
Non-Reportable Positions	97.8	68.0	29.8	*Long*	↓ -4.7	↓ -7.2
Open Interest			**1569.1**		↑ 6.9	↑ 51.2

Source: CFTC

Market Regulation

On 20 March 2012, the CFTC approved the final rule on business conduct standards addressing reporting and recordkeeping requirements and daily trading records requirements for swap dealers (SDs) and major swap participants (MSPs). The rule requires SDs and MSP to designate a chief compliance officer, clarify (specify) duties imposed upon the chief compliance officer as well as those imposed upon SDs and MSPs registered with the Commission with regard to risk management procedures; and monitoring of trading to prevent violations of applicable position limits. However, the CFTC delayed again the vote on the final rule defining the swap dealer and major swap participants, which will eventually determine which entities face mandatory capital and margin requirements as well as position limits.

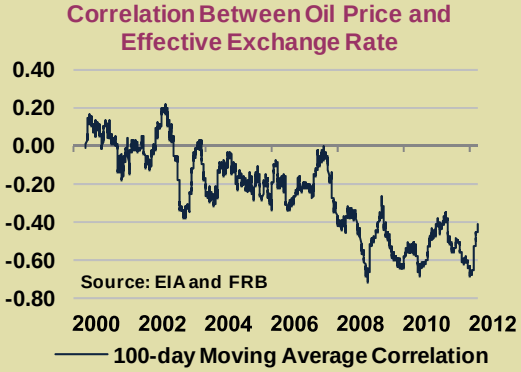
On 22 March 2012, the US CFTC Division of Market Oversight issued an advisory note on special call authorities relating to claimed exemptions from speculative position limits, which would become effective sixty days after the term 'swap' is defined by the Commission. The advisory note reminded market participants that the Commission may use its special call authorities to request market participants, who claim hedge exemptions, to provide information related, but not limited, to the following: positions owned or controlled by that person; trading done pursuant to the claimed exemption; any swaps, futures, options, or cash market positions which support the claim of exemption; relevant business relationships supporting a claim of exemption; their related cash, futures, and swap positions and transactions; and in certain instances, a list of pass-through swap counterparties for pass-through swap exemptions. However, the Commission is yet to issue its final rule on the definition of 'swap'. The earliest estimate for the final rule is in April, which implies that the position limit would not be effective until June, or possibly later if the federal court were to decide to provide a temporary injunction to stop implementation of the position limit.

On 29 March 2012, the European Parliament approved the European Markets Infrastructure Regulation (EMIR), which introduces significant changes to the over-the-counter derivatives markets by establishing common rules for Central Counterparty Clearing Houses (CCPs) and trade repositories (TRs), mandating central clearing for all standardised contracts, as well as bringing reporting requirements to all derivatives contracts. The final draft of EMIR is still pending approval from the European Council. Once adopted by the Council, it will be published in the Official Journal, and the rules will enter into force 20 days after the publication. The new rules are expected to be effective by the end of 2012.

The European Parliament's Economic and Monetary Affairs Committee proposed amendments for Markets in Financial Instruments Directive (MiFID) and Market Abuse Directive (MAD). The amendments call for a new tougher regime on high frequency trading. The amendments included a minimum holding period of 500 milliseconds, higher fees on the cancellation of high volumes as well as a ban on direct electronic access. The proposed amendments also call for more restrictive curbs on speculative positions in commodity derivatives. The proposed amendments call for differentiation between limits on hedge and speculative positions as well as position management arrangements, in addition to ex ante position limits set by trading venues.

Do Exchange Rates Matter?

Oil prices have experienced large fluctuations in recent years. The spike in crude oil prices in mid-2008 to more than $140/bbl, followed by a steep correction in late 2008/early 2009 and subsequent sharp rebound over the last two years have jolted the world economy and pinched consumers at the fuel pump. US dollar weakness in recent years is frequently cited as one reason for high oil prices. It is very common to see the financial press suggesting that a weak dollar has pushed oil prices



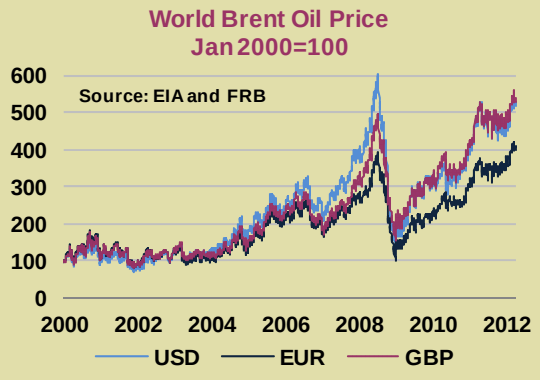
Do Exchange Rates Matter? (continued)

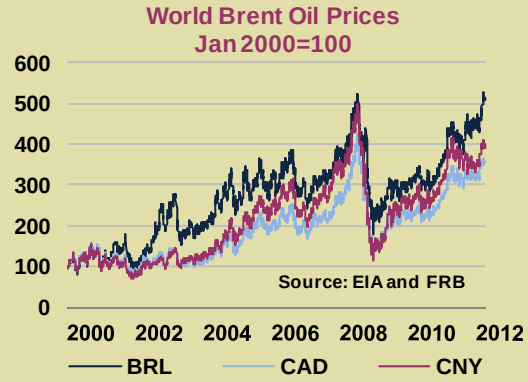
higher. However, this explanation is challenged by the empirical observations that (a) a change in oil price tends to lead to a change in the exchange rate as predicted by economic theory and (b) the oil price has risen regardless of what currency unit one uses to measure the price of oil.

Empirically, there is clearly an inverse correlation between oil prices and exchange rates – that is, other things being equal, oil prices rise if the dollar falls. An assessment of the one-year rolling average correlation between the daily change in the oil price and the daily change in the nominal effective exchange rate shows that this relationship has been relatively strong in recent years, although the negative correlation has been declining in recent months. As we suggested in our *Medium-Term Oil and Gas Markets 2011* report, however, the direction of causality tends to run from oil prices to exchange rate, especially when we use lower frequency observations. This is consistent with the traditional terms of trade argument on the relationship between exchange rates and oil prices. Terms of trade effects suggest that when the price of an import rises, if the demand for that import is very inelastic, (i.e. quantities demanded hardly fall at all when prices rise, as is the case for oil) the trade balance deteriorates, which would decrease the value of the local currency.

The price of oil in different currencies provides further support to the notion that weakness in the US Dollar cannot be the main reason behind the high oil prices. The relationship between the change in oil price and change in the exchange rate is considered to be country-specific. For oil-exporting countries, when oil prices go up, *ceteris paribus*, we expect the country's exchange rate to appreciate. On the other hand, for oil importing countries, the reverse should hold.

For example, as expected, our analysis shows that the correlation between annual change in the oil price and annual change in the Canadian exchange rate is very strong. The price of Brent crude oil measured in US Dollars increased by more than 11% in the first quarter of 2012, from $111/bbl to $123/bbl. During the same period, the Canadian Dollar appreciated by 1% relative to the US Dollar. In the meantime, the price of oil measured in Canadian Dollars, as expected, increased only by 10%. Since the rate of currency appreciation is much smaller than the rate of oil price increase, we observed an increase in the oil price in Canadian Dollars as well.



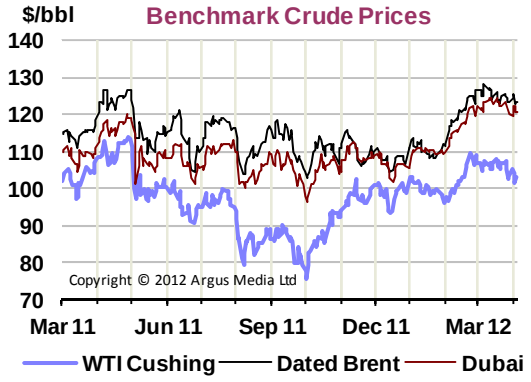


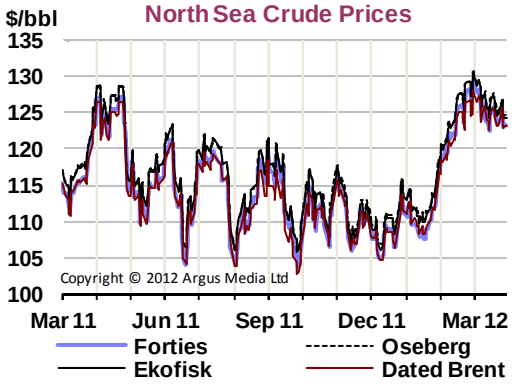
The price of oil measured in different national currencies has followed very similar directional movement with oil prices measured in US Dollars, although some of these currencies appreciated against the US Dollar. The main reason for this, as suggested by Martin Feldstein, is that "the currency in which oil is priced would have no significant or sustained effect on the price of oil when translated into dollars, euros, yen, or any other currency." The equilibrium price in the oil market is determined by global supply and demand; it is irrelevant which currency oil is priced in. The decline of the US Dollar has little to offer as an explanation to the increase in oil prices. On the other hand, the high and rising price of oil does, contribute to the decline of the dollar through the terms of trade effect.

Spot Crude Oil Prices

Spot crude oil markets strengthened in March by 3.3-5.5%, with ongoing supply woes stemming from the Iranian crisis, further non-OPEC outages and relatively low OECD crude inventories in Asia and Europe trumping an expected drop in refinery demand during the seasonally weak second-quarter and evidence of rising 1Q12 supplies overall. European and Asian crude markets posted the strongest gains in March, though prices were trending lower over the month and into early April as concern over the impact of sanctions on Iran receded while resurgent worries over the sustainability of the global economic recovery added modest downward pressure on physical markets.

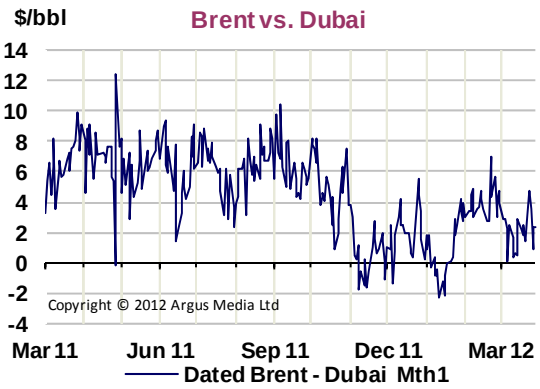
Benchmark spot crude prices increases in March ranged from a low of around $3.90/bbl (to an average $106.21/bbl) for WTI, to as much as $6.41/bbl (to $122.53/bbl) for Dubai. North Sea Brent posted an increase of $5.75/bbl to $125.28/bbl.





The steady decline in Iranian exports on the back of recent EU and US sanctions is partly behind the stronger-than-expected physical markets ahead of the seasonally weak refiner demand period of the second quarter. With sanctions hitting the banking and shipping sectors particularly hard, however, refiners were actively lining up alternative supplies in the spot market during March, though the biggest impact on trade is expected in April and May, judging by reports from Iran's traditional buyers (*see OPEC Supply, 'Iranian Crude Supplies Tumble Under The Weight of Sanctions'*).

In the US, however, spot crude prices were fundamentally weaker due to a combination of reduced refinery throughputs and crude oil stocks hovering at the top of the five-year range. In early March reports of an armada of Saudi crude shipments heading to the US Gulf Coast initially took the market by surprise but approximately 500 kb/d of increased supplies are earmarked for the Saudi Aramco/Shell Motiva refinery, which has just completed the doubling of capacity, to 600 kb/d.



In Europe, North Sea outages continued to underpin Brent crudes in March but prices eased in early April on ample supply in Europe, in part due to increased exports of Russian crude to the region. However, the

shut in of Total's Elgin/Franklin gas and gas condensate field for several months due to a gas leak will likely keep a floor under North Sea grades. Total UK Forties output in 2Q12 is forecast to fall by around 60 kb/d to 390 kb/d, further reducing liquidity from the beleaguered Forties blend. UK North Sea production is now expected to average below 1 mb/d in the second and third quarter of 2012 (*see Non-OPEC Supply, 'The Tip of the Decommissioning Iceberg: Total's Elgin/Franklin Gas Leak*').

Spot Crude Oil Prices and Differentials

(monthly and weekly averages, $/bbl)

	Jan	Feb	Mar	Mar-Feb Avg Chg	%	Week Commencing: 05 Mar	12 Mar	19 Mar	26 Mar	02 Apr
Crudes										
North Sea Dated	110.52	119.53	125.28	5.75	4.8	128.15	127.16	125.19	125.20	124.74
Brent (Asia) Mth 1	111.98	119.16	124.91	5.74	4.8	124.17	125.30	124.76	125.41	124.21
WTI (Cushing) Mth 1	100.32	102.26	106.21	3.95	3.9	106.31	106.13	106.64	105.11	103.51
Urals (Mediterranean)	109.35	118.96	122.88	3.92	3.3	124.56	123.32	121.45	121.14	120.69
Dubai	109.91	116.11	122.53	6.41	5.5	121.06	122.01	123.65	123.01	122.12
Tapis (Dated)	117.73	126.66	132.50	5.84	4.6	133.77	133.06	131.43	131.14	130.79
Differential to North Sea Dated										
WTI (Cushing)	-10.20	-17.27	-19.07	-1.80		-21.84	-21.03	-18.55	-20.09	-21.23
Urals (Mediterranean)	-1.18	-0.57	-2.39	-1.83		-3.59	-3.84	-3.74	-4.06	-4.05
Dubai	-0.61	-3.42	-2.75	0.67		-7.08	-5.15	-1.54	-2.19	-2.61
Tapis (Dated)	7.21	7.13	7.22	0.09		5.62	5.90	6.24	5.94	6.05
Prompt Month Differential										
Forward Cash Brent Mth1-Mth2	0.03	0.76	0.64	-0.12		0.64	0.38	0.43	0.77	0.59
Forward WTI Cushing Mth1-Mth2	-0.22	-0.41	-0.49	-0.08		-0.48	-0.52	-0.47	-0.53	-0.53
Forward Dubai Mth1-Mth2	0.77	0.52	1.42	0.89		1.73	1.82	1.42	0.68	1.06

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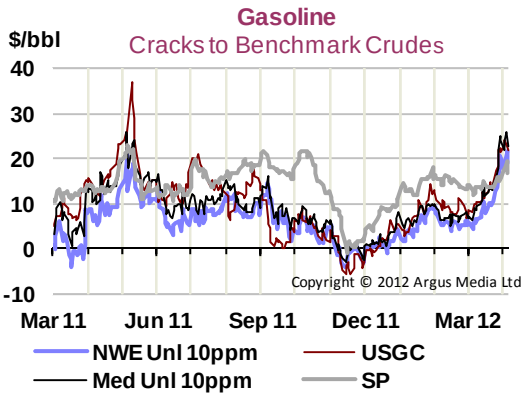
Despite a steady increase in supplies of OPEC Middle East crudes weighing on the market in March, spot prices for Dubai strengthened month-on-month, up 5.5%. As a result, Dubai's discount to Brent narrowed, to -$2.75/bbl on average in March compared with -$3.42/bbl in February. The ample supplies of Middle East grades on offer was also due to sharply lower regional refinery runs in March, which were estimated off by 300 kb/d from February levels at 5.6 mb/d. Reflecting the relative weakness of spot prices in Asia, Saudi Aramco lowered its official selling prices for May liftings. Benchmark Arab Light was lowered by $0.35/bbl. Prices for medium and heavy crudes were reduced by a modest $0.10/bbl while at the other end of the spectrum, Arab Super Light was cut by $2.45/bbl.

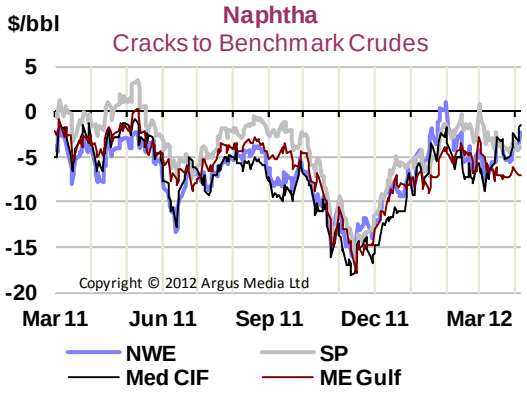
Demand for direct burn crude at power plants in Japan continues to support prices for heavy, sweet crudes such as Duri (*see Demand, 'Japanese Power Sector Demand: One Year After Fukushima').*

Spot Product Prices

Crack spreads trended upwards for most products in March as the refinery maintenance season limited supply. For middle distillates and fuel oils elevated price levels in early February limited the month-on-month increase. In Asia, the upside was further constrained by comfortable stock levels in Singapore in early March. Gasoline crack spreads showed diverging trends in March, continuing to improve in the Atlantic basin, whereas in Asia they fell slightly. Atlantic basin markets were tight, especially in Europe, and markets turned more bullish with the shift to summer grade gasoline and the upcoming summer driving season. Comfortable stock levels in Asia pressured markets here, but the impending refining maintenance season pushed spreads higher towards the end of the month.

In Northwest Europe, gasoline crack spreads to Brent increased by $4.04/bbl month-on-month, and by a stronger $5.87/bbl to Urals in the Mediterranean, reflecting a tight market. An open arbitrage to the US East Coast, as well as demand from West Africa and the Middle East pulled volumes out of the region, and independent stock levels in ARA stayed in the lower end of the five-year range in March. Higher prices closed the arbitrage to the US East Coast at month-end.

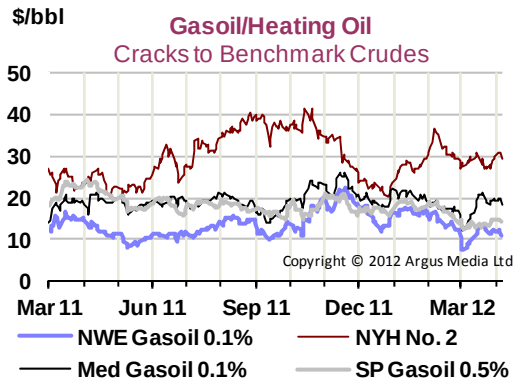


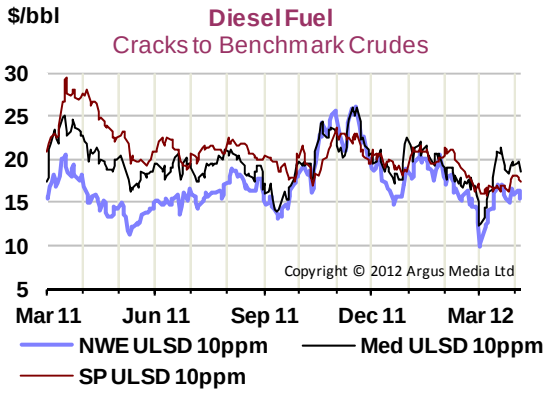


US markets were supported by hopes of both a stronger summer driving season this year and more optimistic prospects for the US economy. Crack spreads increased as lower refinery runs on both sides of the Atlantic tightened supplies, and as demand from Latin America was relatively strong. The closed arbitrage from Europe at month-end gave further upward impetus to prices.

In Asia, gasoline crack spreads trended sideways in March, and fell by a minor $0.68/bbl vs Dubai in Singapore. Comfortable stock levels were offset by strong regional demand, although upward support to crack spreads came from increased refining maintenance towards the end of the month.

Naphtha markets weakened slightly in March with crack spreads falling by around $1.30/bbl to Brent in Europe and by about $1.45/bbl to Dubai in Asia. A stronger gasoline market in Asia was supportive for the crack spread, but the upside was limited by high flat prices and a partly closed arbitrage from Europe.

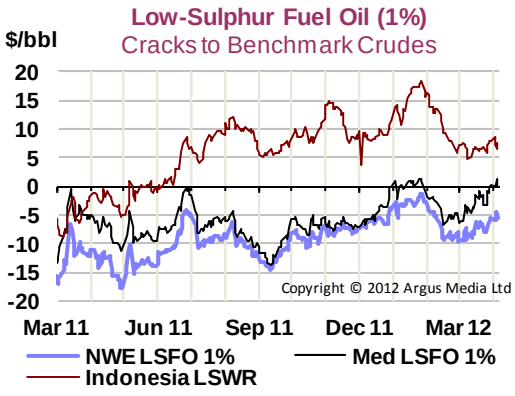


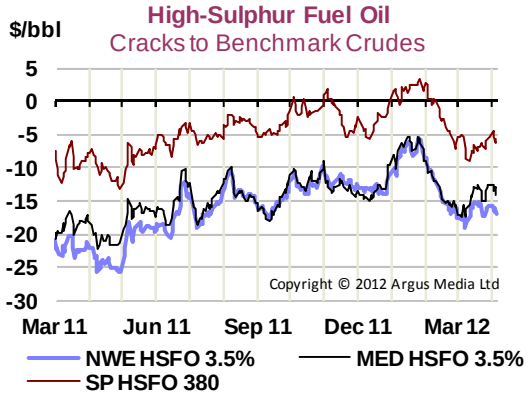


Middle distillates crack spreads mostly fell month-on-month from the strong levels seen in early February. However, after a dip early in March, cracks trended upwards again later in the month, with European diesel cracks to Urals over $20/bbl in the Mediterranean region around mid-month. Support came from ongoing refining maintenance, both regionally and in Russia, but an open arbitrage from the US kept markets well supplied and stocks rose throughout March to above the five-year range.

In the US, middle distillate markets continued to be pressured by the drawing to a close of a poor heating oil season, and high prices also limited demand. However, a strong export market to South America provided some support, together with ongoing refining maintenance. Meanwhile in Asia, crack spreads to Dubai were stable at around $14/bbl during March. Although the arbitrage to the west was only partially open, stocks drew to below the five-year average due to ongoing refining maintenance and strong regional demand.

For heavy fuel oils, discounts narrowed throughout March and broke the downward trend seen from mid-January. Nevertheless, only LSFO crack spreads to Urals in the Mediterranean improved month-on-month, as elevated early-February levels prevented monthly gains in crack spreads elsewhere. In Europe, markets tightened as refining maintenance both in Europe and Russia limited supplies, and the arbitrage to Asia reopened again after being partially closed in the second half of February.





Demand for straight run fuel oil increased also with increasing crude prices, and this resulted in independent stock drawing after a large build at the beginning of the month. In Asia, stocks in Singapore continued to increase, but strong power sector demand from Japan and prospects of lower inflows in April due to seasonal maintenance were supportive for fuel oil markets.

Spot Product Prices

(monthly and weekly averages, $/bbl)

	Jan	Feb	Mar	Mar-Feb		Week Commencing:					Jan	Feb	Mar
				Chg	%	05 Mar	12 Mar	19 Mar	26 Mar	02 Apr			
Rotterdam, Barges FOB											**Differential to Brent**		
Premium Unl 10 ppm	115.97	125.33	135.12	9.79	7.8	132.10	134.32	134.07	141.28	143.34	5.45	5.80	9.84
Naphtha	106.70	115.64	120.07	4.43	3.8	119.66	121.02	119.66	119.40	120.59	-3.83	-3.89	-5.21
Jet/Kerosene	127.96	133.21	137.39	4.18	3.1	136.75	138.40	137.83	137.48	137.88	17.43	13.68	12.12
ULSD 10ppm	129.69	135.45	139.88	4.43	3.3	138.81	141.38	140.59	140.11	140.05	19.16	15.92	14.60
Gasoil 0.1%	127.24	133.51	136.30	2.78	2.1	135.40	137.42	137.04	136.19	135.86	16.72	13.98	11.02
LSFO 1%	107.69	112.50	117.68	5.18	4.6	117.93	118.01	117.28	117.77	118.55	-2.83	-7.03	-7.60
HSFO 3.5%	102.93	105.98	108.74	2.76	2.6	108.50	109.87	108.41	108.10	107.68	-7.60	-13.55	-16.54
Mediterranean, FOB Cargoes											**Differential to Urals**		
Premium Unl 10 ppm	116.81	126.17	135.96	9.79	7.8	132.95	135.16	134.91	142.12	144.19	7.46	7.21	13.07
Naphtha	103.71	113.20	117.63	4.42	3.9	117.20	118.58	117.22	116.98	118.23	-5.64	-5.76	-5.26
Jet Aviation fuel	126.28	132.47	136.42	3.95	3.0	135.92	137.39	136.75	136.39	136.80	16.94	13.51	13.54
ULSD 10ppm	129.93	136.46	140.56	4.10	3.0	139.23	142.26	141.50	140.30	139.98	20.58	17.50	17.68
Gasoil 0.1%	127.87	134.74	137.43	2.69	2.0	136.61	138.29	138.29	137.46	137.16	18.53	15.78	14.54
LSFO 1%	109.59	114.79	119.93	5.14	4.5	120.29	120.03	119.48	120.14	120.93	0.24	-4.17	-2.95
HSFO 3.5%	102.45	105.59	108.28	2.69	2.5	110.23	111.37	110.07	109.84	109.37	-6.90	-13.37	-14.60
New York Harbor, Barges											**Differential to WTI**		
Super Unleaded	125.24	134.14	140.76	6.62	4.9	136.12	138.66	143.37	146.14	146.49	24.92	31.88	34.55
Unleaded	120.65	129.41	135.82	6.41	5.0	130.66	133.88	138.54	141.12	142.77	20.33	27.15	29.61
Jet/Kerosene	131.49	136.46	138.21	1.76	1.3	138.08	139.15	137.55	138.14	138.32	31.17	34.20	32.00
No. 2 (Heating Oil)	127.96	134.14	134.93	0.79	0.6	135.11	136.15	134.45	133.66	133.98	27.64	31.88	28.72
LSFO 1%*	103.78	112.21	118.32	6.11	5.4	117.42	118.54	119.09	118.88	122.03	3.46	9.95	12.11
No. 6 3%*	102.63	109.94	114.72	4.78	4.4	114.61	114.54	115.09	114.90	114.13	2.31	7.68	8.51
Singapore, FOB Cargoes											**Differential to Dubai**		
Premium Unleaded	124.01	130.86	136.60	5.74	4.4	134.97	137.76	136.75	137.53	139.03	14.10	14.75	14.07
Naphtha	104.97	114.35	119.30	4.95	4.3	119.24	120.38	119.05	118.18	117.01	-4.94	-1.76	-3.22
Jet/Kerosene	126.75	132.44	136.25	3.81	2.9	135.16	137.15	136.66	136.66	135.98	16.84	16.33	13.72
Gasoil 0.5%	128.35	132.95	136.17	3.22	2.4	135.32	137.09	136.58	136.56	135.84	18.44	16.84	13.64
HSFO 180 CST	113.71	115.32	117.86	2.54	2.2	117.35	117.99	118.25	118.07	117.36	3.80	-0.79	-4.67
HSFO 380 CST 4%	111.69	113.75	115.93	2.18	1.9	115.69	115.99	116.17	116.08	115.65	1.77	-2.37	-6.60

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* Delivered

OMR Physical Price Analysis Now Based Upon Argus Media Ltd Assessments

As of April 2012, the *OMR* has begun monitoring spot crude, oil products and freight rate data provided by Argus Media Ltd. The table below sets out the price quotations now used in comparison with those formerly received from Platts.

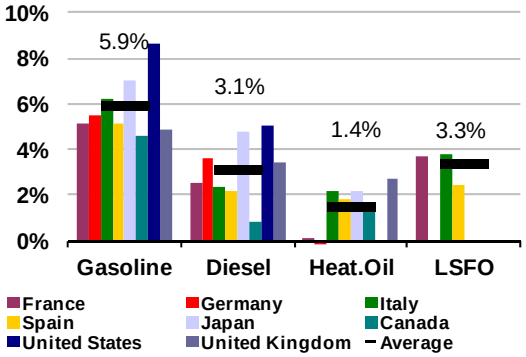
Price Quotations Used for Spot Crude and Product Prices

	Previously Used Platts Quotations	Argus Quotations Used in This Month's OMR
Spot Crude Prices		
North Sea Dated	Brent Dated Mid	North Sea Dated, London close, midpoint, fob
Brent (Asia)	Brent Asia Mth1(Adj) Mid	North Sea Forward month 1, Singapore close, midpoint, fob
WTI	WTI Cushing Mth1(Adj) Mid	Nymex WTI month 1, Houston close, settlement, fip
Urals (Mediterranean)	Urals Med Dated Mid	Urals Med 135kt dated, London close, midpoint, cif
Dubai	Dubai Mth1(Adj) Mid	Dubai month 1, Singapore close, midpoint, fob
Tapis (Dated)	Tapis Dated Mid	Tapis prompt, London close, midpoint, fob
Spot Product Prices		
Rotterdam Barges FOB		
Premium Unl 10 ppm	Gasoline 10 ppm NWE CIF ARA Mid	Gasoline 95r 10ppm NWE fob prompt, London close, midpoint, fob
Naphtha	Naphtha NWE FOB Barges Mid	Naphtha 65 para NWE barge prompt, London close, midpoint, barge
Jet/Kerosene	Jet/Kerosene NWE FOB Barges Mid	Jet/Kerosine NWE fob prompt, London close, midpoint, fob
ULSD 10ppm	ULSD 10ppm NWE FOB Cargoes Mid	Gasoil diesel French 10ppm NWE fob prompt, London close, midpoint, fob
Gasoil 0.1%	Gasoil 0.1% Rdam FOB Barges Mid	Gasoil heating oil French NWE fob prompt, London close, midpoint, fob
LSFO 1%	No.6 1%/LSFO NWE FOB Barges Mid	Fuel oil 1% NWE fob prompt, London close, midpoint, fob
HSFO 3.5%	HSFO 3.5% NWE FOB Barges Mid	Fuel oil 3.5% NWE fob prompt, London close, midpoint, fob
Mediterranean FOB Cargoes		
Premium Unl 10 ppm	Prem Unl 10ppm Med FOB Cargoes Mid	Gasoline 95r 10ppm W Med fob prompt, London close, midpoint, fob
Naphtha	Naphtha Med FOB Cargoes Mid	Naphtha 65 para W Med fob prompt, London close, midpoint, fob
Jet Aviation fuel	Jet Aviation Fuel Med FOB Cargoes Mid	Jet/Kerosine W Med fob prompt, London close, midpoint, fob
ULSD 10ppm	ULSD 10ppm Med FOB Cargoes Mid	Gasoil diesel French 10ppm W Med fob prompt, London close, midpoint, fob
Gasoil 0.1%	Gasoil 0.1% Med FOB Cargoes Mid	Gasoil heating oil French W Med fob prompt, London close, midpoint, fob
LSFO 1%	No.6 1%/LSFO Med FOB Cargoes Mid	Fuel oil 1% W Med fob prompt, London close, midpoint, fob
HSFO 3.5%	HSFO 3.5% Med FOB Cargoes Mid	Fuel oil 3.5% 0.998 W Med fob prompt, London close, midpoint, fob
New York Harbour, Barges		
Super Unleaded	Unl 93 0.3 Max MTBE NYH Barges Mid	Gasoline 93 conv NYH barge prompt, Houston close, midpoint, barge
Unleaded	Unl 87 0.3 Max MTBE NYH Barges Mid	Gasoline 89 conv NYH barge prompt, Houston close, midpoint, barge
Jet/Kerosene	Jet/Kerosene NYH Barges Mid	Jet/Kerosine 54 NYH barge prompt, Houston close, midpoint, barge
No. 2 (Heating Oil)	No. 2 NYH Barges Mid	Heating Oil 2000ppm NYH barge prompt, Houston close, midpoint, barge
LSFO 1%	No.6 1%/LSFO NYH Cargoes Mid	Fuel Oil No 6 1% NYH prompt, Houston close, midpoint, delivered
No. 6 3%	No.6 3.0% NYH Cargoes Mid	Fuel Oil No 6 3% NYH prompt, Houston close, midpoint, delivered
Singapore, Cargoes		
Premium Unleaded	Prem Unleaded Singapore Mid	Gasoline 95r Singapore prompt, Singapore close, midpoint, fob
Naphtha	Naphtha Singapore Mid	Naphtha Singapore fob prompt, Singapore close, midpoint, fob
Jet/Kerosene	Jet/Kerosene Singapore Mid	Jet/Kerosine Singapore prompt, Singapore close, midpoint, fob
Gasoil 0.5%	Gasoil 0.5% Singapore Mid	Gasoil 0.5% Singapore prompt, Singapore close, midpoint, fob
LSWR Cracked	LSWR Cracked Singapore Mid	N/A
HSFO 180 CST	HSFO 180 CST Singapore Mid	Fuel Oil HS 180 cst cargo Singapore prompt, Singapore close, midpoint, fob
HSFO 380 CST 4%	HSFO 380 4.0% Singapore Mid	Fuel Oil HS 380 cst cargo Singapore prompt, Singapore close, midpoint, fob

End-User Product Prices in March

End-user prices for selected IEA countries continued to increase in March after showing steady growth in January and February. Gasoline prices rose on average by 5.9% month-on-month (m-o-m) and by 7.3% year-on-year (y-o-y). Diesel was up 3.1% m-o-m and 4.9% y-o-y. The remaining surveyed products, heating oil and low-sulphur fuel oil (LSFO) experienced price hikes of 1.4% and 3.3% m-o-m, respectively. On a yearly basis, heating oil rose by 3.9% and LSFO by 16.3%.

End-User Product Prices
Monthly Changes in USD, ex-tax

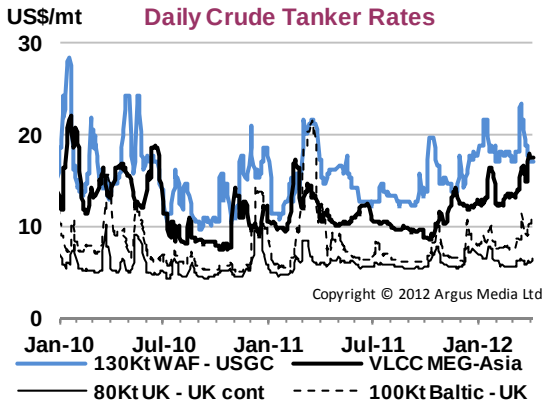


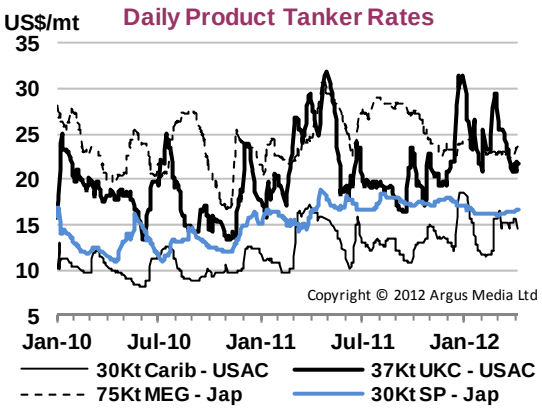
US motorists saw the strongest month-on-month increase of gasoline and diesel prices, up by 8.6% and 5.0%, respectively. UK heating oil prices rose by the highest proportion (2.7%), while in Italy LSFO

increased by 3.8%. On a year-on-year basis, UK gasoline and diesel prices rose by 8.8% and 9.1%, respectively. Italians saw heating oil rise by 5.3%, while Spanish buyers saw a 17% increase for LSFO. During the past 12 months, average European gasoline and diesel prices fell steadily between June and December, but the declining trend flipped since January. This brought average European gasoline and diesel prices to a 7% and 4% increment from March 2011 levels.

Freight

Tracking strong demand for Middle Eastern and West African grades, benchmark VLCC and Suezmax crude tanker rates reached their highest levels since mid-2010. In the Middle East Gulf amid reports of increased Asian and US demand for regional crudes, the benchmark Middle East Gulf – Asia Pacific route for double-hulled VLCCs experienced a sustained recovery throughout March. Rates increased from $13/mt in early March to approximately $17.50/mt one month later, their highest level since mid-2010.





Note: Due to the switch from Platts to Argus pricing from this OMR onwards, freight rates presented here are not directly comparable with those published previously.

Tonnage, already stretched from healthy Asian demand, was further tightened by Saudi Aramco's shipping arm Vela significantly increasing its spot chartering as it sought to move crude to the US Gulf in preparation for the start-up of the expanded Port Arthur refinery, a joint venture between Aramco and Shell. On the benchmark Suezmax West Africa – US Gulf Coast route a boom and bust trend played out, after increased demand during the first half of the month pushed rates to $23.50/mt, a level which proved unsustainable as demand waned, tonnage built up and rates consequently retreated back to $17/mt, the same level as a month earlier.

In the considerably less volatile North Sea market, rates for the cross-UK Aframax trade held at approximately $6/mt. However, rates in the Baltic received some support as the Ust Luga crude terminal on Russia's Baltic Sea coast finally came on stream at the end of March following months of delays. Consequently, Aframax rates in the Baltic rose to $11/mt, their highest levels this year, as the increased demand tightened ice-class tonnage. With the port scheduled to load a further nine cargoes in April and crude volumes shipped via Baltic ports set to increase modestly over the second quarter, this development could buttress Northern European rates over the coming months.

In the product tanker sector, the transatlantic UK – US Atlantic Coast route fared the worst out of all the benchmark routes, where, as a result of fading demand and the steady build-up of tonnage, rates were pressured downwards throughout March, plummeting from over $26/mt in early month to below $22/mt one month later. The picture was more positive in the East where balanced fundamentals helped to sustain the 75Kt Middle East Gulf and 30 Kt Singapore trades into Japan at month-previous levels of approximately $23/mt and $16/mt, respectively.

Due to markets being in backwardation global floating storage remains at low levels with Iran accounting for the majority of crude volumes. Recent reports suggest that at end-March Iranian volumes remained close to those of a month previous with 8.8 mb stored on four NITC VLCCs.

REFINING

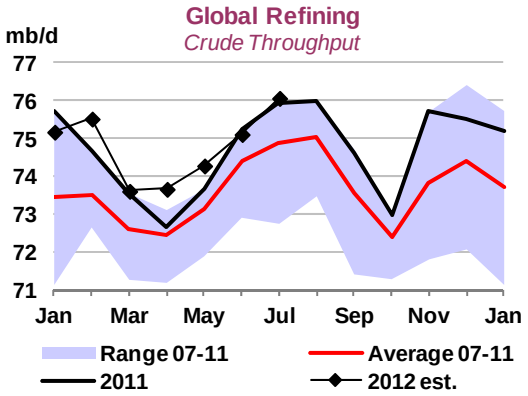
Summary

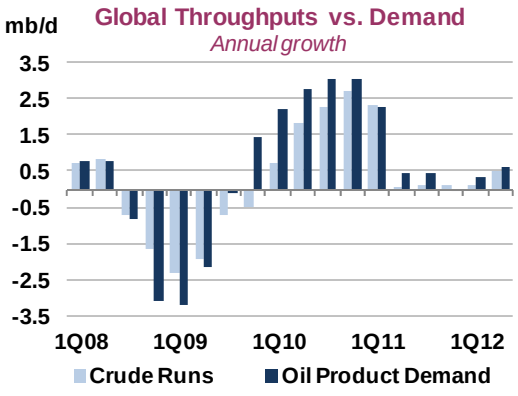
- **Global refinery crude throughput estimates for 1Q12 have been revised slightly lower** since last month's report, as higher February and March estimates only partly offset lower final January data for several OECD and non-OECD countries. Global runs are now assessed at 74.8 mb/d, 120 kb/d higher than a year earlier and 50 kb/d above 4Q11, which was revised up by 150 kb/d on the receipt of more complete data.

- **Seasonal maintenance is expected to curb global crude runs by 410 kb/d in 2Q12, to 74.4 mb/d**, but they remain 0.5 mb/d above a year earlier. OECD Pacific throughputs see the sharpest seasonal decline, as the turnaround schedules in both North America and Europe peak earlier in the year. In the non-OECD, the commissioning of new capacity offsets scheduled outages ahead of summer.

- **OECD refinery crude throughputs rose by 155 kb/d in February**, to 36.7 mb/d, 80 kb/d above previous expectations. The increase stemmed almost entirely from North America, while European runs fell seasonally and Pacific throughputs were largely unchanged. Year-on-year gains of almost 1 mb/d in the US offset contracting European and Pacific runs and lifted total OECD throughputs to 0.5 mb/d above February 2011 levels.

- **Refinery margins were mixed in March, with the European Urals and Gulf Coast coking configurations improving and all other rates declining month-on-month.** The relatively negative overall picture masks a significant improvement in the second half of March, however. Following the more permanent reduction in distillation capacity in the Atlantic Basin in previous months, relatively heavy maintenance conspired to tighten gasoline markets. European and US Gulf Coast margins surged by more than $4/bbl on average in the last three weeks of March, and Singapore by $1.38/bbl.





Global Refinery Overview

Global refinery crude throughput estimates for 1Q12 have been lowered by 90 kb/d since last month's report, to average 74.8 mb/d. Weaker January data for a number of countries were offset by stronger preliminary February and March readings. Final monthly submissions for the US and Japan for January came in 170 kb/d and 120 kb/d lower than preliminary weekly data had suggested, respectively. Non-OECD January data were also revised down on lower-than-expected runs in Taiwan, Algeria and Saudi Arabia. A revision to Ukrainian historical data also contributed. Strong Japanese and Russian preliminary data for March, as well as a higher forecast for Iran, however, provide a partial offset to the quarter as a whole. Iran could have completed the 80 kb/d expansion of its Arak refinery earlier than the expected 2Q12, as seen in higher reported January and February throughputs.

With the arrival of more complete data for the tail end of 2011, our 4Q11 assessment has been lifted by 150 kb/d since last month's report. The bulk of the revision came from the Middle East, with the submission of Kuwaiti data and revised Saudi runs for November. As a result, 4Q11 runs were 85 kb/d higher than a year earlier at 74.7 mb/d. The historical series for the Ukraine was revised lower by 15 kb/d for 2010 and 40 kb/d for 2011 according to annual official data.

Global Refinery Crude Throughput[1]

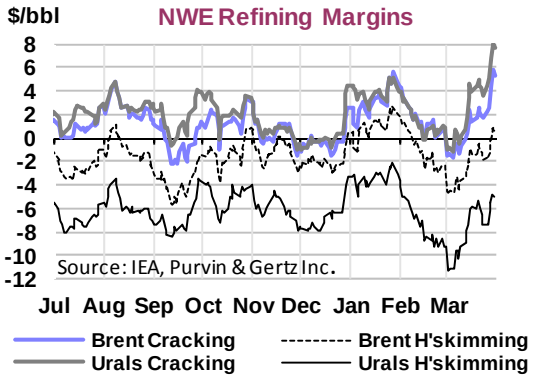
(million barrels per day)

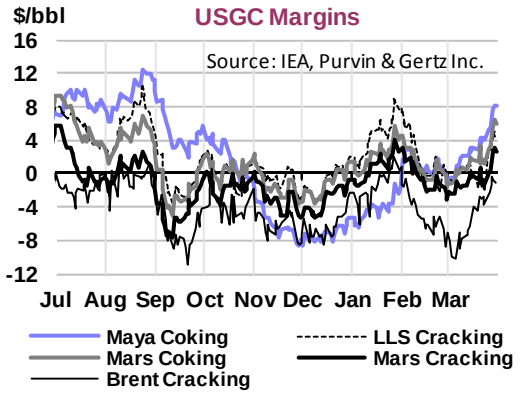
	Dec 11	**4Q2011**	Jan 12	Feb 12	Mar 12	**1Q2012**	Apr 12	May 12	Jun 12	**2Q2012**	Jul 12
North America	18.0	**17.9**	17.5	17.8	17.4	**17.6**	17.8	18.1	18.3	**18.1**	18.5
Europe	12.3	**12.1**	12.2	12.0	11.7	**11.9**	11.7	11.8	12.1	**11.9**	12.3
Pacific	6.8	**6.5**	6.9	6.9	6.7	**6.8**	6.2	6.1	5.9	**6.1**	6.2
Total OECD	**37.0**	**36.5**	**36.5**	**36.7**	**35.7**	**36.3**	**35.8**	**36.0**	**36.3**	**36.0**	**36.9**
FSU	6.6	**6.6**	6.7	6.7	6.5	**6.6**	6.3	6.7	6.7	**6.6**	6.7
Non-OECD Europe	0.6	**0.5**	0.6	0.5	0.5	**0.5**	0.5	0.6	0.6	**0.6**	0.6
China	9.2	**9.1**	9.3	9.3	9.1	**9.2**	9.2	9.2	9.2	**9.2**	9.3
Other Asia	9.2	**8.9**	9.2	9.4	9.1	**9.2**	9.2	9.1	9.4	**9.2**	9.3
Latin America	4.8	**4.9**	5.0	5.0	4.9	**5.0**	4.9	4.8	4.8	**4.8**	5.0
Middle East	6.0	**6.1**	5.9	5.9	5.6	**5.8**	5.6	5.9	6.0	**5.8**	6.1
Africa	2.1	**2.2**	2.1	2.2	2.2	**2.1**	2.2	2.0	2.2	**2.1**	2.2
Total Non-OECD	**38.5**	**38.2**	**38.7**	**39.0**	**37.8**	**38.5**	**37.9**	**38.3**	**38.8**	**38.3**	**39.1**
Total	**75.5**	**74.7**	**75.2**	**75.6**	**73.6**	**74.8**	**73.7**	**74.3**	**75.1**	**74.4**	**76.1**

1 Preliminary and estimated runs based on capacity, known outages, economic run cuts and global demand forecast

Note: US Virgin Islands included in North America and not Latin America as previously

Seasonal maintenance is expected to curb global crude runs by 410 kb/d in 2Q12, to 74.4 mb/d. Global growth returns to more than 0.5 mb/d, however, compared to less than 100 kb/d on average over the last four quarters . OECD Pacific throughputs see the sharpest seasonal decline, as the turnaround schedule in both North America and Europe peaks earlier in the year. In the non-OECD, the commissioning of new capacity offset scheduled outages ahead of summer. India commissioned 360 kb/d of new capacity at the end of March, and China is still ramping up new units commissioned at the start of the year. All told, the seasonal dip in throughputs for 2012 looks less pronounced than last year, albeit the summer ramp-up is also assumed to be less steep.





Refinery margins were mixed in Europe and on the US Gulf Coast in March versus February, with the USGC coking, as well as Urals and Brent cracking in Europe improving and all others falling on a monthly basis. Pacific Basin margins remained weak overall. Nonetheless, margins surged in the second half of

March, for all benchmarks surveyed except the US West Coast, on stronger gasoline cracks. Following the more permanent reduction of distillation capacity in the Atlantic Basin in previous months, relatively heavy spring maintenance conspired to lift European and US Gulf Coast margins by more than $4/bbl on average and Singapore margins by $1.35/bbl in the last three weeks of the month, while West Coast margins fell from more elevated levels in February.

Selected Refining Margins in Major Refining Centres

($/bbl)

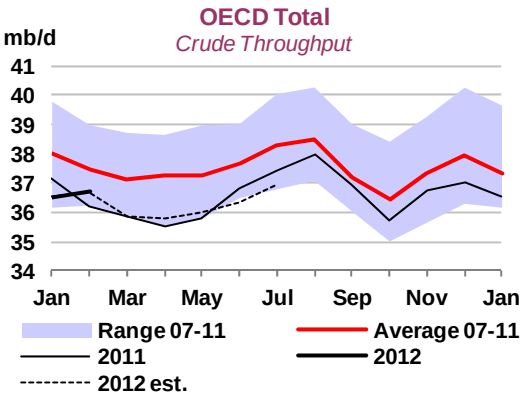
		Monthly Average				Change	Average for week ending:				
		Jan 12	Feb 12	Mar 12		Mar 12-Feb 12	02 Mar	09 Mar	16 Mar	23 Mar	30 Mar
NW Europe	Brent (Cracking)	2.69	0.80	1.68	↑	0.88	-0.42	-0.93	1.48	3.16	4.23
	Urals (Cracking)	3.64	1.49	4.13	↑	2.64	1.34	1.89	4.05	5.26	6.59
	Brent (Hydroskimming)	0.61	-1.85	-2.13	↓	-0.28	-3.66	-4.09	-2.15	-0.78	-0.52
	Urals (Hydroskimming)	-1.03	-4.44	-3.78	↑	0.66	-5.75	-5.25	-3.57	-2.84	-2.49
US Gulf Coast	LLS (Cracking)	3.84	1.87	0.52	↓	-1.35	-0.30	-0.13	0.21	-1.12	3.64
	Mars (Cracking)	0.24	-0.30	-0.65	↓	-0.35	-2.63	-1.66	0.91	-0.84	1.55
	Mars (Coking)	1.38	1.24	1.52	↑	0.28	-1.06	0.15	1.26	1.73	4.75
	Maya (Coking)	-3.34	1.72	3.19	↑	1.47	-0.33	1.40	3.03	4.17	7.06
US West Coast	ANS (Cracking)	1.11	2.85	1.62	↓	-1.23	3.33	2.94	-0.13	0.60	2.83
	Kern (Cracking)	8.69	8.34	4.10	↓	-4.24	3.18	5.62	3.51	2.78	4.48
	Kern (Coking)	7.44	10.54	9.44	↓	-1.10	9.60	12.06	9.56	7.62	8.23
Singapore	Dubai (Hydroskimming)	0.83	-1.26	-4.71	↓	-3.45	-3.94	-4.66	-5.14	-4.99	-4.37
	Tapis (Hydroskimming)	-4.30	-5.94	-8.51	↓	-2.57	-8.97	-9.97	-8.55	-7.31	-7.58
	Dubai (Hydrocracking)	2.08	0.75	-2.08	↓	-2.83	-1.23	-2.19	-2.23	-2.42	-1.67
	Tapis (Hydrocracking)	-5.08	-6.57	-8.90	↓	-2.33	-8.99	-10.39	-8.65	-7.82	-8.09

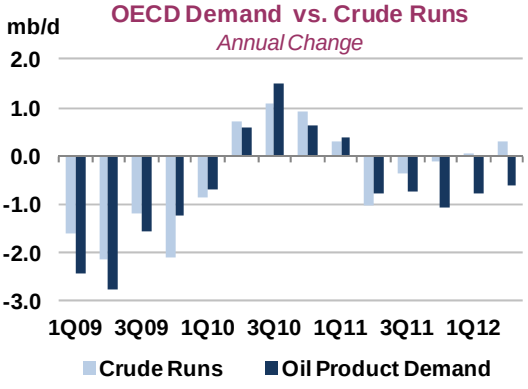
For the purposes of this report, refining margins are calculated for various complexity configurations, each optimised for processing the specific crude in a specific refining centre on a 'full-cost' basis. Consequently, reported margins should be taken as an indication, or proxy, of changes in profitability for a given refining centre. No attempt is made to model or otherwise comment upon the relative economics of specific refineries running individual crude slates and producing custom product sales, nor are these calculations intended to infer the marginal values of crudes for pricing purposes.

Sources: Purvin & Gertz Inc.

OECD Refinery Throughput

OECD refinery crude throughputs rose by 155 kb/d in February, to 36.7 mb/d, 85 kb/d above previous expectations. The monthly increase stemmed almost entirely from North America, while European runs fell seasonally and Pacific throughputs were largely unchanged.





As noted in last month's report, US runs rose counter-seasonally in February, to stand 940 kb/d above year-earlier levels. The stronger year-on-year US runs offset contracting European and Pacific runs and lifted total OECD throughputs 0.5 mb/d above February 2011. In contrast, final monthly data submissions for January for both the US and Japan were weaker than indicated by preliminary weekly data. As a result, January OECD estimates have been lowered by 260 kb/d, to 36.5 mb/d, some 640 kb/d below the same month a year earlier.

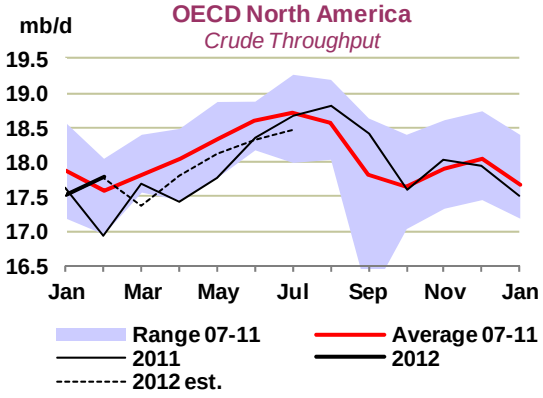
Refinery Crude Throughput and Utilisation in OECD Countries
(million barrels per day)

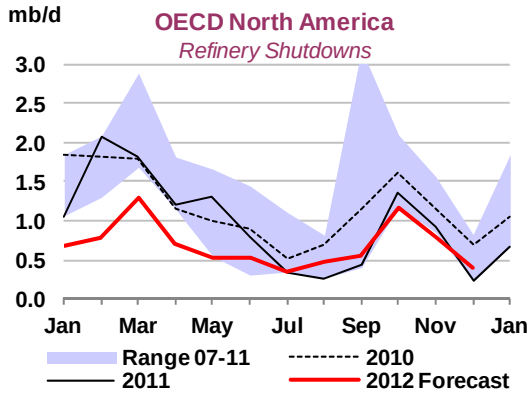
	Sep 11	Oct 11	Nov 11	Dec 11	Jan 12	Feb 12	Change from Jan 12	Change from Feb 11	Utilisation rate[1] Feb 12	Utilisation rate[1] Feb 11
US[2]	15.27	14.54	14.96	14.84	14.42	14.68	0.27	0.94	85.3%	78.5%
US Virgin Islands	0.30	0.27	0.27	0.27	0.30	0.19	-0.11	-0.07	54.5%	75.1%
Canada	1.74	1.62	1.63	1.68	1.59	1.65	0.06	-0.12	89.7%	96.8%
Mexico	1.10	1.15	1.18	1.16	1.21	1.25	0.04	0.09	75.8%	75.5%
OECD North America	**18.41**	**17.59**	**18.04**	**17.95**	**17.52**	**17.77**	**0.25**	**0.83**	**85.9%**	**81.1%**
France	1.33	1.32	1.38	1.41	1.17	1.09	-0.08	-0.26	70.0%	77.0%
Germany	1.91	2.03	1.96	1.95	1.93	1.82	-0.11	-0.11	85.2%	80.6%
Italy	1.57	1.55	1.52	1.55	1.57	1.50	-0.07	-0.05	68.6%	68.1%
Netherlands	1.04	0.97	0.97	1.03	1.06	1.10	0.05	-0.02	85.6%	87.1%
Spain	1.09	1.00	1.10	1.09	1.09	1.15	0.06	0.18	75.7%	69.0%
United Kingdom	1.47	1.39	1.45	1.46	1.48	1.50	0.02	0.08	82.9%	78.4%
Other OECD Europe	3.76	3.64	3.75	3.83	3.86	3.86	0.00	0.04	78.3%	77.7%
OECD Europe	**12.18**	**11.90**	**12.13**	**12.29**	**12.15**	**12.02**	**-0.13**	**-0.14**	**77.9%**	**76.8%**
Japan	3.14	2.98	3.20	3.37	3.45	3.51	0.06	-0.29	76.3%	80.6%
South Korea	2.50	2.63	2.64	2.62	2.65	2.64	-0.01	0.11	96.4%	92.5%
Other OECD Pacific	0.73	0.63	0.72	0.77	0.76	0.74	-0.01	-0.03	79.1%	81.8%
OECD Pacific	**6.37**	**6.24**	**6.56**	**6.76**	**6.85**	**6.88**	**0.03**	**-0.21**	**83.3%**	**84.6%**
OECD Total	**36.95**	**35.73**	**36.73**	**37.00**	**36.53**	**36.68**	**0.15**	**0.48**	**82.0%**	**79.6%**

1 Expressed as a percentage, based on crude throughput and current operable refining capacity

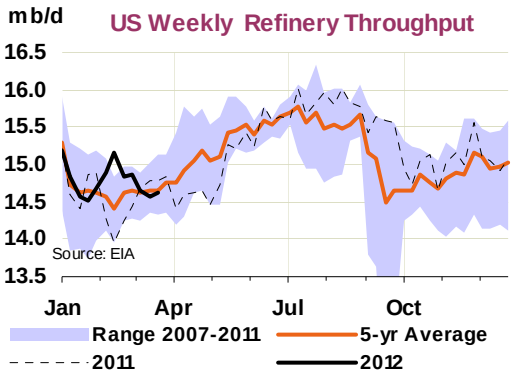
2 US50

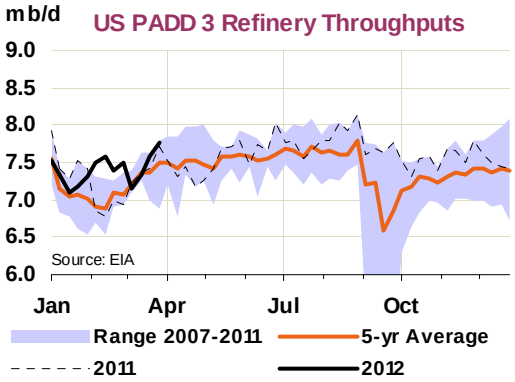
North American crude runs rose by 255 kb/d in February, largely on higher US runs. Compared to an exceptionally weak February 2011, regional runs gained 830 kb/d year-on-year on strong US50 and Mexican throughputs. The closure of Hovensa's 350 kb/d St. Croix refinery in the US Virgin Islands in mid-February provided a partial offset, as did maintenance-reduced Canadian throughputs. St. Croix, once one of the world's largest refineries with 500 kb/d of crude distillation capacity, will be turned into a storage terminal after accumulating losses of $1.3 billion over the past three years. The company had already reduced capacity by 150 kb/d in 2011, due to poor market conditions.





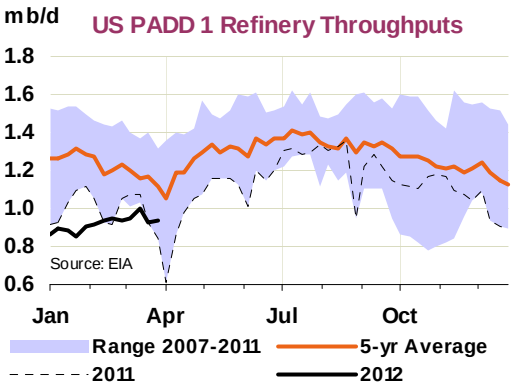
Regional runs are estimated to have fallen in March, as refinery maintenance intensified, ahead of the seasonal ramp up in runs towards the peak summer demand season. Indeed, weekly data from the EIA show that **US50** crude throughputs came down from February's peak of 14.9 mb/d in March. On a monthly basis, US50 crude runs were 175 kb/d lower. The sharpest declines came on the West Coast, where runs fell 150 kb/d month-on-month, and in the Midwest where runs declined 100 kb/d. While US Gulf Coast runs inched up 50 kb/d, East Coast and Rockies runs were mostly unchanged.

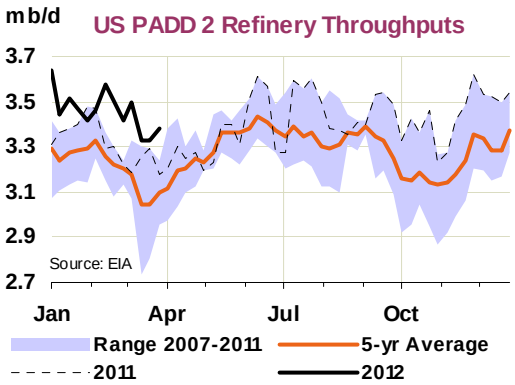




The declines on the West Coast came as BP shut its 260 kb/d Carson City refinery for 45 days for maintenance. The company's Cherry Point refinery also remained shut for repairs and maintenance after a fire in February. The plant is likely to remain closed in April. Alon announced on 8 March that it would restart its Californian refining complex, in which plants in Bakersfield, Paramount and Long Beach, California are operated as one integrated model, at the beginning of 2Q12. The plants, which have a combined capacity of 94 kb/d, were shut down in December due to weak margins and to make some adjustments to improve the crude slate flexibility.

Refinery runs on the Gulf Coast rose sharply in the second half of March, after maintenance cut runs earlier in the month. Maintenance included a crude unit shutdown at ExxonMobil's 560 kb/d Baytown Texas refinery, Citgo's 165 kb/d Corpus Christi, Texas and 425 kb/d Lake Charles, Louisiana plants. An unexpected shutdown of a crude unit at the 348 kb/d Exxon Beaumont refinery in Texas in February further reduced runs. In the last three weeks of March, however, runs rebounded by almost 700 kb/d to 7.8 mb/d. Throughputs will likely rise further over coming weeks, as the expanded Motiva Port Arthur refinery ramps up production. Shipments of Saudi Arabian crude to the US Gulf Coast have surged in recent weeks, in preparation for the start-up of the new units, which raise distillation capacity from 275 kb/d to 600 kb/d.

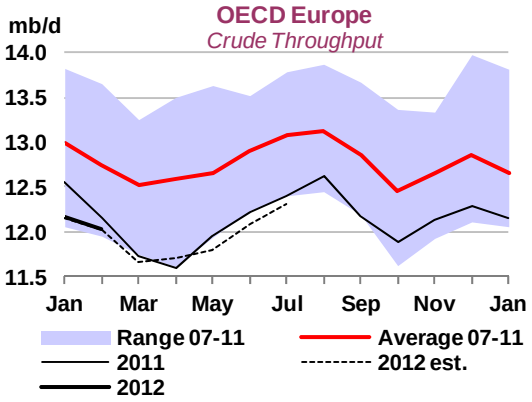


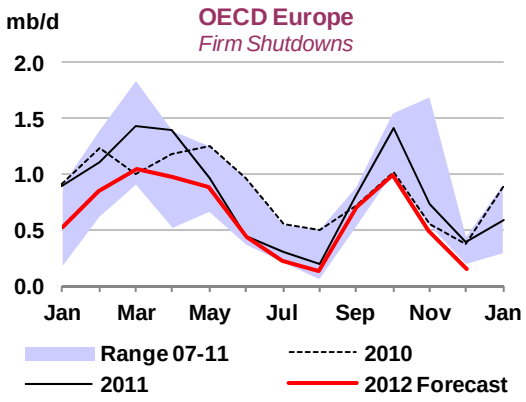


ConocoPhillips extended the deadline for submitting bids for the 187 kb/d Trainer refinery in Philadelphia to the end of May due to recent interest from potential buyers. The original deadline was 31 March. In an interesting turn of events, it was reported in early April that Delta Airlines is considering

putting in a bid for the plant in an attempt to reduce its fuel bill, which amounted to more than $11 billion last year, or 36% of operating costs, and an increase of $2.8 billion from 2010. Sunoco also announced in late March that it is on track to shut the 335 kb/d Philadelphia refinery by July if no buyers are found. The company continues talks with interested parties.

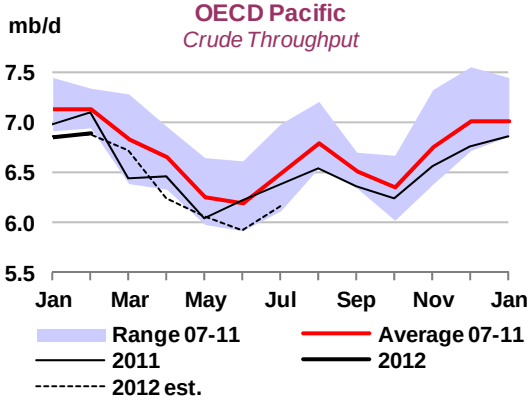
European refinery runs fell by 130 kb/d in February, with lower runs in Germany, France and Italy. Indeed, both French and Italian throughputs stood near record-lows, at 1.09 mb/d and 1.5 mb/d, respectively. In France, the shutdown of Petit Couronne in January following the bankruptcy of Petroplus, further lowered capacity after LyondellBasel shut Berre l'Etang in early January. Total's La Mede refinery was reportedly also undertaking maintenance work in the first quarter. German throughputs fell due to the idling of Ingolstadt in February. The plant had already been running at reduced rates since early January due to difficulties securing crude supplies.

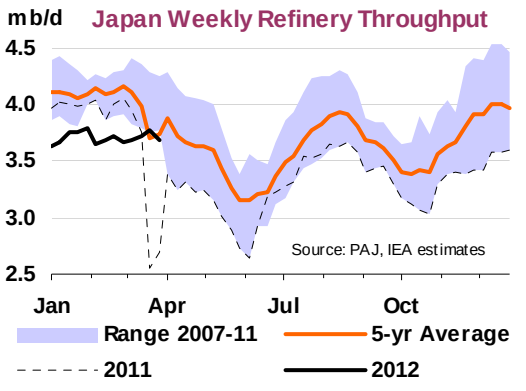




Exxon Mobil undertook maintenance of its Rotterdam refinery in January and February, and Shell's Pernis plant started work in early March. Media reports of a fire at BP's Rotterdam refinery on 30 March were quickly denied by the Rotterdam fire department. Other maintenance shutdowns include Cepsa's Huelva refinery in April/May, Eni/KPC's Milazzo refinery in May/June and the Collombey refinery in Switzerland in March.

Refinery crude intake at **OECD Pacific** plants was unchanged in February, averaging 6.9 mb/d. Slightly higher Japanese refinery runs were mostly offset by small declines in South Korea and New Zealand. Regional runs continued to lag year-earlier levels, with 220 kb/d of distillation capacity still shut in Japan following last year's disastrous earthquake and tsunami. Cosmo was restarted one of two crude units at its Chiba refinery at the end of March, bringing the last shuttered refinery back online.



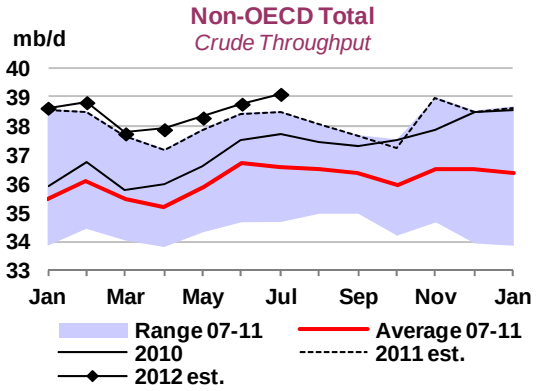


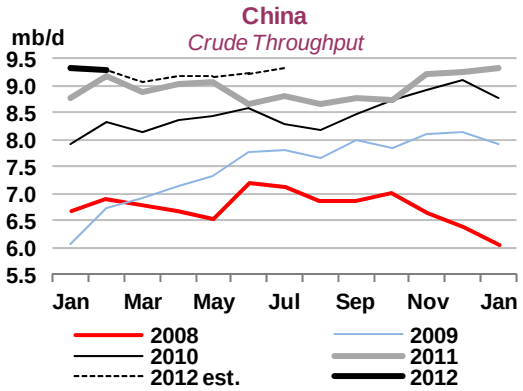
Regional runs were forecast to fall sharply from March onwards, though weekly data from the Petroleum Association of Japan (PAJ) show Japanese runs holding their own in March, leading to a 170 kb/d upward revision. An unplanned shutdown at Nippon's Muroran plant and a power outage at the Marifu refinery

only reduced Japanese runs marginally. Maintenance in Japan is expected to pick up from April, however, towards a seasonal peak of around 800 kb/d in June, reducing throughputs accordingly. South Korean throughputs are estimated lower for March, as SK Energy shut a 240 kb/d crude unit at the Ulsan refinery on 20 March and GS Caltex completed maintenance on a 155 kb/d crude unit at its 750 kb/d Yeochon plant. Nevertheless, South Korean refinery runs are expected to remain robust, maintaining the year-on-year growth recorded since 2Q10.

Non-OECD Refinery Throughput

Non-OECD crude run estimates for 1Q12 have been revised down by 90 kb/d since last month's report, to 38.5 mb/d, following the announcement that Valero will shut its Aruba refinery for the second time since the economic downturn on poor margins and lower-than-expected Algerian runs in January. The restart of Libya's 220 kb/d Ras Lanuf refinery now also looks less likely by late-April than previously assumed. A start-up in late-May looks more realistic, though this could again be delayed if production at key fields and power supplies are not fully restored. Annual throughput growth is expected to pick up in 2Q12, to 0.5 mb/d (from 0.2 mb/d in 1Q12), largely stemming from India, China and Russia. India commissioned 360 kb/d of crude distillation capacity in late-March, which should support runs in coming months.



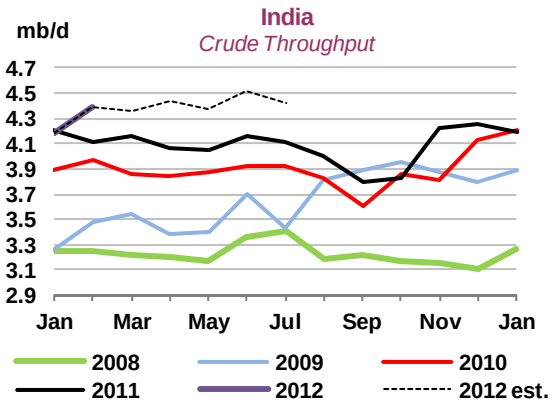


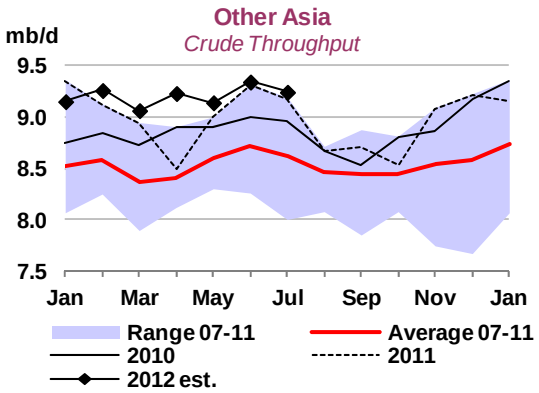
While no new data has been made available since last month's report on **Chinese** refinery operations, official data confirm our previous estimates of 9.34 mb/d and 9.28 mb/d for January and February, respectively. February crude imports again recorded a record-high, amid evidence of strategic stock building. Runs are expected to have dropped in March, as refinery maintenance picks up, potentially taking as much as 700 kb/d off line for the three months through May. Newly commissioned refinery capacity will likely provide a partial offset to maintenance shutdowns however.

China's National Development and Reform Committee (NDRC) announced it would raise retail gasoline and diesel prices by $95/mt with effect from 20 March, only six weeks after the last price increase. The latest adjustments raise the retail price of gasoline to $1.1 per litre for gasoline and $1.22 per litre of diesel. The increase in retail prices will slightly improve refining margins. Capped retail prices for gasoline and diesel turned Chinese refining margins negative in 2011. Sinopec's refining losses more than doubled last year, to -$3.47/bbl, while PetroChina saw margins average -$9.46/bbl. Chinese refinery margins will likely remain under pressure as new capacity is brought on line. After net additions of 230 kb/d in 2011, we see another 450 kb/d of additional capacity added in 2012.

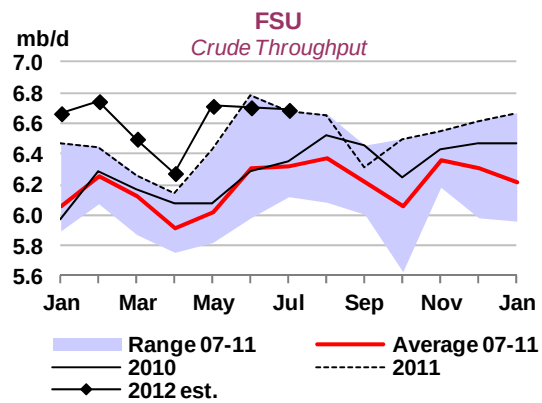
Indian refinery throughputs are estimated to have averaged 4.2 mb/d in February, 2.8% higher than a year earlier and close to record highs. A shutdown of a 290 kb/d crude unit at Reliance's Jamnagar 2 refinery from 10 February, was offset by higher runs elsewhere. IOC's Koyali refinery, HPCL's Mumbai plant, Reliance's domestic refinery and Essar's Vadinar plant all saw monthly increases in February and it is assumed that the new Bathinda refinery also started processing small amounts of crude in February.

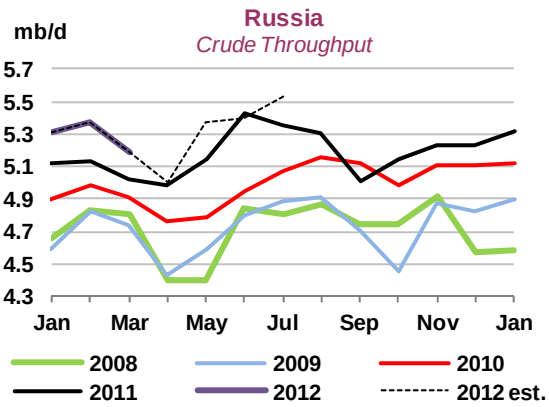
According to a statement from a company representative on 29 March, HPCL's 180 kb/d project was fully commissioned in March, with all units operational at the end of the month. The plant reportedly started trial runs last August. With the seven-year, 100% tax holiday on profits from crude production or refining, expiring at the end of the 2011/2012 fiscal year, a slew of refinery projects were commissioned in March. Essar completed the expansion of its Vadinar refinery, which augmented the plant's capacity by 80 kb/d to 360 kb/d, and added a delayed coker and hydrotreating capacity. The upgrade allows the plant to process a heavier feedstock slate, becoming India's second largest refinery and one of the world's most complex plants, with a Nelson complexity index of 11.8. The plant's capacity will be expanded by an additional 40 kb/d by September - through debottlenecking/optimisation. Mangalore refinery also completed the 80 kb/d expansion of its plant in Southern India before the expiry of the tax holiday. Offsetting the ramping up of new capacity from March/April, HPCL's Visakhapatnam, IOC's Panipat and NRPL's Mangalore refineries will all undertake maintenance shutdowns in coming months.





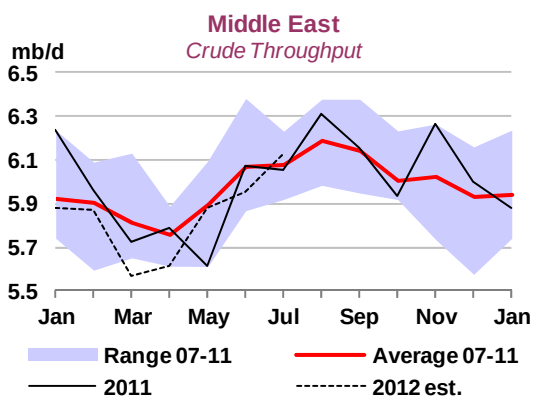
Elsewhere in the region, **Singapore** refinery runs were largely unchanged in February at 1.25 mb/d. A disruption to a unit at Shell's Pulau Bukom refinery on 26 March, which activated the fire alarm and flare system, is not expected to have had material impact on operations as it was resolved quickly. **Taiwan's** refinery runs rose less than expected in January, to only 740 kb/d. Safety shutdowns following a series of fires at Shell's Pulau Bukom refinery last year might have been more extensive than previously assumed.

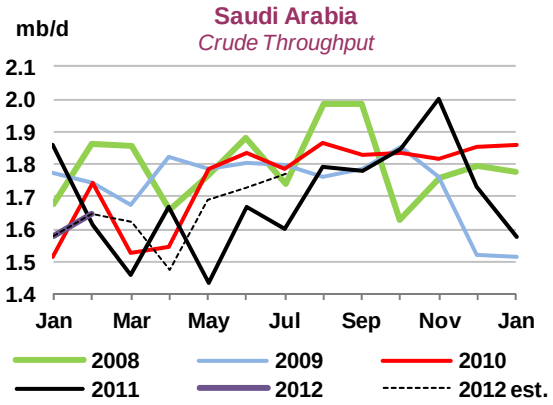




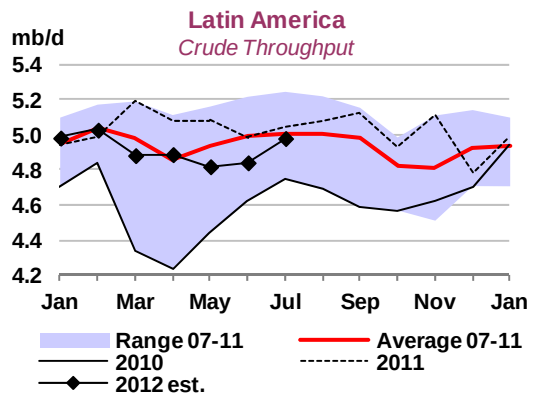
Russian crude throughputs averaged 5.18 mb/d in March, down from 5.37 mb/d in February, and in line with our forecast. Lukoil's Nizhny Novogrod, TNK-BPs Ryazan, Alliance's Khaborovsk, Slavneft's Yaroslav and Rosneft's Syrzan and Novokyibyshev plants are among the refineries expected to undertake maintenance over March-April. Gazprom Neft's 243 kb/d Moscow plant may have to reduce runs in coming months due to poor conditions on the Yaroslavl-Moscow trunk of the Transneft pipeline, which delivers about 50% of the plant's crude supplies. According to Transneft, the company is not allowed to perform maintenance on the line, which runs through a Moscow park where such interventions are forbidden. Transneft has suggested that supplies have to be halted before May, and as alternative supply routes are running close to capacity, the plant might be forced to cut runs.

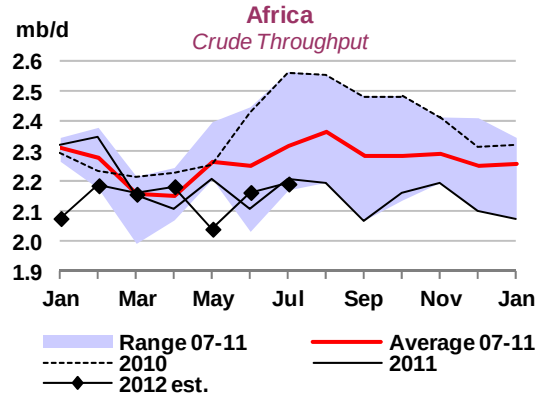
Middle Eastern crude run estimates have been revised higher for 4Q11 with the submission of higher-than-expected Kuwaiti data and an upward revision to Saudi November throughputs. In contrast, January and February Saudi runs were lower than expected; below 1.6 mb/d, and 420 kb/d less than November's high. Saudi Aramco shut its 130 kb/d Riyadh refinery for most of January and early February. The 550 kb/d Ras Tanura refinery partly shut for work in the second half of March, for an expected duration of 45 days. The plant's 325 kb/d crude units, as well as the condensate splitter, hydrocracker and reformer, are reportedly included in the turnaround. As a result, Aramco was looking to import spot gasoline and gasoil for March and April. Iran's most recent refinery runs data, if confirmed, suggest the country may have commissioned the 80 kb/d expansion of its Arak refinery ahead of a previously expected 2Q12 completion. JODI data show Iran's crude runs at 1.64 mb/d and 1.66 mb/d in January and February, respectively, compared to 1.55 kb/d on average in 2011.





In **Latin America,** Valero's 235 kb/d **Aruba** plant halted operations by the end of March due to poor margins. The refinery previously restarted in early 2011 after a 17-month economic shutdown. The company will maintain the plant in a state that allows for restart should economic conditions improve. The company had already halted one 140 kb/d crude unit in December 2011.





In **Africa**, **Nigeria**'s NNPC restarted the Kaduna refinery in mid-February. The plant had been shut since December due to sabotage on crude pipelines. Nigeria's three refineries are running well below their 440 kb/d nameplate capacity, most recently at less than 30% utilisation. Furthermore, we have assumed the start-up of **Libya**'s Ras Lanuf refinery will be delayed from an earlier date of mid-April. Officials have stated the plant will resume operations as key oilfields, Sarir and Mesla return to full capacity, and our assumption now is that the plant restarts from late-May. **Algeria's** refinery runs were reported at 429 kb/d in January, some 80 kb/d less than expected. The country's smallest refinery, the 12 kb/d Adrar plant, was shut for most of January, reportedly due to a dispute over profitability, while the Arzew plant was partially shut for maintenance. The Skikda refinery is scheduled to partially shut for maintenance in early May.

Table 1
WORLD OIL SUPPLY AND DEMAND
(million barrels per day)

	2008	2009	1Q10	2Q10	3Q10	4Q10	2010	1Q11	2Q11	3Q11	4Q11	2011	1Q12	2Q12	3Q12	4Q12	2012
OECD DEMAND																	
North America	24.2	23.3	23.4	23.7	24.1	23.9	23.8	23.8	23.3	23.6	23.4	23.5	23.1	23.0	23.5	23.4	23.3
Europe	15.4	14.7	14.3	14.3	14.9	14.8	14.6	14.2	14.1	14.7	14.1	14.3	13.7	13.6	14.4	14.0	13.9
Pacific	8.1	7.7	8.2	7.3	7.6	8.1	7.8	8.3	7.1	7.7	8.3	7.9	8.7	7.3	7.7	8.0	7.9
Total OECD	47.6	45.6	46.0	45.3	46.7	46.8	46.2	46.3	44.5	45.9	45.7	45.6	45.6	43.9	45.5	45.5	45.1
NON-OECD DEMAND																	
FSU	4.2	4.2	4.4	4.3	4.5	4.6	4.4	4.4	4.6	4.8	4.8	4.7	4.6	4.7	4.9	4.9	4.8
Europe	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
China	7.7	8.1	8.6	9.1	8.9	9.7	9.1	9.5	9.5	9.3	9.7	9.5	9.8	9.8	9.7	10.1	9.9
Other Asia	9.7	10.1	10.4	10.6	10.2	10.6	10.4	10.7	10.7	10.4	10.9	10.7	10.9	11.0	10.7	11.2	10.9
Latin America	6.0	6.0	6.0	6.3	6.5	6.4	6.3	6.3	6.5	6.7	6.6	6.5	6.5	6.6	6.8	6.7	6.7
Middle East	7.3	7.5	7.4	7.8	8.3	7.7	7.8	7.6	8.0	8.5	8.0	8.0	7.9	8.2	8.7	8.2	8.2
Africa	3.3	3.3	3.3	3.5	3.4	3.5	3.4	3.4	3.4	3.3	3.4	3.4	3.5	3.6	3.5	3.6	3.5
Total Non-OECD	38.9	39.9	40.8	42.2	42.5	43.1	42.2	42.8	43.4	43.7	44.1	43.5	43.9	44.6	45.0	45.5	44.7
Total Demand[1]	86.6	85.6	86.8	87.5	89.1	89.8	88.3	89.1	87.9	89.6	89.8	89.1	89.4	88.6	90.6	91.0	89.9
OECD SUPPLY																	
North America[4]	13.3	13.6	14.0	13.9	14.0	14.4	14.1	14.3	14.3	14.4	15.1	14.5	15.2	14.9	15.2	15.5	15.2
Europe	4.8	4.5	4.5	4.1	3.8	4.2	4.1	4.1	3.8	3.6	3.8	3.8	3.8	3.5	3.4	3.7	3.6
Pacific	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6
Total OECD	18.7	18.8	19.1	18.7	18.4	19.2	18.8	18.9	18.6	18.6	19.5	18.9	19.6	19.0	19.2	19.8	19.4
NON-OECD SUPPLY																	
FSU	12.8	13.3	13.5	13.5	13.5	13.6	13.5	13.6	13.6	13.5	13.6	13.6	13.7	13.8	13.7	13.9	13.8
Europe	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
China	3.8	3.9	4.0	4.1	4.1	4.2	4.1	4.2	4.2	4.1	4.0	4.1	4.2	4.1	4.2	4.2	4.2
Other Asia[2]	3.7	3.6	3.7	3.7	3.7	3.7	3.7	3.6	3.5	3.5	3.6	3.6	3.6	3.5	3.5	3.5	3.5
Latin America[2,4]	3.7	3.9	4.0	4.1	4.1	4.1	4.1	4.2	4.2	4.2	4.3	4.2	4.4	4.4	4.5	4.5	4.4
Middle East	1.7	1.7	1.7	1.7	1.7	1.8	1.7	1.8	1.7	1.7	1.5	1.7	1.4	1.4	1.5	1.5	1.4
Africa[2]	2.6	2.6	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.6	2.6	2.6	2.4	2.3	2.4	2.4	2.4
Total Non-OECD	28.4	29.1	29.6	29.7	29.8	30.0	29.8	30.1	29.7	29.7	29.7	29.8	29.8	29.7	29.8	30.1	29.8
Processing Gains[3]	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.2	2.2	2.3	2.2	2.2	2.3	2.3
Global Biofuels[4]	1.4	1.6	1.4	2.0	2.1	1.8	1.8	1.5	1.9	2.2	1.8	1.8	1.6	1.9	2.2	2.0	1.9
Total Non-OPEC[2]	50.6	51.5	52.1	52.5	52.5	53.1	52.6	52.7	52.3	52.6	53.2	52.7	53.2	52.9	53.4	54.2	53.4
Non-OPEC: Historical Composition[2]	49.6	51.5	52.1	52.5	52.5	53.1	52.6	52.7	52.3	52.6	53.2	52.7	53.2	52.9	53.4	54.2	53.4
OPEC																	
Crude[5]	31.6	29.1	29.3	29.2	29.5	29.5	29.4	29.9	29.4	29.9	30.3	29.9	31.2				
NGLs	4.5	4.9	5.2	5.2	5.4	5.6	5.3	5.7	5.7	5.8	5.9	5.8	6.1	6.2	6.5	6.5	6.3
Total OPEC[2]	36.1	34.1	34.4	34.4	34.9	35.0	34.7	35.7	35.1	35.7	36.2	35.7	37.4				
OPEC: Historical Composition[2]	37.1	34.1	34.4	34.4	34.9	35.0	34.7	35.7	35.1	35.7	36.2	35.7	37.4				
Total Supply[6]	86.7	85.5	86.6	86.9	87.5	88.2	87.3	88.3	87.5	88.3	89.4	88.4	90.6				
STOCK CHANGES AND MISCELLANEOUS																	
Reported OECD																	
Industry	0.3	-0.1	0.4	0.9	-0.1	-0.8	0.1	-0.4	0.5	-0.1	-0.7	-0.2					
Government	0.0	0.1	0.0	-0.1	-0.1	0.1	0.0	0.0	0.0	-0.4	0.1	-0.1					
Total	0.3	0.0	0.4	0.9	-0.2	-0.7	0.1	-0.5	0.5	-0.5	-0.6	-0.3					
Floating Storage/Oil in Transit	0.0	0.3	-0.2	0.1	-0.2	-0.3	-0.2	0.2	-0.2	-0.2	0.0	-0.1					
Miscellaneous to balance[7]	-0.2	-0.3	-0.4	-1.5	-1.2	-0.6	-0.9	-0.5	-0.8	-0.6	0.3	-0.4					
Total Stock Ch. & Misc	0.1	0.0	-0.2	-0.6	-1.7	-1.7	-1.1	-0.8	-0.5	-1.3	-0.4	-0.7	1.2				
Memo items:																	
Call on OPEC crude + Stock ch.[8]	31.5	29.2	29.5	29.8	31.2	31.1	30.4	30.7	29.9	31.2	30.7	30.6	30.1	29.5	30.7	30.3	30.1
Adjusted Call on OPEC + Stock ch.[9]	31.3	28.8	29.1	28.3	30.0	30.5	29.5	30.2	29.1	30.7	30.9	30.3	29.4	28.8	30.0	29.6	29.5

1 Measured as deliveries from refineries and primary stocks, comprises inland deliveries, international marine bunkers, refinery fuel, crude for direct burning, oil from non-conventional sources and other sources of supply.
2 Other Asia includes Indonesia throughout. Latin America excludes Ecuador throughout. Africa excludes Angola throughout.
Total Non-OPEC excludes all countries that were members of OPEC at 1 January 2009. Non-OPEC Historical Composition excludes countries that were OPEC members at that point in time.
Total OPEC comprises all countries which were OPEC members at 1 January 2009. OPEC Historical Composition comprises countries which were OPEC members at that point in time.
3 Net volumetric gains and losses in the refining process and marine transportation losses.
4 As of the July 2010 OMR, Global Biofuels comprise all world biofuel production including fuel ethanol from the US and Brazil.
5 As of the March 2006 OMR, Venezuelan Orinoco heavy crude production is included within Venezuelan crude estimates. Orimulsion fuel remains within the OPEC NGL and non-conventional category, but Orimulsion production reportedly ceased from January 2007.
6 Comprises crude oil, condensates, NGLs, oil from non-conventional sources and other sources of supply.
7 Includes changes in non-reported stocks in OECD and non-OECD areas.
8 Equals the arithmetic difference between total demand minus total non-OPEC supply minus OPEC NGLs.
9 Equals the "Call on OPEC + Stock Ch." with "Miscellaneous to balance" added for historical periods and with an average of "Miscellaneous to balance" for the most recent 8 quarters added for forecast periods.

Table 1A
WORLD OIL SUPPLY AND DEMAND: CHANGES FROM LAST MONTH'S TABLE 1

(million barrels per day)

	2008	2009	1Q10	2Q10	3Q10	4Q10	2010	1Q11	2Q11	3Q11	4Q11	2011	1Q12	2Q12	3Q12	4Q12	2012
OECD DEMAND																	
North America	-	-	-	-	-	-	-	-	-	-	-	-	-0.1	-0.1	-0.1	-0.1	-0.1
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.1	-0.1	-
Pacific	-	-	-	-	-	-	-	-	-	-	-	-	0.1	-0.1	0.1	-	-
Total OECD	-	-	-	-	-	-	-	-	-	-	-	-	-0.1	-0.2	-	-0.2	-0.1
NON-OECD DEMAND																	
FSU	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Asia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Latin America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Middle East	-	-	-	-	-	-	-	-	-	-	-	-	0.1	-	0.1	0.1	0.1
Africa	-	-	-	-	-	-	-	-	-	-	-	-	0.1	-	-	-	-
Total Non-OECD	-	-	-	-	-	-	-	-	-	0.1	-	-	0.2	-	0.1	0.1	0.1
Total Demand	-	-	-	-	-	-	-	-	-	-	-	-	0.1	-0.1	0.1	-0.1	-
OECD SUPPLY																	
North America	-	-	-	-	-	-	-	-0.1	-	-0.1	0.1	-	0.2	0.1	0.1	0.1	0.1
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-0.1	-0.1	-0.1	-0.1
Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-0.1	-0.1	-0.1	-0.1	-0.1
Total OECD	-	-	-	-	-	-	-	-0.1	-	-0.1	0.1	-	0.2	-0.1	-	-	-
NON-OECD SUPPLY																	
FSU	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Asia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Latin America	-	-	-	-	-	-	-	-	-	-	-	-	-	-0.1	-	-	-
Middle East	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Non-OECD	-	-	-	-	-	-	-	-	-	-	-	-	-	-0.1	-	-	-
Processing Gains	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Global Biofuels	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Non-OPEC	-	-	-	-	-	0.1	-	-0.1	-	-0.1	0.1	-	0.1	-0.2	-	-	-
Non-OPEC: historical composition	-	-	-	-	-	0.1	-	-0.1	-	-0.1	0.1	-	0.1	-0.2	-	-	-
OPEC																	
Crude	-	-	-	-0.1	-0.1	-	-	-0.1	-0.1	-0.1	-	-0.1					
NGLs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total OPEC	-	-	-	-0.1	-0.1	-	-	-0.1	-0.1	-0.1	-	-0.1					
OPEC: historical composition	-	-	-	-0.1	-0.1	-	-	-0.1	-0.1	-0.1	-	-0.1					
Total Supply	-	-	-	-0.1	-0.1	-	-0.1	-0.1	-0.1	-0.2	0.1	-0.1					
STOCK CHANGES AND MISCELLANEOUS REPORTED OECD																	
Industry	-	-	-	-	-	-	-	-	-	-	-	-					
Government	-	-	-	-	-	-	-	-	-	-	-	-					
Total	-	-	-	-	-	-	-	-	-	-	-	-					
Floating Storage/Oil in Transit	-	-	-	-	-	-	-	-	-	-	0.1	-					
Miscellaneous to balance	-	-	-	-0.1	-0.1	-	-0.1	-0.2	-0.1	-0.2	-0.1	-0.1					
Total Stock Ch. & Misc	-	-	-	-0.1	-0.1	-	-0.1	-0.2	-0.1	-0.2	0.1	-0.1					
Memo items:																	
Call on OPEC crude + Stock ch.	-	-	-	-	-	-	-	0.1	-	0.1	-0.1	-	-	0.1	0.2	-0.1	-
Adjusted Call on OPEC + Stock ch.	-	-	-	-0.1	-0.1	-0.1	-	-0.1	-0.1	-0.1	-0.2	-0.1	-0.1	-	0.1	-0.2	-0.1

When submitting their monthly oil statistics, OECD Member countries periodically update data for prior periods. Similar updates to non-OECD data can occur.

Table 2

SUMMARY OF GLOBAL OIL DEMAND

	2009	1Q10	2Q10	3Q10	4Q10	2010	1Q11	2Q11	3Q11	4Q11	2011	1Q12	2Q12	3Q12	4Q12	2012
Demand (mb/d)																
North America	23.29	23.41	23.69	24.10	23.86	23.77	23.78	23.31	23.56	23.36	23.50	23.15	23.02	23.50	23.43	23.27
Europe	14.66	14.32	14.26	14.93	14.83	14.58	14.20	14.12	14.69	14.06	14.27	13.70	13.64	14.38	14.03	13.94
Pacific	7.69	8.23	7.35	7.62	8.07	7.82	8.34	7.10	7.68	8.29	7.85	8.71	7.27	7.67	8.03	7.92
Total OECD	45.64	45.95	45.29	46.65	46.75	46.17	46.32	44.53	45.93	45.70	45.62	45.55	43.93	45.55	45.49	45.13
Asia	18.19	18.98	19.65	19.12	20.26	19.50	20.27	20.22	19.69	20.58	20.19	20.67	20.80	20.37	21.33	20.79
Middle East	7.53	7.42	7.83	8.29	7.72	7.82	7.65	8.03	8.48	7.96	8.03	7.85	8.23	8.71	8.16	8.24
Latin America	5.99	6.05	6.29	6.46	6.39	6.30	6.29	6.48	6.68	6.59	6.51	6.48	6.65	6.83	6.75	6.68
FSU	4.18	4.37	4.31	4.55	4.56	4.45	4.45	4.61	4.80	4.83	4.67	4.64	4.70	4.91	4.94	4.80
Africa	3.33	3.35	3.46	3.41	3.45	3.42	3.44	3.37	3.30	3.42	3.38	3.53	3.55	3.52	3.57	3.54
Europe	0.71	0.67	0.68	0.68	0.70	0.68	0.67	0.69	0.72	0.72	0.70	0.68	0.69	0.71	0.72	0.70
Total Non-OECD	39.93	40.84	42.22	42.49	43.09	42.17	42.76	43.40	43.68	44.10	43.49	43.85	44.62	45.04	45.47	44.75
World	85.57	86.79	87.51	89.14	89.84	88.33	89.08	87.93	89.60	89.80	89.11	89.41	88.55	90.59	90.95	89.88
of which: US50	18.77	18.87	19.15	19.47	19.23	19.18	19.17	18.82	18.89	18.71	18.90	18.57	18.54	18.85	18.78	18.69
Europe 5*	8.98	8.87	8.75	9.15	9.01	8.95	8.71	8.57	8.89	8.54	8.68	8.35	8.27	8.68	8.48	8.45
China	8.06	8.63	9.06	8.92	9.66	9.07	9.54	9.52	9.30	9.69	9.51	9.81	9.84	9.71	10.12	9.87
Japan	4.39	4.82	4.07	4.36	4.57	4.45	4.86	3.92	4.32	4.82	4.48	5.18	4.05	4.31	4.53	4.52
India	3.26	3.38	3.45	3.13	3.38	3.34	3.50	3.57	3.26	3.57	3.47	3.61	3.67	3.37	3.71	3.59
Russia	3.03	3.16	3.16	3.39	3.35	3.26	3.20	3.42	3.62	3.62	3.46	3.37	3.50	3.71	3.70	3.57
Brazil	2.54	2.60	2.71	2.82	2.80	2.73	2.69	2.77	2.88	2.86	2.80	2.77	2.80	2.91	2.89	2.84
Saudi Arabia	2.47	2.33	2.73	3.02	2.54	2.66	2.49	2.89	3.15	2.74	2.82	2.59	3.00	3.27	2.84	2.93
Canada	2.16	2.15	2.17	2.29	2.25	2.22	2.25	2.15	2.29	2.23	2.23	2.20	2.13	2.26	2.23	2.21
Korea	2.19	2.31	2.18	2.16	2.35	2.25	2.36	2.04	2.21	2.30	2.23	2.36	2.07	2.22	2.33	2.25
Mexico	2.07	2.07	2.10	2.05	2.07	2.07	2.05	2.06	2.09	2.11	2.08	2.06	2.06	2.09	2.11	2.08
Iran	2.11	2.10	2.08	2.08	2.09	2.09	2.09	2.05	2.03	2.03	2.05	2.10	2.05	2.05	2.06	2.06
Total	60.03	61.30	61.60	62.85	63.30	62.27	62.90	61.79	62.93	63.21	62.71	62.98	61.98	63.44	63.77	63.04
% of World	70.2%	70.6%	70.4%	70.5%	70.5%	70.5%	70.6%	70.3%	70.2%	70.4%	70.4%	70.4%	70.0%	70.0%	70.1%	70.1%
Annual Change (% per annum)																
North America	-3.7	-0.1	3.3	3.6	1.3	2.0	1.6	-1.6	-2.2	-2.1	-1.1	-2.7	-1.3	-0.3	0.3	-1.0
Europe	-4.7	-5.1	-1.3	2.3	2.0	-0.5	-0.9	-1.0	-1.6	-5.2	-2.2	-3.5	-3.4	-2.1	-0.2	-2.3
Pacific	-4.6	1.2	0.4	4.7	0.6	1.7	1.4	-3.3	0.7	2.7	0.4	4.4	2.3	0.0	-3.1	0.9
Total OECD	-4.2	-1.5	1.4	3.3	1.4	1.1	0.8	-1.7	-1.6	-2.2	-1.2	-1.7	-1.4	-0.8	-0.5	-1.1
Asia	4.4	12.0	7.1	3.5	6.9	7.2	6.8	2.9	3.0	1.6	3.5	2.0	2.9	3.4	3.6	3.0
Middle East	3.5	5.0	3.4	2.9	4.3	3.8	3.1	2.6	2.3	3.2	2.8	2.7	2.5	2.7	2.5	2.6
Latin America	0.0	4.6	5.2	6.0	4.5	5.1	4.0	2.9	3.5	3.1	3.4	3.1	2.6	2.2	2.4	2.6
FSU	-1.2	8.2	5.9	4.7	6.9	6.4	1.8	6.8	5.7	5.8	5.1	4.3	2.2	2.2	2.2	2.7
Africa	1.6	-1.4	3.0	3.0	6.1	2.7	2.8	-2.6	-3.1	-1.0	-1.0	2.7	5.4	6.5	4.6	4.8
Europe	-6.3	-7.5	-6.9	-3.7	1.3	-4.2	-0.3	1.8	5.1	2.6	2.3	1.1	0.4	-0.7	-0.6	0.0
Total Non-OECD	2.5	7.6	5.4	3.7	5.9	5.6	4.7	2.8	2.8	2.4	3.1	2.5	2.8	3.1	3.1	2.9
World	-1.2	2.6	3.3	3.5	3.5	3.2	2.6	0.5	0.5	0.0	0.9	0.4	0.7	1.1	1.3	0.9
Annual Change (mb/d)																
North America	-0.89	-0.01	0.75	0.83	0.31	0.47	0.37	-0.38	-0.54	-0.50	-0.26	-0.63	-0.30	-0.07	0.07	-0.23
Europe	-0.73	-0.77	-0.18	0.33	0.29	-0.08	-0.12	-0.14	-0.24	-0.77	-0.32	-0.50	-0.47	-0.31	-0.03	-0.33
Pacific	-0.37	0.10	0.03	0.34	0.05	0.13	0.11	-0.24	0.05	0.22	0.04	0.37	0.16	0.00	-0.25	0.07
Total OECD	-1.98	-0.69	0.60	1.50	0.65	0.52	0.37	-0.76	-0.72	-1.05	-0.55	-0.77	-0.61	-0.38	-0.22	-0.49
Asia	0.77	2.04	1.30	0.64	1.31	1.32	1.28	0.57	0.58	0.32	0.69	0.40	0.58	0.67	0.75	0.60
Middle East	0.25	0.35	0.26	0.24	0.32	0.29	0.23	0.20	0.19	0.25	0.22	0.20	0.20	0.23	0.20	0.21
Latin America	0.00	0.27	0.31	0.36	0.27	0.30	0.24	0.18	0.22	0.20	0.21	0.19	0.17	0.15	0.16	0.17
FSU	-0.05	0.33	0.24	0.21	0.29	0.27	0.08	0.29	0.26	0.27	0.23	0.19	0.10	0.10	0.11	0.13
Africa	0.05	-0.05	0.10	0.10	0.20	0.09	0.09	-0.09	-0.11	-0.03	-0.03	0.09	0.18	0.22	0.16	0.16
Europe	-0.05	-0.05	-0.05	-0.03	0.01	-0.03	0.00	0.01	0.03	0.02	0.02	0.01	0.00	-0.01	0.00	0.00
Total Non-OECD	0.98	2.89	2.15	1.52	2.40	2.24	1.92	1.18	1.18	1.01	1.32	1.09	1.23	1.37	1.37	1.26
World	-1.00	2.20	2.76	3.03	3.05	2.76	2.29	0.42	0.46	-0.03	0.78	0.32	0.62	0.99	1.15	0.77
Revisions to Oil Demand from Last Month's Report (mb/d)																
North America	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	-0.13	-0.07	-0.10	-0.12	-0.10
Europe	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.04	0.02	0.05	-0.05	0.00
Pacific	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	-0.01	-0.01	0.00	-0.01	0.09	-0.11	0.06	-0.03	0.00
Total OECD	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	-0.01	-0.01	0.00	0.00	-0.07	-0.16	0.01	-0.20	-0.10
Asia	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.04	-0.01	-0.06	-0.03	-0.01	-0.02	-0.03
Middle East	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.02	0.03	0.00	0.02	0.10	0.04	0.09	0.05	0.07
Latin America	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.02	0.01	0.03	0.00	0.02	0.02	0.02
FSU	0.00	-0.01	-0.02	-0.01	-0.01	-0.01	-0.01	-0.01	-0.02	-0.01	-0.01	0.04	-0.01	-0.02	-0.01	0.00
Africa	0.00	0.01	0.03	0.03	0.02	0.02	0.03	0.03	0.03	0.05	0.04	0.05	0.02	0.02	0.03	0.03
Europe	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Non-OECD	0.00	0.00	0.01	0.02	0.01	0.01	0.04	0.05	0.05	0.01	0.04	0.17	0.02	0.09	0.06	0.09
World	0.00	0.00	0.01	0.02	0.01	0.01	0.04	0.03	0.05	0.02	0.03	0.10	-0.14	0.10	-0.14	-0.02
Revisions to Oil Demand Growth from Last Month's Report (mb/d)																
World	0.00	0.00	0.01	0.02	0.01	0.01	0.04	0.02	0.03	0.01	0.02	0.06	-0.17	0.06	-0.15	-0.05

* France, Germany, Italy, Spain and UK

Table 2a

OECD REGIONAL OIL DEMAND[1]

(million barrels per day)

	2010	2011	1Q11	2Q11	3Q11	4Q11	Nov 11	Dec 11	Jan 12 [2]	Latest month vs. Dec 11	Latest month vs. Jan 11
North America											
LPG&Ethane	2.95	2.97	3.31	2.71	2.76	3.11	3.06	3.35	3.27	-0.07	-0.22
Naphtha	0.37	0.35	0.37	0.36	0.34	0.35	0.34	0.34	0.36	0.01	0.00
Motor Gasoline	10.57	10.33	10.14	10.45	10.49	10.22	10.14	10.30	9.75	-0.56	-0.18
Jet/Kerosene	1.65	1.65	1.60	1.68	1.71	1.60	1.65	1.58	1.53	-0.05	-0.04
Gasoil/Diesel Oil	4.82	4.92	5.04	4.77	4.86	5.02	5.20	4.83	4.87	0.04	-0.17
Residual Fuel Oil	0.93	0.85	0.97	0.87	0.76	0.81	0.71	0.94	0.79	-0.15	-0.18
Other Products	2.46	2.43	2.35	2.47	2.64	2.25	2.29	2.12	2.28	0.15	-0.07
Total	23.77	23.50	23.78	23.31	23.56	23.36	23.38	23.46	22.85	-0.61	-0.86
Europe											
LPG&Ethane	0.96	0.98	1.04	0.96	0.94	0.96	0.98	1.00	1.00	-0.01	-0.01
Naphtha	1.26	1.16	1.27	1.18	1.13	1.06	1.08	1.06	1.20	0.14	-0.12
Motor Gasoline	2.21	2.12	2.02	2.18	2.20	2.06	2.08	2.00	1.83	-0.17	-0.10
Jet/Kerosene	1.27	1.25	1.20	1.27	1.35	1.19	1.15	1.13	1.05	-0.09	-0.13
Gasoil/Diesel Oil	6.13	6.03	6.04	5.73	6.17	6.18	6.22	6.00	5.55	-0.45	-0.05
Residual Fuel Oil	1.27	1.24	1.29	1.22	1.25	1.20	1.14	1.22	1.15	-0.07	-0.16
Other Products	1.47	1.49	1.33	1.57	1.63	1.42	1.50	1.29	1.26	-0.03	-0.03
Total	14.58	14.27	14.20	14.12	14.69	14.06	14.16	13.70	13.04	-0.67	-0.60
Pacific											
LPG&Ethane	0.84	0.83	0.88	0.80	0.79	0.86	0.83	0.97	1.01	0.04	0.04
Naphtha	1.68	1.69	1.78	1.55	1.73	1.71	1.74	1.77	1.83	0.06	0.03
Motor Gasoline	1.57	1.54	1.51	1.47	1.62	1.57	1.56	1.66	1.46	-0.20	0.03
Jet/Kerosene	0.87	0.85	1.18	0.64	0.63	0.96	0.88	1.21	1.21	0.01	-0.08
Gasoil/Diesel Oil	1.62	1.62	1.66	1.53	1.59	1.71	1.71	1.77	1.56	-0.21	0.00
Residual Fuel Oil	0.74	0.75	0.80	0.65	0.75	0.82	0.80	0.90	0.93	0.03	0.08
Other Products	0.49	0.56	0.53	0.47	0.56	0.66	0.57	0.75	0.63	-0.12	0.12
Total	7.82	7.85	8.34	7.10	7.68	8.29	8.09	9.02	8.63	-0.39	0.23
OECD											
LPG&Ethane	4.76	4.78	5.23	4.48	4.49	4.94	4.87	5.32	5.28	-0.04	-0.19
Naphtha	3.31	3.21	3.43	3.09	3.20	3.11	3.16	3.17	3.38	0.22	-0.09
Motor Gasoline	14.36	13.99	13.67	14.10	14.31	13.85	13.79	13.97	13.04	-0.93	-0.24
Jet/Kerosene	3.80	3.75	3.97	3.58	3.70	3.75	3.68	3.91	3.78	-0.13	-0.25
Gasoil/Diesel Oil	12.58	12.58	12.74	12.03	12.62	12.91	13.13	12.59	11.98	-0.61	-0.22
Residual Fuel Oil	2.94	2.84	3.06	2.74	2.76	2.82	2.66	3.06	2.87	-0.19	-0.26
Other Products	4.42	4.48	4.22	4.51	4.84	4.33	4.36	4.16	4.17	0.01	0.02
Total	46.17	45.62	46.32	44.53	45.93	45.70	45.64	46.18	44.51	-1.67	-1.23

1 Demand, measured as deliveries from refineries and primary stocks, comprises inland deliveries, international bunkers and refinery fuel. It includes crude for direct burning, oil from non-conventional sources and other sources of supply. Jet/kerosene comprises jet kerosene and non-aviation kerosene. Gasoil comprises diesel, light heating oil and other gasoils. North America comprises US 50 states, US territories, Mexico and Canada.

2 Latest official OECD submissions (MOS).

Table 2b

OIL DEMAND IN SELECTED OECD COUNTRIES[1]

(million barrels per day)

										Latest month vs.	
	2010	2011	1Q11	2Q11	3Q11	4Q11	Nov 11	Dec 11	Jan 12 [2]	Dec 11	Jan 11
United States[3]											
LPG	2.17	2.18	2.47	1.96	1.99	2.31	2.24	2.54	2.47	-0.06	-0.20
Naphtha	0.26	0.26	0.27	0.27	0.25	0.26	0.26	0.25	0.28	0.03	0.02
Motor Gasoline	8.99	8.74	8.61	8.87	8.89	8.61	8.54	8.66	8.19	-0.47	-0.23
Jet/Kerosene	1.45	1.44	1.40	1.49	1.50	1.39	1.44	1.37	1.32	-0.05	-0.06
Gasoil	3.80	3.85	3.95	3.75	3.78	3.92	4.06	3.77	3.82	0.05	-0.16
Residual Fuel Oil	0.54	0.48	0.61	0.51	0.36	0.43	0.39	0.51	0.44	-0.06	-0.20
Other Products	1.97	1.93	1.86	1.97	2.12	1.77	1.83	1.66	1.83	0.18	-0.03
Total	19.18	18.90	19.17	18.82	18.89	18.71	18.76	18.75	18.36	-0.39	-0.85
Japan											
LPG	0.48	0.50	0.54	0.50	0.45	0.52	0.50	0.61	0.65	0.04	0.04
Naphtha	0.77	0.72	0.79	0.65	0.74	0.70	0.72	0.73	0.75	0.02	-0.06
Motor Gasoline	1.00	0.98	0.95	0.92	1.04	1.00	0.97	1.07	0.91	-0.16	0.01
Jet/Kerosene	0.55	0.53	0.80	0.36	0.34	0.62	0.54	0.83	0.84	0.01	-0.04
Diesel	0.41	0.41	0.41	0.39	0.41	0.43	0.43	0.45	0.37	-0.08	-0.01
Other Gasoil	0.43	0.41	0.48	0.36	0.36	0.43	0.41	0.48	0.46	-0.02	-0.01
Residual Fuel Oil	0.40	0.45	0.42	0.36	0.48	0.53	0.51	0.59	0.59	0.00	0.16
Other Products	0.41	0.49	0.47	0.38	0.51	0.60	0.54	0.68	0.62	-0.06	0.16
Total	4.45	4.48	4.86	3.92	4.32	4.82	4.62	5.43	5.17	-0.25	0.25
Germany											
LPG	0.10	0.10	0.10	0.10	0.11	0.09	0.09	0.09	0.08	-0.01	-0.01
Naphtha	0.41	0.39	0.44	0.40	0.39	0.33	0.34	0.33	0.37	0.05	-0.09
Motor Gasoline	0.46	0.46	0.43	0.47	0.47	0.46	0.48	0.43	0.41	-0.02	-0.01
Jet/Kerosene	0.18	0.18	0.17	0.19	0.19	0.17	0.17	0.16	0.14	-0.01	-0.02
Diesel	0.67	0.68	0.63	0.67	0.71	0.68	0.73	0.64	0.59	-0.04	0.03
Other Gasoil	0.43	0.36	0.37	0.23	0.42	0.41	0.38	0.39	0.32	-0.07	-0.02
Residual Fuel Oil	0.15	0.15	0.16	0.14	0.15	0.15	0.14	0.16	0.13	-0.03	-0.03
Other Products	0.09	0.11	0.05	0.12	0.12	0.13	0.15	0.10	0.07	-0.03	0.02
Total	2.49	2.41	2.35	2.34	2.55	2.42	2.47	2.28	2.12	-0.16	-0.12
Italy											
LPG	0.11	0.10	0.12	0.08	0.08	0.11	0.10	0.13	0.12	-0.01	0.00
Naphtha	0.12	0.09	0.11	0.10	0.08	0.08	0.08	0.08	0.07	-0.01	-0.03
Motor Gasoline	0.24	0.23	0.22	0.24	0.24	0.22	0.22	0.22	0.20	-0.02	-0.01
Jet/Kerosene	0.10	0.10	0.09	0.10	0.12	0.09	0.08	0.09	0.08	-0.01	-0.01
Diesel	0.49	0.49	0.47	0.51	0.50	0.49	0.49	0.48	0.40	-0.07	-0.01
Other Gasoil	0.12	0.11	0.11	0.09	0.10	0.13	0.13	0.13	0.11	-0.03	0.00
Residual Fuel Oil	0.13	0.11	0.10	0.11	0.13	0.10	0.09	0.10	0.10	0.00	0.00
Other Products	0.23	0.23	0.23	0.24	0.22	0.21	0.22	0.20	0.19	-0.01	-0.03
Total	1.53	1.46	1.45	1.47	1.47	1.43	1.41	1.42	1.26	-0.16	-0.09
France											
LPG	0.15	0.14	0.17	0.12	0.12	0.14	0.14	0.16	0.16	0.00	-0.02
Naphtha	0.13	0.13	0.13	0.14	0.13	0.12	0.12	0.14	0.14	0.01	0.01
Motor Gasoline	0.19	0.18	0.17	0.20	0.19	0.17	0.16	0.16	0.15	-0.02	-0.01
Jet/Kerosene	0.15	0.15	0.14	0.15	0.16	0.15	0.14	0.14	0.14	0.00	0.00
Diesel	0.69	0.70	0.69	0.71	0.71	0.69	0.69	0.69	0.65	-0.03	0.02
Other Gasoil	0.30	0.27	0.35	0.19	0.28	0.27	0.24	0.26	0.30	0.04	-0.07
Residual Fuel Oil	0.09	0.08	0.08	0.08	0.08	0.09	0.10	0.08	0.08	0.01	0.01
Other Products	0.17	0.17	0.13	0.19	0.20	0.16	0.17	0.15	0.15	0.00	0.04
Total	1.86	1.82	1.86	1.79	1.87	1.78	1.76	1.77	1.78	0.01	-0.03
United Kingdom											
LPG	0.14	0.14	0.14	0.15	0.13	0.12	0.12	0.12	0.13	0.02	-0.01
Naphtha	0.03	0.03	0.03	0.03	0.02	0.02	0.03	0.02	0.03	0.00	-0.01
Motor Gasoline	0.35	0.33	0.34	0.34	0.33	0.33	0.34	0.32	0.31	-0.01	-0.01
Jet/Kerosene	0.33	0.33	0.34	0.32	0.33	0.32	0.33	0.32	0.28	-0.04	-0.07
Diesel	0.45	0.45	0.45	0.45	0.45	0.47	0.48	0.46	0.41	-0.05	-0.03
Other Gasoil	0.12	0.12	0.11	0.11	0.13	0.11	0.12	0.10	0.10	0.00	0.00
Residual Fuel Oil	0.06	0.06	0.07	0.06	0.06	0.06	0.06	0.07	0.05	-0.02	-0.03
Other Products	0.14	0.15	0.15	0.16	0.15	0.13	0.13	0.13	0.13	0.01	-0.02
Total	1.62	1.60	1.62	1.61	1.61	1.56	1.59	1.53	1.43	-0.09	-0.16
Canada											
LPG	0.35	0.36	0.39	0.35	0.36	0.36	0.38	0.35	0.36	0.01	0.00
Naphtha	0.08	0.08	0.09	0.08	0.08	0.07	0.07	0.08	0.08	0.00	-0.01
Motor Gasoline	0.74	0.74	0.69	0.74	0.78	0.75	0.75	0.76	0.74	-0.02	0.03
Jet/Kerosene	0.11	0.11	0.11	0.10	0.12	0.11	0.11	0.12	0.11	0.00	0.01
Diesel	0.23	0.23	0.22	0.22	0.23	0.25	0.25	0.24	0.24	0.00	0.02
Other Gasoil	0.30	0.32	0.36	0.28	0.32	0.31	0.34	0.30	0.31	0.01	-0.07
Residual Fuel Oil	0.10	0.09	0.11	0.09	0.08	0.10	0.09	0.13	0.12	-0.01	0.00
Other Products	0.30	0.29	0.28	0.29	0.32	0.27	0.25	0.26	0.23	-0.02	-0.06
Total	2.22	2.23	2.25	2.15	2.29	2.23	2.23	2.23	2.19	-0.04	-0.07

1 Demand, measured as deliveries from refineries and primary stocks, comprises inland deliveries, international bunkers and refinery fuel. It includes crude for direct burning, oil from non-conventional sources and other sources of supply. Jet/kerosene comprises jet kerosene and non-aviation kerosene. Gasoil comprises diesel, light heating oil and other gasoils.

2 Latest official OECD submissions (MOS).

3 US figures exclude US territories.

Table 3
WORLD OIL PRODUCTION
(million barrels per day)

	2010	2011	2012	4Q11	1Q12	2Q12	3Q12	4Q12	Jan 12	Feb 12	Mar 12
OPEC											
Crude Oil											
Saudi Arabia	8.05	9.04		9.37	9.65				9.55	9.70	9.70
Iran	3.70	3.58		3.51	3.32				3.30	3.35	3.30
Iraq	2.36	2.67		2.68	2.70				2.65	2.62	2.84
UAE	2.31	2.50		2.54	2.61				2.58	2.59	2.65
Kuwait	2.03	2.24		2.43	2.42				2.45	2.40	2.42
Neutral Zone	0.53	0.59		0.60	0.60				0.60	0.60	0.60
Qatar	0.80	0.82		0.82	0.81				0.82	0.81	0.81
Angola	1.73	1.64		1.72	1.71				1.70	1.76	1.68
Nigeria	2.08	2.18		2.06	2.06				2.04	2.10	2.05
Libya	1.55	0.46		0.55	1.25				1.15	1.29	1.32
Algeria	1.21	1.18		1.16	1.16				1.20	1.14	1.14
Ecuador	0.47	0.50		0.49	0.48				0.48	0.48	0.48
Venezuela	2.53	2.50		2.40	2.46				2.47	2.46	2.44
Total Crude Oil[6]	29.36	29.90		30.32	31.23				30.99	31.29	31.43
Total NGLs[1,6]	5.34	5.78	6.33	5.91	6.14	6.21	6.46	6.50	6.14	6.14	6.14
Total OPEC[6]	34.70	35.68		36.22	37.38				37.13	37.43	37.57
OPEC: Historical Composition[6]	34.70	35.68		36.22	37.38				37.13	37.43	37.57
NON-OPEC[2]											
OECD											
North America	14.09	14.53	15.19	15.14	15.22	14.89	15.19	15.45	15.36	15.27	15.04
United States[5]	7.78	8.10	8.61	8.53	8.64	8.56	8.57	8.69	8.73	8.62	8.57
Mexico	2.96	2.94	2.87	2.92	2.90	2.89	2.85	2.82	2.90	2.92	2.90
Canada	3.35	3.49	3.71	3.69	3.68	3.44	3.78	3.94	3.73	3.73	3.57
Europe	4.14	3.83	3.60	3.83	3.79	3.50	3.42	3.69	3.89	3.83	3.66
UK	1.36	1.12	0.97	1.10	1.07	0.95	0.87	1.01	1.11	1.08	1.00
Norway	2.14	2.04	1.97	2.05	2.06	1.88	1.90	2.03	2.11	2.08	2.00
Others	0.65	0.68	0.66	0.68	0.67	0.66	0.65	0.65	0.67	0.66	0.66
Pacific	0.61	0.52	0.58	0.54	0.54	0.57	0.61	0.61	0.50	0.60	0.53
Australia	0.51	0.43	0.50	0.45	0.46	0.49	0.53	0.53	0.41	0.51	0.45
Others	0.10	0.09	0.08	0.09	0.09	0.08	0.08	0.08	0.09	0.09	0.09
Total OECD	18.85	18.88	19.37	19.51	19.56	18.96	19.22	19.76	19.75	19.70	19.23
NON-OECD											
Former USSR	13.55	13.58	13.77	13.57	13.71	13.83	13.65	13.87	13.73	13.70	13.71
Russia	10.45	10.58	10.70	10.67	10.62	10.71	10.74	10.72	10.64	10.61	10.61
Others	3.10	3.00	3.07	2.90	3.09	3.12	2.91	3.15	3.08	3.09	3.10
Asia	7.80	7.68	7.68	7.58	7.72	7.66	7.67	7.68	7.74	7.74	7.68
China	4.10	4.12	4.18	4.02	4.15	4.15	4.18	4.22	4.15	4.18	4.13
Malaysia	0.72	0.66	0.66	0.67	0.68	0.66	0.65	0.65	0.69	0.68	0.66
India	0.86	0.89	0.89	0.87	0.88	0.88	0.90	0.89	0.87	0.88	0.88
Indonesia	0.97	0.93	0.87	0.92	0.90	0.88	0.86	0.83	0.92	0.89	0.90
Others	1.14	1.08	1.09	1.10	1.11	1.10	1.08	1.08	1.11	1.11	1.11
Europe	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.13	0.14	0.14	0.14
Latin America	4.07	4.22	4.43	4.32	4.36	4.36	4.48	4.53	4.34	4.37	4.38
Brazil[5]	2.14	2.19	2.35	2.25	2.34	2.27	2.37	2.43	2.32	2.36	2.34
Argentina	0.69	0.67	0.67	0.69	0.67	0.67	0.67	0.67	0.67	0.67	0.68
Colombia	0.79	0.92	0.99	0.95	0.93	0.99	1.02	1.03	0.94	0.90	0.94
Others	0.45	0.44	0.42	0.43	0.42	0.43	0.42	0.41	0.41	0.43	0.42
Middle East[3]	1.74	1.65	1.45	1.49	1.43	1.44	1.46	1.46	1.45	1.42	1.42
Oman	0.87	0.89	0.91	0.89	0.89	0.90	0.92	0.92	0.88	0.89	0.90
Syria	0.39	0.33	0.18	0.21	0.19	0.18	0.17	0.17	0.19	0.19	0.19
Yemen	0.30	0.23	0.17	0.18	0.15	0.16	0.17	0.18	0.17	0.14	0.14
Others	0.19	0.20	0.19	0.20	0.20	0.20	0.19	0.19	0.20	0.20	0.20
Africa	2.51	2.56	2.38	2.59	2.40	2.31	2.36	2.44	2.59	2.32	2.29
Egypt	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71
Gabon	0.25	0.24	0.25	0.25	0.24	0.24	0.25	0.25	0.25	0.24	0.24
Others	1.56	1.61	1.42	1.63	1.45	1.36	1.40	1.48	1.63	1.36	1.34
Total Non-OECD	29.81	29.82	29.84	29.68	29.77	29.74	29.75	30.10	29.99	29.69	29.63
Processing Gains[4]	2.10	2.17	2.26	2.23	2.28	2.23	2.24	2.31	2.28	2.28	2.28
Global Biofuels[5]	1.83	1.83	1.94	1.80	1.58	1.94	2.24	1.99	1.60	1.58	1.56
TOTAL NON-OPEC[6]	52.58	52.71	53.42	53.23	53.18	52.87	53.45	54.16	53.61	53.24	52.69
Non-OPEC: Historical Composition[6]	52.58	52.71	53.42	53.23	53.18	52.87	53.45	54.16	53.61	53.24	52.69
TOTAL SUPPLY	87.28	88.39		89.45	90.56				90.74	90.67	90.26

1 Includes condensates reported by OPEC countries, oil from non-conventional sources, e.g. Venezuelan Orimulsion (but not Orinoco extra-heavy oil), and non-oil inputs to Saudi Arabian MTBE. Orimulsion production reportedly ceased from January 2007.
2 Comprises crude oil, condensates, NGLs and oil from non-conventional sources
3 Includes small amounts of production from Israel, Jordan and Bahrain.
4 Net volumetric gains and losses in refining and marine transportation losses.
5 As of the July 2010 OMR, Global Biofuels comprise all world biofuel production including fuel ethanol from the US and Brazil.
6 Total OPEC comprises all countries which were OPEC members at 1 January 2009. OPEC Historical Composition comprises countries which were OPEC members at that point in time. Total Non-OPEC excludes all countries that were OPEC members at 1 January 2009. Non-OPEC Historical Composition excludes countries that were OPEC members at that point in time.

Table 4

OECD INDUSTRY STOCKS[1] AND QUARTERLY STOCK CHANGES

	RECENT MONTHLY STOCKS[2] in Million Barrels					PRIOR YEARS' STOCKS[2] in Million Barrels			STOCK CHANGES in mb/d			
	Oct2011	Nov2011	Dec2011	Jan2012	Feb2012*	Feb2009	Feb2010	Feb2011	1Q2011	2Q2011	3Q2011	4Q2011
North America												
Crude	475.6	475.9	463.9	474.7	479.9	482.5	474.9	485.2	0.25	0.02	-0.36	-0.03
Motor Gasoline	243.1	254.5	259.0	271.4	268.1	248.2	267.1	263.6	-0.03	-0.01	0.02	0.09
Middle Distillate	218.1	216.6	225.2	225.7	217.6	222.6	228.2	222.6	-0.24	-0.04	0.16	-0.03
Residual Fuel Oil	44.4	47.2	40.8	41.1	41.0	46.1	49.7	42.5	-0.05	-0.01	-0.02	-0.02
Total Products[3]	689.5	698.4	697.3	704.0	690.0	685.4	689.0	670.4	-0.58	0.29	0.30	-0.11
Total[4]	1334.1	1336.2	1311.9	1333.9	1330.3	1315.7	1305.8	1298.4	-0.38	0.49	0.03	-0.32
Europe												
Crude	299.6	303.0	285.9	290.3	297.8	339.2	340.4	325.3	0.01	-0.05	-0.11	-0.24
Motor Gasoline	90.9	94.3	94.8	97.6	93.8	101.9	109.6	104.6	0.04	-0.09	-0.03	0.06
Middle Distillate	260.0	264.4	275.4	287.0	281.8	284.3	292.2	286.6	0.09	-0.13	-0.09	0.11
Residual Fuel Oil	63.1	63.1	60.4	59.2	58.2	78.6	72.1	66.2	-0.01	-0.03	0.00	-0.04
Total Products[3]	535.1	539.8	548.6	560.5	550.0	576.3	585.5	572.4	0.11	-0.22	-0.08	0.11
Total[4]	900.6	912.1	901.4	918.3	914.3	990.5	997.2	964.7	0.06	-0.24	-0.23	-0.11
Pacific												
Crude	155.3	156.2	155.8	154.3	158.6	175.0	160.8	155.1	0.00	0.02	-0.03	-0.01
Motor Gasoline	24.4	23.8	22.1	25.2	24.8	24.9	28.5	25.8	0.00	0.01	0.00	-0.03
Middle Distillate	67.0	68.5	61.1	63.0	56.3	63.3	65.3	58.1	-0.06	0.14	0.01	-0.08
Residual Fuel Oil	19.9	19.7	19.1	19.7	19.6	21.6	19.4	18.4	0.02	0.01	-0.01	-0.01
Total Products[3]	181.4	178.6	164.5	164.1	155.9	170.9	170.4	162.4	-0.09	0.18	0.11	-0.19
Total[4]	408.1	408.5	390.2	390.6	385.7	415.0	394.2	389.9	-0.11	0.27	0.07	-0.24
Total OECD												
Crude	930.5	935.0	905.7	919.2	936.2	996.8	976.0	965.6	0.26	-0.01	-0.49	-0.29
Motor Gasoline	358.5	372.5	376.0	394.2	386.7	375.0	405.1	394.0	0.01	-0.09	-0.02	0.13
Middle Distillate	545.1	549.5	561.6	575.7	555.7	570.2	585.8	567.3	-0.21	-0.03	0.07	0.00
Residual Fuel Oil	127.4	129.9	120.3	120.0	118.8	146.3	141.2	127.1	-0.04	-0.04	-0.03	-0.07
Total Products[3]	1406.0	1416.8	1410.3	1428.6	1395.8	1432.5	1444.8	1405.2	-0.56	0.25	0.33	-0.19
Total[4]	2642.8	2656.8	2603.5	2642.7	2630.3	2721.2	2697.2	2652.9	-0.43	0.51	-0.13	-0.67

OECD GOVERNMENT-CONTROLLED STOCKS[5] AND QUARTERLY STOCK CHANGES

	RECENT MONTHLY STOCKS[2] in Million Barrels					PRIOR YEARS' STOCKS[2] in Million Barrels			STOCK CHANGES in mb/d			
	Oct2011	Nov2011	Dec2011	Jan2012	Feb2012*	Feb2009	Feb2010	Feb2011	1Q2011	2Q2011	3Q2011	4Q2011
North America												
Crude	696.0	696.0	696.0	696.0	696.0	705.5	726.6	726.5	0.00	0.00	-0.33	0.00
Products	0.0	0.7	0.7	0.7	1.0	2.0	2.0	0.0	-0.02	0.00	0.00	0.01
Europe												
Crude	182.8	184.2	186.7	187.9	187.9	187.8	184.9	185.9	-0.01	-0.01	-0.02	0.04
Products	235.5	235.2	234.1	231.2	231.2	232.4	240.1	233.4	-0.03	0.05	-0.01	-0.02
Pacific												
Crude	391.1	392.6	393.6	393.6	393.6	389.2	388.9	390.3	0.02	0.00	0.00	0.03
Products	20.0	20.0	20.0	20.0	19.7	19.2	20.0	20.0	0.00	0.00	-0.01	0.01
Total OECD												
Crude	1269.9	1272.7	1276.2	1277.4	1277.4	1282.5	1300.4	1302.7	0.01	-0.01	-0.36	0.07
Products	255.5	255.9	254.7	251.9	251.9	253.6	262.1	253.4	-0.05	0.05	-0.03	0.00
Total[4]	1526.7	1529.9	1532.2	1530.7	1530.8	1537.1	1563.9	1557.6	-0.03	0.04	-0.38	0.07

* estimated

1 Stocks are primary national territory stocks on land (excluding utility stocks and including pipeline and entrepot stocks where known) and include stocks held by industry to meet IEA, EU and national emergency reserve commitments and are subject to government control in emergencies.

2 Closing stock levels.

3 Total products includes gasoline, middle distillates, fuel oil and other products.

4 Total includes NGLs, refinery feedstocks, additives/oxygenates and other hydrocarbons.

5 Includes government-owned stocks and stock holding organisation stocks held for emergency purposes.

Table 5

TOTAL STOCKS ON LAND IN OECD COUNTRIES[1]

('millions of barrels' and 'days')

	End December 2010		End March 2011		End June 2011		End September 2011		End December 2011 [3]	
	Stock Level	Days Fwd[2] Demand	Stock Level	Days Fwd Demand	Stock Level	Days Fwd Demand	Stock Level	Days Fwd Demand	Stock Level	Days Fwd Demand
North America										
Canada	196.2	86	185.2	84	189.7	81	188.6	85	189.8	-
Mexico	44.5	22	45.0	22	46.5	22	46.1	22	44.4	-
United States[4]	1796.1	94	1769.5	94	1807.6	96	1780.9	95	1752.1	-
Total[4]	2058.9	87	2021.7	87	2065.9	88	2037.7	87	2008.5	87
Pacific										
Australia	38.1	39	39.1	39	39.5	39	38.2	38	40.0	-
Japan	588.3	121	575.4	147	593.2	137	601.1	125	588.7	-
Korea	165.4	70	170.2	83	175.2	79	173.6	75	166.8	-
New Zealand	8.8	58	7.6	54	8.7	62	8.7	56	8.3	-
Total	800.6	96	792.3	112	816.5	106	821.6	99	803.8	92
Europe[5]										
Austria	19.7	77	19.4	77	19.6	70	18.0	72	19.3	-
Belgium	33.6	50	37.0	59	38.1	58	36.7	58	36.4	-
Czech Republic	21.2	117	21.5	106	21.7	109	20.1	109	20.7	-
Denmark	26.8	171	21.4	132	21.5	134	22.4	138	22.4	-
Finland	27.8	127	26.9	133	27.0	130	27.0	130	28.9	-
France	168.2	91	167.4	94	166.7	89	160.0	90	165.0	-
Germany	286.8	122	289.4	124	290.8	114	282.6	117	282.8	-
Greece	34.3	92	33.9	106	32.6	99	30.9	95	27.9	-
Hungary	15.9	119	17.4	124	17.3	118	16.2	112	15.4	-
Ireland	9.8	63	10.8	79	10.2	73	11.3	77	10.7	-
Italy	133.3	92	131.8	90	130.0	88	130.1	91	128.3	-
Luxembourg	0.6	10	0.5	9	0.6	9	0.7	11	0.6	-
Netherlands	125.8	129	125.7	124	117.8	114	114.3	115	101.4	-
Norway	20.8	81	21.1	93	23.5	96	24.5	97	25.9	-
Poland	65.5	123	62.8	109	64.6	105	65.2	110	64.5	-
Portugal	22.9	89	23.5	87	23.3	86	21.9	90	21.9	-
Slovak Republic	8.3	109	9.0	111	8.9	104	8.3	103	8.5	-
Spain	133.2	93	132.9	97	130.1	94	131.2	97	132.8	-
Sweden	32.4	94	33.7	101	32.5	101	32.6	104	31.2	-
Switzerland	36.8	156	36.6	168	37.2	150	37.0	153	35.7	-
Turkey	58.5	101	58.3	85	56.6	73	56.4	83	55.8	-
United Kingdom	88.8	55	92.8	57	84.9	53	84.1	54	87.1	-
Total	1371.1	97	1374.0	97	1355.4	92	1331.5	95	1323.4	97
Total OECD	4230.7	91	4188.1	94	4237.9	92	4190.9	92	4135.7	91
DAYS OF IEA Net Imports[6]	-	147	-	146	-	147	-	145	-	148

1 Total Stocks are industry and government-controlled stocks (see breakdown in table below). Stocks are primary national territory stocks on land (excluding utility stocks and including pipeline and entrepot stocks where known) they include stocks held by industry to meet IEA, EU and national emergency reserves commitments and are subject to government control in emergencies.
2 Note that days of forward demand represent the stock level divided by the forward quarter average daily demand and is very different from the days of net imports used for the calculation of IEA Emergency Reserves.
3 End December 2011 forward demand figures are IEA Secretariat forecasts.
4 US figures exclude US territories. Total includes US territories.
5 Data not available for Iceland.
6 Reflects stock levels and prior calendar year's net imports adjusted according to IEA emergency reserve definitions (see www.iea.org/netimports.asp). Net exporting IEA countries are excluded.

TOTAL OECD STOCKS

CLOSING STOCKS	Total	Government[1] controlled	Industry	Total	Government[1] controlled	Industry
	Millions of Barrels			*Days of Fwd. Demand[2]*		
4Q2008	4206	1527	2679	90	33	57
1Q2009	4278	1547	2731	96	35	61
2Q2009	4306	1561	2745	95	35	61
3Q2009	4327	1564	2763	94	34	60
4Q2009	4205	1564	2641	92	34	57
1Q2010	4241	1567	2675	94	35	59
2Q2010	4319	1562	2757	93	33	59
3Q2010	4296	1549	2747	92	33	59
4Q2010	4231	1561	2670	91	34	58
1Q2011	4188	1558	2630	94	35	59
2Q2011	4238	1561	2677	92	34	58
3Q2011	4191	1526	2665	92	33	58
4Q2011	4136	1532	2603	91	34	57

1 Includes government-owned stocks and stock holding organisation stocks held for emergency purposes.
2 Days of forward demand calculated using actual demand except in 4Q2011 (when latest forecasts are used).

Table 6

IEA MEMBER COUNTRY DESTINATIONS OF SELECTED CRUDE STREAMS[1]

(million barrels per day)

	2009	2010	2011	1Q11	2Q11	3Q11	4Q11	Nov 11	Dec 11	Jan 12	Year Earlier Jan 11	Year Earlier change
Saudi Light & Extra Light												
North America	0.52	0.69	0.69	0.71	0.72	0.47	0.85	0.96	0.93	0.91	0.81	0.09
Europe	0.59	0.66	0.83	0.70	0.79	0.93	0.88	0.89	0.84	0.86	0.75	0.12
Pacific	1.28	1.21	1.24	1.33	1.14	1.21	1.27	1.26	1.35	1.34	1.30	0.04
Saudi Medium												
North America	0.40	0.36	0.37	0.33	0.36	0.40	0.40	0.44	0.42	0.41	0.32	0.10
Europe	0.02	0.00	0.02	-	0.02	0.05	0.01	0.02	0.00	0.02	-	-
Pacific	0.34	0.34	0.40	0.39	0.38	0.43	0.40	0.46	0.42	0.42	0.40	0.02
Saudi Heavy												
North America	0.03	0.02	0.02	0.02	0.03	0.03	0.01	0.02	-	-	0.02	-
Europe	0.02	0.00	0.01	0.00	0.00	0.03	0.03	0.03	0.03	0.01	0.01	0.00
Pacific	0.15	0.22	0.20	0.20	0.21	0.23	0.18	0.23	0.22	0.22	0.19	0.03
Iraqi Basrah Light[2]												
North America	0.40	0.36	0.29	0.21	0.41	0.31	0.21	0.31	0.32	0.52	0.18	0.34
Europe	0.12	0.09	0.11	0.03	0.10	0.19	0.11	0.13	0.08	0.16	0.06	0.10
Pacific	0.24	0.29	0.34	0.40	0.26	0.38	0.32	0.33	0.30	0.22	0.30	-0.07
Iraqi Kirkuk												
North America	0.06	0.03	0.07	0.11	0.07	0.05	0.06	0.03	0.11	0.03	0.14	-0.11
Europe	0.31	0.27	0.27	0.21	0.31	0.32	0.26	0.20	0.28	0.22	0.20	0.03
Pacific	-	-	-	-	-	-	-	-	-	-	-	-
Iranian Light												
North America	-	-	-	-	-	-	-	-	-	-	-	-
Europe	0.15	0.24	0.23	0.24	0.28	0.20	0.21	0.23	0.18	0.26	0.16	0.10
Pacific	0.07	0.04	0.04	0.06	0.03	0.04	0.03	0.02	0.05	0.02	0.04	-0.02
Iranian Heavy[3]												
North America	-	-	-	-	-	-	-	-	-	-	-	-
Europe	0.40	0.49	0.55	0.34	0.59	0.73	0.54	0.60	0.46	0.44	0.33	0.11
Pacific	0.57	0.52	0.51	0.63	0.41	0.51	0.49	0.48	0.46	0.52	0.62	-0.10
Venezuelan Light & Medium												
North America	0.39	0.14	0.18	0.06	0.30	0.24	0.13	0.06	-	-	0.18	-
Europe	0.07	0.02	0.02	0.03	0.01	0.02	0.02	0.05	-	0.03	0.04	0.00
Pacific	-	-	-	-	-	-	-	-	-	0.03	-	-
Venezuelan 22 API and heavier												
North America	0.75	0.86	0.76	0.89	0.77	0.70	0.69	0.74	0.64	0.61	0.99	-0.38
Europe	0.07	0.06	0.05	0.04	0.05	0.06	0.05	0.05	0.06	0.06	0.03	0.03
Pacific	-	-	-	-	-	-	-	-	-	-	-	-
Mexican Maya												
North America	0.93	0.91	0.82	0.82	0.80	0.84	0.84	0.89	0.78	0.64	0.88	-0.25
Europe	0.10	0.11	0.12	0.14	0.12	0.12	0.12	0.11	0.13	0.09	0.11	-0.02
Pacific	-	-	-	-	-	-	-	-	-	-	-	-
Mexican Isthmus												
North America	0.01	0.04	0.07	0.05	0.08	0.06	0.07	0.07	0.07	0.05	0.01	0.05
Europe	0.01	0.02	0.01	0.01	0.02	0.00	0.01	-	0.03	-	0.02	-
Pacific	-	-	-	-	-	-	-	-	-	-	-	-
Russian Urals												
North America	0.15	0.08	0.01	0.01	-	-	0.02	-	-	-	-	-
Europe	1.72	1.80	1.69	1.76	1.86	1.51	1.61	1.63	1.66	1.88	1.78	0.11
Pacific	-	-	-	-	-	-	-	-	-	-	-	-
Nigerian Light[4]												
North America	0.54	0.60	0.53	0.62	0.60	0.43	0.46	0.33	0.30	0.22	0.77	-0.55
Europe	0.32	0.34	0.45	0.40	0.40	0.54	0.48	0.51	0.56	0.68	0.42	0.26
Pacific	0.00	-	0.05	0.05	0.04	0.06	0.05	0.05	0.04	-	0.06	-
Nigerian Medium												
North America	0.21	0.25	0.18	0.20	0.18	0.18	0.14	0.07	0.19	0.02	0.30	-0.27
Europe	0.13	0.09	0.14	0.14	0.17	0.11	0.13	0.08	0.22	0.22	0.07	0.16
Pacific	-	-	-	-	-	-	-	-	-	-	-	-

1 Data based on monthly submissions from IEA countries to the crude oil import register (in '000 bbl), subject to availability. May differ from Table 8 of the Report.
IEA North America includes United States and Canada.
IEA Europe includes all countries in OECD Europe except Hungary. The Slovak Republic and Poland is excluded through December 2007 but included thereafter.
IEA Pacific data includes Australia, New Zealand, Korea and Japan.

2 Iraqi Total minus Kirkuk.

3 Iranian Total minus Iranian Light.

4 33° API and lighter (e.g., Bonny Light, Escravos, Qua Iboe and Oso Condensate).

Table 7
REGIONAL OECD IMPORTS[1,2]
(thousand barrels per day)

	2009	2010	2011	1Q11	2Q11	3Q11	4Q11	Nov-11	Dec-11	Jan-12	Year Earlier Jan-11	Year Earlier % change
Crude Oil												
North America	7353	7343	6703	6571	6928	6793	6519	6381	6347	5942	6751	-12%
Europe	8893	9072	8986	8857	8846	9331	8905	9193	8728	9421	9182	3%
Pacific	6082	6249	6370	6645	6084	6260	6492	6436	6823	6718	6756	-1%
Total OECD	22329	22663	22058	22072	21859	22384	21917	22010	21898	22080	22801	-3%
LPG												
North America	13	8	8	20	4	4	3	2	1	20	36	-44%
Europe	260	270	307	313	284	304	327	362	277	323	323	0%
Pacific	529	558	561	569	547	580	546	519	612	576	631	-9%
Total OECD	802	836	876	903	836	888	877	882	889	919	989	-7%
Naphtha												
North America	22	36	42	34	51	43	38	59	14	28	22	27%
Europe	352	390	291	292	336	285	253	237	238	442	437	1%
Pacific	841	900	876	917	830	906	853	898	854	846	984	-14%
Total OECD	1215	1326	1209	1243	1217	1234	1144	1194	1106	1317	1443	-9%
Gasoline[3]												
North America	878	789	752	669	981	703	654	748	606	704	669	5%
Europe	193	174	217	223	221	216	207	265	166	265	224	18%
Pacific	96	64	74	72	61	71	92	93	101	59	54	8%
Total OECD	1167	1027	1042	964	1262	990	953	1106	874	1028	947	9%
Jet & Kerosene												
North America	62	76	73	62	86	81	63	89	31	51	64	-20%
Europe	452	417	398	320	367	451	450	554	349	321	379	-15%
Pacific	53	40	50	58	43	45	55	59	42	49	63	-23%
Total OECD	567	532	521	440	497	578	569	703	422	421	506	-17%
Gasoil/Diesel												
North America	55	49	34	46	30	32	29	56	11	53	82	-35%
Europe	1035	1045	1001	1078	931	934	1063	1096	938	1006	1124	-10%
Pacific	87	97	128	98	153	123	139	115	156	136	79	73%
Total OECD	1177	1191	1164	1223	1114	1089	1231	1267	1105	1195	1284	-7%
Heavy Fuel Oil												
North America	270	277	266	345	304	193	222	250	211	265	318	-17%
Europe	534	529	584	505	582	651	595	548	579	778	534	46%
Pacific	113	117	146	147	111	156	169	184	182	225	137	64%
Total OECD	917	923	995	997	997	1001	986	982	972	1268	989	28%
Other Products												
North America	870	805	872	855	896	903	834	843	905	955	944	1%
Europe	770	666	703	683	776	724	628	649	570	469	665	-29%
Pacific	325	335	326	383	251	343	328	302	365	363	412	-12%
Total OECD	1964	1806	1901	1921	1924	1971	1790	1794	1841	1787	2020	-12%
Total Products												
North America	2171	2040	2047	2033	2355	1960	1843	2047	1781	2076	2134	-3%
Europe	3595	3491	3501	3415	3497	3566	3524	3712	3117	3604	3685	-2%
Pacific	2045	2110	2162	2243	1995	2225	2184	2169	2313	2254	2359	-4%
Total OECD	7810	7641	7709	7691	7847	7750	7550	7928	7210	7934	8178	-3%
Total Oil												
North America	9524	9382	8750	8604	9283	8753	8362	8427	8128	8018	8997	-11%
Europe	12488	12562	12487	12271	12344	12897	12429	12905	11845	13025	12867	1%
Pacific	8127	8360	8531	8888	8079	8485	8676	8605	9136	8971	9115	-2%
Total OECD	30139	30304	29768	29763	29706	30134	29467	29938	29108	30014	30980	-3%

1 Based on Monthly Oil Questionnaire data submitted by OECD countries in tonnes and converted to barrels.
2 Excludes intra-regional trade.
3 Includes additives.

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For information on the data sources, definitions, technical terms and general approach used in preparing the *Oil Market Report (OMR)*, *Medium-Term Oil and Gas Markets (MTOGM)* and *Annual Statistical Supplement* (current issue of the Statistical Supplement dated 10 August 2011), readers are referred to the *Users' Guide* at www.oilmarketreport.org/glossary.asp.

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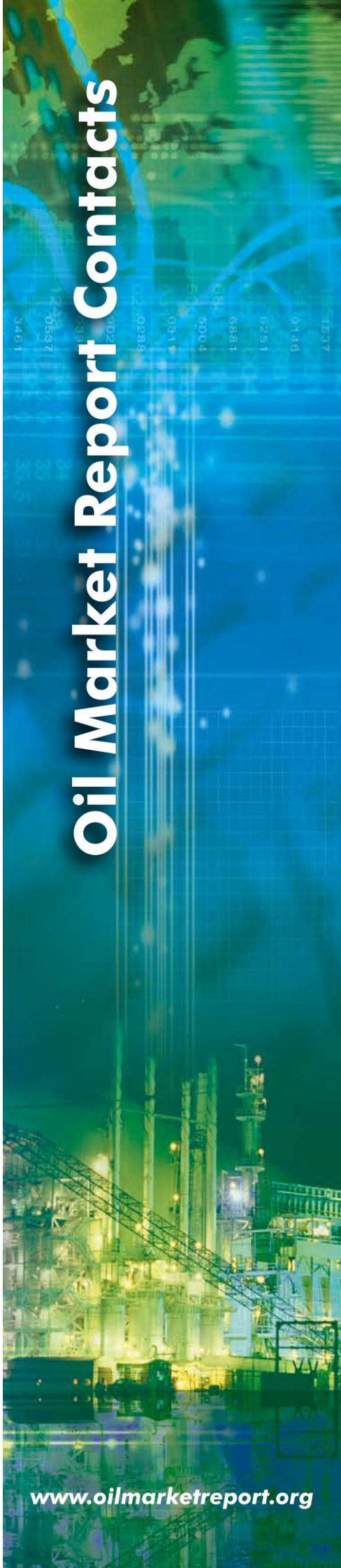

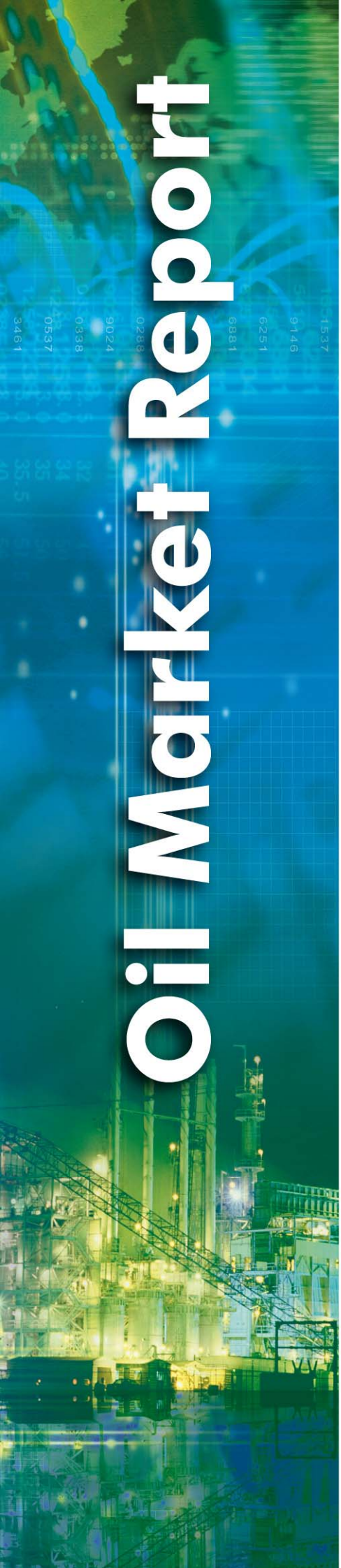

International Energy Agency

11 May 2012

HIGHLIGHTS

- **Crude markets reversed their upward course in April** and by early May futures prices had fallen $10-12/bbl amid disappointing economic data for the US and Europe and an apparent easing of tensions between the international community and Iran. Brent crude was last trading near a three-month low of $113/bbl, with WTI at $97/bbl.

- **Global oil supply increased by 0.6 mb/d to 91.0 mb/d in April,** 3.9 mb/d above last year. Higher Iraqi, Nigerian and Libyan supplies lifted OPEC production by 410 kb/d, to 31.85 mb/d. The 'call on OPEC crude and stock change' is raised by 0.2 mb/d to 30.9 mb/d for 3Q12 and by 0.4 mb/d to 30.7 mb/d for 4Q12, with the 2012 average now 30.3 mb/d.

- **Non-OPEC supply increased by 0.1 mb/d to 52.9 mb/d in April** as a seasonal rise in biofuels output offset declining supplies in the UK and Canada. Despite persistent non-OECD outages in 2012, production growth in North America should average 0.6 mb/d for the remainder of the year, lifting non-OPEC supplies by 0.6 mb/d y-o-y to 53.3 mb/d.

- **Global oil consumption is set to rise by 0.8 mb/d (0.9%) in 2012**, to 90.0 mb/d, with gains in the non-OECD more than offsetting declining OECD demand. After posting near-zero annual growth in 4Q11, global demand growth is forecast to gradually accelerate throughout 2012, culminating in an expansion of 1.2 mb/d by 4Q12.

- **OECD industry oil inventories increased by 13.5 mb in March**, to 2 649 mb, lifting total stocks above the five-year average for the first time since May 2011. Moreover, forward demand cover rose by 0.5 day to 60.3 days, 3.0 days above the five-year average. Preliminary data indicate a modest 5.1 mb increase in industry stocks in April.

- **Global crude throughputs reached a seasonal low of 73.4 mb/d in April,** coinciding with a peak in refinery maintenance. Crude runs are expected to rise sharply from May onwards, as refiners complete turnarounds and meet seasonally stronger demand. On a quarterly basis, global runs are expected to fall from 74.8 mb/d in 1Q12 to 74.3 mb/d in 2Q12, 150 kb/d and 440 kb/d respectively above 2011 levels.

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A FOGGY HORIZON

Our global oil balance this month paints a marginally tighter picture than in the last *OMR*, with the underlying 'call on OPEC crude and stock change' averaging 30.8 mb/d in the second half of 2012. Slightly stronger global oil demand (albeit 2012 growth remains close to last month's +0.8 mb/d) coincides with a non-OPEC supply prognosis trimmed by an average 0.2 mb/d for the second half of the year. Nonetheless, with OPEC producing an estimated 31.8 mb/d in April, and OECD stocks having clawed their way back from earlier tight levels, some of the nervousness which drove prices to record highs in March has receded. But there is no room for complacency: the path of market fundamentals for the rest of the year remains highly uncertain and geopolitical risks will likely continue to keep prices high. As always, the IEA will monitor market conditions and stands ready to act if supply conditions warrant it.

Several factors examined in this month's *OMR* highlight the complexities faced by those trying to peer through the murk that shrouds any outlook for the second half of the year. The precise impact on physical supplies of sanctions imposed on Iran is of course near the top of that list. But, with Iran's domestic tanker fleet by some accounts becoming less easy to track, real-time analysis of cargo movements is more difficult. The monthly data on imports from Iran that we present in the *OMR* are based on official national reporting, but there is always a lag of a month or more before such information becomes available. Shipping data based on vessel arrivals, by provenance, are used to fill in the gaps for more recent months, but are themselves prone to major revisions. All we can say currently is that 1Q12 imports from Iran seem to be around 0.3 mb/d below 4Q11 levels, and that imports in April look to have fallen more sharply, with much of the drop apparently being funnelled into the 0.5-0.8 mb/d that Iran seems to have placed in floating storage. Whether Iranian vessels stay tied up in storage, or are pressed back into service amid restrictions on marine insurance for international fleets, remains to be seen.

The spate of unplanned stoppages currently afflicting non-OPEC supply is partly carried through our outlook, with around 1 mb/d of production that was originally in our forecast now assumed shuttered on average for the year. This month, as last month, we retain fairly cautious assumptions about production from the two Sudans, Syria and Yemen, as political turmoil there shows little sign of resolution. That said, technically-derived, un-planned stoppages affecting production in locations such as the North Sea and Canada are assumed to gradually recede and, all told, we see non-OPEC supply showing reasonable y-o-y growth of around 0.6 mb/d in 2012, with the Americas to the fore. More worrisome for the medium and longer term is the precedent set in Argentina, where the expropriation of Repsol assets by the government raises concerns about contract sanctity, which has been toyed with before in the region, with adverse results, not least on oil and gas supply. Without certainty that contracts will be respected, foreign investors are likely to shun aspiring resource plays in favour of more predictable domains.

Finally, demand estimation also carries its own ambiguities. A more optimistic recent set of GDP projections from the IMF carried some heavy caveats around the damaging impact of high oil prices and continuing risks in the euro zone. These were followed by a slew of disappointing industrial and employment indicators for the US and Europe. Nonetheless, driven by robust growth from China, other Asia and the oil producing regions, the consensus economic view is slightly brighter than a few months ago. While euro-zone risks and potential price spikes might drag oil demand lower than we project, similarly, upside potential exists depending on the fate of the Japanese nuclear moratorium, China's economic landing (hard or soft?), that country's strategic stockpiling policy and summer crude burn in exporting countries. Who'd be a forecaster?

DEMAND

Summary

- **Global oil demand is expected to expand by 0.8 mb/d (or 0.9%) in 2012 to 90.0 mb/d**, following consumption of 89.2 mb/d of oil products in 2011. The non-OECD countries are forecast to account for all of the growth, with demand rising from 43.5 mb/d to 44.8 mb/d, whilst OECD demand falls from 45.6 mb/d to 45.2 mb/d.

- **The world's four biggest markets – China, the US, Europe and Japan – should dominate the demand story in 2012.** Chinese growth is forecast to maintain its global dominance in 2012, at 0.4 mb/d (to 9.9 mb/d) or nearly 50% of the total expansion. Big declines are foreseen in Europe and the US, down by 0.3 mb/d (to 13.9 mb/d) and 0.2 mb/d (to 18.7 mb/d) respectively. Japan is expected to buck the falling OECD trend, up by 40 kb/d to 4.5 mb/d.

- **The annual demand outlook masks an important uptick in global demand throughout 2012.** After next to no growth in 4Q11, the predicted trend will accelerate through the year to 1.3% by 4Q12.

- **Historical data revisions equate to a higher absolute 1Q12 demand number but lower 1Q12 growth.** The preliminary series for 1Q12 is 50 kb/d higher than last month's report, at 89.5 mb/d, but the underlying year-on-year (y-o-y) growth trend is 0.3% as opposed to 0.4% previously.

Global Oil Demand (2010-2012)

(million barrels per day)

	1Q10	2Q10	3Q10	4Q10	2010	1Q11	2Q11	3Q11	4Q11	2011	1Q12	2Q12	3Q12	4Q12	2012
Africa	3.3	3.5	3.4	3.5	3.4	3.4	3.4	3.3	3.4	3.4	3.5	3.5	3.5	3.5	3.5
Americas	29.5	30.0	30.6	30.3	30.1	30.1	29.8	30.3	30.0	30.1	29.7	29.7	30.4	30.3	30.0
Asia/Pacific	27.2	27.0	26.7	28.3	27.3	28.6	27.3	27.4	28.9	28.1	29.5	28.0	28.1	29.4	28.7
Europe	15.0	14.9	15.6	15.5	15.3	14.9	14.8	15.4	14.8	15.0	14.4	14.4	15.1	14.8	14.7
FSU	4.4	4.3	4.5	4.6	4.4	4.5	4.6	4.8	4.8	4.7	4.7	4.7	4.9	4.9	4.8
Middle East	7.4	7.8	8.3	7.7	7.8	7.6	8.0	8.5	8.0	8.0	7.7	8.2	8.7	8.2	8.2
World	**86.9**	**87.6**	**89.2**	**89.9**	**88.4**	**89.2**	**88.0**	**89.7**	**89.9**	**89.2**	**89.5**	**88.6**	**90.7**	**91.1**	**90.0**
Annual Chg (%)	2.6	3.3	3.6	3.5	3.3	2.6	0.5	0.6	0.1	0.9	0.3	0.7	1.1	1.3	0.9
Annual Chg (mb/d)	2.2	2.8	3.1	3.1	2.8	2.3	0.4	0.5	0.1	0.8	0.3	0.6	1.0	1.2	0.8
Changes from last OMR (mb/d)	0.06	0.04	0.01	0.02	0.03	0.07	0.04	0.05	0.11	0.07	0.05	0.06	0.07	0.16	0.08

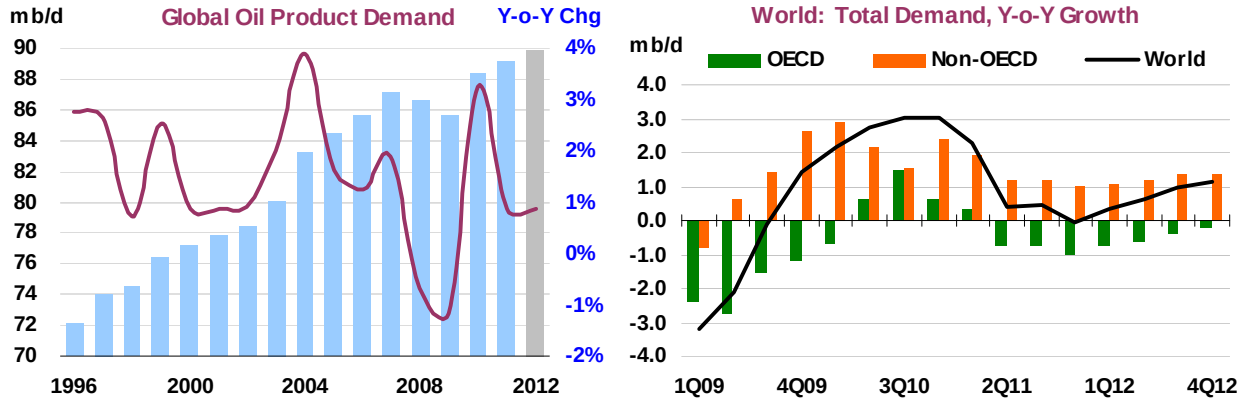
Global Overview

Oil demand growth is expected to accelerate through 2012, having remained fairly modest in 1Q12, according to the latest preliminary figures. First quarter demand averaged 89.5 mb/d – a gain of 0.3 mb/d (or 0.3%) on the corresponding period last year. Global demand is forecast to average 90.0 mb/d in 2012, 80 kb/d higher than last month's estimate and a gain of 0.8 mb/d (0.9%) on the year earlier. The modest upside revision is attributable to marginally higher base demand numbers and GDP projections provided by the IMF (see '*IMF Cautiously More Optimistic on The Global Economy*').

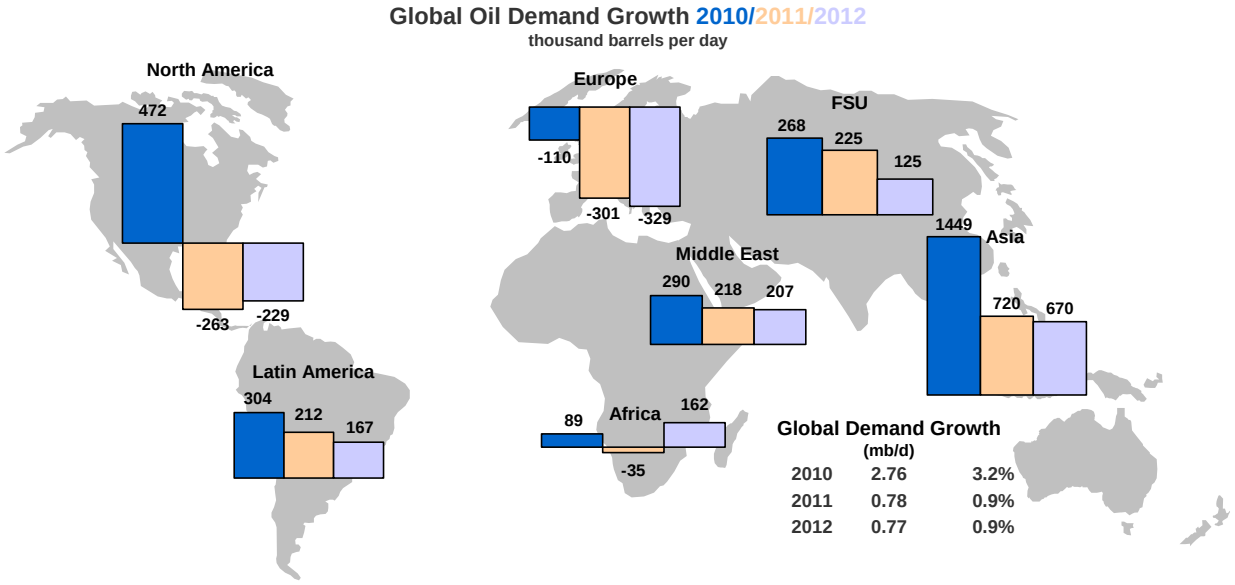
The predicted improvement in economic activity over the course of the year sees global oil demand attain y-o-y growth of 0.6 mb/d (0.7%) in 2Q12 (to 88.6 mb/d), accelerating through to 1.0 mb/d in 3Q12 and 1.2 mb/d in 4Q12. The pace of demand growth in the non-OECD will exceed expectations for the OECD, where demand is predicted to continue to ease, not only amid weaker economic activity but also reflecting a structural oil demand decline which, barring 2010, has been in place since 2005.

Relatively high oil prices allied to the mild winter weather overall at the start of 2012, curtail the extent of 2012 demand growth. The Brent price that underpins this demand forecast is for an average of around $112/bbl in 2012, up from $108/bbl in 2011. The degree of negative price impact however appears to have diminished, as not only have prices softened recently but also as demand growth remains primarily

driven by rapidly expanding non-OECD incomes, and as consumers outside of the US face much less in the way of direct feed-through from high international crude prices. The income effect has a much more pronounced impact upon demand than the price effect. That is not to say that high oil prices are not a disincentive to consumption in the medium and longer term. However, we would continue to see the impact of high prices globally stemming more indirectly via macro-economic impacts, as opposed to direct demand suppression via price, with again the potential exception here being the US. That being said of course, further downside risk to the demand projection, at the margin, could accrue were prices to spike again in light of any worsening geopolitical and related supply-side events.



Of the individual products within our base case, gasoil/diesel will provide the majority of the growth in 2012, with an additional 0.4 mb/d of consumption added (roughly half of the global increment), taking total demand to 26.5 mb/d. Gasoil's strength, largely attributable to the economies of the non-OECD, is seen growing by 0.5 mb/d to 14.0 mb/d, supported by the still relatively strong industrial, construction and agricultural sectors. OECD demand for gasoil is projected to fall by around 70 kb/d in 2012 to 12.5 mb/d, with lower heating oil demand outweighing increases foreseen in OECD diesel demand.



Having fallen by around 80 kb/d in 2011, gasoline demand is forecast to expand by 180 kb/d in 2012, taking global gasoline consumption to 22.5 mb/d. The majority of the growth is a consequence of rapidly expanding non-OECD incomes, as non-OECD gasoline demand is predicted to rise by 290 kb/d to 8.7 mb/d. Demand continues to contract in the mature OECD markets. The greatest global contraction is forecast in heavy fuel oil, with a dip of 60 kb/d expected globally to 8.3 mb/d. Tougher environmental legislation in the OECD will result in this region leading the downside momentum, with a 100 kb/d OECD drop envisaged to 2.7 mb/d. This is despite incremental use in Japan for power generation.

IMF Cautiously More Optimistic on The Global Economy

The IMF has raised its global economic growth projections for 2012, and to a lesser degree 2013, in the *World Economic Outlook* (published April 2012), with growth of 3.5% now foreseen in 2012 rising to 4.1% in 2013. Back in January the IMF was predicting growth of 3.3% in 2012 and 4.0% in 2013. Leading the upside revisions are the notably stronger growth projections for the US, Germany, France, Canada and Japan.

The converse of the old adage '*when the US sneezes, the rest of the world catches a cold*' now seems to apply, with the rest of world now benefiting from stronger US economic activity in the form of greater export opportunities and the general confidence garnered from rising equity markets. Previously, US economic growth of 1.8% was foreseen in 2012 whereas now the IMF believes an acceleration towards 2.1% is probable (from 1.7% in 2011), with a further increase towards 2.4% pencilled in for 2013. These estimates already lean towards the more conservative of predictions, with the US Federal Reserve having since forecast US growth of 2.4%-to-2.9% in 2012 and 2.7%-to-3.1% in 2013.

Real GDP Growth
OMR dated 11 May 2012

% change	2011	2012
WORLD	**3.9**	**3.5**
OECD	**1.8**	**1.5**
OECD, North America	2.0	2.2
OECD, Europe	2.0	0.2
OECD, Pacific	0.7	2.6
Non-OECD	**6.2**	**5.6**
Africa	3.9	4.0
Latin America	4.3	3.8
China (excl. Hong Kong)	9.2	8.2
Other Asia	5.7	5.7
Non-OECD Europe	2.1	1.8
FSU	5.0	4.1
Middle East	4.6	3.2

Current vs. Previous
OMR dated 10 February 2012

	2011	2012
WORLD	**0.2**	**0.2**
OECD	**0.2**	**0.3**
OECD, North America	0.2	0.3
OECD, Europe	0.1	0.3
OECD, Pacific	0.1	0.3
Non-OECD	**-**	**(0.1)**
Africa	(0.4)	(0.9)
Latin America	(0.1)	-
China (excl. Hong Kong)	-	-
Other Asia	(0.2)	-
Non-OECD Europe	0.1	(0.3)
FSU	0.5	0.2
Middle East	0.2	(0.1)

Sources: IMF, IEA

The IMF also cited the relative success of the policy response to the European debt crisis, as further supporting its higher economic projections. The euro zone is still forecast to dip into a mild recession in 2012, as the sovereign debt crisis chokes off economic activity, but the assumed decline rate is less than previously assumed (-0.3%, whereas in January -0.5% was assumed).

Heightened downside risks remain, with particular emphasis made by the IMF on its warning with regard to a large increase in oil prices and the risk of a further implosion in the economies of the euro zone. On this latter point, the IMF suggests a *euro zone crash* scenario whereby global and euro zone output decline, by 2% and 3.5% respectively over a two-year time frame. Considerable attention is also given to the IMF's *doomsday* scenario whereby the oil price rises by a further 50% (on the IMF's baseline projection), which they forecast removing 1.25% from global economic output. Of course, if either of these two scenarios were to happen then our own oil demand estimates (based largely on the recent IMF GDP estimates) would be greatly reduced. For example, feeding the latter scenario into our model would result in a global demand estimate on a par with our own *lower GDP sensitivity*, carried in January's *OMR*, effectively leaving 2012 global oil consumption unchanged at 2011 levels.

It is worth noting that in the IMF's base case scenario non-OECD growth was revised modestly lower, which given their higher associated income elasticity keeps a relative lid on the feed through from stronger global GDP growth through to oil demand.

Note: the four-tenth of a percentage point upside revision in the Japanese economic projection, to +2.0% for 2012, could place an additional burden on the Japanese power generation sector (see 'Japanese Power Sector Demand: One Year After Fukushima', OMR dated 12 April 2012).

OECD

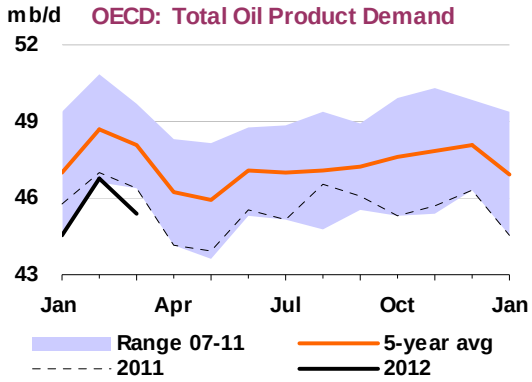
According to preliminary data, OECD inland deliveries (oil products supplied by refineries, pipelines and terminals) contracted by 2.1% y-o-y (or by 1.0 mb/d) in March, to 45.4 mb/d, with all regions bar the Pacific declining. Demand plummeted by over 4% in **OECD Europe** and nearly 3% in **OECD North America** (which includes US Territories), with losses seen across all of the major product sub-categories. In **OECD Pacific** (+4.2%), higher direct crude burn and residual fuel oil use, following the near complete closure of the Japanese nuclear industry (see *'Japanese Power Sector Demand: One Year After Fukushima', OMR* dated 12 April 2012) offset big losses in jet/kerosene (-6.9%) and heating oil (-1.2%).

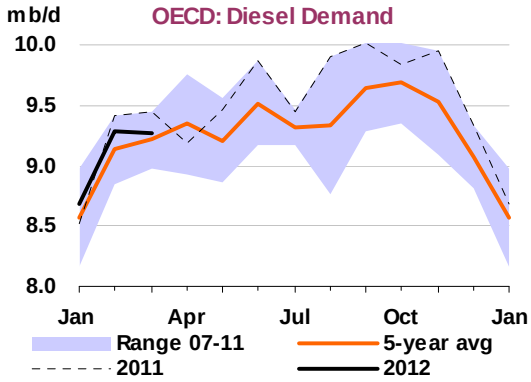
OECD Demand based on Adjusted Preliminary Submissions - March 2012
(million barrels per day)

	Gasoline		Jet/Kerosene		Diesel		Other Gasoil		RFO		Other		Total Products	
	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa
OECD North America*	**10.29**	**-0.3**	**1.57**	**-3.9**	**3.88**	**-3.0**	**0.95**	**-11.7**	**0.77**	**-18.7**	**5.90**	**-2.60**	**23.36**	**-2.8**
US50	8.70	-0.7	1.35	-5.0	3.27	-4.3	0.48	-18.0	0.39	-27.9	4.45	-3.0	18.64	-3.5
Canada	0.71	3.1	0.12	4.2	0.22	4.5	0.30	-8.5	0.09	-3.2	0.78	-4.0	2.21	-1.2
Mexico	0.80	0.4	0.06	3.5	0.33	4.8	0.14	4.8	0.18	-10.9	0.61	2.1	2.12	0.8
OECD Europe	**2.01**	**-3.6**	**1.14**	**-5.8**	**4.28**	**-2.1**	**1.56**	**-10.0**	**1.22**	**-3.9**	**3.45**	**-4.8**	**13.67**	**-4.4**
Germany	0.45	-0.3	0.16	-7.6	0.72	3.3	0.26	-20.0	0.19	15.1	0.61	-1.3	2.38	-1.6
United Kingdom	0.34	-1.5	0.33	-3.9	0.47	1.1	0.12	-3.2	0.05	-16.1	0.27	-9.8	1.57	-3.4
France	0.16	-9.1	0.14	0.0	0.70	-2.1	0.24	-17.3	0.09	3.3	0.43	1.7	1.75	-3.9
Italy	0.20	-9.5	0.09	-9.9	0.45	-8.4	0.10	-4.6	0.10	-8.9	0.33	-21.3	1.27	-12.2
Spain	0.11	-2.8	0.09	-16.2	0.43	-9.7	0.18	-8.0	0.17	-8.0	0.33	-7.3	1.33	-8.6
OECD Pacific	**1.56**	**2.1**	**0.97**	**-6.9**	**1.12**	**3.9**	**0.57**	**-1.2**	**0.85**	**16.2**	**3.28**	**7.2**	**8.35**	**4.2**
Japan	0.99	2.8	0.67	-2.9	0.43	5.1	0.46	1.4	0.53	41.6	1.95	15.6	5.03	9.9
Korea	0.18	4.2	0.15	-26.5	0.27	2.3	0.11	-10.2	0.28	-14.5	1.15	-3.4	2.15	-6.2
Australia	0.33	-0.2	0.13	1.8	0.37	4.3	0.00	0.0	0.02	8.9	0.16	-4.8	1.01	1.1
OECD Total	**13.86**	**-0.6**	**3.69**	**-5.3**	**9.28**	**-1.8**	**3.08**	**-9.0**	**2.84**	**-3.7**	**12.64**	**-0.9**	**45.38**	**-2.1**

* Including US territories

The 1Q12 OECD demand estimate is 45.5 mb/d, a drop of 1.7% on the corresponding period a year earlier (-0.8 mb/d). An absolute reduction of 15 kb/d has been seen since last month's report, as European consumption came in below expectations. For the year as a whole, OECD demand is forecast to contract by a more modest 1.0% (-0.5 mb/d) to 45.2 mb/d, on account of the projected lessening in the rate of decline through the year. A y-o-y demand decline of 1.4% is foreseen in 2Q12, -0.7% in 3Q12 and -0.3% in 4Q12. The largest OECD contractions in 2012 are envisaged in heavy fuel oil (-3.4%) and jet/kerosene (-1.6%), with only diesel demand forecast to offer anything near growth (+0.1%).

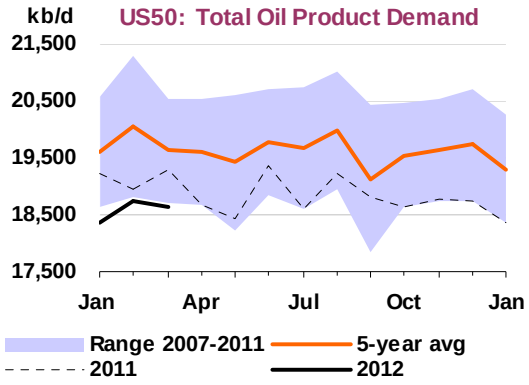


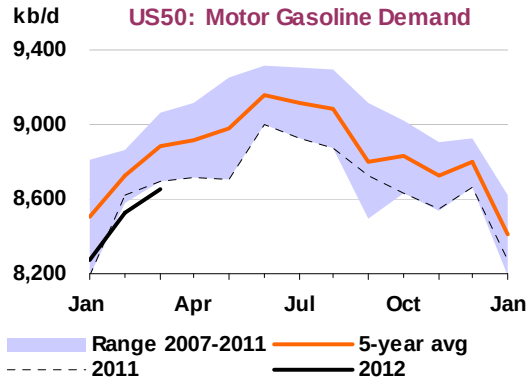


North America

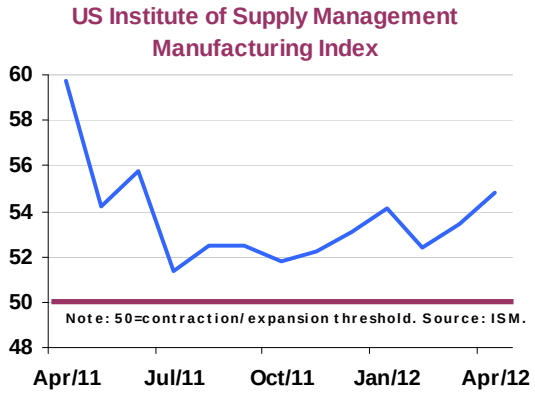
Consumption of oil products continues to fall heavily, according to the latest preliminary data for 1Q12, with demand averaging 23.2 mb/d a drop of 630 kb/d (-2.7%) on the year earlier. Despite this continued downturn, hope has emerged that the declining trend is abating, led by early indicators that US demand flat-lined y-o-y in February.

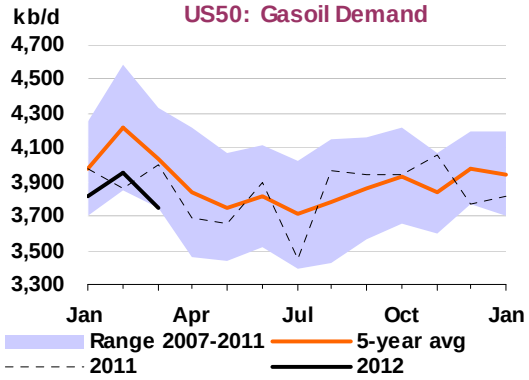
Having endured ten consecutive months of heavily falling demand, **US** oil consumption is finally showing signs of bottoming-out. Total demand in the US (excluding territories) amounted to 18.7 mb/d in February, down by 1.2% on the corresponding month a year earlier and notably less than the recent near-5% declines seen in December and January. US consumers have shown remarkable resilience in the face of rising retail prices, with February gasoline demand up 5.2% on January levels despite the corresponding 6% hike in pump prices. This month-on-month (m-o-m) gain is gasoline's strongest performance within the last three and a half years, amounting to a y-o-y contraction of 0.5%, its slowest in nearly a year. Not only did vehicles miles travelled rise in February (up 1.8% y-o-y), but also 14.3% more vehicles were sold, at a seasonally adjusted 15.7 million units.





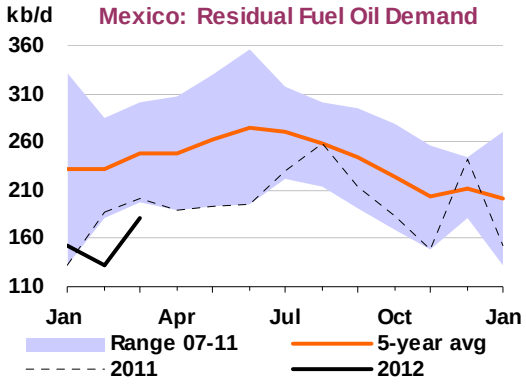
Revised February data cite gasoil demand averaging 4.0 mb/d in February, up by 2.3% y-o-y. We attribute this rise to expanding activity in America's strong manufacturing sector, traditionally a big consumer of distillates, illustrated by an above-50 reading from the Institute for Supply Management's Manufacturing Index. Further evidence for this trend comes from the 31.7% y-o-y gain in seasonally adjusted heavy vehicle sales in February.

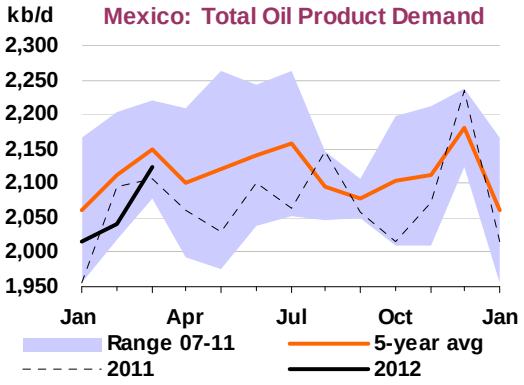




Preliminary estimates for March pointed towards average US consumption of 18.6 mb/d, down by 3.5% on the year earlier, as gasoil demand slipped back into negative territory on account of 2011's late winter peak (March as opposed to February) and concerns that economic progress is still far from clear cut. The US Labor Department, for example, reported that 115,000 new jobs were created in April, roughly half the level traditionally deemed to be required to support a strengthening economy. Demand is assumed to average 18.6 mb/d in 1Q12, a y-o-y decline of 3.1%, and a level it is forecast to maintain in 2Q12, down 1.2% y-o-y. The declines are then forecast to disappear in 3Q12, as demand remains roughly unchanged y-o-y, before rising 0.8% in 4Q12 taking total US50 consumption to 18.9 mb/d. The relative performance of US demand is forecast to rebound as economic growth strengthens through to 2013 (from 2.1% in 2012 to 2.4% in 2013).

In **Mexico**, oil demand grew marginally in March (up 0.8% y-o-y), following a 2.6% drop in February. Demand for gasoil/diesel (4.8%) and 'other products' (13.8%) showed firm growth, while residual fuel oil (-10.9%) lagged. Consumption found support on solid economic output from the industrial sector, but Mexico's export-driven growth entails downside risks as the US economy has yet to provide fully convincing signs of sustainable growth. Interestingly, residual fuel oil demand was subdued against cost-competitive natural gas and LNG in the power sector, because of new LNG import capacity and electricity generation at the western port of Manzanillo. During 1Q12, the government's monthly marginal price hikes on transport fuels have weighed down on gasoline demand, albeit against strong growth in passenger and commercial vehicle sales. Although its monthly price hike is marginal, it has successfully kept gasoline demand flat since the beginning of 2011. Diesel demand, on the other hand, trailed economic activity, but remains dependent on the health of North American trade. Our current forecast of Mexican total oil product demand remains flat at 2.1 mb/d.

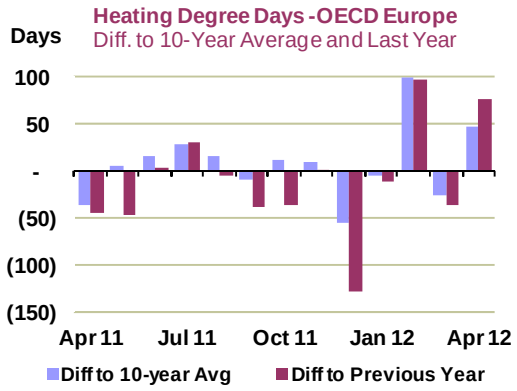


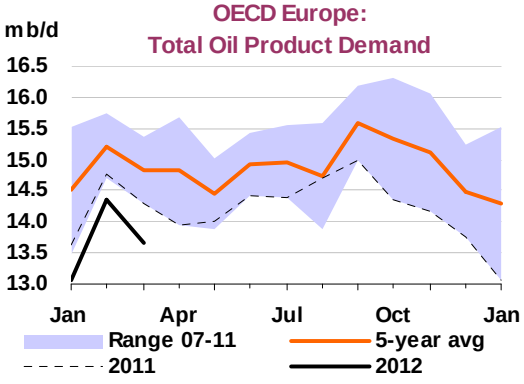


Europe

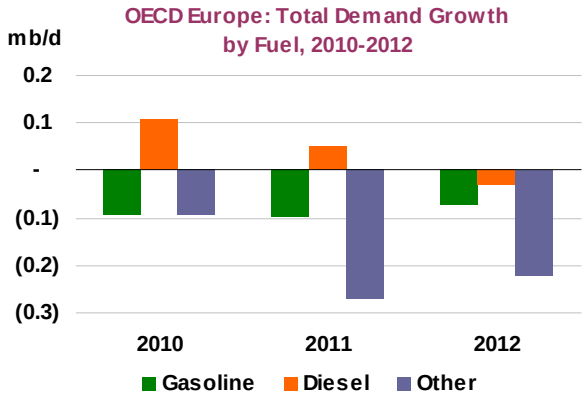
Oil consumption in Europe is in a dire state, matching the region's general state of economic malaise, as March unemployment rose to 10.9% in the euro zone (10.2% for wider EU). The latest figures show Greece, Spain, Italy, Portugal, the Netherlands, Ireland, Slovenia and the UK in the midst of technical recession – i.e. enduring two or more consecutive quarters of negative economic growth.

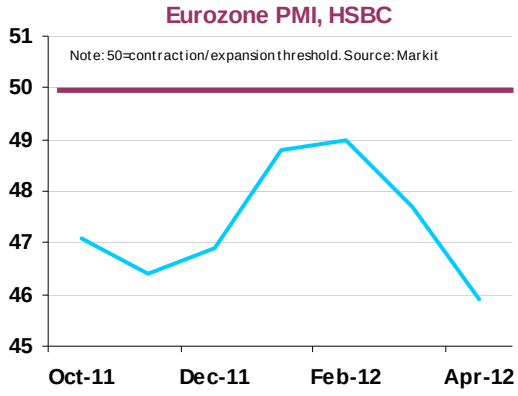
Preliminary data depict total oil product demand at 13.7 mb/d in March, down by 640 kb/d (or -4.5%) on the year earlier. Naphtha demand performed particularly poorly, down 5.8% to 1.1 mb/d, as ailing gasoline consumption reduces blending requirements. The falling overall European demand trend reflects not just an unusually warm March but also the weak economic backdrop, near-record high retail prices and the heightened sense of EU political uncertainty amid government changes in France and Greece. This reinforces the predicted y-o-y drop of 540 kb/d (-3.8%) in 1Q12, taking the OECD European demand estimate to 13.7 mb/d.



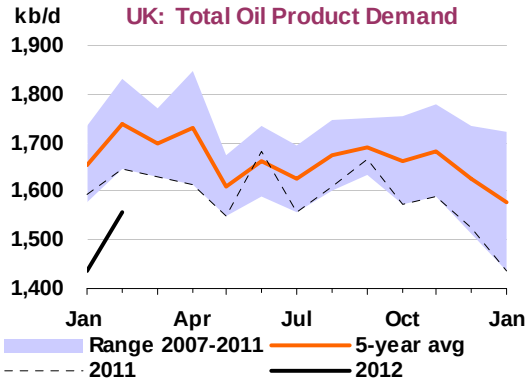


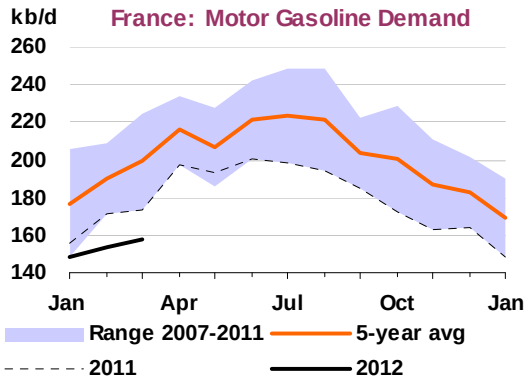
Bleak confidence indicators, such as Markit's Purchasing Managers' Index (PMI) falling to a near-three-year low of 45.9 in April, imply further short-term demand weakness. Although European demand is forecast to fall in y-o-y terms throughout 2012, the pace of the declines should lessen as the worst of the economic slowdown is assumed to occur in the first half of the year.





France consumed 1.8 mb/d of oil products according to preliminary data for March, 3.9% less than a year earlier, with transportation fuels performing particularly poorly. Gasoline demand, although up seasonally, plummeted 9.1% to 160 kb/d, while road diesel edged 2.1% lower to 700 kb/d, as near-record retail prices and a weak economic backdrop undermined consumption. The newly elected President has promised to cap petrol prices for three months by adjusting the tax on the fuel, a policy that could impact upon demand. The exact details of the plan have yet to emerge. Heightened economic concerns caused even worse demand contractions in **Italy** and **Spain**, with respective y-o-y drops of 12.2% and 8.6% (both to 1.3 mb/d).



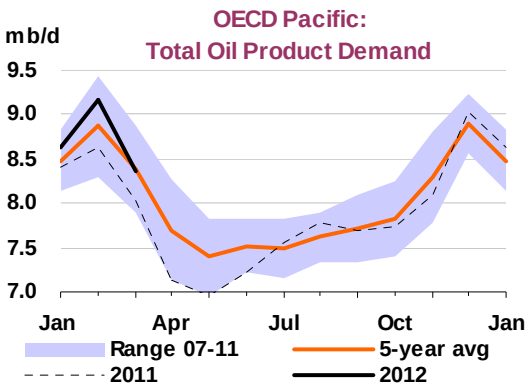


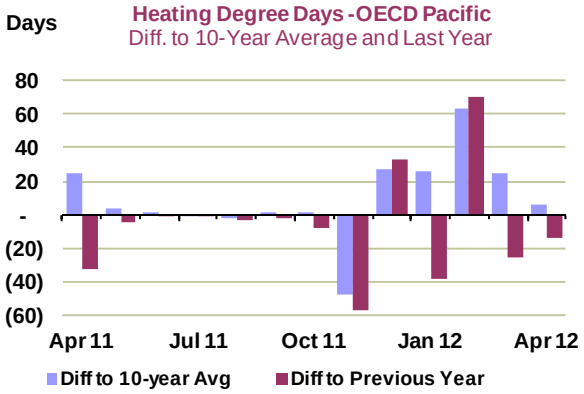
UK demand data remain weak, as total oil product demand came in at 1.6 mb/d in February, a drop of 5.3% (or 90 kb/d) on the corresponding metric last year. The UK officially entered 'double-dip' recession territory in 1Q12, as predicted by the OECD a couple of weeks earlier. Weak economic news coincided with near-record retail prices for fuels such as motor gasoline, which saw demand down by 3.2% y-o-y to 330 kb/d. The outlook remains bleak, with total UK demand forecast to decline by 3.2% in 2012 to 1.6 mb/d.

A more modest 1.6% y-o-y contraction was seen in **Germany**, as preliminary data put demand around 2.4 mb/d for oil products in March. Relatively robust industrial consumption supported demand for oil products, with diesel up 3.3% in March to 720 kb/d. Gasoline also performed relatively well, considering the sharp falls seen across most of Europe, down just 0.3% y-o-y to 450 kb/d.

Pacific

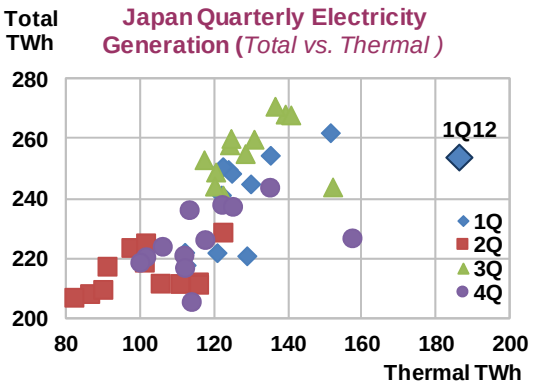
OECD Pacific demand remains supported by the nuclear-related shutdowns in Japan, with preliminary consumption of 8.4 mb/d in March, 335 kb/d (4.2%) more than the corresponding month in 2011. Heavy fuel oil and other products, which include crude oil for direct burn, continue to dominate growth prospects, as they are the key replacement fuels in the power sector shorn of nuclear capacity. Here, respective y-o-y expansions of 16.2% and 25.9% are forecast. Temperatures in March were colder than the ten-year average but higher than in 2011.

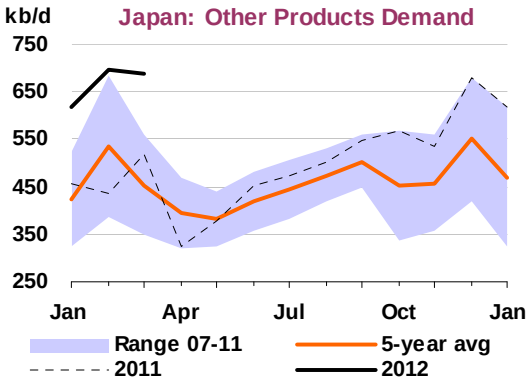




In March, according to preliminary data, **Japanese** oil product deliveries posted their largest y-o-y increase (9.9%) in nine years (albeit distorted by very low demand in March 2011 on account of the tsunami). Demand grew across all product categories, bar naphtha and jet/kerosene, notably residual fuel oil and 'other products', which include direct crude burn, rose by 41.6% and 32.5% respectively, on the back of strong electricity generation.

Japanese economic activity drove total electricity generation in March to 81.9 TWh an increase of 1.3% year-over-year and in line with the five-year average. Total thermal generation during 1Q12 rose to a record high of 186 TWh or 73% of total generation. Strong electricity consumption certainly boosted oil product demand but economic activity in general also gave support to LPG (+24.7%), diesel (3.2%) and gasoline (2.8%). Our 2012 demand outlook for Japan thus remains unchanged for now at 4.5 mb/d, showing growth of some 40 kb/d or 0.9% versus 2011, although the nuclear closures bring an additional layer of uncertainty to the forecast (see '*Japanese Power Sector Demand: One Year After Fukushima', OMR* dated 12 April 2012). We continue to assume a very gradual nuclear recovery towards end-2012, although a zero-nuclear case has only a marginal impact and would raise our oil demand projections by 80 kb/d for 2012 as a whole.





South Korean demand fell heavily in March, down by 6.2% y-o-y to 2.2 mb/d and a 170 kb/d reduction on our previous forecast. Lower demand numbers were seen right across the board, bar motor gasoline,

with naphtha (with demand at 960 kb/d, 60 kb/d less than assumed in last month's report), jet/kerosene (-40 kb/d) and residual fuel oil (-25 kb/d) taking the brunt of the correction. Overall the greatest volumetric y-o-y declines were seen in jet/kerosene (-55 kb/d) and residual fuel oil (-50 kb/d). The former followed reports of warm weather; the latter in response to a dramatic fall in demand of bunker fuels as less freight cargoes travelled in March. Despite relatively strong survey data (*HSBC's Manufacturing PMI* rose to a one-year high of 52.0 in March), industrial oil demand fell heavily, with all the major industrial sectors, except construction, using less oil products than they did a year earlier. Modest demand growth is forecast to return in 3Q12 and 4Q12, supporting demand of around 2.2 mb/d in 2012 up 0.6% on the year despite the government announcing it plans to launch efforts to curb demand.

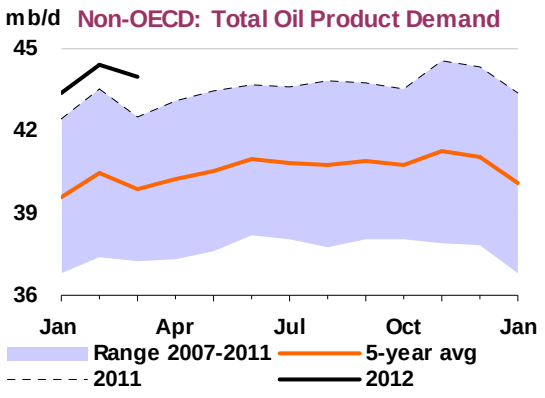
Non-OECD

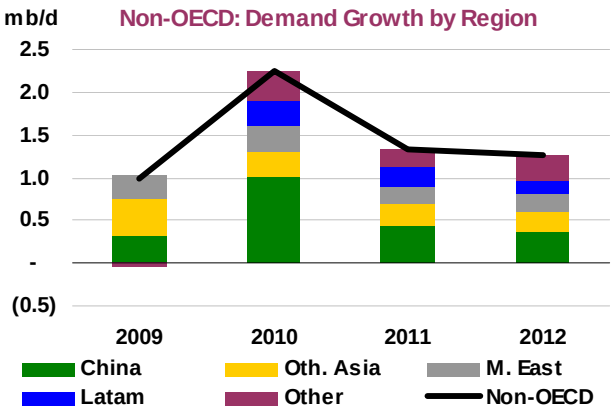
Consumption conditions remain strong in the non-OECD although demand growth remains significantly below the near-6% growth peak it demonstrated at the end of 2010. Preliminary March demand of 44.0 mb/d shows only a negligible slowdown, up by 3.4% on the year earlier. The relative resilience of the non-OECD demand trend may at first glance appear surprising, given oil prices are nearly a third higher against a weaker economic backdrop. However, demand in many markets is bolstered by the continued existence of end-user price subsidies, which cushion consumers from the impact of high international prices.

Non-OECD: Demand by Product
(thousand barrels per day)

	Demand			Annual Chg (kb/d)		Annual Chg (%)	
	Jan-12	Feb-12	Mar-12	Feb-12	Mar-12	Feb-12	Mar-12
LPG & Ethane	4,992	5,065	5,011	61	73	1.2	1.5
Naphtha	2,718	2,789	2,713	-70	34	-2.4	1.3
Motor Gasoline	8,523	8,744	8,441	533	440	6.5	5.5
Jet Fuel & Kerosene	2,771	2,691	2,682	-64	135	-2.3	5.3
Gas/Diesel Oil	13,470	13,857	13,857	466	595	3.5	4.5
Residual Fuel Oil	5,324	5,541	5,554	-125	-13	-2.2	-0.2
Other Products	5,577	5,726	5,741	91	189	1.6	3.4
Total Products	**43,375**	**44,413**	**44,000**	**892**	**1,453**	**2.1**	**3.4**

Transportation fuels continue to drive non-OECD demand, as rapidly expanding incomes not only make motorised transportation an increased possibility for many but subsidies also provide a level of price protection. Gasoline led the upside momentum, as consumption rose by an estimated 5.5% y-o-y in March to 8.4 mb/d. The potential for further strong gains remains, as total non-OECD gasoline demand is still less than in the world's largest consumer, the US.





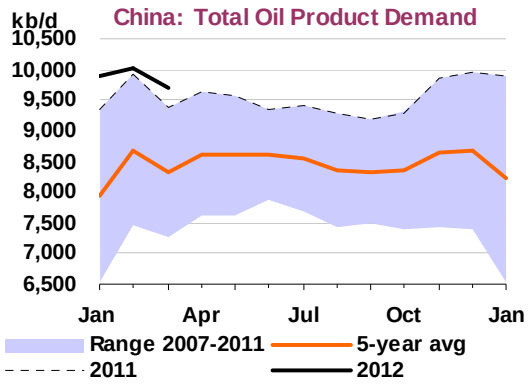
For the year as a whole, non-OECD demand is estimated at 44.8 mb/d, a gain of 2.9% or 1.2 mb/d over 2011. A resilient economic backdrop, with GDP growth of 5.6% assumed for 2012 and, for now price – cushioned consumers, combine to support the growth prediction. Notably strong expansions are foreseen in transportation fuels, with gasoline demand forecast to rise by 3.5% to 8.7 mb/d and gas/diesel consumption expected to gain 3.6% to 14.0 mb/d.

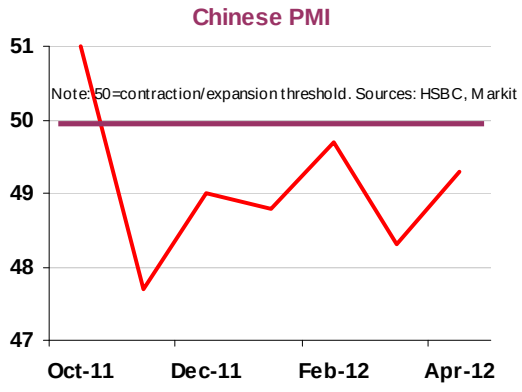
Non-OECD: Demand by Product
(thousand barrels per day)

	Demand			Annual Chg (kb/d)		Annual Chg (%)	
	2010	2011	2012	2011	2012	2011	2012
LPG & Ethane	4,734	4,969	5,091	235	122	5.0	2.5
Naphtha	2,680	2,652	2,675	-28	23	-1.1	0.9
Motor Gasoline	8,078	8,371	8,660	293	289	3.6	3.5
Jet Fuel & Kerosene	2,634	2,726	2,783	92	57	3.5	2.1
Gas/Diesel Oil	12,940	13,537	14,020	597	483	4.6	3.6
Residual Fuel Oil	5,467	5,508	5,549	41	41	0.8	0.7
Other Products	5,673	5,772	6,000	99	228	1.7	4.0
Total Products	**42,206**	**43,535**	**44,779**	**1,329**	**1,244**	**3.1**	**2.9**

China

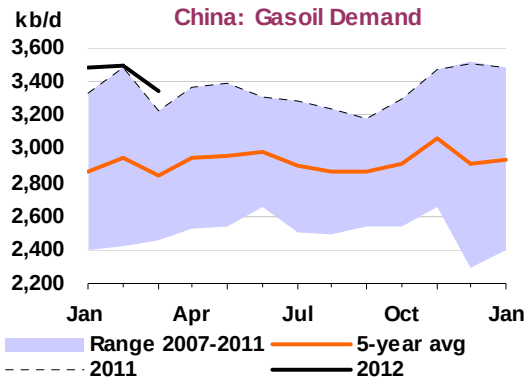
The latest apparent demand figures for **China**, (net product imports plus refinery output), show a slight uptick in demand growth following the low figures witnessed at the turn of the year. Estimates for 1Q12 demand point towards total product consumption of 9.9 mb/d, 3.4% (or 330 kb/d) higher than a year earlier after a relatively flat 4Q11 (up 0.3% y-o-y). Chinese demand growth remains muted in comparison to the double-digit percentage point gains seen at the beginning of 2011, with the most obvious decelerations seen in the industrially important gasoil and naphtha markets. Having risen by as much as 11.1% y-o-y in 1Q11, gasoil demand growth fell back to 2.8% in 1Q12 (to 3.4 mb/d) as manufacturing activity slowed. HSBC's PMI has endured six consecutive months of sub-50 readings through April, implying contracting sentiment in the manufacturing sector, albeit at a lesser degree (as the index has risen to 49.3 in April, from 48.3 in March). Naphtha consumption growth similarly fell, from 10.2% in 1Q11 to 0.8% in 1Q12 (to 1.2 mb/d), as demand from the previously buoyant petrochemical sector waned.

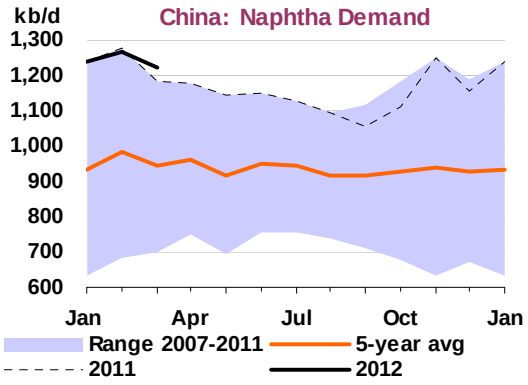




Reflecting the relative Chinese slowdown, production of electricity rose by its lowest non-holiday amount for a year in March. Electrical output is traditionally a good indicator of underlying Chinese demand trends, given the paucity of otherwise reliable data. China used 344 TWh of thermally-generated electricity in March, a gain of 7.3% on the corresponding period in 2011. Total electricity output also rose by just over 7% y-o-y in March, to 410.9 TWh, according to the National Bureau of Statistics.

Growth in the Chinese economy has steadily eased since 4Q10. According to the preliminary series from the China National Bureau of Statistics economic growth came out at 8.1% in 1Q12, a couple of percentage points below the consensus estimate of the markets. We are forecasting Chinese oil demand growth of 4.1% in 2012, to 9.9 mb/d, on the assumption that the Chinese economy will expand by 8.2%. Our demand estimate leans towards the lower end of the spectrum (with estimates stretching as high as 8%), as we believe the authorities' ability to reflate the economy will be contained by persistent inflationary pressures (as the consumer price index rose 3.6% y-o-y in March). Despite this, demand growth is forecast to accelerate through the year, to 4.8% by 4Q12 (to 10.2 mb/d), as the underlying economics solidify.





Transportation fuels will continue to underpin Chinese demand growth, at least in the short term, as any pending electric car revolution remains a long way off. Consumers in Shanghai, for example, bought a mere 40 electric cars in 2011 (*People's Daily*, 16 April), versus a government target for Shanghai of 1 000. The recharging infrastructure, meanwhile, remains insufficient with only 93 charging stations opened in Shanghai in 2011, against an intended 700. Near-4% demand gains are foreseen in both gasoil and gasoline, as growth is forecast to remain muted consequential on the weak economic backdrop, the recent price gains and relatively slow car sales (up 4.5% y-o-y in March, to 1.4 million, according to the Chinese Association of Automobile Manufacturers).

China: Demand by Product

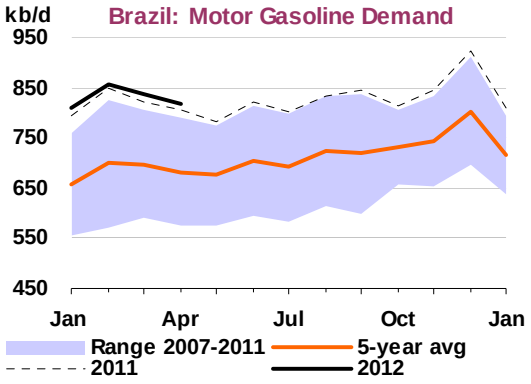
(thousand barrels per day)

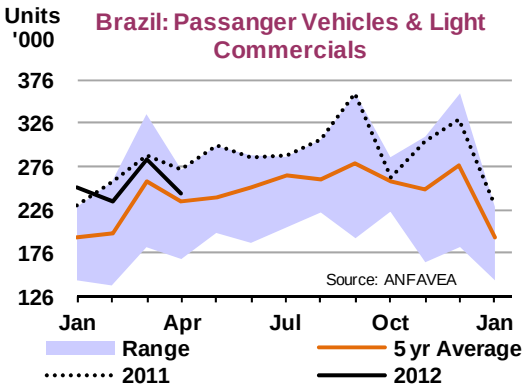
	Demand			Annual Chg (kb/d)		Annual Chg (%)	
	2010	2011	2012	2011	2012	2011	2012
LPG & Ethane	668	693	707	26	14	3.9	2.0
Naphtha	1,129	1,163	1,185	34	22	3.0	1.9
Motor Gasoline	1,546	1,655	1,729	109	74	7.1	4.4
Jet Fuel & Kerosene	368	402	413	33	11	9.0	2.8
Gas/Diesel Oil	3,143	3,341	3,471	198	130	6.3	3.9
Residual Fuel Oil	531	541	548	10	7	1.8	1.3
Other Products	1,685	1,717	1,849	32	132	1.9	7.7
Total Products	**9,069**	**9,511**	**9,902**	**442**	**390**	**4.9**	**4.1**

Other Non-OECD

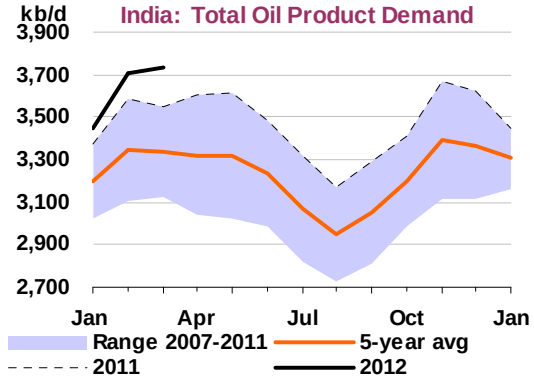
Gasoline fundamentals remained tight in **Brazil** amid firm demand, low supply of ethanol and high gasoline prices. Even though total gasoline consumption (including ethanol) grew by 2.5% y-o-y in February, the share of ethanol (by volume) remained at a low 38% of the total gasoline pool. The latter is on the back of low stocks of ethanol during the inter-harvest period and historically poor investment in the sector. Going forward, the long awaited 2012 sugarcane harvest in Brazil started with weather-related delays reducing output. However, the Sugarcane Industrial Union of Brazil (UNICA) said that laboratory tests on cane samples showed recoverable sugar content was 10-15% higher than last year.

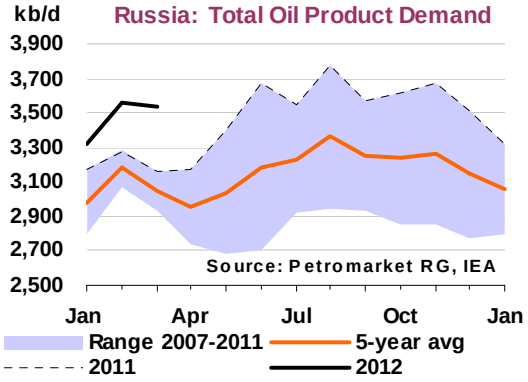
Also the industry union informed that around two thirds of the crushed cane was channelled to ethanol production due to price signals that favour the motor fuel over refining sugar. Effectively, the start of the season in late April brought a respite to ethanol consumers and helped tame the price of blended motor gasoline, highly demanded by flex-fuel vehicles. The economy is showing signs of slowing down, as sales of passenger vehicles and light commercials in Brazil came in flat during 1Q12 versus last year, while gasoline imports during the same period retraced slightly from the historically high level observed in December. In 2012, Brazilian total products demand is expected to be 2.8 mb/d, a year-over-year increase of 1.2%.





Preliminary estimates of **Indian** demand in March point towards a 5.1% y-o-y gain to 3.7 mb/d. Gasoil demand continues to show the strongest significant growth, as consumption rose by an estimated 10.3% y-o-y to 1.5 mb/d, supported by particularly strong growth from the automotive and power sectors. Subsidies on diesel consumption continue to distort demand trends in relation to fuel oil and gasoline, which are sold at market prices. Indian demand is forecast to rise by 3.4% in 2012, to 3.6 mb/d, as consumption expands supported by an economy forecast to grow by just under 7%.





Russian demand continues to surge thus far in 2012, with the second month of near-double-digit percentage growth y-o-y seen in March, taking total demand to 3.5 mb/d. The preliminary March estimate is 215 kb/d up on last month's forecast as strong growth in February proved to be more than a temporary aberration. Transportation fuels led the upside, with gasoline demand 12.4% higher at 750 kb/d and jet-kerosene up 9.9% at 250 kb/d. The Russian demand forecast has been significantly revised higher in recent months to reflect not just the recent flow of more bullish demand data, but also what now looks a stronger structural trend. Russian consumption is now forecast to average 3.6 mb/d in 2012, a 3.4% gain on 2011, whereas last year we were assuming a relatively flat 1% trajectory for 2012.

SUPPLY

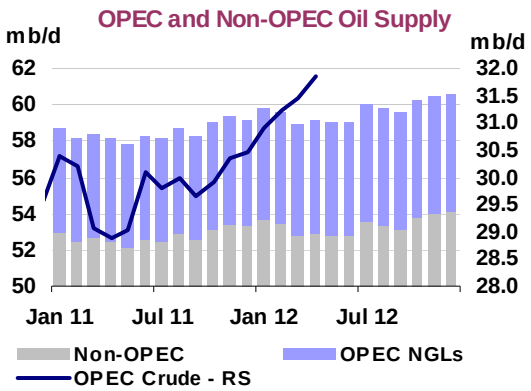
Summary

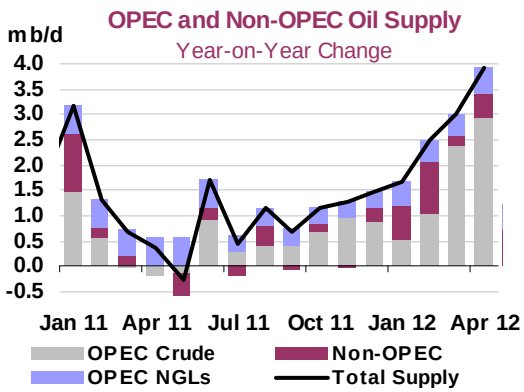
- **Global oil supply increased by 0.6 mb/d to 91.0 mb/d in April, with OPEC crude production accounting for more than 70% of the increase.** Compared to a year ago, global oil production stood 3.9 mb/d higher, 90% of which stemmed from increasing output of OPEC crude and NGLs.

- **Non-OPEC supply increased by 0.1 mb/d to 52.9 mb/d in April from the prior month.** A seasonal rise in biofuels output offset declining supply in the UK North Sea and at synthetic crude plants in Canada. Non-OPEC supplies are expected to grow by around 600 kb/d to 53.3 mb/d in 2012, 90 kb/d lower than last month's estimate due to downward revisions to Africa and Latin America. The outlook assumes that substantial production stoppages affecting the Sudans, Syria and Yemen persist for much of 2012.

- **OPEC crude supply in April rose by 410 kb/d, to 31.85 mb/d, with Iraq, Nigeria and Libya providing 85% of the increase.** The 'call on OPEC crude and stock change' has been raised by 0.2 mb/d to 30.9 mb/d for 3Q12 and by 0.4 mb/d to 30.7 mb/d for 4Q12, taking the 2012 average to 30.3 mb/d. OPEC's April effective spare capacity declined to an estimated 2.38 mb/d from 2.54 mb/d in March. For 3Q12, OPEC sustainable crude capacity is expected to increase by 330 kb/d, to 35.3 mb/d.

- **OPEC has increased output for seven months running and volumes are now nearly 3 mb/d above April 2011 levels.** Higher OPEC production has, in part, offset constrained non-OPEC supplies stemming largely from unplanned outages**.** OPEC's Gulf producers also appear to have ramped up output ahead of the anticipated disruption in Iranian crude flows in coming months as the EU's 1 July oil embargo nears.





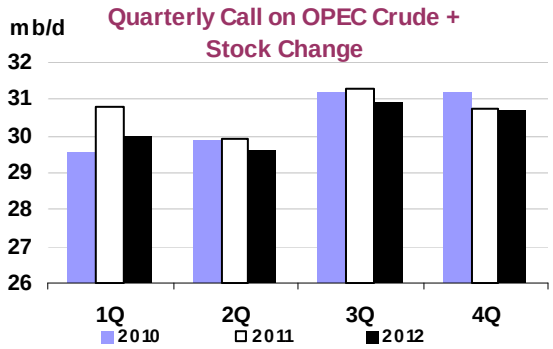
All world oil supply figures for April discussed in this report are IEA estimates. Estimates for OPEC countries, some US states, and Russia are supported by preliminary April supply data.

Note: Random events present downside risk to the non-OPEC production forecast contained in this report. These events can include accidents, unplanned or unannounced maintenance, technical problems, labour strikes, political unrest, guerrilla activity, wars and weather-related supply losses. Specific allowance has been made in the forecast for scheduled maintenance in all regions and for typical seasonal supply outages (including hurricane-related stoppages) in North America. In addition, from July 2007, a nationally allocated (but not field-specific) reliability adjustment has also been applied for the non-OPEC forecast to reflect a historical tendency for unexpected events to reduce actual supply compared with the initial forecast. This totals –200 kb/d for non-OPEC as a whole, with downward adjustments focused in the OECD.

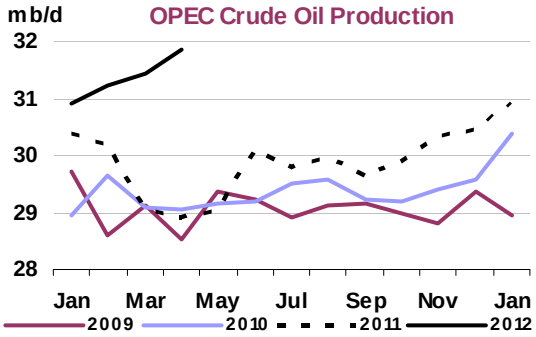
OPEC Crude Oil Supply

OPEC crude supply in April rose by 410 kb/d, to 31.85 mb/d, with Iraq, Nigeria and Libya providing around 85% of the increase. Indeed, higher Iraqi exports accounted for half of the incremental supply. Angola, Kuwait and the UAE also posted smaller month-on-month increases.

OPEC producers have increased output for seven months running and volumes are now nearly 3 mb/d above April 2011 levels. Higher OPEC production has, in part, offset constrained non-OPEC supplies stemming largely from unplanned outages, now forecast to average a steep 1.3 mb/d in 2Q12 (see *Non-OPEC Supply*). OPEC's Gulf producers also appear to have ramped up output to meet increased customer demand in response to the potential disruption in Iranian crude flows in coming months as the EU's 1 July oil embargo nears. EU and US sanctions are expected to ultimately impact upon 800 kb/d to 1 mb/d of Iranian exports compared to 2011 levels.



Entire series based on OPEC Composition as of January 2009 onwards (including Angola & Ecuador & excluding Indonesia)



Entire series based on OPEC Composition as of January 2009 onwards (including Angola & Ecuador & excluding Indonesia)

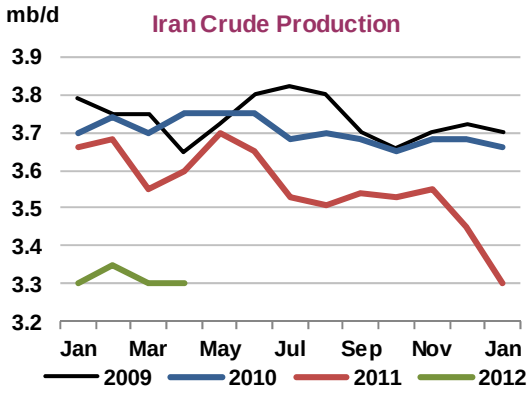
The 'call on OPEC crude and stock change' has been raised by 0.2 mb/d to 30.9 mb/d for 3Q12 and by 0.4 mb/d to 30.7 mb/d for 4Q12. For 2012 as a whole, the 'call' is raised by 0.2 mb/d, to 30.3 mb/d.

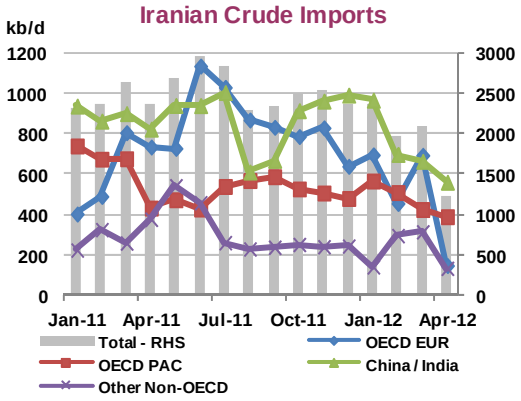
OPEC's 'effective' spare capacity declined to an estimated 2.38 mb/d from 2.54 mb/d in March. A baseline downward adjustment to Qatar crude output and capacity levels by an average of 75 kb/d for 2011-2012 also contributed to the revision. For 3Q12, OPEC sustainable crude capacity is forecast to increase by 330 kb/d, to 35.3 mb/d, with Iraq and Angola bringing on stream new production accounting for half the incremental barrels and smaller contributions from Nigeria, Libya, Kuwait and the UAE. OPEC is now producing nearly 2 mb/d above its collective target of 30 mb/d agreed at its December 2011 meeting. The producer group will next meet 14 June in Vienna to discuss the market outlook and review output targets.

Iranian crude output was unchanged at 3.3 mb/d in April. While some of the country's main buyers, including Japan and South Korea, are gradually reducing Iranian crude imports, other countries such as Turkey and South Africa appear to have ramped up imports ahead of the 1 July sanctions deadline. Latest tanker data show a steep drop in Iranian imports by OECD Europe countries in April but data are highly preliminary. Traders say Iranian crude exports in April were estimated at as much as 1.8 mb/d, although this does not necessarily conflict with lower levels of imports which we show overleaf. Tracking Iranian exports has become increasingly difficult following reports that the National Iranian Tanker Company (NITC) ordered its vessels to shut-off their communication beacons (*See Freight, 'Iranian Tankers Play Hide & Seek'*).

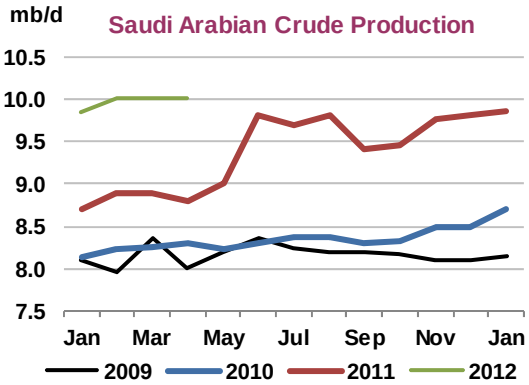
In addition, a wide range of estimates have emerged for Iranian crude held in floating storage. It appears that much of the unsold March production ended up in onshore and floating storage in April. Estimates of crude held in floating storage at end-April ranged from 20-35 mb compared with 8 mb in March. That is equivalent to a rise of between 450 kb/d-800 kb/d held offshore. A further 20-25 mb has reportedly been stored at onshore facilities in recent months.

Adding to the confusion, NITC is reported to be actively shuttling crude from Kharg Island to the Suez-Mediterranean (Sumed) facility at Ain Sukhna, Egypt so that customers, unable to get insurance for Iranian ports, pick up barrels CIF from the other end of the Sumed pipeline at Sidi Kerir in the Mediterranean. Indeed, securing insurance for tanker movements before the sanctions go into full force has proved one of the most challenging aspects of the sanctions. The UK is reportedly planning to request that the EU postpone by six months the ban on insurance coverage for tankers carrying Iranian oil, arguing that more time is needed for companies to find alternative coverage, which could lead to a sudden jump in costs as the July deadline nears. While the bulk of Iranian exports go to Asia, the impact of the measure is expected to have a large impact on London's marine insurance market.



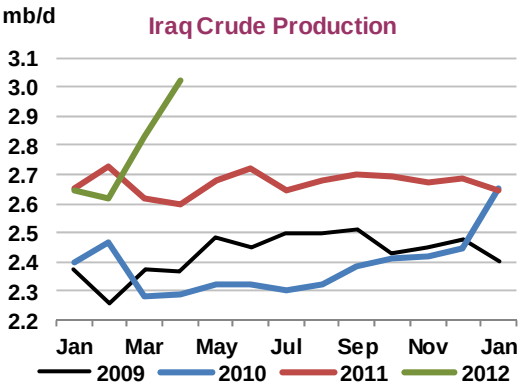


Saudi crude oil supply in April was unchanged at an estimated 10 mb/d. Oil Minister Ali al-Naimi reported in early May that the Kingdom holds 80 mb in inventories. Approximately 10 mb is stored near consumer markets in Okinawa, North West Europe and Sidi Kerir, with the remaining inside the Kingdom. Crude supplies are on track to go above 10.1 mb/d in May, according to tanker loading data and volumes may rise further in June given the steep price discounts announced for mainstream Arab Light crude sold into Asia. Some of these liftings may be from storage.



Saudi Aramco slashed Arab Light prices for Asian buyers by $1.30/bbl for June. Customers expected Aramco to lower prices, given markets are relatively well supplied and the narrowing of Dubai crude's backwardation for prompt sales. Nonetheless, the cuts were steeper than anticipated and are likely to prompt some customers to increase liftings in June on improved margins.

Iraqi crude oil production in April rose by 195 kb/d to 3.03 mb/d, the highest level in several decades. Oil exports rose to 2.51 mb/d. Basrah shipments were up by around 200 kb/d to 2.12 mb/d, with increased exports from the new Single Point Mooring (SPM). A second SPM was inaugurated in April, but both SPMs are operating well-below capacity given constraints with pumping capacity on trunk lines from producing fields and lack of storage tanks. Near term, export capacity from the two SPMs combined is expected to be capped at 300 kb/d versus nameplate capacity of 1.8 mb/d until infrastructure problems can be resolved.



Exports of northern Kirkuk crude were 400 kb/d in April, up a marginal 5 kb/d from March. Exports from the Kurdish region, which feed into the Kirkuk crude stream, were halted in early April due to ongoing payment disputes between Baghdad and the Kurdish Regional Government (KRG). To date, little progress in resolving the complex issues has been reported.

Crude supply from **Qatar** was unchanged in April at 750 kb/d after March estimates were revised down from an earlier 810 kb/d. Qatari Oil Minister Mohammed al-Sada production at the Al-Shaheen field has been constrained to around 300 kb/d since 2009 due to reservoir complications, despite the major capacity expansion of the field to some 550 kb/d. As a result, Qatar's production and capacity have been lower than reported and revised down by around 75 kb/d for 2011-12 and 60 kb/d for 2009-2010.

OPEC Crude Production

(million barrels per day)

	Feb 2012 Supply	Mar 2012 Supply	Apr 2012 Supply	2Q12 Sustainable Production Capacity[1]	Spare Capacity vs April 2012 Supply	3Q12 Average Sustainable Production Capacity	3Q12 Production Capacity Versus 2Q12 Capacity
Algeria	1.14	1.14	1.14	1.18	0.04	1.18	0.00
Angola	1.76	1.73	1.75	1.90	0.15	2.00	0.10
Ecuador	0.48	0.48	0.48	0.52	0.04	0.54	0.02
Iran	3.35	3.30	3.30	3.51	0.21	3.45	(0.07)
Kuwait[2]	2.70	2.72	2.74	2.84	0.10	2.89	0.05
Libya	1.29	1.35	1.40	1.48	0.08	1.51	0.03
Nigeria[3]	2.10	2.05	2.15	2.55	0.40	2.59	0.04
Qatar	0.75	0.75	0.75	0.75	0.00	0.75	0.00
Saudi Arabia[2]	10.00	10.00	10.00	11.88	1.88	11.88	0.00
UAE	2.59	2.65	2.67	2.75	0.08	2.79	0.04
Venezuela[4]	2.46	2.44	2.44	2.53	0.09	2.53	0.00
OPEC-11	**28.61**	**28.61**	**28.82**	**31.89**	**3.07**	**32.09**	**0.21**
Iraq	2.62	2.83	3.03	3.06	0.03	3.18	**0.12**
Total OPEC	**31.23**	**31.44**	**31.85**	**34.94**	**3.10**	**35.27**	**0.33**
(excluding Iraq, Nigeria, Libya and Iran)					*2.38)*		

1 Capacity levels can be reached within 30 days and sustained for 90 days.
2 Includes half of Neutral Zone production.
3 Nigeria's current capacity estimate excludes some 200 kb/d of shut-in capacity.
4 Includes upgraded Orinoco extra-heavy oil assumed at 370 kb/d in April.

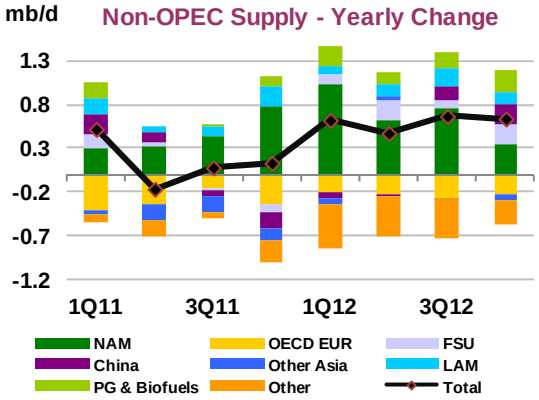
Libyan production in April rose a further 50 kb/d to 1.4 mb/d from a revised 1.35 mb/d for March. Output is edging closer to its pre-civil war average of 1.6 mb/d in 2010 from just 460 kb/d in 2011. Production from the Sarir and Mesla fields remains below capacity while repair and maintenance work takes place, which may now not be completed for another month. Protesters, calling for more transparency on how the new government has spent oil revenues, led to Libya's largest oil company, Arabian Gulf Oil Co (AGOCO), to shut-in some of the company's 360 kb/d production for more than two weeks in late April/early May. Protesters effectively closed AGOCO's headquarters on 23 April, which forced the company to shut-in production of around 30 kb/d. Security forces retook the building on 9 May.

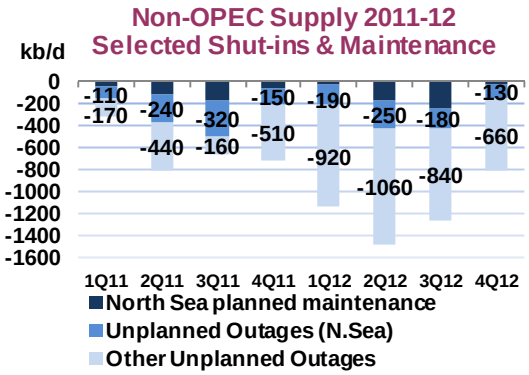
Nigerian crude output rose by 100 kb/d to 2.15 mb/d, largely due to the steady ramp up in production from the deepwater offshore 180 kb/d Usan field. However, Shell was forced to shut-in 60 kb/d of Bonny Light crude and declare *force majeure* on 4 May due to theft and illegal bunkering along the Nembe Creek trunk line. New production in **Angola** also boosted April output, up by 25 kb/d to 1.75 mb/d. Output from the 220 kb/d Pazflor deep-water complex is estimated to have reached around 200 kb/d. Angolan supplies are expected to decline again in June due to planned maintenance work at the massive 250 kb/d deep-water Girassol complex. Operator Total said output would be reduced in June in order to link new volumes from a satellite field, aimed at stemming decline rates. Total previously linked new wells, such as those from the nearby Jasmim field, to Girassol in order to maintain production levels.

Non-OPEC Overview

Non-OPEC supply fell by around 600 kb/d in March amid lower expected US NGL output and ongoing production disruptions affecting Australia, Colombia, Brazil, the North Sea, the Middle East, and Africa. Yet overall, supplies grew by 180 kb/d in March y-o-y and were also 600 kb/d higher on a quarterly basis in 1Q12 y-o-y. April output is expected to have improved marginally, and non-OPEC supplies should post another annual gain of 470 kb/d in 2Q12. Non-OPEC supplies should grow by around 600 kb/d to 53.3 mb/d in 2012, 90 kb/d lower than last month's estimate. In short, growth from the Americas offsets longstanding outages affecting Middle East and African production. US crude production has risen above 6.0 mb/d in 1Q12 for the first time in over 13 years as companies employ horizontal drilling and hydraulic fracturing to liquids-rich shale and carbonate plays. Annual production growth in North America is expected to average 0.6 mb/d for the remainder of the year.

Unplanned outages should increase in the second quarter of this year to around 1.3 mb/d, much higher than any quarterly reading in 2011 and 200 kb/d worse than 1Q12. The outages are assumed to abate slightly in the third and fourth quarter of 2012, but they do not disappear altogether and constrain non-OPEC supply growth to around 700 kb/d in 2H12. As discussed last month, outages in Syria, Yemen, Sudan, and a hurricane allowance in the US comprise the majority of the 1.0 mb/d in unplanned outages that are assumed for 3Q12.



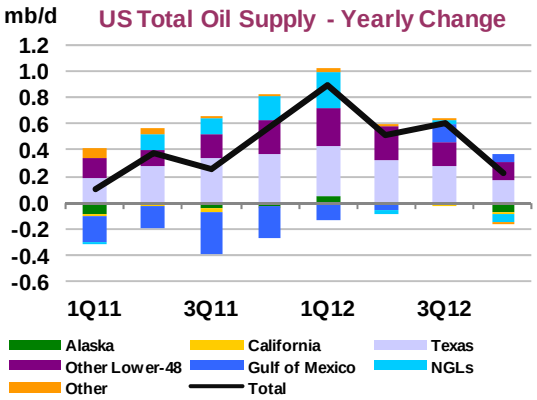


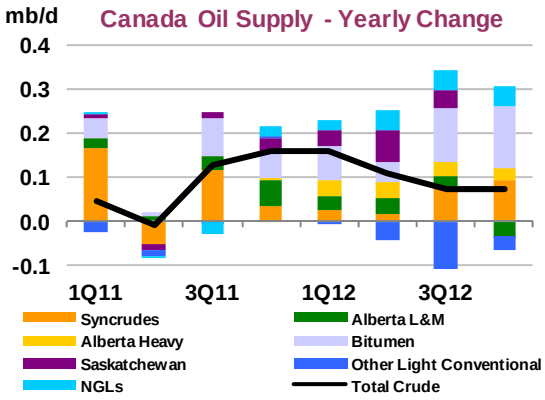
The major source of the revision to non-OPEC supplies compared to last month is related to the escalation of the tensions between Sudan and South Sudan, with South Sudanese forces targeting the 40-60 kb/d Heglig field in Sudan. With no evidence of trucked volumes making their way south, estimates for oil production have also been cut in 2Q12 and 3Q12. Elsewhere in non-OECD countries, Brazilian output is faltering slightly and expectations have been reduced by 50 kb/d in 2012. Canadian output is reduced by 10 kb/d on balance in 2H12 to take into account turnarounds at offshore facilities.

OECD

North America

Canada—January actual: Canadian oil output fell from a record high of 3.8 mb/d in December 2011 to an estimated 3.6 mb/d in March due to unplanned maintenance at synthetic crude oil production facilities. Synthetic crude output fell to 670 kb/d in April but will likely rebound to 780 kb/d in May. Production is stabilising from Alberta Light and Medium output as well as from Saskatchewan, and we have increased expectations during 2H12 by 30 kb/d. This upward revision has been offset by taking into account planned maintenance at Husky's Sea Rose FPSO and Nexen's Terra Nova and White Rose FPSOs. The Sea Rose maintenance will last 125 days, and the Terra Nova and White Rose FPSO maintenance will last for slightly longer. All told, this maintenance is expected to reduce 3Q12 production at the Terra Nova, Hibernia, and White Rose fields to no more than 150 kb/d, which is around 130 kb/d less than last year. The maintenance will not dent the resilient growth in other Canadian production during 2H12, with total Canadian oil production increasing by 6% (210 kb/d) to 3.8 mb/d.





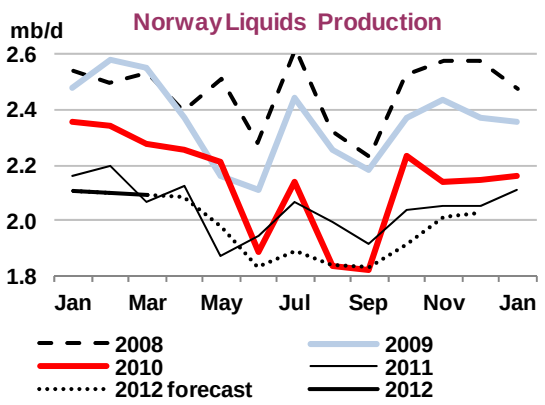
US – March preliminary, Alaska actual, other states estimated: Production from light tight oil formations and the Gulf of Mexico increased US crude production in March to 6.1 mb/d. Crude production grew by more than 11% (590 kb/d) year-on-year in 1Q12. With the exception of 3Q09, when the Gulf of Mexico rebounded strongly from Hurricanes Gustav and Ike the prior year, US crude production last quarter increased at the highest annual pace since at least 1994. The breakneck pace of growth is expected to moderate slightly in upcoming months due to turnarounds at Gulf of Mexico facilities in 2Q12 and the hurricane season. NGL supplies are expected to have declined due to fractionator maintenance in March and 2Q12 to around 2.2 mb/d, from record levels of 2.3 mb/d in 4Q11. Upward revisions to Texas and other Lower-48 oil production raised US liquids output to 8.7 mb/d in 2012, 0.6 mb/d higher than in 2011.

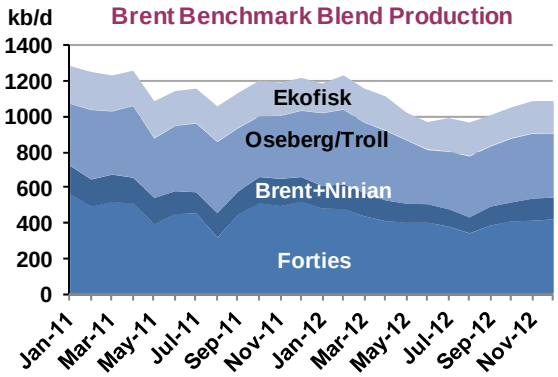
North Sea

North Sea crude and condensate production is expected to fall by 300 kb/d in 2Q12 year-on-year to average 2.7 mb/d due to seasonal and unplanned maintenance. Production is expected to fall further by 180 kb/d to 2.5 mb/d in 3Q12, potentially amplifying the relative strength in benchmark Brent prices versus other grades. Output of crude streams linked to Dated Brent prices are expected to fall by 130 kb/d (-12%) from 3Q11 to around 960 kb/d in 3Q12. Some upside to these 3Q12 estimates exists if producers decide to undergo seasonal maintenance earlier or later than planned.

UK—March preliminary, February actual: Forties output fell by 40 kb/d in March, contributing to a decline in UK offshore crude output of 60 kb/d to average 1.0 mb/d. Based on preliminary loading schedules, output is expect to fall by 160 kb/d in 2Q12 from the prior quarter and by 20% from the prior year. The Buzzard field went offline for several days in April, due to a bearing failure in one of the gas compressors, which results in three deferred cargoes for May. We assume that because of Buzzard's lingering operational issues and unconfirmed maintenance in 3Q12, as well as the Elgin/Franklin/Shearwater leak, Forties production will average only 340 kb/d during 2H12 (60 kb/d less than 2H11). In this area production is revised downwards from last month by 20 kb/d in 2H12 to take into account lower expectations from the Erskine and Callanish fields. Although Apache brought online the long-awaited Bacchus field in April, we have tempered our expectations slightly and believe the field's output level is unlikely to exceed 12 kb/d by the end of the year, before increasing to 18 kb/d during 2013. In sum, UK oil output should average around 950 kb/d in 2012, around 15% below 2011. Third quarter total production is expected to decline by 11% y-o-y.

Norway—March preliminary, February actual: Total liquids output averaged around 2.1 mb/d during the last six months, and sustained this level in large part from rising NGL production. We expect that production will fall to around 2.0 mb/d in May with the onset of some seasonal maintenance and from field problems at Ormen Lange. In late March, BP shut in production at its Valhall and Hod fields (a total capacity of around 35 kb/d) due to unplanned maintenance at a compressor unit, but the fields returned to normal rates earlier than expected in mid-April. Since last month, we have increased the outlook for NGLs during 2H12 by around 20 kb/d due to higher than expected historical output. Gjøa's crude and

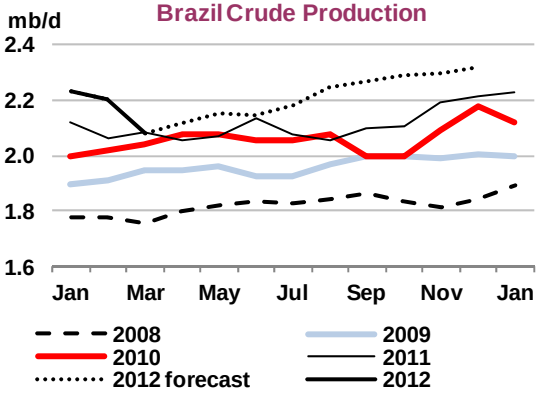




NGL output has exceeded expectations and has now increased to around 100 kb/d since the field came online in November 2010. Oselvar is now onstream, adding around 15 kb/d via a tieback to the Ula field. The positive revisions are partially offset by a field delay at BP's 85-kb/d Skarv, now expected online in 4Q12. In sum, Norway's liquids production is revised up by around 10 kb/d in 2012, posting a 3% decline from 2011 to 2.0 mb/d.

Non-OECD

Latin America



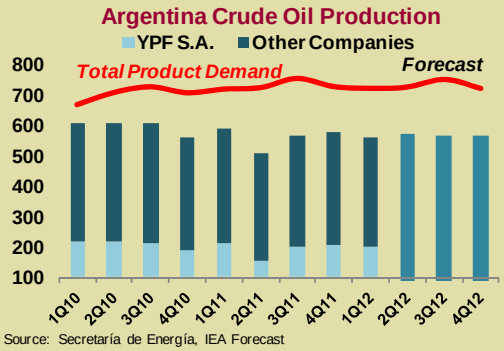
Brazil – March actual: Brazilian crude and condensate production fell by over 100 kb/d in March to 2.1 mb/d. Production from the Marlim, Marlim Sul, Roncador and Frade fields in the Campos basin fell by almost 100 kb/d to 750 kb/d. The fields account for around 40% of Brazil's 2.1 mb/d output, and the monthly decline constrained Brazil's year-on-year growth to the prior year's level. We have slightly tempered our expectations from the Marlim and Marlim Sul fields to take the poor output performance into account. Brazilian crude production is expected to increase by 100 kb/d in 2012 to 2.3 mb/d. Updated Agriculture Ministry (MAPA) March and April biofuels production data was not available at the time of publishing so the biofuels forecast remains largely unchanged from last month.

Africa

South Sudanese forces (the SPLA) occupied and then retreated from the Heglig field in **Sudan** for about a week in April in an escalation of the conflict between the two countries. GNPOC operates the fields in Blocks 1, 2, and 4 in Sudan and South Sudan, and the company produced around 120 kb/d from them in 2011. Sudapet estimated the group of fields (in S. Sudan inclusive) produced only 60 kb/d in March 2012. We remain sceptical on the volumes currently flowing despite media reports that production from the Heglig field in Sudan has been restarted. Company and tanker tracking estimates will help indicate how much oil is actually being sold but these will be delayed. News reports indicated that the field sustained damage by both sides, meaning that a slow restart is likely. The military intensification is also a worrisome sign that increases the likelihood of continued conflict unless the two sides agree on the border and revenue sharing. Sudan and South Sudan's production is expected to average just 70 kb/d in 2Q and 3Q12, almost 400 kb/d less than before the countries separated.

Milking a *Vaca Muerta*: Argentina's YPF Expropriation Clouds Investment Climate

In the latest instance of resource nationalism in Latin America, on 16 April, Argentina's President Cristina Fernandez de Kirchner announced that the government was seizing control of Spanish firm Repsol's share of YPF S.A. The government now holds a 51% share in YPF (of which the oil producing Argentine provinces will hold 49%). Repsol's current 57.4% stake in the company will be reduced to 6.4%. YPF accounts for a third of the country's crude oil production of 560 kb/d. The government has declared that hydrocarbon self-sufficiency is in the public interest, and therefore other players in Argentina will be affected in the government's pursuit of that self-sufficiency.



Source: Secretaría de Energía, IEA Forecast

The government also created a Hydrocarbons Federal Council which will regulate the sector and make sure that the government's plans are being followed. The government takeover clouds the investment climate for international companies that might otherwise have been attracted to unconventional resources in the Vaca Muerta (meaning 'dead cow') and other plays. Absent foreign investor guarantees of contract sanctity, the move could deepen Argentina's product import needs in the short and medium term.

Motivating Factors. Fernandez has said that the expropriation was necessary due to a lack of investment and decreasing oil and gas production from YPF. Argentina was forced to import $9.4 billion in fuel last year as domestic crude and product production declined. Domestic liquids production has declined by an average of 3% per year over the last decade. Producers must pay a tax on exports, and refinery utilization rates suffered as refiners lost money on selling their products at subsidised prices. Argentina had been paying in kind for some of its fuel supplies from Venezuela with farm and manufactured products, and the country became a net oil importer in 2010. New trade restrictions that took effect on 1 February have exacerbated the problem this year, with key fuel supplier YPF saying the changes could mean it will face problems in importing products. Short term financial gains may partially underpin the move as in previous instances. At the height of the global financial crisis, the government nationalised around $30 billion in private pension funds and renationalised airline Aerolineas Argentinas, which had been privatised in the 1990s. The government believes that by reining in this private capital it will aid Argentina's rising fiscal deficit and deteriorating economic situation.

Resources and Reserves of the Vaca Muerta Formation

	Oil & Condensate (mb)	Total (mboe)
Prospective Resources*	6,128	21,167
Contingent Resources*	1,115	1,525
Possible	33	48
Probable	25	35
Proven	23	33
Total 3P Reserves	81	116

Source: Ryder Scott.

*Contingent resources are potentially recoverable hydrocarbon quantities based on previous exploratory activity that includes discoveries. These resources cannot be considered currently commercial and could be economically viable. Prospective resources are potentially recoverable hydrocarbon quantities based on an area where preliminary data is available but where no discovery wells have been drilled.

Vaca Muerta's resources. The Vaca Muerta formation spreads over an area of about 30 000 square kilometres (7.4 million acres), of which YPF holds a 40% interest. To apply the shale experience of the US to Argentina's geology, Repsol chose the formation in the Neuquén basin as the one with the most promise and spent around $300 million on mapping, exploration, and initial development. By January 2012, the company had drilled 28 new wells in the area. The formation contains around 21.2 billion barrels of oil equivalent of hydrocarbon prospective resources, as independently estimated by Ryder Scott. Contingent oil resources (those estimated to be potentially recoverable based on exploration to date) total around 1.1 billion barrels. For comparison Statoil and Lundin found 1.7-3.3 billion barrels of contingent oil resources at Avaldsnes and Aldous Major in the North Sea last year. The firm indicated that 77% of the area contains oil, with the rest containing dry and wet gas. At the time, Repsol indicated that about $28 billion for wells and 60 additional drilling equipment units would be needed to realise the resource's full potential, possibly raising Argentina's current output levels by 50%. A Repsol press release estimated that the play was around three times as thick but twice as high in pressure as the Eagle Ford unconventional play. Apache also owns 1.7 million acres in the Vaca Muerta. The company is producing around 0.9 bcm (89 mmcf/d) of natural gas and plans to drill several wells in 2012. But, Apache has said that the rig market is tight in the Neuquén, and large scale development requires significant additional infrastructure and human resources. ExxonMobil also hopes to test a well it drilled in 2011 in the Vaca Muerta.

Milking a *Vaca Muerta* *(continued)*

Resources to reserves. The government's political interventions are unlikely to reduce the country's import needs, and it faces a steep challenge in achieving a short-term reduction in imports. The decision to expropriate Repsol's share, rather than taking control of the share through the open market, is bound to negatively influence foreign investors' decisions in Argentina. Looking forward, Argentina will need continued investment and an improved regulatory framework to turn resources into reserves. Vaca Muerta contains only 81 million barrels of 3P oil reserves, but much further exploration is needed to confirm the 7.2 billion barrels of resources assessed by Ryder Scott. YPF in particular will face higher borrowing costs from a downgraded Moody's rating. The government may claim production is showing short term gains; however, higher state influence is bound to direct capital to lower-return projects, companies will face higher borrowing costs, and a tight rig market is likely to make exploration and development in the Vaca Muerta costly for YPF and other players.

Major Participants in Argentina's Oil Sector

	Liquids Production 2011 (kb/d)	Liquids Resource Base (mb)[1]
YPF*	275	2,640
BP^	75	747
Sinopec	40	320
Chevron	35	201
Petrobras	35	130
Pluspetrol	28	90
CNOOC	23	249
Bridas Energy	23	249
Apache	10	45
Total	8	10
Wintershall	8	67
Shell	2	11
ExxonMobil	2	14
Total Argentina	**670**	**20,800**

Source: Rystad Energy. IEA for Total production

1. Remaining resources. Figures do not include prospective (undiscovered) resources. Includes liquids from gas formations. Equity share of resources.
*Repsol maintains a 6.4% share in YPF.
^BP is trying to sell its 60% share in Pan American Energy

A cloudy outlook. In the near term we expect to see companies commit to new investments to secure their positions with the government. The government's move also adds an element of fear to producers and service sector players in Argentina that they could also suffer from increased scrutiny by the government over their commercial decisions. It has also raised the ire of the US, Mexico, and the EU and is sure to affect Argentina's trade relations. Finally, the lack of a clear path forward on how the government allocates the expropriated shares sets the stage for a possible conflict amongst provinces and with the central government. Absent guarantees of stability from the government, producers are unlikely to risk significant investment to develop shale deposits in the Neuquén basin and to employ costly technologies to enhance existing production.

Middle East

Production from **Oman** fell by 30 kb/d in February to 870 kb/d, ahead of expected growth in coming months from enhanced oil recovery. Our forecast still assumes that Oman will fall short of the government's 1 mb/d target for the near future as water shortages hinder the amount of steam that can be used for steam-flooding. Oman is forecast to increase crude and condensate production by 20 kb/d to 910 kb/d in 2012.

Operators did not report any improvement to the export and security situation in **Yemen** in April and early May. Since 2010, output had been cut in half to 150 kb/d by 1Q12 as labour unrest and sabotage have prevented producers from exporting oil. Al Qaeda's branch in Yemen has exploited weakening government control The continued targeting of the 270-mile Marib oil pipeline has shut in production in Block 18, and Oxy is threatening a pullout if the government cannot guarantee security. Total's LNG facilities have been targeted twice in the last month, and some of its security-related officials were wounded. The output forecast for 2012 is lowered by 20 kb/d to 140 kb/d to take into account the worsening situation.

Former Soviet Union

Russia—April preliminary: Although Russian crude production fell by 20 kb/d in April from the prior month, production is still up by 1.1% compared to the prior year. Gazprom NGL production fell slightly in April, dragging down growth in crude output. Lukoil has successfully maintained production at its Western Siberian fields at around 880 kb/d while its Yuzhno Khylchuyu field has fallen below 40 kb/d after being at 60 kb/d in September 2011. TNK-BP's output increased by 10 kb/d from rising production at Verkhnechonskoye and the Uvat group of fields. The company mitigated the annual decline rate at the legacy Samotlor field to 6.2% in April, an improvement from the twelve-month average of 7.4%.

FSU net exports rebounded by 160 kb/d to 9.11 mb/d in March but still remained 470 kb/d lower than a year ago. In contrast to recent trends, the month-on-month increase was led by rising product shipments while exports of crude oil fell by 40 kb/d to 6.4 mb/d. Kazakhstani deliveries fell as domestic refinery runs rose. Indeed, Kazakh producers opted to reduce shipments sent via the Transneft network by a combined 175 kb/d, with Novorossiysk (-190 kb/d m-o-m) bearing the brunt of these cuts, as more oil was railed to outlets such as the Ukrainian port of Odessa (+ 60 kb/d m-o-m). A reduction in Kazakh exports, largely resulting from work upgrading the CPC pipeline, is also a factor contributing to the 280 kb/d year-on-year contraction in Black Sea exports. Higher Primorsk shipments raised Baltic port exports by 70 kb/d in March. Meanwhile, the much-delayed Russian Baltic port of Ust Luga finally exported its first cargo at the end of March. Shipments from the port are now expected to be ramped up quickly from 90 kb/d in April to 400 kb/d in May.

Product shipments rose by 140 kb/d to 2.8 mb/d largely as a result of a 120 kb/d increase in fuel oil, most of which was delivered to Northern Europe and the US. However, this rise in total product liftings is anticipated to be short-lived as refinery maintenance is set to peak in April. Russian refiners are expected to ensure that domestic deliveries, especially of 10-ppm diesel, which they are struggling to produce in sufficient quantity, are maintained at the expense of exports so as to avoid a repeat of last year's light product shortages.

FSU Net Exports of Crude & Petroleum Products

(million barrels per day)

	2010	2011	2Q2011	3Q2011	4Q2011	1Q2012	Jan 12	Feb 12	Mar 12	Latest month vs. Feb 12	Latest month vs. Mar 11
Crude											
Black Sea	2.10	1.93	1.87	1.87	1.92	1.83	1.83	1.89	1.78	-0.11	-0.28
Baltic	1.60	1.50	1.57	1.37	1.56	1.48	1.53	1.42	1.48	0.07	-0.09
Arctic/FarEast	0.74	0.67	0.69	0.65	0.65	0.62	0.63	0.63	0.61	-0.03	-0.10
BTC	0.77	0.70	0.76	0.69	0.64	0.73	0.69	0.74	0.75	0.00	-0.04
Crude Seaborne	**5.22**	**4.80**	**4.89**	**4.58**	**4.77**	**4.66**	**4.68**	**4.69**	**4.62**	**-0.07**	**-0.51**
Druzhba Pipeline	1.13	1.17	1.12	1.18	1.24	1.24	1.23	1.25	1.24	-0.01	0.08
Other Routes	0.42	0.53	0.54	0.54	0.50	0.51	0.50	0.50	0.54	0.04	-0.01
Total Crude Exports	**6.76**	**6.50**	**6.55**	**6.30**	**6.51**	**6.42**	**6.41**	**6.44**	**6.40**	**-0.04**	**-0.43**
Of Which: Transneft[1]	4.00	4.18	4.16	4.09	4.31	4.18	4.21	4.20	4.12	-0.08	-0.21
Products											
Fuel oil[2]	1.54	1.58	1.82	1.59	1.46	1.50	1.64	1.38	1.50	0.12	0.10
Gasoil	0.88	0.77	0.79	0.72	0.69	0.85	0.83	0.82	0.90	0.08	-0.02
Other Products	0.43	0.43	0.53	0.36	0.33	0.42	0.44	0.45	0.38	-0.07	-0.13
Total Product	**2.85**	**2.77**	**3.14**	**2.66**	**2.49**	**2.78**	**2.90**	**2.65**	**2.79**	**0.14**	**-0.04**
Total Exports	**9.61**	**9.27**	**9.68**	**8.96**	**9.00**	**9.19**	**9.31**	**9.09**	**9.18**	**0.10**	**-0.47**
Imports	0.07	0.08	0.08	0.10	0.08	0.11	0.12	0.13	0.07	-0.07	0.00
Net Exports	**9.55**	**9.19**	**9.60**	**8.86**	**8.92**	**9.08**	**9.19**	**8.95**	**9.11**	**0.16**	**-0.47**

Sources: Argus Media Ltd, IEA estimates

[1]Transneft data exclude Russian CPC volumes.

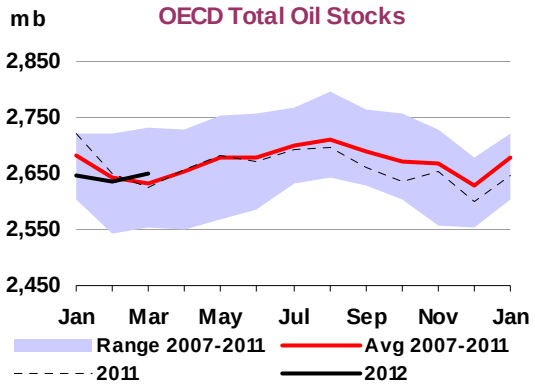
[2]Includes Vacuum Gas Oil

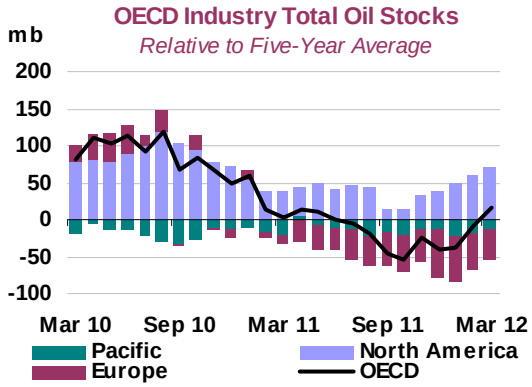
OECD STOCKS

Summary

- **Total OECD industry oil inventories increased by 13.5 mb in March, to 2 649 mb, in contrast with a five-year average decline of 10.2 mb.** OECD commercial oil stocks also rose above the five-year average for the first time since May 2011. This pushed the surplus versus historical average to 15.2 mb from an implied deficit of 8.4 mb in February. Moreover, forward demand cover rose by 0.5 day to 60.3 days, 3.0 days above the five-year average.

- **Preliminary data indicate a 5.1 mb increase in April OECD industry inventories, compared with a five-year average 19.4 mb build.** Crude oil and 'other oils' stocks led the increase, rising by 10.0 mb and 5.1 mb, respectively, while product holdings fell by 10.0 mb as sharp decreases in gasoline and middle distillate inventories outweighed a rise in 'other products' stocks. Gasoline, middle distillate and fuel oil holdings fell by 11.5 mb, 11.6 mb and 2.3 mb, respectively, while 'other products' stocks increased by 15.4 mb.





OECD Inventories at End-March and Revisions to Preliminary Data

Total OECD industry oil inventories increased by 13.5 mb in March, to 2 649 mb, in contrast with a five-year average decline of 10.2 mb. As a result, OECD commercial oil stocks rose above the five-year average for the first time since May 2011. The implied surplus of inventories compared with the historical average is therefore 15.2 mb, versus a deficit of 8.4 mb in February. Moreover, in terms of forward demand cover, OECD commercial oil holdings remained 3.0 days above the five-year average, at 60.3 days. This equates to a 0.5 day increase from the previous month and a 1.3 day rise on a year-on-year basis. Regionally, the absolute surplus of stocks versus the five-year average in North America rose substantially, while the deficit in Europe narrowed significantly, and the Pacific shortfall also narrowed slightly.

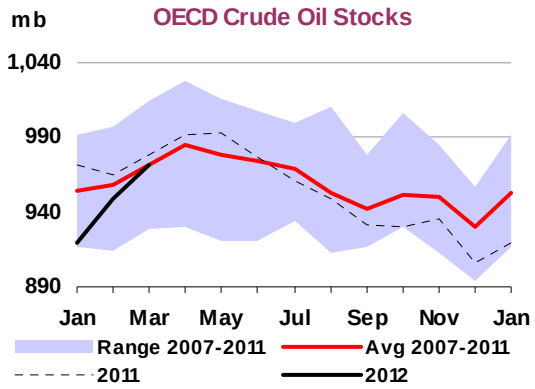
Preliminary Industry Stock Change in March 2012 and First Quarter 2012

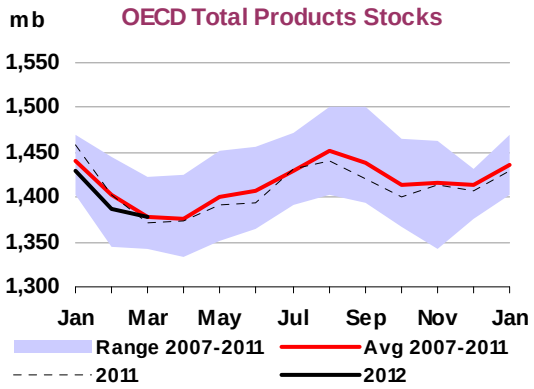
	March 2012 (preliminary) *(million barrels)*				March 2012 (preliminary) *(million barrels per day)*				First Quarter 2012 *(million barrels per day)*			
	N. Am	Europe	Pacific	Total	N. Am	Europe	Pacific	Total	N. Am	Europe	Pacific	Total
Crude Oil	**18.7**	**3.3**	**1.3**	**23.4**	**0.60**	**0.11**	**0.04**	**0.75**	**0.41**	**0.23**	**0.08**	**0.73**
Gasoline	-7.3	-3.0	1.3	-9.0	-0.23	-0.10	0.04	-0.29	0.00	-0.01	0.03	0.02
Middle Distillates	-7.5	-0.5	-0.5	-8.5	-0.24	-0.02	-0.02	-0.27	-0.20	0.02	-0.08	-0.26
Residual Fuel Oil	-0.1	1.1	-0.3	0.8	0.00	0.04	-0.01	0.02	0.03	0.00	0.01	0.03
Other Products	9.6	-0.8	-2.8	5.9	0.31	-0.03	-0.09	0.19	0.00	-0.01	-0.12	-0.12
Total Products	**-5.2**	**-3.3**	**-2.3**	**-10.8**	**-0.17**	**-0.11**	**-0.07**	**-0.35**	**-0.17**	**-0.01**	**-0.15**	**-0.33**
Other Oils[1]	0.8	1.1	-1.0	0.9	0.02	0.03	-0.03	0.03	0.08	0.04	0.00	0.13
Total Oil	**14.2**	**1.1**	**-1.9**	**13.5**	**0.46**	**0.04**	**-0.06**	**0.43**	**0.32**	**0.27**	**-0.06**	**0.53**

1 Other oils includes NGLs, feedstocks and other hydrocarbons.

Crude stocks rose by 23.4 mb to 972 mb in March, nearly double the five-year average build of 13.4 mb. After eight consecutive months below the historical trend, crude stocks rose above the five-year average. Most of the growth in stocks stemmed from North America, up by 18.7 mb. Europe and the Pacific also increased by 3.3 mb and 1.3 mb, respectively. Sustained high levels of OPEC crude supply in the midst of seasonally weak refining activity built OECD crude oil stocks in March.

In the meantime, product inventories fell by 10.8 mb, a milder decline than a five-year average 25.1 mb draw. Most of the product stock draw centred on gasoline and middle distillate stocks, falling seasonally by 9.0 mb and 8.5 mb, respectively. North America showed the largest product stock decline of 5.2 mb, while Europe and the Pacific saw 3.3 mb and 2.3 mb reductions, respectively.





OECD stocks were revised 4.9 mb higher for February, upon receipt of more complete monthly submissions from member countries. This implies a 10.6 mb drop in February inventory levels, compared with preliminary estimates of a 12.4 mb decrease. Upward adjustments were centred on crude stocks, and were evident across all three regions. North American, European, and Pacific crude oil inventories were adjusted up by 2.8 mb, 6.0 mb and 3.4 mb, respectively. Moreover, fuel oil and 'other products' stocks also showed upward adjustments of 3.9 mb and 1.4 mb, respectively. However, lower-than-initially estimated middle distillates holdings provided a substantial offset to the upward revisions.

Revisions versus 12 April 2012 Oil Market Report

(million barrels)

	North America		*Europe*		*Pacific*		*OECD*	
	Jan-12	Feb-12	Jan-12	Feb-12	Jan-12	Feb-12	Jan-12	Feb-12
Crude Oil	**0.0**	**2.8**	**0.3**	**6.0**	**0.0**	**3.4**	**0.4**	**12.2**
Gasoline	0.0	-1.9	-0.1	3.1	0.0	-0.9	-0.1	0.3
Middle Distillates	0.0	-3.4	-0.6	-8.6	0.2	-1.7	-0.4	-13.6
Residual Fuel Oil	0.0	2.3	0.2	1.2	0.0	0.5	0.2	3.9
Other Products	0.0	0.2	0.5	1.9	0.0	-0.7	0.5	1.4
Total Products	**0.0**	**-2.9**	**-0.1**	**-2.3**	**0.2**	**-2.8**	**0.1**	**-8.0**
Other Oils[1]	1.7	-2.9	1.0	3.6	0.0	0.0	2.6	0.8
Total Oil	**1.7**	**-3.0**	**1.3**	**7.3**	**0.2**	**0.6**	**3.2**	**4.9**

1 Other oils includes NGLs, feedstocks and other hydrocarbons.

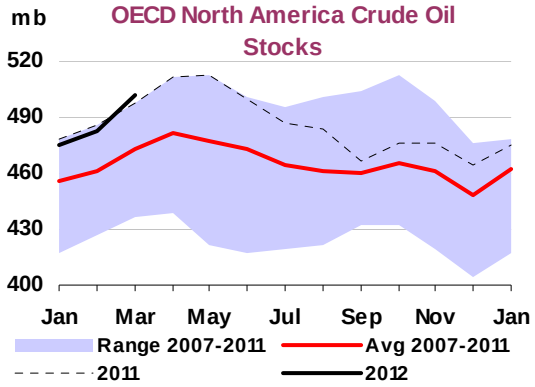
Preliminary data indicate a 5.1 mb increase in April OECD industry inventories, compared with a five-year average 19.4 mb build. Crude oil and 'other oils' stocks led the increase rising by 10.0 mb and 5.1 mb, respectively, while product holdings fell by 10.0 mb as sharp decreases in gasoline and middle distillate inventories outweighed a rise in 'other products' stocks. Gasoline, middle distillate and fuel oil holdings fell by 11.5 mb, 11.6 mb and 2.3 mb, respectively while 'other products' stocks increased by 15.4 mb.

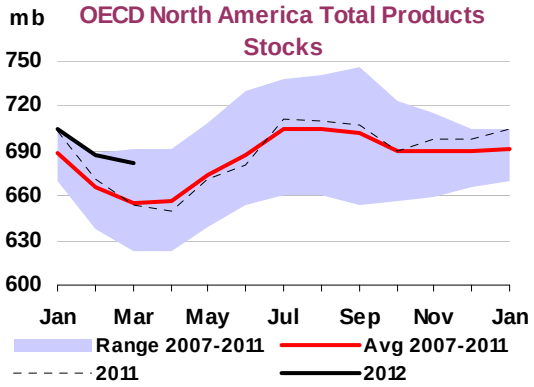
Analysis of Recent OECD Industry Stock Changes

OECD North America

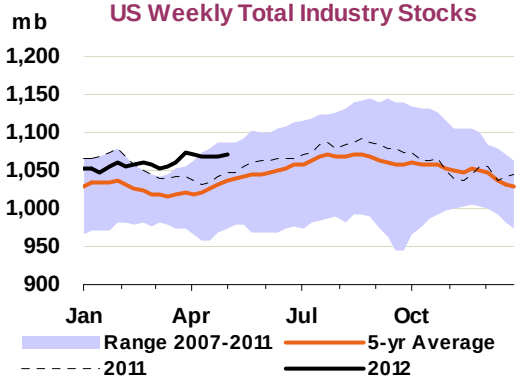
North American industry oil inventories rose by 14.2 mb to 1 342 mb in March, a heavier increase than the five-year average build of 3.8 mb, thus again, widening the surplus versus the five-year average to 70.2 mb, from 59.8 mb in February. Commercial oil stocks in North America have therefore exceeded five-year highs for a third month running. Crude oil holdings surged by 18.7 mb to 501 mb, with the lion's share of the increase stemming from the US. Not only lower refinery runs but also higher crude imports and domestic output inflated US crude inventories.

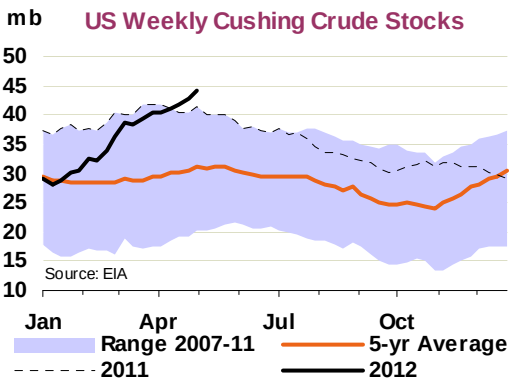
Meanwhile, product inventories fell by 5.2 mb to 682 mb as declines in gasoline and middle distillate stocks outweighed an increase in 'other products' holdings. Gasoline inventories decreased by 7.3 mb as refiners switched over from winter to summer grades and US gasoline demand rose month-on-month, albeit remaining weak on an annual basis. Middle distillate stocks fell by 7.5 mb, marking their lowest level since November 2008. Firm US middle distillate exports to Latin America and Europe in the midst of lower domestic production drove middle distillate holdings down significantly. In the meantime, 'other products' stocks rose by 9.6 mb, providing a partial offset.





US weekly data show oil inventories declined by 3.8 mb in April, in stark contrast with a five-year average 15.3 mb build. Sharp decreases in gasoline and middle distillate stocks led the decline. Gasoline inventories plunged by 12.9 mb as refiners cleared out winter grades while rebuilding summer grades and gasoline demand rose month-on-month, despite remaining lower than the five-year range. Middle distillate holdings also plummeted by 13.4 mb on higher demand amid strong exports and hit the lowest level since October 2008. Distillate stocks are quite tight on the US Gulf in particular, since refiners in the region drew stocks to sustain high exports. Gulf Coast stockpiles of the fuel fell by 5.2 mb to 34.1 mb, which marked the lowest level for distillates in the region since November 2008. In the meantime, 'other products' holdings rose by 12.0 mb, providing a partial offset and resulting in a total draw of 17.4 mb in refined product inventories as a whole.





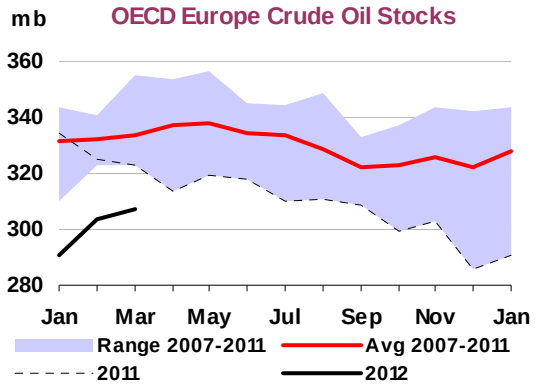
Meanwhile, higher domestic production in the midst of weak refinery runs drove crude oil stocks up by 14.5 mb, marking their highest since August 1990. Crude oil inventories have increased by 30.6 mb since the middle of March. Crude stock levels at Cushing, Oklahoma increased by 3.8 mb to a record high 44.1 mb in the week ending May 4. Since the beginning of 2012, stockpiles at Cushing have increased by 15.0 mb. Cushing inventories may ease somewhat when work on the Seaway pipeline reversal is completed in the middle of May. Flows toward the US Gulf Coast could average 150 kb/d initially, rising to 400 kb/d by end-2012/early-2013.

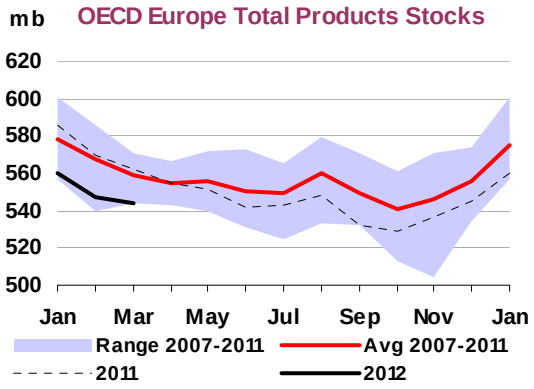
OECD Europe

Industry oil inventories in Europe rose by 1.1 mb in March to 923 mb, in contrast with a five-year average draw of 7.4 mb. This led to a narrowing in the deficit versus the five-year average to 41.7 mb, from 50.2 mb in February. Nonetheless, European oil stocks have stood below their five-year range for twelve consecutive months. However, in terms of days of forward demand cover, total oil holdings in Europe look more comfortable, having stood above the five-year average for eight successive months.

Crude oil inventories increased by 3.3 mb to 307 mb, in line with a five-year average 1.7 mb build, due to lower refinery runs. Nonetheless, amid very weak refiner crude demand, absolute stocks have been held well below historical norms for over a year now, while forward cover has also looked tight for crude since late 2011.

Also in March, refined product inventories fell by 3.3 mb to 544 mb on weak refinery runs. This was a milder decline than the five-year average drop of 9.0 mb, thus reducing the deficit versus the five-year average to 14.4 mb from 20.2 mb in February. However, product stocks look much more comfortable when measured against forward demand, standing 1.5 days above the five-year average at 39.8 days. Gasoline, middle distillate and 'other products' holdings declined by 3.0 mb, 0.5 mb and 0.8 mb, respectively, while fuel oil stocks rose by 1.1 mb. Meanwhile, German end-user heating oil stocks fell by 3 percentage points to 49% fill at end-March.



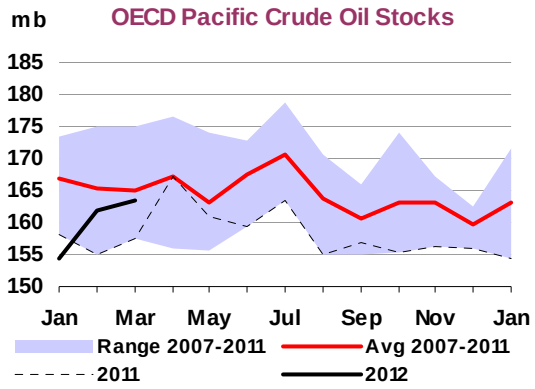


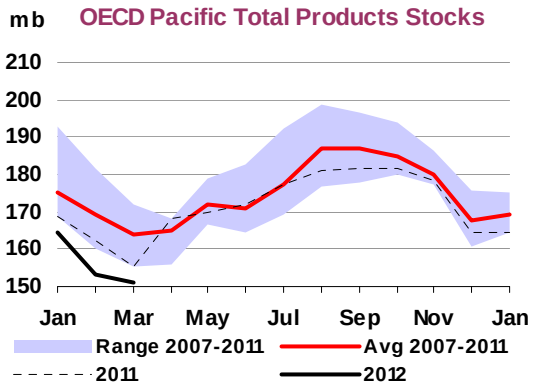
April preliminary data from Euroilstock point to a 4.3 mb stock draw, exceeding a five-year average 1.4 mb fall in the EU-15 and Norway. Crude oil inventories led the decline, decreasing by 4.8 mb with the backwardation of Brent discouraging European refiners from storing oils. In the meantime, refined product holdings rose by 0.5 mb as increases in gasoline and 'other oils' stocks outweighed declines in middle distillate and fuel oil holdings. Gasoline and 'other products' inventories increased by 1.4 mb and 0.9 mb, respectively while middle distillate and fuel oil stocks fell by 0.8 mb and 1.0 mb, respectively. Refined product stocks held in independent storage in Northwest Europe also fell in April, led by declines in both gasoil and fuel oil stocks as regional demand for diesel rose and fuel oil exports to Asia, notably to Japan, increased.

OECD Pacific

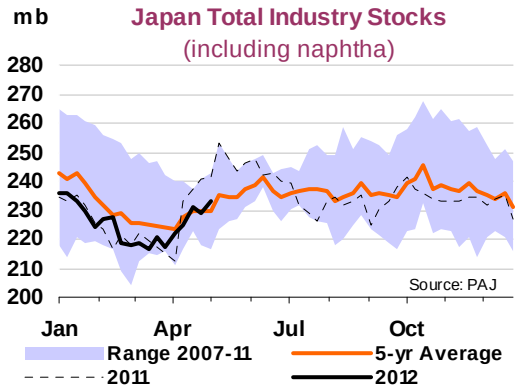
Commercial oil inventories in the OECD Pacific fell by 1.9 mb to 384 mb in March, lagging behind a five-year average draw of 6.6 mb, and thus reducing the deficit of inventories versus the five-year average to 13.3 mb from 18.1 mb in February. Having fallen to very low levels at the turn of the year, Pacific total oil stocks crept back within the five-year range in March. Forward demand cover has also recovered sharply from the very low levels evident since April last year.

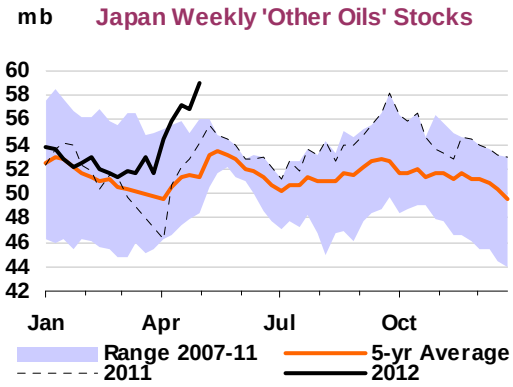
Crude holdings increased counter-seasonally by 1.3 mb to 163 mb, as a crude stock build in Japan outweighed a decrease in crude holdings in Korea. In the meantime, product stocks declined by 2.3 mb to 151 mb, compared with the five-year average decrease of 5.3 mb and remained below the five-year range for a third consecutive month. 'Other products' holdings led the decline, down by 2.8 mb. Middle distillate and fuel oil stocks also edged lower by 0.5 mb and 0.3 mb, respectively, while gasoline holdings rose by 1.3 mb.





Japanese industry inventories surged by 13.2 mb in April, according to weekly data from the Petroleum Association of Japan (PAJ). 'Other oils' stocks including feedstocks led the increase, rising by 6.1 mb, mostly affected by lower refinery throughput. Crude oil stocks rose by 0.3 mb due also to lower refinery runs. Despite weaker refinery runs, with demand for petroleum product likely remaining sluggish, product holdings rose by 6.8 mb, with every product category showing an increase. Gasoline, middle distillate, fuel oil and 'other products' holdings rose by 0.1 mb, 2.6 mb, 1.6 mb and 2.6 mb, respectively.





Recent Developments in Singapore and China Stocks

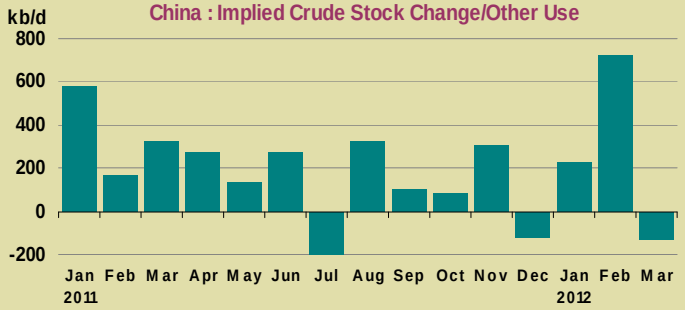
According to *China Oil, Gas and Petrochemicals (OGP)*, Chinese commercial oil inventories fell in March by an equivalent of 1.5 mb (data are reported in terms of percentage stock change). Commercial crude oil holdings were up by 2.0% (4.1 mb), although lower imports outweighed weaker refinery runs.

Commercial product inventories fell by 3.6% (5.6 mb), with every major product category showing a decrease. Due to lower refinery runs, gasoline, diesel and kerosene inventories declined by 0.6% (0.3 mb), 4.9% (4.6 mb) and 5.1% (0.6 mb), respectively. However, the biggest draw was in diesel holdings as the beginning of spring planting season in northern China boosted agricultural demand for gasoil in March.

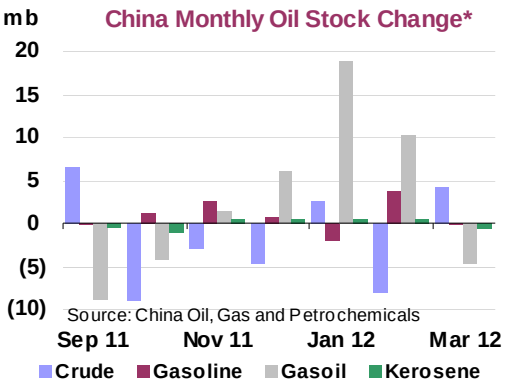
Taking The Gauge of A Possible SPR Build in China

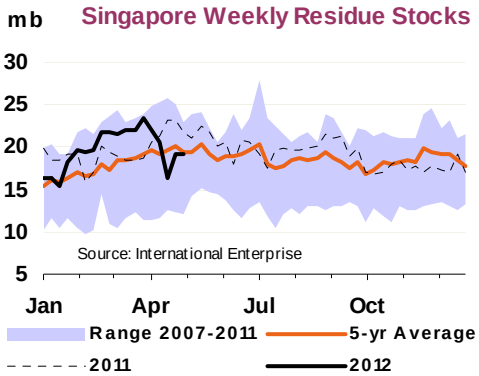
Official data are inconclusive on the subject of whether 1Q12 saw significant strategic crude stockbuilding by China. State oil company CNPC completed nearly 40 mb of new storage capacity at Dushanzi and Lanzhou in the second half of 2011 under the second phase of China's strategic storage capacity programme. CNPC recently acknowledged the 11% increase seen in 1Q12 Chinese crude imports, and suggested that further increases could come later in 2012 as more SPR sites are completed.

Less clear however is whether or to what extent crude buying to fill SPR facilities began in 1Q12. On the one hand, an implied global stock build of 1.2 mb/d for 1Q12 from our own global supply/demand balance, evidence of sharply higher Chinese 1Q12 crude imports and the fact that only around half of the implied global build can be accounted for by OECD company stocks anecdotally supports extra Chinese purchasing. Moreover, a simplified balance between Chinese domestic crude production, net imports and refinery runs throws up a difference of around 275 kb/d, compared with equivalent levels of 185 kb/d and 90 kb/d for year 2011 and 4Q11 respectively. The surge in February crude imports in particular looks supportive of some stockpiling of crude, albeit this is not reflected in officially reported company data on month-on-month stock changes.



However, on the other hand, caution is required: firstly, prevailing backwardated price structure is unsupportive of stock-building in purely economic terms. In addition, part of the implied 'stock build' may instead be due to fluctuations in independent refiner activity or crude oil for direct burning in the power sector. These caveats aside, Chinese crude demand in coming months may run ahead of that implied by product demand if concerns over Middle East supplies lead to further SPR purchasing.





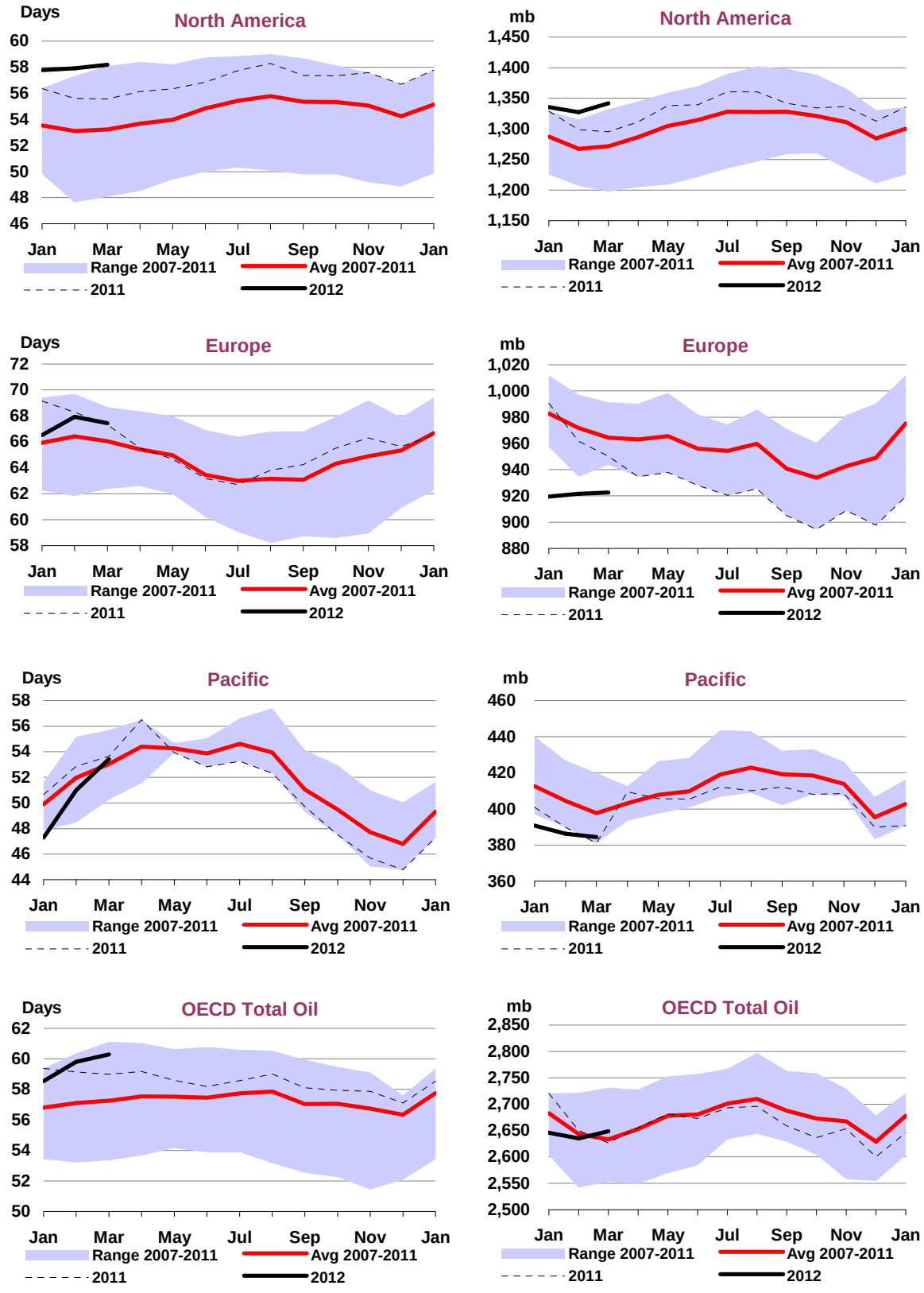
*Since August 2010, COGP only reports percentage stock change

Singapore onshore inventories fell by 4.3 mb to 38.5 mb in April, driven by a decrease in fuel oil stocks. Fuel oil holdings declined by 3.6 mb, putting an end to three successive months of growth as fuel oil imports from the West reduced significantly. Recently, fuel oil stocks in Singapore have shown high volatility affected by dramatic changes in import volumes from the West. Middle distillate holdings edged down by 0.6 mb, as strong demand from India and Vietnam emerged. Light distillate inventories were virtually unchanged, as increases in supply from India and China were offset by firm demand from Vietnam and Indonesia.

Regional OECD End-of-Month Industry Stocks

(in days of forward demand and millions barrels of total oil)

Days[1] **Million Barrels**



1 Days of forward demand are based on average demand over the next three months

PRICES

Summary

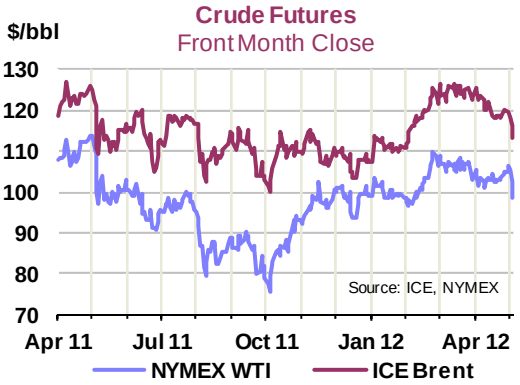
- **Crude oil markets reversed their upward course in April and by early May futures prices had fallen by $10-14/bbl amid worsening economic data for the US and Europe,** mounting pessimism in equity markets in the wake of elections in Europe and apparently reduced tensions between the international community and Iran over the latter's nuclear programme. Futures prices for Brent crude were last trading near a three-month low of $113/bbl, with WTI at $97/bbl.

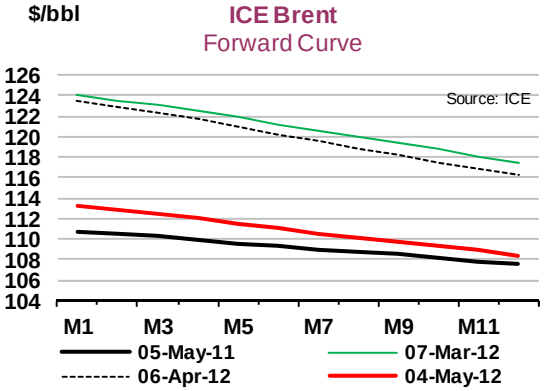
- **In a latest attempt to address increased price volatility and prevent excessive speculation in oil markets, President Obama asked the US Congress to provide the CFTC with additional authority to raise margin requirements in oil futures markets.** Opponents of the move argue that raising margin requirements may instead lead to an increase in price volatility and market share concentration while having no effect on price levels.

- **Crude oil spot markets turned lower on limited demand for prompt barrels while refinery turnarounds were in full swing in April, as well as higher crude availabilities from OPEC producers.** Saudi Arabia's decision to sharply reduce June Arab Light prices for Asian customers took the market by surprise and could add further downward pressure on spot crudes in the region.

- **Refined product crack spreads improved in April as seasonal refining maintenance provided support.** Gasoline crack spreads increased the most, supported by fear of tight supplies due to the recent refinery closures in the Caribbean, US East Coast and Europe. However, markets were volatile, with gasoline crack spreads peaking around mid-month, before falling steeply as demand worries again came into focus.

- **Rates weakened on all benchmark crude tanker routes during April, although by early May rates had either stabilised or begun to creep back up.** Meanwhile the picture was slightly brighter in product tanker markets, with rates firming on all but one of the benchmark routes over April.





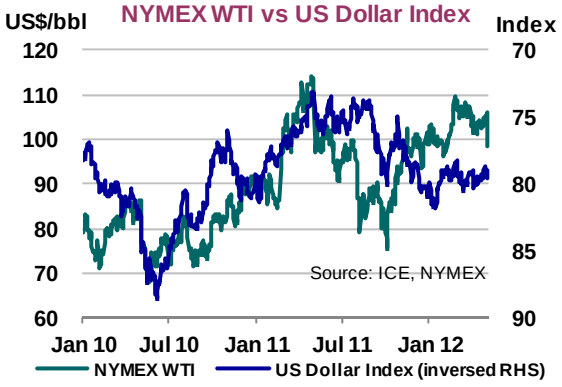
Market Overview

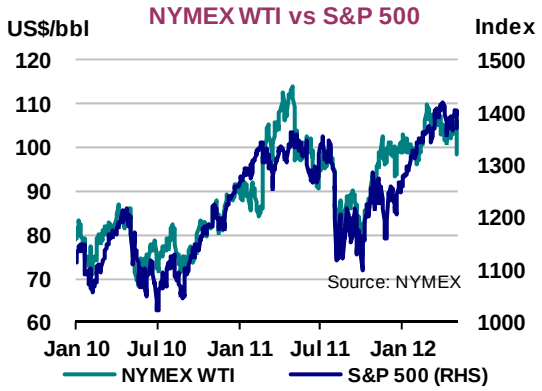
Crude oil prices tumbled in April and into early May amid worsening economic data for the US and Europe, mounting pessimism in equity markets in the wake of European elections, and increased crude oil supplies from OPEC. In addition, market worries over the impact of sanctions on Iranian exports lessened as tensions seemed to ease between Iran and the global community ahead of the next meeting between officials from Tehran and the UN P5+1 group on 23 May in Baghdad. Futures prices were last trading near three-month lows, with Brent at $113/bbl and WTI at $97/bbl.

As full implementation of EU and US sanctions on Iran draw nearer, refiners and traders are adopting a more sanguine view on the market impact, in large part due to increased supplies from OPEC and despite continued unexpected disruptions to non-OPEC supplies. OPEC increased supplies to the market in April by just over 400 kb/d, to 31.85 mb/d, which is the highest level since July 2008. Non-OPEC outages continue to short the market, however, with unplanned outages now assumed to average 1.3 mb/d in 2Q, and to remain near 1 mb/d for the remainder of the year.

Imports of Iranian crude appear to have fallen sharply in April but preliminary data is fraught with inconsistencies and the tanker trackers are finding the monitoring of Iranian vessels difficult. That said, it appears that refiners are actively lining up replacement barrels from Saudi Arabia, Iraq, Libya and Russia ahead of the 1 July deadline. In addition, companies which have received US exemptions from the full sanctions after reducing imports from Iran are focussed now on securing insurance for their permitted liftings. The UK has stepped into the debate over tanker insurance and is seeking a six-month exemption for the EU sanctions on the shipping industry so customers have more time to find alternatives. The marine insurance industry has a large base in London.

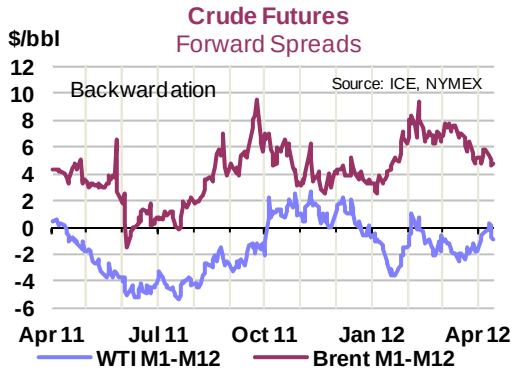
As concern over Iran has eased in recent weeks, market worries shifted to the less-than-stellar economic outlook. Elections in Greece have also cast a pall over financial markets and the euro zone economic recovery. In early May, stock markets posted their worst week of the year.





Market attention has also focussed on a steady rise in global inventories, especially in the US where crude oil stocks are at the highest level in two decades. OECD crude oil inventories also rose in both Asia and Europe in March. Japan, in particular, appears to be boosting crude inventories ahead of the full implementation of sanctions on Iran.

The steady increase in supply in 1Q12 is adding downward pressure on the front end of the forward curve for both Brent and WTI. Prompt futures prices for Brent have been supported by the chronic unplanned outages in the North Sea but increased supplies from Iraq and Libya into Europe have tempered the upward momentum. The Brent M1-M12 backwardation narrowed to around $4.90/bbl in early May compared with just under $6/bbl in April and $7.15/bbl in March.



Record levels of crude stocks at the NYMEX delivery point at Cushing, Oklahoma also added downward pressure on the front end of the WTI contract. The WTI M1-M12 contract moved deeper into contango in April at an average -$1.47/bbl compared with -$1.15/bbl in March.

Prompt Month Oil Futures Prices

(monthly and weekly averages, $/bbl)

	Feb	Mar	Apr	Apr-Mar Avg Chg	% Chg	Week Commencing: 02 Apr	09 Apr	16 Apr	23 Apr	30 Apr
NYMEX										
Light Sweet Crude Oil	102.26	106.21	103.35	-2.86	-2.8	103.51	102.53	103.02	104.05	103.46
RBOB	126.41	140.39	136.65	-3.73	-2.7	141.24	138.97	134.40	133.49	129.22
No.2 Heating Oil	134.17	135.55	132.55	-3.00	-2.3	134.48	131.86	131.24	132.77	131.03
No.2 Heating Oil ($/mmbtu)	23.03	23.27	22.75	-0.52	-2.3	23.09	22.64	22.53	22.79	22.49
Henry Hub Natural Gas ($/mmbtu)	2.53	2.30	2.05	-0.25	-12.1	2.14	2.02	1.95	2.05	2.31
ICE										
Brent	119.06	124.54	120.49	-4.06	-3.4	124.02	121.25	118.44	119.15	117.32
Gasoil	134.66	138.19	134.94	-3.25	-2.4	137.47	134.72	133.64	134.39	133.29
Prompt Month Differentials										
NYMEX WTI - ICE Brent	-16.80	-18.34	-17.14	1.20		-20.51	-18.72	-15.41	-15.10	-13.86
NYMEX No.2 Heating Oil - WTI	31.91	29.34	29.20	-0.14		30.97	29.33	28.22	28.71	27.57
NYMEX RBOB - WTI	24.14	34.18	33.31	-0.88		37.74	36.44	31.38	29.44	25.76
NYMEX 3-2-1 Crack (RBOB)	26.73	32.57	31.94	-0.63		35.48	34.07	30.33	29.20	26.37
NYMEX No.2 - Natural Gas ($/mmbt	20.51	20.97	20.71	-0.27		20.94	20.62	20.58	20.74	20.19
ICE Gasoil - ICE Brent	15.60	13.64	14.45	0.81		13.46	13.47	15.20	15.24	15.97

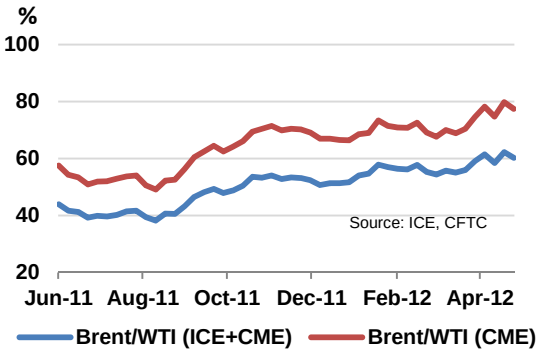
Source: ICE, NYMEX

Futures Markets

Activity Levels

After reaching a historical peak at 62.3% on 24 April 2012, the ratio of Brent futures in London ICE to New York and London WTI oil positions is down by more than 2% in the week ending 1 May. The surge was triggered by a 4.1% and 5.5% increase in NYMEX WTI and ICE WTI open interest, respectively, in the last week of April. Over the period from 3 April to 1 May, the ratio of Brent to WTI contracts increased by 1.1% to 60.2%. The increase in the ratio of Brent to WTI open interest is sharper when ICE WTI contracts are excluded, rising by 2.8% to 77.8% in April. This ratio also tested new peaks at 79.8% in the week ending 24 April.

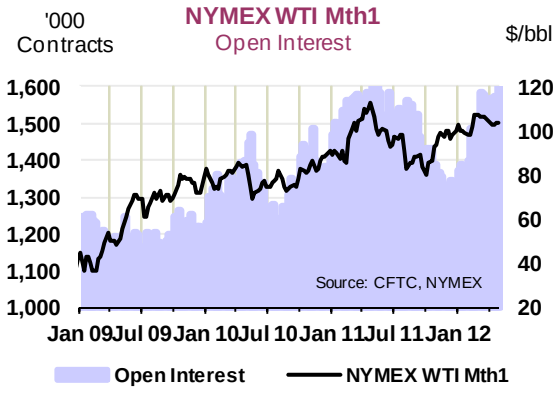
Percentage of Brent to WTI Open Interest

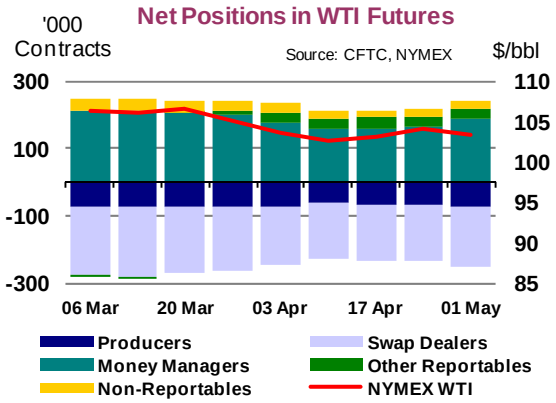


Open interest in all oil major derivatives contracts increased in April. Open interest in New York CME WTI futures and options contracts increased by 0.18% to 2.54 million contracts. Meanwhile, open interest in futures-only contracts increased by 2.1% to a one-year high of 1.6 million from 1.57 million. Over the same period, open interest in London ICE WTI contracts increased to 0.46 million and 0.54 million contracts in futures-only and combined contracts, respectively, reaching its highest level since July 2011. Meanwhile, open interest in ICE Brent contracts also tested fresh records in April with 1.24 million and 1.45 million contracts in futures-only and combined contracts, respectively.

Money managers cut their bets on rising WTI crude oil prices by 14 979 contracts to reach to the lowest level since early February to 164 522 from 3 April 2012 to 24 April 2012 as a response to rising crude stocks at Cushing as well as concern over the US recovery. However, they boosted their net long futures positions by 21 579 to 186 101 in the week ending 1 May, as the price of WTI crude oil rallied to a one-month high of $106.16/bbl. Similarly, money managers reduced their bets on rising Brent prices by 18% from 125 076 to 102 391 futures contracts from 3 April to 24 April, the lowest level since February, as a response to easing geopolitical tensions surrounding Iran as well as the re-emergence of sovereign debt crisis worries in the eurozone economies. However, like money managers in WTI contracts, they

increased their net long futures positions by 12 836 contracts in the week ending 1 May to a one-month high of 115 227 contracts.





Producers increased their net futures short positions from 70 974 to 74 134 contracts in April; they held 20.2% of the short and 15.6% of the long contracts in CME WTI futures-only contracts. Swap dealers, who accounted for 23.5% and 34.6% of the open interest on the long side and short side, respectively, increased their bets on falling prices by 1.7% to hold 177 329 net futures short positions over the same period. Producers' trading activity in the London WTI contracts followed an opposite pattern with CME WTI contracts. Producers in the London ICE WTI contracts increased their net long positions from 25 040 to 48 726 contracts. Swap dealers, on the other hand, followed a similar pattern with respect to their trading in CME WTI contracts and increased their net short positions from 24 407 to 57 226 contracts.

NYMEX RBOB futures and combined open interest declined by more than 12% to 302 610 and 322 207, respectively, over the same period. Open interest in NYMEX heating oil futures contracts increased by almost 6.7% to 304 613 contracts while open interest in natural gas futures market is up by 1.9% to 1.26 million contracts.

Index investors' long exposure in commodities in March 2012 declined by $7.2 billion to $302.8 billion in notional value. The notional value of long exposures in both on- and off-WTI Light Sweet Crude Oil futures contracts declined by $1.6 billion in March, triggered by a decline in WTI prices from $107.70/bbl to $103.20/bbl from end-February to end-March. The number of long futures equivalent contracts increased to 557 000, equivalent to $57.5 billion in notional value.

Positions on NYMEX Light Sweet Crude Oil (WTI) Futures Contracts

Thousand Contracts

01 May 2012	Long	Short	Net	Long/Short	Δ Net from Prev. Week	Δ Net Vs Last Month
Producers' Positions	249.3	323.5	-74.1	*Short*	↓ -8.6	↓ -3.2
Swap Dealers' Positions	156.8	334.1	-177.3	*Short*	↓ -10.4	↓ -2.9
Money Managers' Positions	225.4	39.3	186.1	*Long*	↑ 21.6	↑ 6.6
Others' Positions	149.2	108.6	40.5	*Long*	↓ -7.3	↑ 4.5
Non-Reportable Positions	92.3	67.5	24.8	*Long*	↑ 4.7	↓ -5.0
Open Interest			**1602.0**		↑ 62.8	↑ 32.9

Source: CFTC

Market Regulation

On 17 April 2012, the Obama Administration proposed new initiatives to strengthen oversight of energy markets. The President's plan calls on Congress to:

- Increase funding to augment the number of surveillance and enforcement staff charged with oversight of the oil futures market;

- Allow the Commodity Futures Trading Commission (CFTC) to upgrade the technology used to monitor the energy markets;
- Increase the civil and criminal penalties for those convicted of manipulating the oil futures market;
- Expand access to CFTC data so that analysts can better understand trading trends in the oil markets and;
- Provide the CFTC with additional authority to raise margin requirements in oil futures markets to limit disruptions in the oil market.

Market participants welcomed the first four items in the list but raised concern over the proposal on margin increase (See '*Margin Requirements in Futures Markets'*).

On 18 April 2012, the US CFTC approved final rules on its long-awaited definition of 'swap dealers (SDs)' and 'major swap participants (MSPs)', which will be effective 60 days after publication in the Federal Register. These rules eventually determine which entities face mandatory capital and margin requirements as well as position limits. The final rule closely follows the Dodd- Frank Act in defining SDs. The Dodd-Frank Act defines SDs as persons who hold themselves out as a dealer in swaps or make a market in swaps or regularly enter into swaps with counterparties as an ordinary course of business for their own account; or engage in activity causing themselves to be commonly known in the trade as a dealer or market maker in swaps. Furthermore, an entity would be deemed an MSP if it held a "substantial position" in any of the major swap categories, excluding positions held for hedging and mitigating commercial risk. Highly leveraged financial entities, which are not already subject to federal banking regulators' capital requirements, are also considered as major swap participants if they hold substantial swap positions. In addition, a person whose outstanding swaps positions created "substantial counterparty exposure that could have serious adverse effects" on the U.S. financial system is considered a major swap participant.

The final rule also provides exemption from being considered as SDs for those who are entering into a swap for the purpose of mitigating or offsetting price risks of a physical position. Finally, in line with Dodd-Frank Act requirements, the final rule allows an exemption for a person who "engages in a *de minimis* quantity of swap dealing in connection with transactions with or on behalf of its customers." In the proposed rule, a threshold of aggregate gross notional amount in a 12-month period was set at $100 million. The final rule increases this threshold and specifies that a swap dealer is an entity that engages in $8 billion or more of swap dealing activity annually in the interim period. Once the Commission receives two and a half years' worth of data from swap data repositories, the staff will conduct a study and, depending on the results, may end the interim period, or propose new rules to change the threshold. If the Commission does not take action to end the interim period, it will terminate automatically five years after data starts to be reported to swap data repositories and the threshold will be reduced to $3 billion. The final rule requires that SDs or MSPs to register with the Commission by the later of the effective date of the swap entity definition and swap product definition rules. However, the US CFTC has yet to deliver its final rule on the swap product definition, now expected in the second quarter of 2012.

Market participants welcomed the increased threshold since lower thresholds would have required many energy companies to be registered as swap dealers or major swap participants. However, some argue that the oversight exemption ceiling at $100 million as initially proposed would have exempted only 30% of derivatives traders; while a higher ceiling of $8 billion annually set by the final rule would exempt more than 85% of derivatives traders from heightened oversight, including additional capital and margin requirements under the Dodd-Frank Act. Critics stressed that major players might be able to avoid regulations based on *de minimis* quantity exemption. However, market participants argued that it will still cover the major broker-dealers and financial institutions given the estimated size of the crude oil swap market which averages $500 billion a day.

On 30 April 2012, three major price reporting agencies (Argus, ICIS and Platts) in physical commodities released a draft self-regulating code of conduct, which addresses some of issues raised by the International Organisation of Securities and Commissions' (IOSCO) consultation paper and subsequent comments received from industry stakeholders. PRAs argued that the Independent Price Reporting Organisation (IPRO) Code may also be regarded as a standard of best practice among PRAs. The Code "applies strictly to activities, policies and structures associated with the publication by the IPROs of price assessments in commodities markets and does not govern the specific design or substance of methodologies used by IPROs for determining their price assessments". The code specifically addresses issues such as governance, managing and mitigating conflict of interest, integrity and transparency of price reporting process, non-discriminatory participation and data collection processes, timely publication of price assessments, corrections and methodology modifications, monitoring and detecting of non-representative transaction data in connection with the price reporting process, responding to complaints as well as confidential information and record-keeping. PRAs have requested feedback on the Code from industry stakeholders, other potential IPRO Code signatories and any other interested parties by 1 July 2012. In the meantime, IOSCO, in collaboration with the IEA, IEF and OPEC, is expected to release its recommendations on PRAs later this summer.

Margin Requirements in Futures Markets

Despite scant evidence of a negative impact of speculation in the oil market, in seeking to prohibit excessive speculation and its possible effect on price volatility in futures markets, the US CFTC approved final rules on federal speculative positions limits on commodity futures, options and swaps positions of speculators for 28 commodities in October 2011. As we reported in previous *OMRs*, position limit rules are being challenged by the International Swaps and Derivatives Association (ISDA) and the Securities Industry and Financial Markets Association (SIFAM) in court. They are challenging the final rule based on whether the Commission overreached its mandate by pre-emptively setting a position limit on derivatives contracts, amid almost non-existent cost-benefit analysis in the final rulemaking, as well as insufficient review of some of the comment letters, which they argue that the Commission was bound to take into account. The court still has to deliver its decision on the speculative position limit rule.

The main hypothesis of proponents of hard position limits is to reduce market share concentration in commodity markets. They argue that doing so ensure that markets are made up of a broad group of market participants with a diversity of views, thereby preventing distortion in market prices. The limit on the concentration of market share is also deemed necessary to reduce systemic risk.

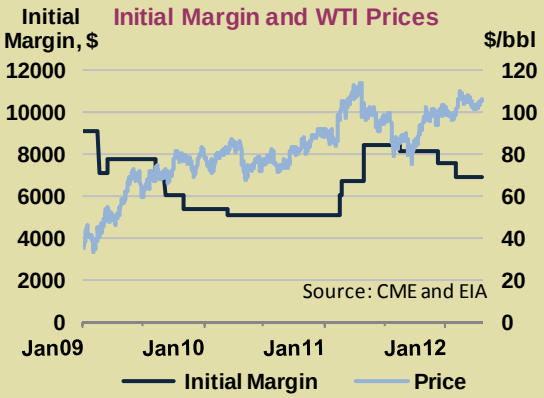
In a latest attempt to reduce price volatility and prevent excessive speculation in oil markets, President Obama asked the US Congress to provide the CFTC with additional authority to raise margin requirements in oil futures markets. However, raising margin requirements in oil futures markets may well lead to an increase in price volatility and concentration of market share of large speculators while having no effect on price levels.

One of the key safeguards in the risk management systems of futures clearing organisations is the requirement that market participants post collateral, known as margin, to guarantee their performance on contract obligations. In contrast to the operation of credit margins in the stock market, a futures margin is not a partial payment for the position being undertaken. Instead, the futures margin is a performance bond that serves as collateral or as a "good faith" deposit given by the trader to the broker. Minimum levels for initial and maintenance margins are set by the exchange. However, futures commission merchants (FCM) have the right to demand higher margins from their customers. The US regulator (CFTC) also has the power to increase margins in emergencies but they have rarely used this option, given the fact that exchanges frequently change margin requirements as a response to a change in volatility and they notify market participants at least one-day in advance.

In a traditional futures market, contracts are margined under a risk-based margining system, which is called SPAN. Portfolio margining systems evaluate positions as a group and determine margin requirements based on the estimates of changes in the value of the portfolio that would occur under assumed changes in market conditions. Margin requirements are set to cover the largest portfolio loss generated by a simulation exercise that includes a range of potential market conditions.

Margin Requirements in Futures Markets (continued)

Marked to market ensures that futures contracts always have zero value; hence the clearing house does not face any risk. Marked to market takes place through margin payments. At the inception of the contract, each party pays an initial margin (typically less than 10% of the value of the contract) to a margin account held by its broker. Initial margin may be paid in interest-bearing securities (T-bills) so there is no interest cost. If the futures price rises (falls), the longs have made a paper profit (loss) and the shorts a paper loss (profit). The broker pays losses from and receives any profits into the parties' margin accounts on the morning following trading. Loss-making parties are required to restore their margin accounts to the required level during the course of the same day by payment of variation margins in cash; margin in excess of the required level may be withdrawn by profit-making parties.



For example, the initial margin for one WTI futures contract is currently $6 885 and the maintenance margin requirement is $5 100 per contract for speculators, 6.5% and 4.8% of the value of the contract as of 1 May, respectively. Initial and maintenance margins for hedgers and clearing members, even for their speculative trading, is the same amount as the maintenance margin levels for speculative traders. However, clearing members' initial margin for their speculative positions will be increased to that of speculators' initial margin in early August. Whenever the margin account exceeds or falls below the maintenance margin, the customer receives a margin call from its broker (or broker receives a margin call from the exchange). If the margin account exceeds the maintenance margin, the investor is entitled to withdraw any balance in the margin account in excess of the initial margin and whenever it is below the maintenance level, the customer has to make a deposit to bring the margin account to its initial margin level. The extra funds deposited are known as a variation margin. Basically, if there is a price decline the investor who has a long position has to deposit extra funds, so called variation margin, to bring the margin account to the initial level. On the other hand, the seller of the contract account will be credited. That is to say, if a trader is on the right side of the market, there is nothing to worry about margin calls. However, if a trader is on the wrong side of the market, he/she gets a warning in terms of a margin call to reconsider his/her position.

The Effects of Margin on Market Activity, Composition of Traders, Volatility and Prices

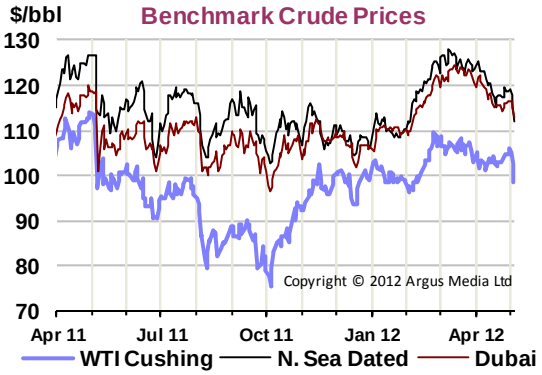
Exchanges argue that changes in margin levels are related to volatility in the markets; if the market becomes more (less) volatile, they increase (reduce) the margin level. The purpose of a change in margins is not to control the composition of traders, volatility or prices but serve primarily as insurance to futures exchanges from default by traders – for example, by setting margin to cover 99% of possible price moves for a position in a trading day.

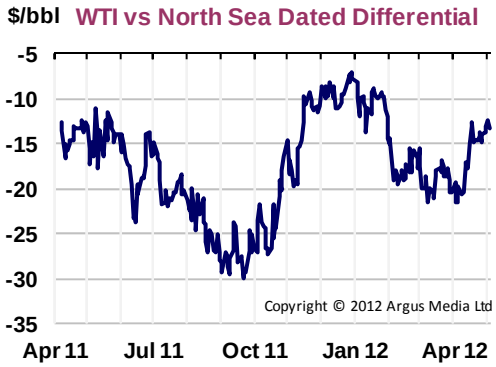
Some argue that setting higher margins should drive away less risk averse and less informed traders; and without them, markets will be more stable. Others argue that an increase in margin will result in thin markets due to an increase in the cost of using these markets, thereby increasing the volatility. Empirical research generally suggests that the effect of margin on market activity tends to be small as long as margin changes move in line with price volatility. Furthermore, extant research suggests that it is not obvious which types of traders leave the market when margin increases. These studies also find no clear impact of margins on the volatility or price behaviour in the futures markets. It is not surprising to see no relationship between margin levels and the price level, since the latter depends on physical supply and demand.

However, it is important to note that these results are obtained when analysing the impact of relatively small margin changes by exchanges. If we consider raising margin requirements to a very high level through regulations to combat speculation, then we might find that certain trader groups, especially the hedgers and cash-constrained small speculators, will be driven out of the market, increasing concentration share where few traders, especially large traders, participate in the price discovery, leading to more volatile, rather than more stable, oil markets.

Spot Crude Oil Prices

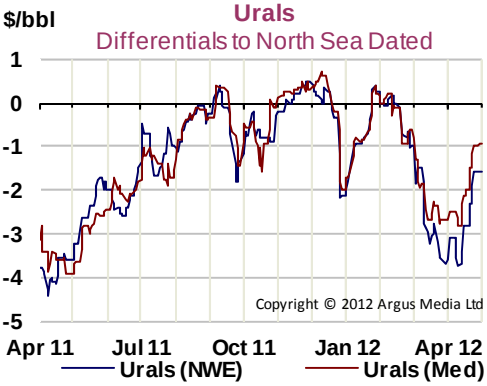
Crude oil markets turned lower on limited demand for prompt barrels while refinery turnarounds were in full swing in April as well as higher crude availabilities from OPEC. Spot prices for benchmark crudes in April and early May were down $10-14/bbl from March levels. Atlantic basin benchmarks diverged in April, with Dated Brent down a steeper $5.70/bbl while WTI posted a smaller loss of under $3/bbl. Both grades were off a further $7-8/bbl in early May in the wake of mounting pessimism over the economic outlook for the euro zone, and hence oil demand, following European elections. Disappointing US employment data also pressured prices. Dubai crude lost about $5.25/bbl, to an average $117.28/bbl for April, pressured lower by rising supplies of Middle East crudes.





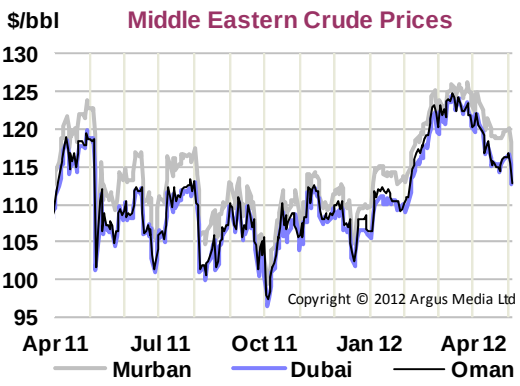
WTI's discount to Brent narrowed in early May after reaching six month highs again at $21.50/bbl on 3 April. The spot WTI-Dated Brent price differential was averaging around $13.10/bbl in early May, compared with an average $16.28/bbl in April and $19.13/bbl in March. WTI relative weakness partly reflected the steady rise in crude oil inventories at the Cushing, Oklahoma storage depot in April. Moreover, by early May, US crude oil inventories were at their highest level in more than 20 years. In addition to the lofty stock levels, the completion of the reversal of the Seaway pipeline later this month should take some pressure off WTI prices going forward. The Seaway pipeline is slated to initially move around 150 kb/d from the landlocked Cushing region to the US Gulf Coast refining centre.

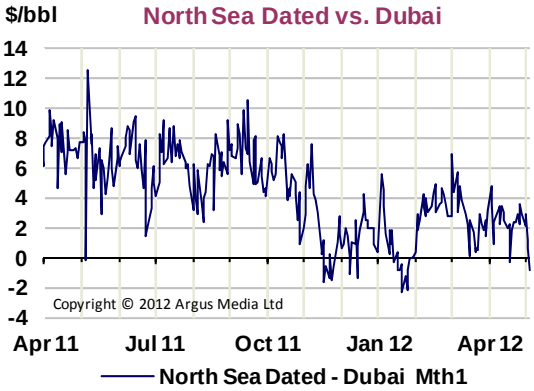
European spot crude prices in April moved lower in tandem with futures markets and reduced demand for prompt barrels due to seasonally low refinery runs and despite more disruptions in North Sea output. Refiners, however, continue to cast about for replacement barrels for Iranian crudes, with a focus on crudes from Saudi Arabia, Russia and Iraq. Indeed, increased exports of Iraqi crude are finding a home in Europe. Moreover, spot crude prices are expected to find extra support as European refiners come out of turnaround in May.



Urals crude was relatively weak next to North Sea crudes in early April, but strengthened as the month went on, partly due to stronger refiner interest as a replacement for Iranian crudes. The Urals-Brent discount in the Mediterranean narrowed sharply in early May, to just under -$1/bbl compared with an average -$2.11/bbl for April and -$2.04/bbl in March.

In Asia, plentiful Middle East grades weighed on markets in April and upcoming June maintenance turnarounds limited demand. Saudi Arabia's decision to sharply reduce official selling prices for Asian customers for benchmark Arab Light took the market by surprise and could add further downward pressure on regional spot crude markets.





Brent crude's premium to Dubai narrowed in April to $2.29/bbl and was trading just under $1/bbl in early May. The continued absence of heavier crude supplies from Syria, South Sudan, Sudan and Yemen is supporting prices of similar grades. Meanwhile, demand from Japanese refiners for heavy-sweet crudes for direct burn at power plants remains brisk.

Spot Crude Oil Prices and Differentials

(monthly and weekly averages, $/bbl)

	Feb	Mar	Apr	Apr-Mar Avg Chg	%	Week Commencing: 02 Apr	09 Apr	16 Apr	23 Apr	30 Apr
Crudes										
North Sea Dated	119.53	125.28	119.57	-5.71	-4.6	123.99	120.65	117.10	117.85	116.66
Brent (Asia) Mth 1	119.16	124.91	120.65	-4.25	-3.4	124.21	121.22	118.92	119.08	118.51
WTI (Cushing) Mth 1	102.21	106.15	103.29	-2.86	-2.7	103.51	102.53	103.02	103.82	103.46
Urals (Mediterranean)	119.32	123.24	117.46	-5.78	-4.7	121.34	118.04	114.82	116.52	115.69
Dubai	116.11	122.53	117.28	-5.25	-4.3	121.13	118.26	115.50	115.18	115.25
Tapis (Dated)	126.66	132.50	126.53	-5.97	-4.5	130.79	127.66	123.54	125.11	123.40
Differential to North Sea Dated										
WTI (Cushing)	-17.31	-19.13	-16.28	2.85		-20.48	-18.12	-14.08	-14.02	-13.20
Urals (Mediterranean)	-0.21	-2.04	-2.11	-0.07		-2.65	-2.61	-2.28	-1.33	-0.97
Dubai	-3.42	-2.75	-2.29	0.46		-2.86	-2.40	-1.61	-2.67	-1.41
Tapis (Dated)	7.13	7.22	6.96	-0.26		6.80	7.01	6.44	7.26	6.74
Prompt Month Differential										
Forward Cash Brent Mth1-Mth2	0.76	0.64	0.22	-0.42		0.59	0.19	-0.05	0.25	0.14
Forward WTI Cushing Mth1-Mth2	-0.38	-0.48	-0.48	0.01		-0.54	-0.50	-0.52	-0.38	-0.37
Forward Dubai Mth1-Mth2	0.52	1.41	0.42	-0.99		1.06	0.86	0.17	-0.19	0.47

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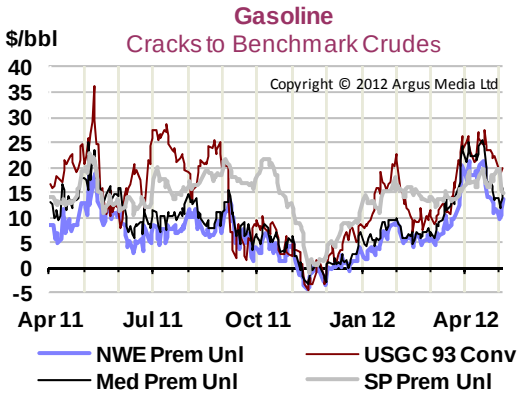
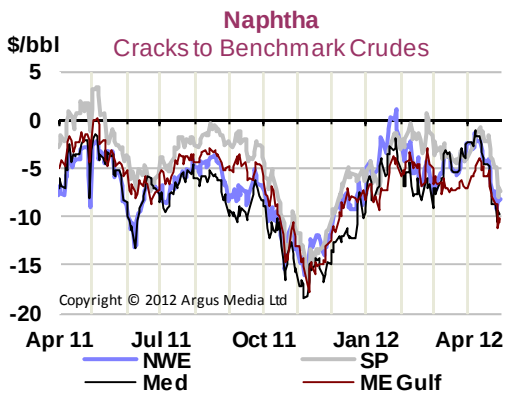
Spot Product Prices

All spot product prices bar gasoline fell in April, following the downward trend for crude and equity markets in general. Nevertheless, product crack spreads improved in April as seasonal refinery maintenance provided support. Gasoline crack spreads increased the most, supported by fears of tight supplies due to the recent refinery closures in the Caribbean, US East Coast and Europe. However, markets were volatile, with gasoline crack spreads peaking around mid-month, before falling steeply as demand worries again came into focus.

Gasoline crack spreads strengthened across the board in April, with the strongest gains seen in the Atlantic basin. On the US Gulf Coast super unleaded gasoline cracks spreads to LLS increased by $9.33/bbl whereas crack spreads increased by $7.06/bbl to Brent in Northwest Europe and by $7.37/bbl to Urals in the Mediterranean in April. Prices were supported by fears of tighter supply in the US due to recent refinery closures and as the shift to summer grade gasoline also lifted flat prices higher.

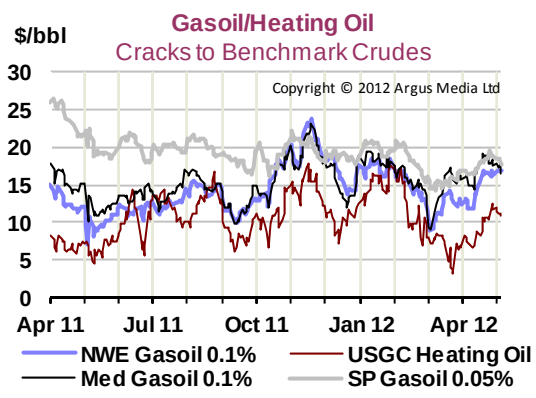
In Europe, gasoline markets were tight as export demand was strong, with an open arbitrage to the US East Coast and demand from West Africa as well as the Middle East. However, crack spreads fell steeply in the second half of the month, and US Gulf Coast cracks fell to around $19/bbl in early May after a mid-April peak of $27.50/bbl. The main driver behind the drop was easing on the supply side, both as refineries came back from spring turnarounds and as large arbitrage volumes arrived at the US East Coast. Additional pressure came from demand worries as the price at the pump for the US on average increased to just under $4/gallon mid-April, before falling back again thereafter. European crack spreads were also pressured lower, with a closed arbitrage to the US East Coast being a contributing factor.

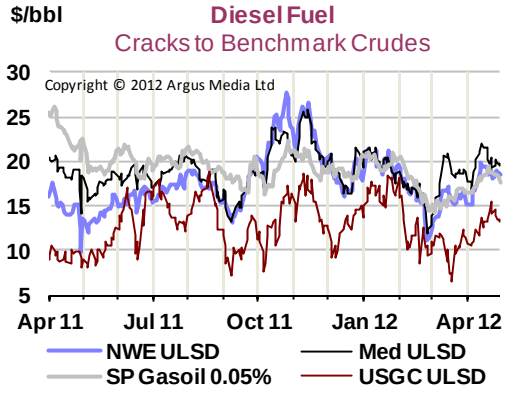




In Singapore, on the other hand, gasoline crack spreads were strong throughout April, and price differentials to Dubai were $17.80/bbl on average for the month, up $3.70 from March. Strong demand supported prices as well as reduced refinery activity with increasing maintenance.

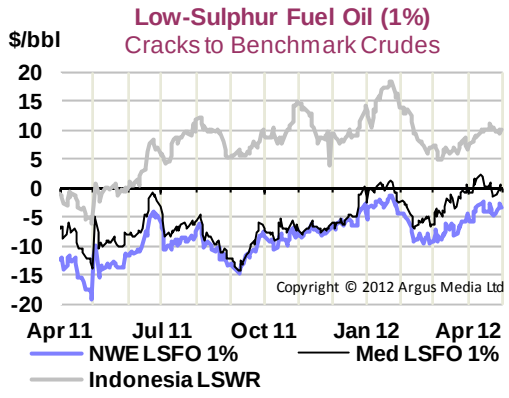
Naphtha crack spreads followed much the same trends as for gasoline, and a slight improvement was seen month-on-month in both Europe and in Asia, with a peak around mid-month before falling steeply in the second half of the month. Prices edged lower partly because alternative feedstock for the petrochemical industry was relatively cheaper, and on a partly closed arbitrage to Asia that pressured European markets. In Singapore, on the other hand, the arrival of earlier-booked arbitrage volumes pressured cracks lower there.

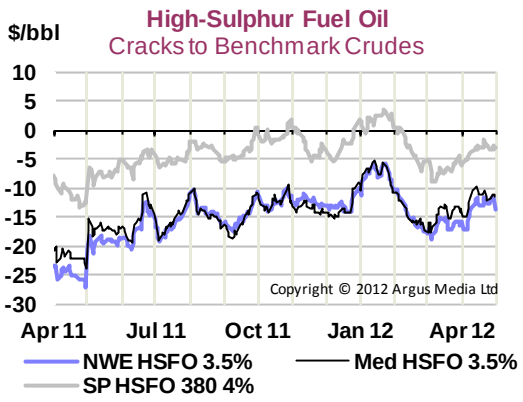




Middle distillates crack spreads saw moderate increases in all regions in April. In Northwest Europe, diesel crack spreads increased by $2.99/bbl versus Brent to an average $17.79/bbl in April, and in the Med, spreads increased by $2.47/bbl versus Urals to an average $19.80/bbl for the month. Markets were supported by ongoing refining maintenance both regionally and in Russia, with lower volumes being exported. Comfortable stock levels however capped upside price potential. On the US Gulf Coast, diesel crack spreads to LLS increased by $2.47/bbl. Continuously strong exports to both Europe and Latin America were supportive for prices, and draws in middle distillate stocks were also contributing to the

upward price pressure. In Singapore, 0.05% gasoil differentials to Dubai increased by $2.23/bbl in April to an average $17.76/bbl. The ramp-up in refining maintenance tightened the market, and Singapore stock levels fell below the five-year average in the second half of the month.





Fuel oil markets strengthened in April, and LSFO crack spreads in the Mediterranean improved by $3.78/bbl over the month, and moved into positive territory to a monthly average of $0.48/bbl. Also HSFO markets strengthened with Singapore bunker fuel grade crack spreads improving $2.85/bbl in April. In Europe, supplies were tight due to less inflow from Russia and ongoing regional refining maintenance and independent stocks in the ARA region fell to below the five-year average during April. In Asia, strong demand from Japan continued to be supportive with prospects of increased fuel oil demand in coming months with the country's last nuclear reactor taken offline early May. Increased demand lifted bunker fuel grades.

Spot Product Prices

(monthly and weekly averages, $/bbl)

	Feb	Mar	Apr	Apr-Mar Chg	Apr-Mar %	Week Commencing: 02 Apr	09 Apr	16 Apr	23 Apr	30 Apr	Feb	Mar	Apr
Rotterdam, Barges FOB											**Differential to North Sea Dated**		
Premium Unl 10 ppm	125.47	134.99	136.35	1.35	1.0	143.01	139.65	135.56	130.42	128.16	5.94	9.72	16.78
Naphtha	115.64	120.07	115.69	-4.39	-3.7	120.59	118.29	113.89	112.39	108.40	-3.89	-5.21	-3.88
Jet/Kerosene	133.21	137.39	135.31	-2.08	-1.5	137.88	134.99	133.93	134.83	134.00	13.68	12.12	15.74
ULSD 10ppm	136.66	140.08	137.36	-2.72	-1.9	140.11	137.13	136.26	136.53	135.29	17.13	14.80	17.79
Gasoil 0.1%	134.30	137.21	134.62	-2.59	-1.9	136.66	134.32	133.42	134.31	133.46	14.77	11.93	15.05
LSFO 1%	112.50	117.68	115.62	-2.06	-1.8	118.55	116.97	113.96	114.14	113.14	-7.03	-7.60	-3.95
HSFO 3.5%	105.98	108.74	106.00	-2.74	-2.5	107.68	106.21	104.76	105.76	104.35	-13.55	-16.54	-13.57
Mediterranean, FOB Cargoes											**Differential to Urals**		
Premium Unl 10 ppm	126.17	135.96	137.55	1.60	1.2	144.19	140.88	136.79	131.62	129.36	6.85	12.72	20.10
Naphtha	113.20	117.63	113.37	-4.25	-3.6	118.23	115.98	111.61	110.06	106.10	-6.11	-5.61	-4.09
Jet Aviation fuel	132.47	136.42	134.22	-2.20	-1.6	136.80	133.91	132.85	133.72	132.90	13.16	13.18	16.76
ULSD 10ppm	136.46	140.56	137.25	-3.31	-2.4	139.98	136.84	136.24	136.47	135.39	17.15	17.33	19.80
Gasoil 0.1%	134.74	137.43	134.74	-2.69	-2.0	137.16	134.23	133.40	134.45	133.10	15.42	14.19	17.28
LSFO 1%	114.79	119.93	117.94	-1.99	-1.7	120.93	119.44	116.21	116.39	115.33	-4.52	-3.30	0.48
HSFO 3.5%	105.59	108.28	105.73	-2.55	-2.4	107.37	106.00	104.48	105.46	104.35	-13.72	-14.95	-11.72
US Gulf, FOB Pipeline											**Differential to LLS**		
Super Unleaded	132.17	141.65	146.25	4.60	3.2	150.30	146.94	145.93	143.71	138.38	11.76	14.51	23.85
Unleaded	125.73	134.38	134.43	0.05	0.0	141.60	137.26	132.09	129.42	125.35	5.33	7.24	12.02
Jet/Kerosene	134.50	136.67	135.25	-1.43	-1.0	136.85	134.50	134.63	135.04	133.68	14.10	9.54	12.84
ULSD 10ppm	133.43	137.28	135.02	-2.26	-1.6	136.96	134.66	133.64	135.07	132.76	13.03	10.15	12.62
No. 6 3%*	109.26	111.58	108.55	-3.03	-2.7	110.92	108.71	106.95	108.08	105.87	-11.14	-15.55	-13.85
Singapore, FOB Cargoes											**Differential to Dubai**		
Premium Unleaded	130.86	136.60	135.06	-1.54	-1.1	139.03	135.29	133.33	133.20	131.43	14.75	14.07	17.78
Naphtha	114.35	119.30	114.54	-4.76	-4.0	117.01	116.02	114.07	112.18	108.39	-1.76	-3.22	-2.74
Jet/Kerosene	132.44	136.25	133.29	-2.96	-2.2	135.98	133.04	132.31	132.41	131.88	16.33	13.72	16.02
Gasoil 0.05%	134.54	138.06	135.04	-3.02	-2.2	137.81	135.05	133.70	134.17	133.50	18.43	15.53	17.76
LSWR Cracked	126.76	129.20	126.52	-2.69	-2.1	128.65	126.90	125.34	125.70	125.08	10.65	6.68	9.24
HSFO 180 CST	115.32	117.86	115.05	-2.81	-2.4	117.36	115.44	113.80	114.18	113.53	-0.79	-4.67	-2.22
HSFO 380 CST 4%	113.75	115.93	113.53	-2.40	-2.1	115.65	113.81	112.42	112.77	112.10	-2.37	-6.60	-3.75

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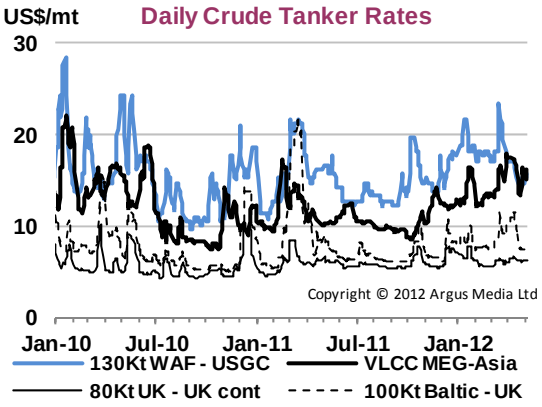
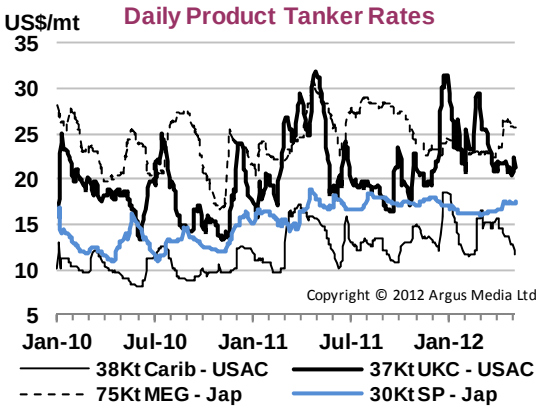
* Waterborne

Please note that some of the price quotes have been re-assessed this month. For a full overview, please visit our web site at www. oilmarketreport. org

Freight

Rates weakened on all benchmark crude tanker routes during April, although by early May rates had either stabilised or begun to creep back up, largely due to continued high demand for Middle Eastern crudes. The benchmark Middle East Gulf – Japan trade, which initially weakened to $13/mt, recovered to stand at above $15/mt at the time of writing. The Suezmax market remained depressed throughout April on over supply. The West Africa – US Gulf coast route, which initially softened to under $15/mt, posted a modest recovery in mid-May, to breach $15/mt. In the European Aframax markets, the end of ice restrictions in the Baltic weighed heavy with an abundance of newly suitable vessels exerting downward pressure on rates. Not surprisingly, the Baltic – UK trade bore the brunt of the losses as rates collapsed from $11.40/mt to $7.60/mt by early May.





In the product tanker market, the picture was slightly brighter. The only trade to experience a sharp fall was the Caribbean – US Atlantic Coast route, which steadily declined from $15.60/mt in early April to below $12/mt by the first week in May. It is highly likely that this fall is related to the closure of the St Croix and Aruba refineries. With no operational refineries and only storage terminals located in the region the volumes transported on the route will now be minimal and thus most vessels operating the route are expected to re-orientate towards other Atlantic basin markets. In the East, rates on the 75 Kt Middle East Gulf – Japan trade surged to a mid-month high of over $27/mt in response to buoyant Japanese demand.

Iranian Tankers Play Hide and Seek

Crude oil tankers controlled by the National Iranian Tanker Company (NITC) have reportedly been ordered to routinely deactivate their Automatic Identification System (AIS) transponders. These systems, although intended primarily to supplement radar and mitigating against marine collisions, are also used by numerous organisations to track vessel movements. Switching off the transponders, even only for a limited period of one or two days, can hamper the tracking of a vessel's movements.

NITC currently operates a fleet of 39 vessels composed of 25 VLCCs, 9 Suezmaxes and 5 Aframaxes. Due to ongoing sanctions and the connected problems of obtaining insurance for carriers calling at Iranian ports, NITC tankers have recently shipped the bulk of Iran's crude exports. The deactivating of the AIS transponders therefore permits these vessels to obscure destination ports and ship-to-ship transfers in mid-ocean where oil is transferred onto another carrier for forward delivery. Indeed at the time of writing, tracking data indicate that over a quarter of the NITC fleet have not activated their transponders since April. This issue is hindering assessing Iran's oil in transit on the water and also the amount of Iranian oil in floating storage, since it is unclear, without firm information of the draught of a vessel, whether it has unloaded its cargo in the time that its transponder has been deactivated. This is reflected in the varied recent estimates of Iranian floating storage. Although sources acknowledge that Iranian floating storage has risen over April, total volumes vary between 23 and 35 mb, with up to half of the Iranian fleet possibly engaged in storage.

As such, with NITC reportedly due to take delivery this month of the first of eight new VLCCs due to be completed in 2012, and given the ongoing difficulties for Iran to sell its crude, assessing Iranian trade flows is likely to remain challenging for the foreseeable future.

REFINING

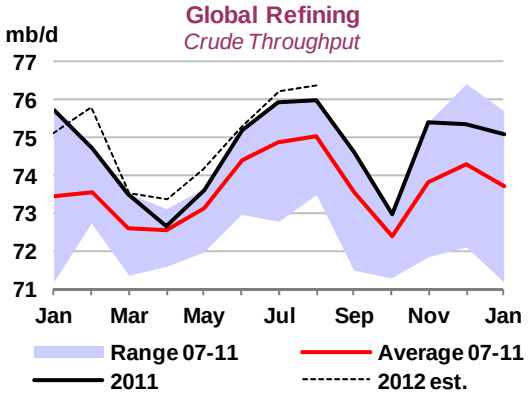
Summary

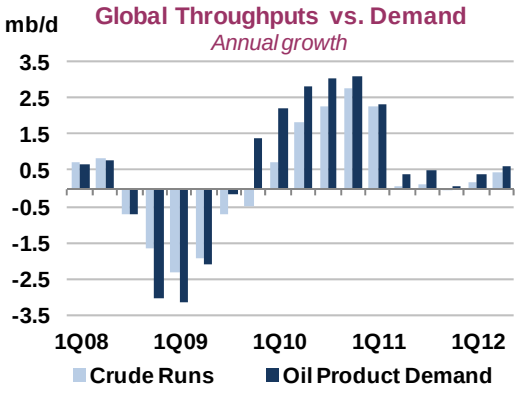
- **Global refinery crude throughputs reached a seasonal low in April,** but are set to rise sharply from May onwards to meet higher demand for oil products through the summer. Coinciding with a peak in refinery maintenance, global crude runs are estimated at 73.4 mb/d in April, 2.5 mb/d less than February's high. Poor OECD refining economics in 1Q12 also contributed to lower throughputs. From an average 74.8 mb/d in 1Q12, runs are expected to fall to 74.3 mb/d in 2Q12, with throughputs up by 150 kb/d and 440 kb/d y-o-y, respectively.

- **OECD crude runs plummeted by 1.2 mb/d in March,** as seasonal maintenance peaked in both Europe and North America. European runs regained previous record-lows seen last April, at 11.6 mb/d, down 575 kb/d from February. The shutdown of Hovensa's refinery in the US Virgin Islands helped reduce North American throughputs by 0.5 mb/d. Pacific runs recorded smaller month-on-month declines, due to a later maintenance season which normally peaks in June.

- **Refinery margins rose in all regions surveyed in April**, bar the US West Coast, which fell from more elevated levels in March. US Gulf Coast margins saw the sharpest improvements, rising $4.25/bbl on average to around $4/bbl for cracking margins and more than $6.50/bbl for coking configurations. Northwest European margins rose by $2.70/bbl on average, while Singapore rates gained $2.30/bbl in the month, but remained in negative territory on a full cost basis. Reduced run rates due to maintenance, unscheduled outages and economic run cuts supported margins.

- **Refinery capacity rationalisation efforts were partly reversed in April,** with the potential sale of four Atlantic Basin refineries previously taken out of the market due to poor margins. Delta Airlines agreed to buy ConocoPhillips' Trainer refinery in Pennsylvania, Vitol/AtlasInvest bought Petroplus' Cressier plant in Switzerland, Gunvor is about to restart the Antwerp refinery, also bought from Petroplus, and the Carlyle group is in talks to buy Sunoco's Philadelphia refinery after Energy Transfer Partners bought Sunoco's pipeline and retail network for $5.3 billion.





Global Refinery Overview

Global refinery runs for February were 170 kb/d higher than preliminary data had indicated, with European runs notably stronger. Also, Middle Eastern crude runs were higher than expected, but offset by downward adjustments to Latin America and non-OECD Europe. March data were slightly lower than expected in the OECD (-85 kb/d) partly offset by higher runs in the non-OECD (+60 kb/d). In all, 1Q12 global crude runs have been revised up by 20 kb/d, to average 74.8 mb/d.

Global Refinery Crude Throughput[1]

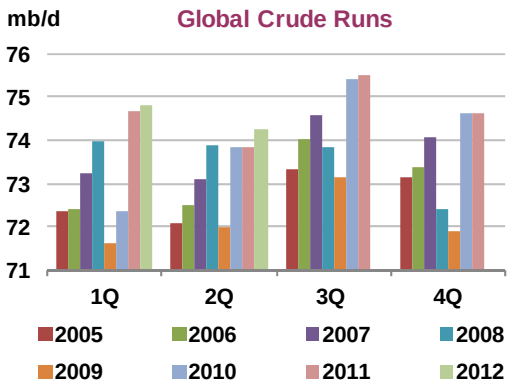
(million barrels per day)

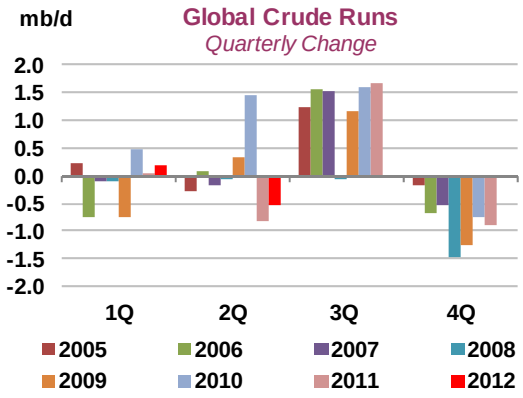
	4Q2011	Jan 12	Feb 12	Mar 12	1Q2012	Apr 12	May 12	Jun 12	2Q2012	Jul 12	Aug 12
North America	**17.9**	17.5	17.8	17.3	**17.5**	17.3	18.0	18.3	**17.9**	18.6	18.5
Europe	**12.1**	12.1	12.2	11.6	**12.0**	11.8	11.9	12.1	**11.9**	12.3	12.5
Pacific	**6.5**	6.9	6.9	6.7	**6.8**	6.5	6.1	6.1	**6.2**	6.3	6.4
Total OECD	**36.5**	**36.5**	**36.9**	**35.7**	**36.3**	**35.6**	**36.0**	**36.5**	**36.0**	**37.1**	**37.4**
FSU	**6.5**	6.7	6.7	6.5	**6.6**	6.4	6.5	6.8	**6.6**	6.7	6.8
Non-OECD Europe	**0.5**	0.5	0.4	0.5	**0.5**	0.5	0.5	0.5	**0.5**	0.5	0.5
China	**9.1**	9.3	9.3	9.1	**9.2**	9.1	9.3	9.2	**9.2**	9.4	9.3
Other Asia	**8.9**	9.2	9.4	9.2	**9.2**	9.1	9.2	9.4	**9.2**	9.3	9.0
Latin America	**4.9**	5.0	5.0	4.9	**5.0**	4.9	4.8	4.8	**4.8**	5.0	4.9
Middle East	**6.1**	5.9	6.0	5.6	**5.8**	5.7	6.0	6.0	**5.9**	6.0	6.2
Africa	**2.1**	2.1	2.2	2.2	**2.1**	2.2	1.9	2.1	**2.0**	2.2	2.3
Total Non-OECD	**38.1**	**38.6**	**38.9**	**37.9**	**38.5**	**37.8**	**38.2**	**38.8**	**38.3**	**39.1**	**39.0**
Total	**74.6**	**75.1**	**75.8**	**73.5**	**74.8**	**73.4**	**74.2**	**75.3**	**74.3**	**76.2**	**76.4**

1 Preliminary and estimated runs based on capacity, known outages, economic run cuts and global demand forecast

Note: US Virgin Islands included in North America and not Latin America as previously

2Q12 global throughputs have been lowered by 90 kb/d since last month's report to 74.3 mb/d. The adjustments follow from significantly weaker US runs in April, and continued delays to the restart of Libya's Ras Lanuf refinery and outages in India. Furthermore, an evaluation of non-OECD European data also lowers throughputs in Croatia and Romania through the forecast period. Higher Japanese data lift the OECD Pacific however, providing a partial offset to global runs.





The quarterly decline in runs from 1Q12 to 2Q12 is now assessed at 0.5 mb/d, less than last year's dip, but steeper than historical trends. Global throughputs generally rise most sharply in 3Q, by 1.2 mb/d on average for the last five years, before falling seasonally again in 4Q (-1.0 mb/d).

Refinery margins improved in all regions surveyed in April, except for the US West Coast, where they came down from more elevated levels in March. US Gulf Coast margins gained $4.25/bbl on average, and returned to profitable levels of $3.50-6.70/bbl. Northwest European margins rose $2.70/bbl on average, with cracking margins returning to respectable returns of $4.90-6.60/bbl. Urals hydroskimming margins improved but remained negative in April. Similarly, Singapore margins improved by more than $2/bbl but remained negative for all configurations surveyed on a full cost basis.

Selected Refining Margins in Major Refining Centres

($/bbl)

		Monthly Average				Change	Average for week ending:				
		Feb 12	Mar 12	Apr 12		Apr 12-Mar 12	30 Mar	06 Apr	13 Apr	20 Apr	27 Apr
NW Europe	Brent (Cracking)	0.80	1.68	4.88	↑	3.20	4.23	4.71	4.95	6.03	4.13
	Urals (Cracking)	1.49	4.13	6.64	↑	2.51	6.59	6.91	7.19	7.44	5.38
	Brent (Hydroskimming)	-1.85	-2.13	0.77	↑	2.90	-0.52	0.03	0.53	1.99	0.68
	Urals (Hydroskimming)	-4.44	-3.78	-1.54	↑	2.24	-2.49	-2.23	-1.50	-0.58	-1.73
US Gulf Coast	LLS (Cracking)	1.87	0.52	4.85	↑	4.33	3.64	5.29	4.54	4.75	4.68
	Mars (Cracking)	-0.30	-0.65	3.49	↑	4.14	1.55	3.53	3.27	3.63	2.96
	Mars (Coking)	1.24	1.52	6.55	↑	5.03	4.75	6.91	6.52	6.80	5.66
	Maya (Coking)	1.72	3.19	6.67	↑	3.48	7.06	9.03	7.54	5.94	4.80
US West Coast	ANS (Cracking)	2.85	1.62	0.03	↓	-1.59	2.83	0.33	-0.09	-0.81	0.44
	Kern (Cracking)	8.34	4.10	3.96	↓	-0.14	4.48	4.78	2.95	2.76	4.97
	Kern (Coking)	10.54	9.44	6.60	↓	-2.84	8.23	8.27	6.01	4.46	7.07
Singapore	Dubai (Hydroskimming)	-1.26	-4.71	-2.63	↑	2.08	-4.37	-4.13	-3.46	-1.80	-1.26
	Tapis (Hydroskimming)	-5.94	-8.51	-6.01	↑	2.50	-7.58	-7.21	-6.93	-4.66	-5.28
	Dubai (Hydrocracking)	0.75	-2.08	-0.01	↑	2.07	-1.67	-1.35	-0.93	0.78	1.29
	Tapis (Hydrocracking)	-6.57	-8.90	-6.35	↑	2.55	-8.09	-7.61	-7.38	-4.97	-5.54

For the purposes of this report, refining margins are calculated for various complexity configurations, each optimised for processing the specific crude in a specific refining centre on a 'full-cost' basis. Consequently, reported margins should be taken as an indication, or proxy, of changes in profitability for a given refining centre. No attempt is made to model or otherwise comment upon the relative economics of specific refineries running individual crude slates and producing custom product sales, nor are these calculations intended to infer the marginal values of crudes for pricing purposes.

Source: Purvin & Gertz Inc.

New Refinery Entrants Temporarily Stall Rationalisation Drive

The confirmation on 30 April that Delta Airlines will buy ConocoPhillips' 187 kb/d Trainer refinery for a bargain price of $150 million, in an attempt to reduce jet fuel cost, was met by mixed reactions. On the one hand, the plant's 400 employees and local officials were relieved to save jobs directly and indirectly linked to the plant, which has been idled since September 2011. More critical observers say that market fundamentals on the US East Coast have not improved, and economics will remain just as challenging for Delta – which is already struggling to survive amid challenging airline industry economics. Delta is planning to spend $100 million to reconfigure the plant to produce more jet fuel, and expects production to resume in 3Q12.

Also on the US East Coast, Sunoco announced in late April it will delay the planned shutdown of its 330 kb/d Philadelphia refinery by a month to end-July to allow it more time to conclude a deal with private equity firm Carlyle Group to take the majority stake in the plant. If an agreement is not reached between the two parties, the plant will be destined for the same fate as Sunoco's 175 kb/d Marcus Hook plant, already idled since December 2011 on deteriorating market conditions, and be permanently shut.

Separately, Energy Transfer Partners, a natural gas pipeline company, has agreed to buy Sunoco for $5.3 billion. The deal will allow ETP to enter the Marcellus and Utica shale plays, and become the controlling partner of Sunoco Logistics LP, which operates 2 500 miles of refined products pipelines, 5 400 miles of crude pipelines, and the storage of 42 mb of crude and refined products across the US. The deal also encompasses 4 900 retail stations and two refineries, though Sunoco will continue its plans for exiting the refining business, as well as its plans for the proposed refinery joint venture with the Carlyle Group.

In Europe, a new breed of owners is increasing its presence in the refining sphere. After the collapse of the region's largest independent refiner, Petroplus, administrators and local governments have been working to secure buyers for the five plants and a few deals were struck recently. Independent commodity trader Gunvor struck a deal to take over the 108 kb/d Antwerp refinery in March. The plant is currently in start-up mode and is expected to resume full production by mid-May. On 3 May Petroplus announced it had made a deal with Varo Holdings, a JV between oil trader Vitol and AtlasInvest for the sale of the 68 kb/d Cressier refinery. The plant could be restarted in 3Q12. France's Petit Couronne refinery is planning to restart runs through a tolling agreement with Shell, and reportedly is moving closer to finding a buyer.

While the refinery purchases surely make sense for the new owners, trying to become more vertically integrated or looking for a physical stake at key trading hubs, and the restarts are good for employment, they do nothing to address the fundamental overhang in capacity afflicting the OECD industry in general.

OECD Refinery Throughput

OECD crude runs declined by 1.2 mb/d in March, to 35.7 mb/d, or 215 kb/d less than March 2011. Throughputs were lower in all regions as seasonal maintenance picked up, but most sharply in Europe, where crude runs fell by 575 kb/d, to 11.6 mb/d, equalling the record-low reached last April. North American throughputs also declined by 520 kb/d, though the shutdown of Hovensa's 350 kb/d refinery in the US Virgin Islands accounted for some of the fall. Runs in the US, Canada and Mexico all fell as maintenance intensified. Pacific refiners reported smaller declines, however, with only South Korean runs lower than in February. Japanese refiners traditionally cut runs later in the season, and reach a low point in June when turnarounds peak. March OECD crude runs were 85 kb/d lower than our previous forecast overall, with minor changes to all regions. Final February data on the other hand were higher than preliminary data, leading to an upward revision of 210 kb/d. Stronger German and Belgian rates drove European throughputs 150 kb/d higher.

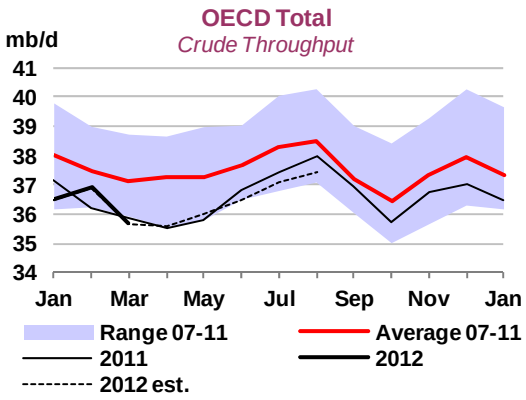
Refinery Crude Throughput and Utilisation in OECD Countries
(million barrels per day)

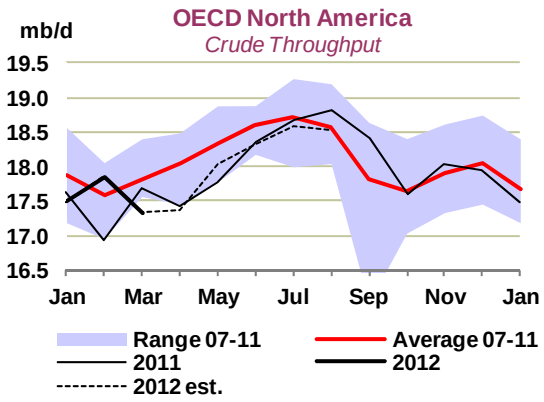
							Change from		Utilisation rate[1]	
	Oct 11	Nov 11	Dec 11	Jan 12	Feb 12	Mar 12	*Feb 12*	*Mar 11*	Mar 12	Mar 11
US[2]	14.54	14.96	14.84	14.42	14.66	14.50	-0.16	0.05	84.3%	82.5%
US Virgin Islands	0.27	0.27	0.27	0.27	0.19	0.00	-0.19	-0.26	0.0%	75.1%
Canada	1.62	1.63	1.68	1.59	1.74	1.64	-0.10	-0.14	89.6%	97.2%
Mexico	1.15	1.18	1.16	1.21	1.25	1.18	-0.07	-0.02	71.7%	77.8%
OECD North America	**17.59**	**18.04**	**17.95**	**17.49**	**17.85**	**17.33**	**-0.52**	**-0.37**	**83.7%**	**84.7%**
France	1.32	1.38	1.41	1.17	1.09	1.04	-0.06	-0.22	66.4%	71.9%
Germany	2.03	1.96	1.95	1.93	1.91	1.80	-0.11	0.07	84.6%	72.4%
Italy	1.55	1.52	1.55	1.57	1.50	1.39	-0.11	-0.15	63.6%	67.7%
Netherlands	0.97	0.97	1.03	1.06	1.10	1.07	-0.03	-0.01	82.8%	83.6%
Spain	1.00	1.10	1.09	1.09	1.15	1.08	-0.06	0.13	71.4%	68.0%
United Kingdom	1.39	1.45	1.46	1.48	1.50	1.48	-0.02	0.09	81.7%	76.6%
Other OECD Europe	3.64	3.75	3.83	3.85	3.93	3.74	-0.18	-0.05	75.9%	77.0%
OECD Europe	**11.90**	**12.13**	**12.29**	**12.14**	**12.17**	**11.60**	**-0.57**	**-0.14**	**75.2%**	**74.1%**
Japan	2.98	3.20	3.37	3.45	3.49	3.54	0.05	0.38	77.0%	66.9%
South Korea	2.63	2.64	2.62	2.65	2.64	2.46	-0.18	-0.06	89.9%	92.0%
Other OECD Pacific	0.63	0.72	0.77	0.76	0.74	0.74	0.00	-0.03	79.5%	83.0%
OECD Pacific	**6.24**	**6.56**	**6.76**	**6.85**	**6.87**	**6.74**	**-0.13**	**0.29**	**81.5%**	**76.9%**
OECD Total	**35.73**	**36.73**	**37.00**	**36.48**	**36.89**	**35.66**	**-1.23**	**-0.22**	**80.4%**	**78.9%**

1 Expressed as a percentage, based on crude throughput and current operable refining capacity

2 US50

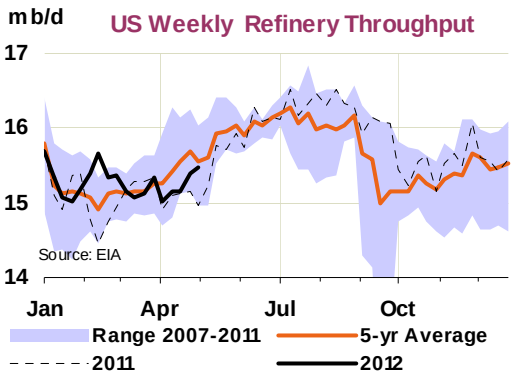
Preliminary April data for key countries showed diverging trends in the Pacific and the US. While US runs rose less than expected, despite announced maintenance schedules winding down, Japanese crude throughputs were higher than expected. The traditional seasonal ramp-up in US refinery runs could have been hampered by exceptionally weak margins in February and March. A wide improvement in returns in April suggests the lower runs in April paid off, and refiners will likely come back strongly from early May onwards. Furthermore, Motiva's expanded Port Arthur refinery (+325 kb/d) is expected to lift Gulf Coast throughputs as the plant ramps up to full rates. OECD European refiners reached a seasonal peak in maintenance in March, and runs are expected to pick up already from April and further in May, once shuttered capacity comes back online. Petroplus' Antwerp and Cressier refineries are scheduled to resume operations over May and June/July, while the company's Petit Couronne plant in France could restart somewhat later, depending on the completion of current maintenance work.

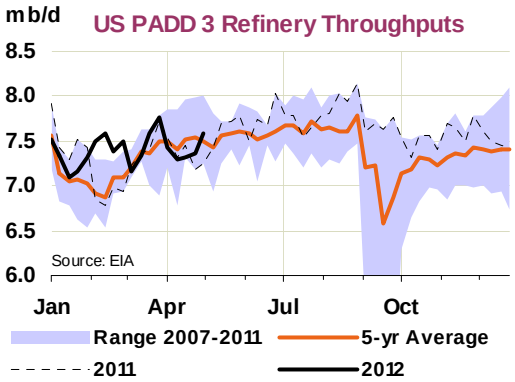




North American crude throughput estimates are unchanged since last month's report for 1Q12, but have been lowered substantially for 2Q12 following weaker-than-expected April US runs. Regional runs fell 520 kb/d in March, in large part due to the closure of Hovensa's refinery in the US Virgin Islands, and maintenance shutdowns elsewhere. March totals were 45 kb/d lower than our previous forecast and 365 kb/d below a year earlier.

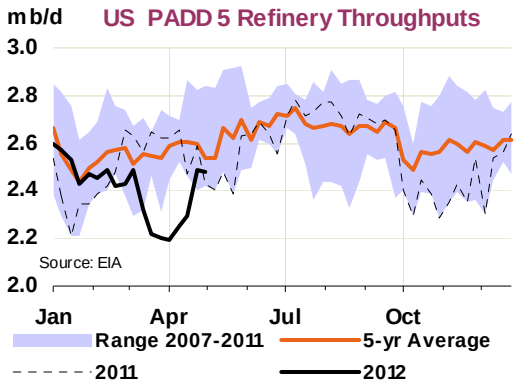
Regional refinery maintenance peaked in March with 1 500 kb/d in reported outages. In April shutdowns fell to 1 200 kb/d before most work is to be completed in May. Key shutdowns in March included Marathon's Garyville refinery in Louisiana, Citgo's Corpus Christi in Texas, BP's Cherry Point in Washington and Valero's Port Arthur plant in Texas. In April, planned shutdowns comprised amongst others Valero's Houston refinery and at Exxon's Beaumont refinery. Furthermore, an unplanned outage at BP's Texas City refinery slightly lowered runs.

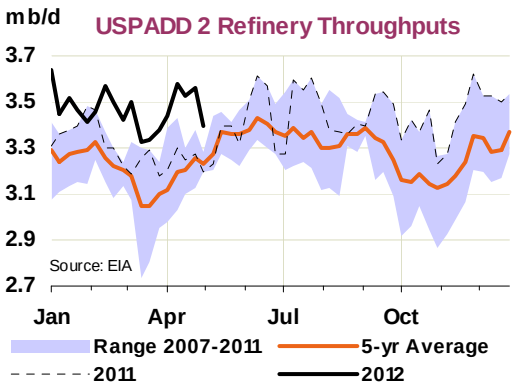




Despite the lower announced maintenance figures for April, weekly EIA data show US crude runs mostly unchanged from March. Weak, and in some cases negative, margins, especially on the Gulf Coast through March, likely led to discretionary run cuts. US Gulf Coast refinery runs fell sharply in April, also due to poor margins in March. Cracking margins were negative on average in March (-$0.65/bbl) and LLS cracking returned only $0.52/bbl. Margins saw sharp improvement in April, however, rising by more than $4/bbl on average on the Gulf Coast. West Coast margins fell however, as refineries came back from scheduled and unscheduled outages.

On the West Coast, operations resumed at BP's Ferndale refinery, Valero's Norco refinery and Alon resumed operations at its Californian refineries. BP's 225 kb/d Cherry Point refinery, which has been shut since February due to a fire at the plant's crude distillation unit, restarted on 7 May. Also at Midwest refineries, utilisation rates recovered with the restart of Valero's 90 kb/d Ardmore refinery in Oklahoma.

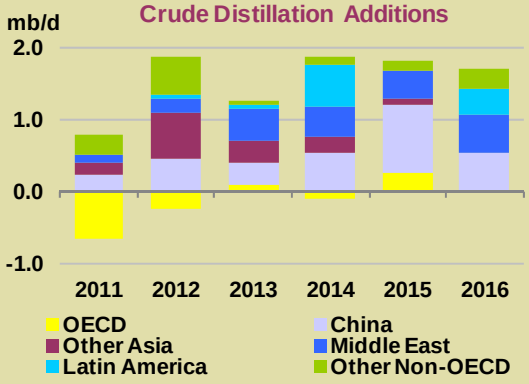


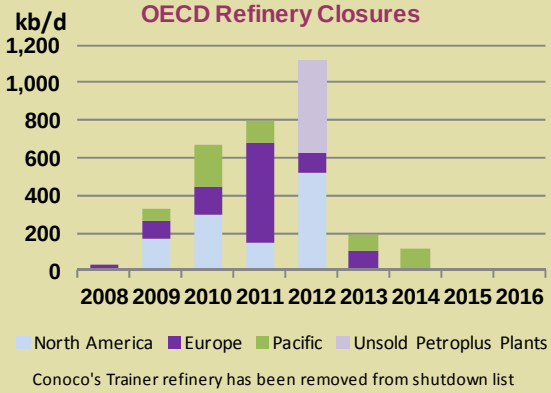


Implications of European Refinery Rationalisation

Notwithstanding recent refinery sales, since the start of the economic downturn in 2008, 2.8 mb/d of OECD crude distillation capacity has been shut or is committed to shut, with further capacity at risk.

The European downstream industry restructuring currently underway follows more than two years of low profitability. European refinery margins have gone from bad to worse, with both cracking and simple hydro-skimming margins deteriorating to levels that have forced several plants to halt operations. Regional crude throughputs are trending at all-time lows, averaging just over 12.0 mb/d in 2011, some 1.7 mb/d less than five years earlier. So far, more than 1.0 mb/d of regional crude distillation capacity has been shed, through seven refinery shutdowns and two capacity reductions, with likely more to come. The three unsold Petroplus plants add another 490 kb/d, destined for permanent closure if no buyers are found.





Conoco's Trainer refinery has been removed from shutdown list

While several factors contribute to the current dire situation of the European downstream, the structural decline in regional product demand is most relevant. Regional demand fell by 1.3 mb/d from 2006 to 2011, and is forecast to decline by another 0.7 mb/d by 2016. The 2.1 mb/d demand contraction by far outweighs completed or committed refinery shutdowns. Furthermore, demand is becoming progressively biased towards diesel. Europe's gasoil demand share is set to grow from 40% in 2006 to 42% in 2011 and 44% in 2016. At the same time, the gasoline share falls from 16% to 13%, which creates further problems for those European refiners geared towards gasoline production.

European product markets have traditionally been balanced by importing the required diesel, mostly from the FSU, and exporting surplus gasoline to the US. Since 2008, however, there has been another revolution related to North American crude and product balances. Increased regional crude supplies, from the US and Canada, have seen feedstock imports decline significantly. US net imports of crude are now less than 8.8 mb/d, over 1 mb/d lower than five years ago. More significantly for European refiners, US product exports are surging and gasoline imports are on a sharp decline. US refiners with access to cheaper, WTI-linked crudes and inexpensive natural gas used as refinery fuel or feedstocks, enjoy better margins than their counterparts on the other side of the Atlantic (and also refiners on the US East Coast, who do not benefit from the same advantage). Furthermore, US gasoline demand is in steep decline, with ethanol taking up an increasing share, further cutting demand for imports from Europe. Refinery capacity rationalisation on the US East Coast could provide increased export opportunities for European refiners however.

Implications of European Refinery Rationalisation (continued)

So where else can Europe send its surplus gasoline output? So far, European refiners have been finding markets in Africa, the Middle East and other non-OECD regions, but large scale expansions of non-OECD refinery capacity could further undermine this outlet. The non-OECD countries plan to add more than 9.0 mb/d of crude distillation capacity by 2016, far outpacing expected global demand growth of 6.7 mb/d. An increasing share of demand will furthermore be met by supplies bypassing the refinery system (crude direct burn, NGLs, GTLs, biofuels), and from refinery processing gains.

The fundamentals outlined here (in line with the December 2011 MTOMR Update) imply 5.9 mb/d of capacity would have to be shut or not built worldwide for global utilisation rates to be brought back to 83%, the average over 2006-2008, the last time we saw synchronous healthy refining margins. This suggests that, in addition to further refinery shutdowns, some project delays and cancellations post-2013 are now likely. Additional closure of European distillation capacity could be as much as 2.3 mb/d for utilisation rates to bump back up to 83%, or 2.6 mb/d if 85% was targeted. OECD Europe's crude oil imports from outside the region could fall by 760 kb/d (-8.8%) from 8.6 mb/d in 2010 to 7.8 mb/d by 2016.

Overall, main trade flows to Europe from Russia, the US, the Middle East and Asia currently account for over 1 mb/d of distillate imports. Assuming lower regional runs going forward, this could rise to more than 1.5 mb/d by 2016, as diesel demand is still expected to grow. Gasoline and fuel oil balances on the other hand will remain relatively unchanged, as lower output offsets declining regional demand. While fuel quality standards are evolving at different speeds across the world, much of the planned capacity upgrading and expansion looks set to meet Euro V standards. New supplies of high quality fuels are expected to outpace demand in the emerging markets, leaving high quality fuel available for export.

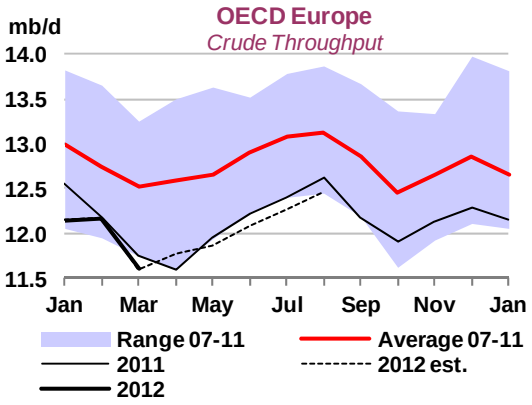
In the event of future distillate shortages in Europe, arbitrage economics should keep the European market well supplied, with future capacity additions likely to boost exportable surplus distillates by at least 1.3 mb/d (with Saudi Arabia, Russia and, in the longer term, Brazil likely to add additional supplies). Growing demand in Asia should restrict exports from that region unless premia for ultra low sulphur diesel (ULSD) keep the arbitrage open to European markets. Some Middle East and Asian volumes of distillate, such as gas-to-liquids (GTL) from Qatar and Malaysia, and hydrotreated vegetable oil biodiesel are likely to continue to flow to Europe due to their extremely low sulphur content. Such fuels are marketed as "green" relative to their conventional equivalents.

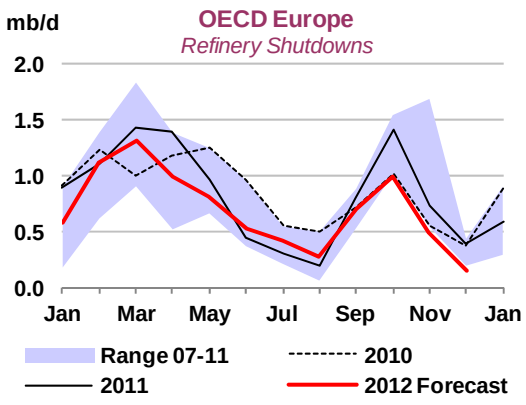
In addition to changing the balance of trade in favour of products rather than crude oil, the shutting of refinery capacity in Europe could also have a direct impact on commercial stock levels of crude oil and unfinished products, while their effect on commercial stocks of finished products is considered more limited. Commercial stocks of input fuels are assumed to decline by a share equal to the share of shut down refining capacity. Storage facilities of finished products at closed refinery sites that can be used as import terminals or distribution hubs will largely be maintained, due to a combination of high costs for complete site restoration and the existing trend of higher exports from refiners in non-OECD countries to Europe.

One likely repercussion of a shift in the balance between commercial stocks of crude oil/unfinished products and finished products, in favour of the latter is that holding strategic stocks under an industry obligation will likely become more expensive on a per barrel basis. A second outcome is that higher demand for oil product storage facilities – as already witnessed in some European countries – is likely to become an issue elsewhere as well.

Irrespective of whether a country fulfils its stockholding obligation by keeping public or industry stocks or a mix of both, refinery closures will likely lead to lower commercial inventories of crude oil and unfinished products. The impact on total stocks held by a country could hinge upon the kind of stockholding system in place and the number of refineries on its territory. First, the decrease in total stocks will conceivably be less pronounced for countries that cover the 90-day IEA obligation with public stocks only. Second, although there may be exceptions, the lower the number of refineries in a country, the more pronounced will be the impact of a refinery closure on overall stock levels.

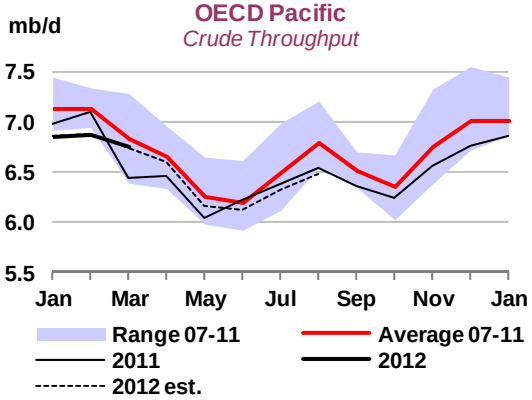
OECD European runs plummeted by 570 kb/d in March, to 11.6 mb/d, 60 kb/d less than forecast in last month's report, reflecting the weak demand picture outlined earlier. February preliminary data were revised up by 150 kb/d however, on stronger German and Belgian readings. The March total was likely the season's low-point coinciding with the peak in scheduled outages, and was on par with the previous all time-low hit last April. Runs fell in practically all countries, though most sharply in Germany, Italy, Spain and France. The year-on-year deficit, of 140 kb/d in total, was most pronounced in France (-220 kb/d y-o-y), Italy (-150 kb/d), Switzerland (-60 kb/d) and Belgium (-55 kb/d)

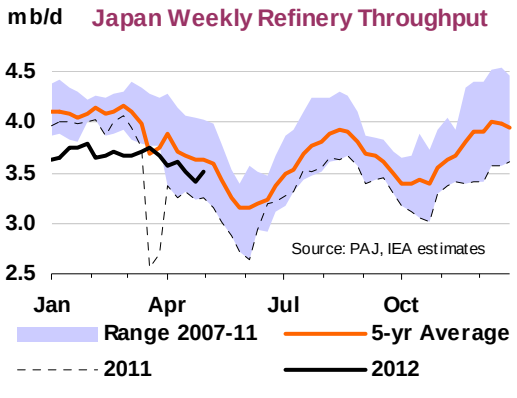




Regional runs are expected to pick up from April onwards as maintenance winds down. After peaking in March at 1.3 mb/d, the 2Q12 outage forecast is now around 670 kb/d, with shutdowns falling sharply from 700-850 kb/d in April and May to 400 kb/d in June. The shutdown of the Italian Gela plant has been included from mid-April to the end of the year. Belgium's Antwerp refinery, which was bought by Gunvor, is currently in start-up mode and will likely restart production in mid-May. Petroplus' French refinery in Petit Couronne will resume production in coming months, after maintenance is completed. Shell will then supply up to 100 kb/d of crude for refining under a tolling agreement. Petroplus' Swiss refinery has also found a buyer in Varo Holdings (a joint venture between Vitol and AtlasInvest). The 68 kb/d refinery is expected to resume operations early in 3Q12, after the transaction is closed later in 2Q12.

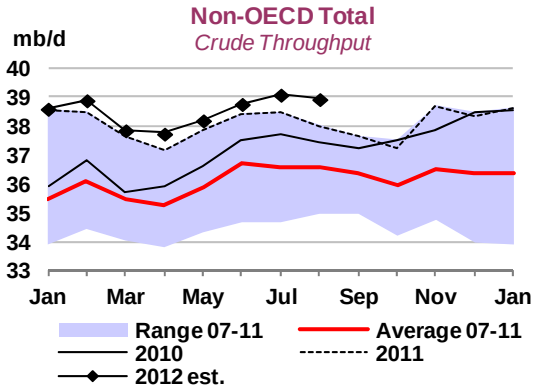
OECD Pacific crude runs declined 130 kb/d in March, to 6.7 mb/d on average. The regional total was some 295 kb/d higher than a year earlier, when Japan was hit by a devastating earthquake and tsunami. Runs are expected to start falling seasonally in April, and indeed, weekly data from the Petroleum Association of Japan through 5 May confirms maintenance work was picking up. The monthly decline was nevertheless much weaker than expected, leading to an upward revision of 320 kb/d to Japanese estimates. An incident at Shell's Geelong refinery in Australia in early April likely cut runs there, providing a partial offset. Shell reportedly delayed the loading of a Vietnamese cargo from May to June and was looking to sell at least one cargo bought in a tender prior to the accident.

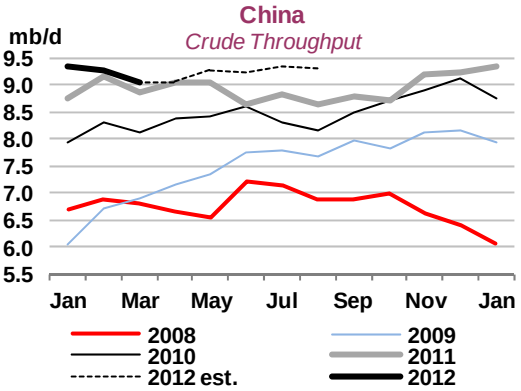




Non-OECD Refinery Throughput

Non-OECD refinery crude run estimates have been left largely unchanged for 1Q12, averaging 38.5 mb/d. Higher Middle Eastern throughputs were offset by a downward baseline adjustment to non-OECD Europe. The 2Q12 forecast have been lowered by 90 kb/d on the other hand, due to the lower non-OECD European baseline and following further delays to the start up of Libya's largest refinery and unscheduled outages in India.





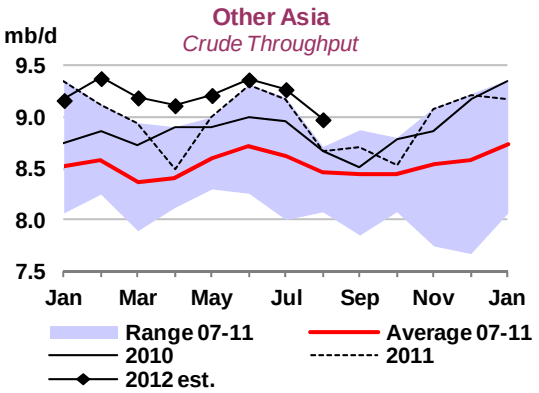
Chinese crude runs fell by 210 kb/d in March, to 9.1 mb/d, in line with expectations. Throughputs were 200 kb/d or 2.3% above a year earlier, but the lowest since October 2011 as refiners commenced seasonal maintenance. Throughputs were set to fall further in April as turnarounds intensified and amidst continued poor margins. Outages scheduled for April include a 200 kb/d crude unit at Sinopec's Zhenhai refinery, further work at PetroChina's Dalian plant, and a partial reduction at the joint venture WEPEC refinery.

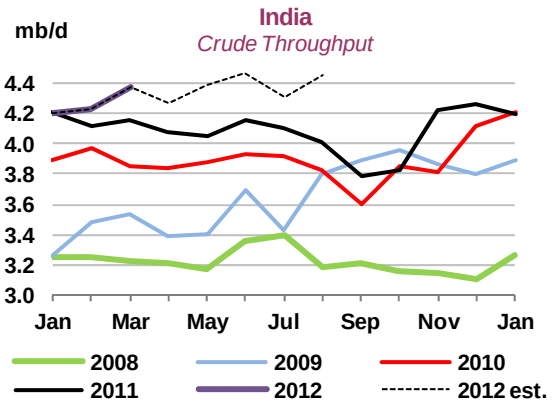
Sinopec reportedly started crude deliveries to the new 160 kb/d unit at its Jinling refinery in the last week of March, boosting the plants capacity to 430 kb/d, the largest in China after the 460 kb/d Zhenhai refinery. Full operations are not immediate, however, as some secondary units are still to be completed. The unit was originally scheduled to start up at the end of 2011, but was delayed until June 2012 after a series of accidents in the Chinese refining sector.

In '**Other Asia'**, refinery runs were slightly higher than expected in March, with India, Singapore and Taiwan lifting the regional total by a combined 50 kb/d compared to the previous forecast. In all, regional runs are assessed at 9.2 mb/d, 215 kb/d lower than in February. Expected lower runs in Indonesia and Taiwan were partly offset by higher Indian runs.

India's refinery throughputs are estimated to have averaged 4.3 mb/d in March, adjusting official ministry data for Reliance's Jamnagar export plant and the recently commissioned Bina and Bathinda refineries. The monthly figure is assessed some 4.4% higher than a year earlier and 2.8% above the previous month. According to its latest financial report, Reliance Ind. Ltd (RIL) processed 16.2 million mt of crude in the first quarter, or an average of 1.3 mb/d, of which 720 kb/d were accounted for by the domestic orientated Jamnagar 1 site and the remaining 580 kb/d by the export oriented plant. Quarterly runs were 1 million mt less than in 4Q11 due to a planned shutdown in 1Q12.

In the same report, RIL reported that its refining margins averaged $7.60/bbl in 1Q12, compared to $6.80/bbl in 4Q12. For the 2011/2012 fiscal year as a whole, the company processed 67.6 million mt of crude and exported 39.6 million mt of products, an annual increase of 3%. In terms of value however, product exports rose 23% from the previous year to $36 billion in 2011/2012. In March, India's private refiners, which account for about a third of India's refining capacity, was boosted further as shipments from the recently expanded Essar Vadinar refinery doubled. Essar expanded the Vadinar refinery by 150 kb/d in March, to 360 kb/d. In all, shipments averaged 1.13 mb/d, 34% higher than in February.



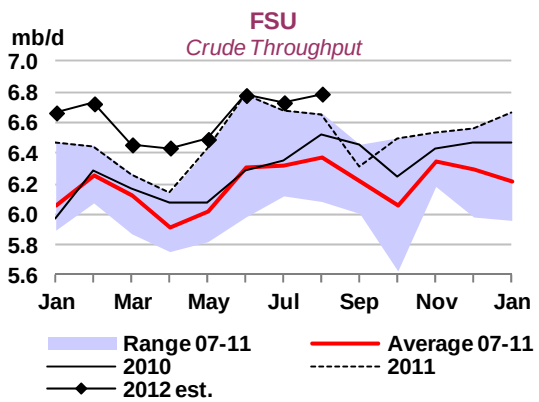


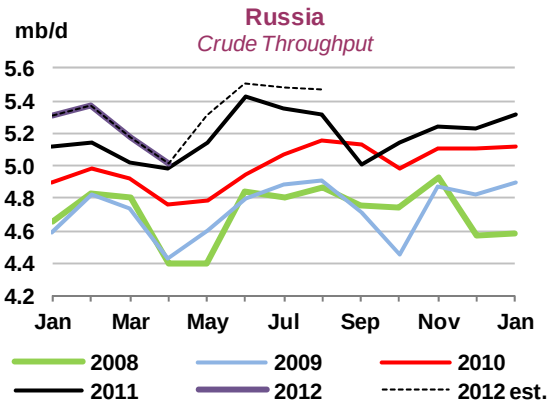
Runs for both April and May have been revised lower, as state-run Mangalore Refinery and Petrochemicals Ltd had to shut its 300 kb/d refinery in the south of the country due to a water shortage. Local authorities reduced water supplies to the plant from end-March and on 11 April the water intake from the Nethravath River was completely halted, forcing a full shutdown. The company declared *force majeure* on crude feedstock supplies as well as refined product deliveries. By end April, however, the facility was partially restarted and *force majeure* lifted after water supplies to the plant resumed. Commissioning of the Phase 3 expansion (including a 60 kb/d crude distillation unit) completed in March 2012, however, will be delayed until water supplies can be further increased. A fire at the 60 kb/d Numaligarh refinery led the company to shut the plant in April for an expected duration of 20 days. Prior to the fire, the company was planning a maintenance shutdown in May.

Trafigura, the worlds' third largest crude trader, entered the Asian refining sector in April by taking a 24% share in India's third planned private refinery, the 120 kb/d Nagarjuna in southern India. The project, initially slated to start up in November 2011, will now likely be commissioned later this year with full commercial production starting in the first half of 2013.

In Taiwan, operations at CPC's 220 kb/d Kaohsiung refinery were unaffected by a fire and explosion at the complex on 6 April. Throughputs were still estimated lower in March, due to continued safety shutdowns at Formosa's 540 kb/d Mailiao plant.

After declining 200 kb/d in March, **Russian** crude runs fell another 160 kb/d in April, in line with our previous forecast. At 5 mb/d, Russian refinery throughputs are expected to have reached the seasonal low-point. Refinery maintenance is thought to have peaked in April, with more than 1 mb/d of capacity offline. In May, offline capacity falls to less than 0.6 mb/d and 0.2 mb/d in June.

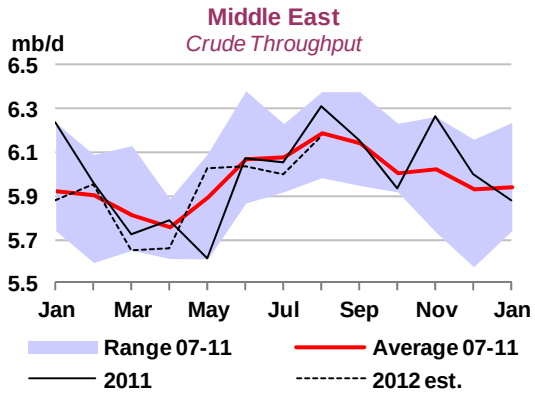


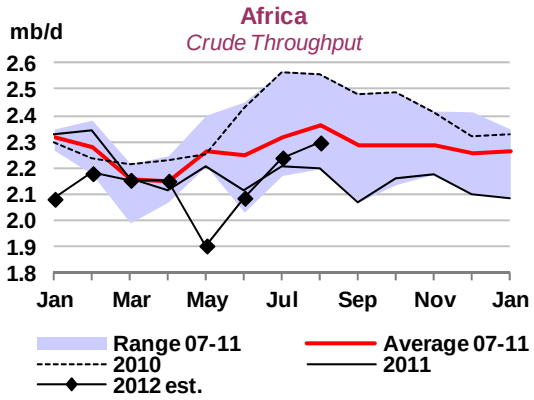


In **Lithuania**, PKN Orlen closed its sole refinery, the 190 kb/d Mazeikiu plant at the end of April for a 35-day maintenance shutdown. **Ukraine's**, TNK-BP announced it was preparing to mothball its

Lysychansk refinery (halted since March) as the Government would not limit gasoline imports from neighbouring countries benefitting a from cheaper Russian crude prices (through the Russian-Belarus-Kazakhstan customs union). Also in the Ukraine, Lukoil's 56 kb/d Odessa refinery has been shut in since October, due to poor margins. Kazakhstan's three refineries processed 284 kb/d of crude in March, up 11% from a year earlier but 5.2% lower than in February.

Middle Eastern crude run estimates have been lifted by 55 kb/d for 1Q12 and 90 kb/d for 2Q12 since last month's report. **Saudi Arabia's** 550 kb/d Ras Tanura refinery, which has partly been shut since March is expected to come back online in early May. The plant's 350 kb/d crude unit was reportedly back already in mid-April, followed by the 200 kb/d condensate splitter by end-month and the hydrocracker in early May. Aramco imported 90 kb/d of gasoline in March and 110 kb/d in April, due to the shutdowns. **Iraqi** refinery runs fell to 593 kb/d in March, from 660 kb/d in February, as exports surged to their highest level since 1989 with the startup of new export capacity. In the **UAE**, maintenance at ADNOC's 140 kb/d crude unit at the Ruwais refinery from March 9 to April 12 likely lowered throughputs.





Elsewhere, **Latin American** throughput estimates for 1Q12 and 2Q12 are largely unchanged since last month's report, at 5.0 mb/d and 4.8 mb/d, respectively. **Brazil's** crude throughputs were 1.9 mb/d in March, 65 kb/d more than a month earlier and on par with the previous year. In **Argentina**, Spanish firm Repsol-YPF was ordered to boost refinery runs after Buenos Aires moved to expropriate a 51% stake in the firm (see Supply, '*Milking a Vaca Muerta: Argentina's YPF Expropriation Clouds Investment Climate*'). The 189 kb/d La Plata refinery near the capital city was told to raise runs to 93% of capacity, from 85%. The plant will run 15 kb/d more heavy sweet Escalante crude to boost fuel oil supplies to domestic power stations. YPF is Argentina's largest fuel retailer and refiner, with just over 50% of the country's refining capacity across three refineries with a combined capacity of 320 kb/d. The latest monthly data available for Argentina puts crude throughputs at 527 kb/d in December 2011. In **Chile**, Enap was looking to restart a crude unit at its 110 kb/d Bio Bio refinery amid improving margins. One of the plant's two crude units had been offline since 4Q11 due to weak economics. The company's 95 kb/d Concon refinery were running at reduced rated for the same reason.

African refinery runs are set to dip sharply in May, due to scheduled and unscheduled outages. A fire at EGCP's Suez refinery in April was expected to reduce **Egyptian** supplies through early June. Scheduled maintenance at **Algeria**'s Skikda refinery from May is expected to curb regional runs further, though the extent of the shutdowns are not known. Also in Algeria, problems with a gasoline producing unit at the Arzew refinery will result in below-capacity runs for several months, after a partial shutdown was completed only in mid-February. In **Libya**, an official at refinery operator Lerco told Reuters that the restart of the country's principal Ras Lanuf refinery is unlikely for at least another month after a meeting between board members and shareholders, expected in mid-May.

Table 1
WORLD OIL SUPPLY AND DEMAND

(million barrels per day)

	2008	2009	1Q10	2Q10	3Q10	4Q10	2010	1Q11	2Q11	3Q11	4Q11	2011	1Q12	2Q12	3Q12	4Q12	2012
OECD DEMAND																	
North America	24.2	23.3	23.4	23.7	24.1	23.8	23.8	23.8	23.3	23.6	23.4	23.5	23.2	23.1	23.5	23.5	23.3
Europe	15.4	14.7	14.3	14.3	14.9	14.8	14.6	14.2	14.1	14.7	14.1	14.3	13.7	13.7	14.4	14.0	14.0
Pacific	8.1	7.7	8.2	7.3	7.6	8.1	7.8	8.3	7.1	7.7	8.3	7.9	8.7	7.2	7.7	8.1	7.9
Total OECD	47.6	45.6	46.0	45.3	46.7	46.7	46.2	46.3	44.5	45.9	45.8	45.6	45.5	43.9	45.6	45.6	45.2
NON-OECD DEMAND																	
FSU	4.2	4.2	4.4	4.3	4.5	4.6	4.4	4.5	4.6	4.8	4.8	4.7	4.7	4.7	4.9	4.9	4.8
Europe	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
China	7.7	8.1	8.6	9.1	8.9	9.7	9.1	9.5	9.5	9.3	9.7	9.5	9.9	9.9	9.7	10.2	9.9
Other Asia	9.7	10.1	10.4	10.6	10.2	10.6	10.4	10.8	10.7	10.4	10.9	10.7	10.9	11.0	10.6	11.2	10.9
Latin America	6.0	6.0	6.1	6.3	6.5	6.4	6.3	6.3	6.5	6.7	6.6	6.6	6.5	6.7	6.9	6.8	6.7
Middle East	7.3	7.5	7.4	7.8	8.3	7.7	7.8	7.6	8.0	8.5	8.0	8.0	7.7	8.2	8.7	8.2	8.2
Africa	3.3	3.3	3.3	3.5	3.4	3.5	3.4	3.4	3.4	3.3	3.4	3.4	3.5	3.5	3.5	3.5	3.5
Total Non-OECD	38.9	39.9	40.9	42.3	42.5	43.1	42.2	42.8	43.4	43.7	44.2	43.5	43.9	44.7	45.0	45.5	44.8
Total Demand[1]	86.6	85.6	86.9	87.6	89.2	89.9	88.4	89.2	88.0	89.7	89.9	89.2	89.5	88.6	90.7	91.1	90.0
OECD SUPPLY																	
North America[4]	13.3	13.6	14.0	13.9	14.0	14.4	14.1	14.3	14.3	14.5	15.2	14.5	15.3	14.9	15.2	15.5	15.2
Europe	4.8	4.5	4.5	4.1	3.8	4.2	4.1	4.1	3.8	3.6	3.8	3.8	3.9	3.6	3.4	3.6	3.6
Pacific	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6
Total OECD	18.7	18.8	19.1	18.7	18.4	19.2	18.8	18.9	18.6	18.6	19.5	18.9	19.7	19.0	19.2	19.8	19.4
NON-OECD SUPPLY																	
FSU	12.8	13.3	13.5	13.5	13.5	13.6	13.5	13.6	13.6	13.5	13.6	13.6	13.8	13.8	13.6	13.8	13.7
Europe	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
China	3.8	3.9	4.0	4.1	4.1	4.2	4.1	4.2	4.2	4.1	4.0	4.1	4.2	4.2	4.2	4.2	4.2
Other Asia[2]	3.7	3.6	3.7	3.7	3.7	3.7	3.7	3.6	3.5	3.5	3.6	3.6	3.6	3.6	3.5	3.5	3.5
Latin America[2,4]	3.7	3.9	4.0	4.1	4.1	4.1	4.1	4.2	4.2	4.2	4.3	4.2	4.3	4.3	4.4	4.5	4.4
Middle East	1.7	1.7	1.7	1.7	1.7	1.8	1.7	1.8	1.7	1.7	1.5	1.6	1.4	1.4	1.4	1.4	1.4
Africa[2]	2.6	2.6	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.6	2.6	2.6	2.4	2.3	2.3	2.3	2.3
Total Non-OECD	28.4	29.1	29.6	29.7	29.8	30.0	29.8	30.1	29.7	29.7	29.7	29.8	29.7	29.6	29.6	29.9	29.7
Processing Gains[3]	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.2	2.2	2.3	2.2	2.2	2.3	2.3
Global Biofuels[4]	1.4	1.6	1.4	2.0	2.1	1.8	1.8	1.5	1.9	2.2	1.8	1.8	1.6	1.9	2.2	2.0	1.9
Total Non-OPEC[2]	50.6	51.5	52.1	52.5	52.5	53.1	52.6	52.7	52.3	52.6	53.3	52.7	53.3	52.8	53.3	53.9	53.3
Non-OPEC: Historical Composition[2]	49.6	51.5	52.1	52.5	52.5	53.1	52.6	52.7	52.3	52.6	53.3	52.7	53.3	52.8	53.3	53.9	53.3
OPEC																	
Crude[5]	31.6	29.1	29.2	29.1	29.5	29.4	29.3	29.9	29.3	29.8	30.2	29.8	31.2				
NGLs	4.5	4.9	5.2	5.2	5.4	5.6	5.3	5.7	5.7	5.8	5.9	5.8	6.2	6.2	6.5	6.5	6.4
Total OPEC[2]	36.1	34.0	34.4	34.3	34.9	35.0	34.6	35.6	35.1	35.6	36.1	35.6	37.4				
OPEC: Historical Composition[2]	37.1	34.0	34.4	34.3	34.9	35.0	34.6	35.6	35.1	35.6	36.1	35.6	37.4				
Total Supply[6]	86.7	85.5	86.5	86.8	87.4	88.1	87.2	88.2	87.4	88.2	89.4	88.3	90.6				
STOCK CHANGES AND MISCELLANEOUS																	
Reported OECD																	
Industry	0.3	-0.1	0.4	0.9	-0.1	-0.8	0.1	-0.5	0.5	-0.2	-0.6	-0.2	0.5				
Government	0.0	0.1	0.0	-0.1	-0.1	0.1	0.0	0.0	0.0	-0.4	0.1	-0.1	0.0				
Total	0.3	0.0	0.4	0.9	-0.2	-0.7	0.1	-0.5	0.5	-0.5	-0.6	-0.3	0.5				
Floating Storage/Oil in Transit	0.0	0.3	-0.2	0.1	-0.2	-0.3	-0.2	0.2	-0.2	-0.2	0.0	-0.1	-0.4				
Miscellaneous to balance[7]	-0.2	-0.4	-0.5	-1.6	-1.2	-0.7	-1.0	-0.6	-0.9	-0.7	0.1	-0.5	1.0				
Total Stock Ch. & Misc	0.1	-0.1	-0.3	-0.7	-1.7	-1.8	-1.1	-0.9	-0.6	-1.5	-0.5	-0.9	1.2				
Memo items:																	
Call on OPEC crude + Stock ch.[8]	31.5	29.2	29.6	29.9	31.2	31.2	30.4	30.8	29.9	31.3	30.8	30.7	30.0	29.6	30.9	30.7	30.3
Adjusted Call on OPEC + Stock ch.[9]	31.3	28.8	29.0	28.2	29.9	30.4	29.4	30.2	29.0	30.6	30.8	30.2	31.0	29.0	30.3	30.1	30.1

1 Measured as deliveries from refineries and primary stocks, comprises inland deliveries, international marine bunkers, refinery fuel, crude for direct burning, oil from non-conventional sources and other sources of supply.
2 Other Asia includes Indonesia throughout. Latin America excludes Ecuador throughout. Africa excludes Angola throughout.
Total Non-OPEC excludes all countries that were members of OPEC at 1 January 2009. Non-OPEC Historical Composition excludes countries that were OPEC members at that point in time.
Total OPEC comprises all countries which were OPEC members at 1 January 2009. OPEC Historical Composition comprises countries which were OPEC members at that point in time.
3 Net volumetric gains and losses in the refining process and marine transportation losses.
4 As of the July 2010 OMR, Global Biofuels comprise all world biofuel production including fuel ethanol from the US and Brazil.
5 As of the March 2006 OMR, Venezuelan Orinoco heavy crude production is included within Venezuelan crude estimates. Orimulsion fuel remains within the OPEC NGL and non-conventional category, but Orimulsion production reportedly ceased from January 2007.
6 Comprises crude oil, condensates, NGLs, oil from non-conventional sources and other sources of supply.
7 Includes changes in non-reported stocks in OECD and non-OECD areas.
8 Equals the arithmetic difference between total demand minus total non-OPEC supply minus OPEC NGLs.
9 Equals the "Call on OPEC + Stock Ch." with "Miscellaneous to balance" added for historical periods and with an average of "Miscellaneous to balance" for the most recent 8 quarters added for forecast periods.

Table 1A
WORLD OIL SUPPLY AND DEMAND: CHANGES FROM LAST MONTH'S TABLE 1

(million barrels per day)

	2008	2009	1Q10	2Q10	3Q10	4Q10	2010	1Q11	2Q11	3Q11	4Q11	2011	1Q12	2Q12	3Q12	4Q12	2012
OECD DEMAND																	
North America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.1	-
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-	-0.1	-	0.1	-
Total OECD	-	-	-	-	-	-	-	-	-	-	0.1	-	-	-	0.1	0.2	0.1
NON-OECD DEMAND																	
FSU	-	-	-	-	-	-	-	-	-	-	-	-	0.1	-	-	-	-
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-	-	-	0.1	-	-	-	-
Other Asia	-	-	-	-	-	-	-	-	-	-	-	-	0.1	-	-	-	-
Latin America	-	-	0.1	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-
Middle East	-	-	-	-	-	-	-	-	-	-	-	-	-0.1	-	-	-	-
Africa	-	-	-	-	-	-	-	-	-	-	-	-	-0.1	-	-	-	-
Total Non-OECD	-	-	0.1	-	-	-	-	0.1	-	-	0.1	-	0.1	0.1	-	-	-
Total Demand	-	-	0.1	-	-	-	-	0.1	-	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1
OECD SUPPLY																	
North America	-	-	-	-	-	-	-	-	-	-	-	-	0.1	-	-	0.1	-
Europe	-	-	-	-	-	-	-	-	-	-	-	-	0.1	0.1	-0.1	-0.1	-
Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total OECD	-	-	-	-	-	-	-	-	-	-	-	-	0.1	0.1	-	-	-
NON-OECD SUPPLY																	
FSU	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-0.1	-
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Asia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Latin America	-	-	-	-	-	-	-	-	-	-	-	-	-0.1	-0.1	-0.1	-0.1	-0.1
Middle East	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-0.1	-0.1	-0.1	-0.1
Total Non-OECD	-	-	-	-	-	-	-	-	-	-	-	-	-	-0.1	-0.1	-0.3	-0.1
Processing Gains	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Global Biofuels	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Non-OPEC	-	-	-	-	-	-	-	-	-	-	-	-	0.1	-0.1	-0.2	-0.3	-0.1
Non-OPEC: historical composition	-	-	-	-	-	-	-	-	-	-	-	-	0.1	-0.1	-0.2	-0.3	-0.1
OPEC																	
Crude	-	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-				
NGLs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total OPEC	-	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-				
OPEC: historical composition	-	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-				
Total Supply	-	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0.1				
STOCK CHANGES AND MISCELLANEOUS																	
REPORTED OECD																	
Industry	-	-	-	-	-	-	-	-	-	-	-	-					
Government	-	-	-	-	-	-	-	-	-	-	-	-					
Total	-	-	-	-	-	-	-	-	-	-	-	-					
Floating Storage/Oil in Transit	-	-	-	-	-	-	-	-	-	-	-	-					
Miscellaneous to balance	-	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.2	-0.2					
Total Stock Ch. & Misc	-	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.2	-0.1	-0.1	-0.2	-0.1	-				
Memo items:																	
Call on OPEC crude + Stock ch.	-	-	0.1	-	-	-	-	0.1	-	0.1	0.1	0.1	-0.1	0.1	0.2	0.4	0.2
Adjusted Call on OPEC + Stock ch.	-	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-	-0.1	-0.1	-0.1	-0.1	1.6	0.2	0.3	0.5	0.6

When submitting their monthly oil statistics, OECD Member countries periodically update data for prior periods. Similar updates to non-OECD data can occur.

Table 2

SUMMARY OF GLOBAL OIL DEMAND

	2009	1Q10	2Q10	3Q10	4Q10	2010	1Q11	2Q11	3Q11	4Q11	2011	1Q12	2Q12	3Q12	4Q12	2012
Demand (mb/d)																
North America	23.29	23.41	23.69	24.10	23.83	23.76	23.78	23.31	23.56	23.39	23.51	23.15	23.06	23.52	23.51	23.31
Europe	14.66	14.32	14.26	14.93	14.82	14.58	14.22	14.12	14.69	14.09	14.28	13.68	13.68	14.40	14.05	13.95
Pacific	7.69	8.23	7.35	7.62	8.07	7.82	8.34	7.10	7.68	8.29	7.85	8.71	7.19	7.70	8.09	7.92
Total OECD	45.64	45.95	45.29	46.65	46.73	46.16	46.34	44.53	45.93	45.76	45.64	45.54	43.93	45.62	45.65	45.19
Asia	18.19	19.00	19.65	19.12	20.28	19.51	20.29	20.23	19.70	20.60	20.20	20.77	20.83	20.38	21.33	20.83
Middle East	7.53	7.41	7.81	8.27	7.70	7.80	7.63	8.02	8.47	7.97	8.02	7.73	8.25	8.70	8.19	8.22
Latin America	5.99	6.11	6.35	6.48	6.43	6.34	6.33	6.53	6.73	6.64	6.56	6.53	6.69	6.87	6.78	6.72
FSU	4.18	4.37	4.31	4.55	4.56	4.45	4.45	4.61	4.82	4.82	4.68	4.75	4.71	4.90	4.90	4.81
Africa	3.33	3.35	3.46	3.41	3.45	3.42	3.43	3.36	3.29	3.41	3.37	3.46	3.52	3.49	3.54	3.50
Europe	0.71	0.67	0.68	0.68	0.70	0.68	0.67	0.69	0.72	0.72	0.70	0.69	0.69	0.70	0.72	0.70
Total Non-OECD	39.93	40.90	42.26	42.51	43.13	42.21	42.81	43.43	43.72	44.15	43.54	43.92	44.68	45.04	45.47	44.78
World	85.57	86.85	87.55	89.16	89.85	88.37	89.15	87.97	89.66	89.92	89.18	89.46	88.62	90.66	91.11	89.97
of which: US50	18.77	18.87	19.15	19.47	19.23	19.18	19.17	18.82	18.89	18.71	18.90	18.57	18.59	18.90	18.86	18.73
Europe 5*	8.98	8.87	8.75	9.15	9.01	8.95	8.73	8.57	8.90	8.55	8.69	8.32	8.25	8.68	8.47	8.43
China	8.06	8.63	9.06	8.92	9.66	9.07	9.54	9.52	9.30	9.69	9.51	9.87	9.85	9.73	10.15	9.90
Japan	4.39	4.82	4.07	4.36	4.57	4.45	4.86	3.92	4.32	4.82	4.48	5.25	3.99	4.29	4.57	4.52
India	3.26	3.38	3.45	3.13	3.38	3.34	3.50	3.57	3.26	3.57	3.47	3.63	3.69	3.36	3.69	3.59
Russia	3.03	3.16	3.16	3.39	3.35	3.26	3.20	3.41	3.63	3.60	3.46	3.47	3.50	3.69	3.66	3.58
Brazil	2.54	2.60	2.71	2.82	2.80	2.73	2.69	2.77	2.88	2.86	2.80	2.77	2.80	2.90	2.88	2.84
Saudi Arabia	2.47	2.33	2.73	3.02	2.54	2.66	2.49	2.89	3.15	2.76	2.82	2.51	3.02	3.30	2.88	2.93
Canada	2.16	2.15	2.17	2.29	2.23	2.21	2.25	2.15	2.29	2.26	2.24	2.20	2.14	2.27	2.24	2.21
Korea	2.19	2.31	2.18	2.16	2.35	2.25	2.36	2.04	2.21	2.30	2.23	2.30	2.06	2.25	2.34	2.24
Mexico	2.07	2.07	2.10	2.05	2.07	2.07	2.05	2.06	2.09	2.11	2.08	2.06	2.05	2.06	2.09	2.07
Iran	2.11	2.10	2.08	2.08	2.09	2.09	2.09	2.05	2.03	2.03	2.05	2.10	2.07	2.04	2.06	2.07
Total	60.03	61.30	61.60	62.85	63.28	62.26	62.92	61.78	62.95	63.26	62.73	63.05	62.00	63.47	63.90	63.11
% of World	70.2%	70.6%	70.4%	70.5%	70.4%	70.5%	70.6%	70.2%	70.2%	70.4%	70.3%	70.5%	70.0%	70.0%	70.1%	70.1%
Annual Change (% per annum)																
North America	-3.7	-0.1	3.3	3.6	1.2	2.0	1.6	-1.6	-2.2	-1.9	-1.1	-2.7	-1.1	-0.2	0.5	-0.8
Europe	-4.7	-5.1	-1.3	2.3	2.0	-0.5	-0.7	-1.0	-1.6	-5.0	-2.1	-3.8	-3.1	-2.0	-0.3	-2.3
Pacific	-4.6	1.2	0.4	4.7	0.6	1.7	1.4	-3.3	0.7	2.7	0.5	4.4	1.3	0.3	-2.4	0.9
Total OECD	-4.2	-1.5	1.4	3.3	1.4	1.1	0.8	-1.7	-1.5	-2.1	-1.1	-1.7	-1.3	-0.7	-0.3	-1.0
Asia	4.4	12.1	7.1	3.5	7.0	7.3	6.8	3.0	3.0	1.6	3.5	2.4	2.9	3.4	3.6	3.1
Middle East	3.5	4.8	3.2	2.8	4.1	3.7	3.1	2.6	2.3	3.4	2.8	1.2	2.9	2.8	2.8	2.4
Latin America	0.0	5.2	6.0	6.8	5.3	5.8	3.7	2.8	3.8	3.2	3.4	3.1	2.5	2.1	2.2	2.5
FSU	-1.2	8.3	5.9	4.7	6.9	6.4	1.9	6.8	6.0	5.7	5.1	6.6	2.3	1.6	1.6	2.9
Africa	1.6	-1.4	2.9	3.0	6.1	2.6	2.6	-2.8	-3.3	-1.3	-1.2	0.7	4.7	5.9	4.0	3.8
Europe	-6.3	-7.5	-6.9	-3.7	1.2	-4.3	-0.2	1.8	5.2	2.9	2.4	3.2	-0.2	-1.7	-0.8	0.1
Total Non-OECD	2.5	7.7	5.5	3.8	6.0	5.7	4.7	2.8	2.9	2.4	3.2	2.6	2.9	3.0	3.0	2.9
World	-1.2	2.6	3.3	3.6	3.5	3.3	2.6	0.5	0.6	0.1	0.9	0.3	0.7	1.1	1.3	0.9
Annual Change (mb/d)																
North America	-0.89	-0.01	0.75	0.83	0.29	0.47	0.37	-0.38	-0.54	-0.45	-0.25	-0.63	-0.25	-0.04	0.12	-0.20
Europe	-0.73	-0.77	-0.18	0.33	0.29	-0.08	-0.10	-0.14	-0.23	-0.74	-0.30	-0.54	-0.44	-0.29	-0.04	-0.32
Pacific	-0.37	0.10	0.03	0.34	0.05	0.13	0.11	-0.24	0.05	0.22	0.04	0.37	0.09	0.02	-0.20	0.07
Total OECD	-1.98	-0.69	0.60	1.50	0.63	0.52	0.39	-0.76	-0.72	-0.97	-0.52	-0.80	-0.60	-0.31	-0.12	-0.45
Asia	0.77	2.05	1.30	0.65	1.32	1.33	1.30	0.58	0.58	0.32	0.69	0.48	0.59	0.68	0.74	0.62
Middle East	0.25	0.34	0.24	0.22	0.30	0.28	0.23	0.20	0.19	0.26	0.22	0.09	0.23	0.23	0.22	0.19
Latin America	0.00	0.30	0.36	0.41	0.32	0.35	0.22	0.18	0.25	0.21	0.21	0.19	0.16	0.14	0.15	0.16
FSU	-0.05	0.33	0.24	0.21	0.29	0.27	0.08	0.29	0.27	0.26	0.23	0.29	0.11	0.08	0.08	0.14
Africa	0.05	-0.05	0.10	0.10	0.20	0.09	0.09	-0.10	-0.11	-0.04	-0.04	0.02	0.16	0.19	0.13	0.13
Europe	-0.05	-0.05	-0.05	-0.03	0.01	-0.03	0.00	0.01	0.04	0.02	0.02	0.02	0.00	-0.01	-0.01	0.00
Total Non-OECD	0.98	2.92	2.19	1.56	2.45	2.28	1.91	1.17	1.22	1.03	1.33	1.10	1.25	1.31	1.31	1.24
World	-1.00	2.23	2.79	3.06	3.08	2.79	2.30	0.41	0.50	0.06	0.81	0.30	0.65	1.01	1.20	0.79
Revisions to Oil Demand from Last Month's Report (mb/d)																
North America	0.00	0.00	0.00	0.00	-0.02	-0.01	0.00	0.00	0.00	0.03	0.01	0.00	0.04	0.03	0.08	0.04
Europe	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.03	0.01	-0.02	0.04	0.03	0.02	0.02
Pacific	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	-0.07	0.02	0.06	0.00
Total OECD	0.00	0.00	0.00	0.00	-0.02	-0.01	0.02	0.00	0.00	0.06	0.02	-0.01	0.01	0.07	0.16	0.06
Asia	0.00	0.01	0.00	0.00	0.01	0.01	0.02	0.01	0.01	0.01	0.01	0.10	0.03	0.01	0.00	0.04
Middle East	0.00	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.02	0.00	-0.01	-0.13	0.02	-0.01	0.03	-0.02
Latin America	0.00	0.06	0.05	0.02	0.04	0.04	0.05	0.05	0.05	0.05	0.05	0.05	0.04	0.04	0.04	0.04
FSU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.11	0.01	-0.01	-0.04	0.02
Africa	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	-0.01	-0.01	-0.01	-0.01	-0.08	-0.03	-0.03	-0.03	-0.04
Europe	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	-0.01	0.00	0.00
Total Non-OECD	0.00	0.06	0.04	0.01	0.04	0.04	0.05	0.04	0.05	0.05	0.05	0.07	0.06	0.00	0.00	0.03
World	0.00	0.06	0.04	0.01	0.02	0.03	0.07	0.04	0.05	0.11	0.07	0.05	0.06	0.07	0.16	0.09
Revisions to Oil Demand Growth from Last Month's Report (mb/d)																
World	0.00	0.03	0.04	0.04	0.02	0.03	0.01	-0.01	0.04	0.09	0.03	-0.02	0.03	0.02	0.04	0.02

* France, Germany, Italy, Spain and UK

Table 2a

OECD REGIONAL OIL DEMAND[1]

(million barrels per day)

	2010	2011	1Q11	2Q11	3Q11	4Q11	Dec 11	Jan 12	Feb 12 [2]	Latest month vs. Jan 12	Latest month vs. Feb 11
North America											
LPG&Ethane	2.95	2.98	3.33	2.71	2.76	3.14	3.42	3.32	3.22	-0.10	-0.06
Naphtha	0.37	0.35	0.37	0.36	0.34	0.35	0.34	0.36	0.33	-0.03	-0.01
Motor Gasoline	10.57	10.33	10.14	10.45	10.49	10.22	10.31	9.75	10.18	0.43	0.02
Jet/Kerosene	1.65	1.65	1.60	1.68	1.71	1.60	1.57	1.53	1.59	0.06	-0.02
Gasoil/Diesel Oil	4.82	4.92	5.02	4.77	4.86	5.03	4.84	4.87	5.03	0.15	0.04
Residual Fuel Oil	0.93	0.85	0.97	0.87	0.76	0.80	0.93	0.77	0.71	-0.06	-0.30
Other Products	2.46	2.43	2.35	2.47	2.64	2.25	2.12	2.26	2.20	-0.06	-0.01
Total	23.76	23.51	23.78	23.31	23.56	23.39	23.52	22.86	23.24	0.38	-0.34
Europe											
LPG&Ethane	0.96	0.98	1.05	0.96	0.94	0.97	1.00	1.00	1.09	0.10	0.02
Naphtha	1.26	1.15	1.26	1.17	1.11	1.07	1.08	1.22	1.30	0.08	0.03
Motor Gasoline	2.21	2.12	2.02	2.18	2.20	2.06	2.00	1.83	1.91	0.07	-0.15
Jet/Kerosene	1.27	1.25	1.20	1.26	1.36	1.19	1.14	1.05	1.12	0.07	-0.07
Gasoil/Diesel Oil	6.13	6.05	6.05	5.75	6.19	6.20	6.02	5.57	6.34	0.77	-0.14
Residual Fuel Oil	1.27	1.24	1.29	1.22	1.25	1.20	1.22	1.14	1.28	0.14	-0.01
Other Products	1.47	1.49	1.36	1.57	1.63	1.40	1.27	1.25	1.30	0.05	-0.10
Total	14.58	14.28	14.22	14.12	14.69	14.09	13.75	13.07	14.35	1.28	-0.42
Pacific											
LPG&Ethane	0.84	0.83	0.88	0.80	0.79	0.86	0.97	1.01	0.96	-0.05	0.10
Naphtha	1.68	1.69	1.78	1.55	1.73	1.71	1.77	1.83	1.81	-0.02	-0.07
Motor Gasoline	1.57	1.54	1.51	1.47	1.62	1.58	1.66	1.46	1.58	0.12	0.00
Jet/Kerosene	0.87	0.85	1.18	0.64	0.63	0.96	1.21	1.21	1.28	0.06	0.08
Gasoil/Diesel Oil	1.62	1.62	1.66	1.53	1.59	1.71	1.78	1.56	1.82	0.26	0.03
Residual Fuel Oil	0.74	0.75	0.80	0.65	0.75	0.82	0.90	0.93	0.98	0.06	0.17
Other Products	0.49	0.56	0.53	0.47	0.56	0.66	0.75	0.63	0.75	0.12	0.24
Total	7.82	7.85	8.34	7.10	7.68	8.29	9.03	8.63	9.18	0.55	0.54
OECD											
LPG&Ethane	4.76	4.80	5.26	4.47	4.50	4.97	5.39	5.33	5.27	-0.05	0.06
Naphtha	3.31	3.20	3.41	3.08	3.18	3.13	3.19	3.40	3.43	0.03	-0.05
Motor Gasoline	14.36	13.99	13.67	14.10	14.31	13.85	13.97	13.04	13.66	0.62	-0.14
Jet/Kerosene	3.80	3.75	3.97	3.58	3.70	3.75	3.92	3.79	3.98	0.19	-0.01
Gasoil/Diesel Oil	12.57	12.59	12.73	12.05	12.64	12.94	12.64	12.00	13.19	1.18	-0.07
Residual Fuel Oil	2.94	2.84	3.06	2.74	2.77	2.82	3.05	2.84	2.97	0.13	-0.14
Other Products	4.42	4.47	4.24	4.51	4.83	4.31	4.13	4.14	4.25	0.10	0.13
Total	46.16	45.64	46.34	44.53	45.93	45.76	46.30	44.55	46.76	2.21	-0.22

1 Demand, measured as deliveries from refineries and primary stocks, comprises inland deliveries, international bunkers and refinery fuel. It includes crude for direct burning, oil from non-conventional sources and other sources of supply. Jet/kerosene comprises jet kerosene and non-aviation kerosene. Gasoil comprises diesel, light heating oil and other gasoils. North America comprises US 50 states, US territories, Mexico and Canada.

2 Latest official OECD submissions (MOS).

Table 2b

OIL DEMAND IN SELECTED OECD COUNTRIES[1]

(million barrels per day)

	2010	2011	1Q11	2Q11	3Q11	4Q11	Dec 11	Jan 12	Feb 12 [2]	Latest month vs. Jan 12	Latest month vs. Feb 11
United States[3]											
LPG	2.17	2.18	2.47	1.96	1.99	2.31	2.54	2.47	2.42	-0.05	0.00
Naphtha	0.26	0.26	0.27	0.27	0.25	0.26	0.25	0.28	0.23	-0.05	0.00
Motor Gasoline	8.99	8.74	8.61	8.87	8.89	8.61	8.66	8.19	8.62	0.43	-0.04
Jet/Kerosene	1.45	1.44	1.40	1.49	1.50	1.39	1.37	1.32	1.37	0.05	-0.03
Gasoil	3.80	3.85	3.95	3.75	3.78	3.92	3.77	3.82	3.95	0.14	0.09
Residual Fuel Oil	0.54	0.48	0.61	0.51	0.36	0.43	0.51	0.44	0.39	-0.05	-0.24
Other Products	1.97	1.93	1.86	1.97	2.12	1.77	1.66	1.83	1.74	-0.09	0.00
Total	19.18	18.90	19.17	18.82	18.89	18.71	18.75	18.36	18.74	0.38	-0.22
Japan											
LPG	0.48	0.50	0.54	0.50	0.45	0.52	0.61	0.65	0.62	-0.03	0.07
Naphtha	0.77	0.72	0.79	0.65	0.74	0.70	0.73	0.75	0.72	-0.03	-0.14
Motor Gasoline	1.00	0.98	0.95	0.92	1.04	1.00	1.07	0.91	0.98	0.07	0.00
Jet/Kerosene	0.55	0.53	0.80	0.36	0.34	0.62	0.83	0.84	0.92	0.08	0.09
Diesel	0.41	0.41	0.41	0.39	0.41	0.43	0.45	0.37	0.45	0.08	0.01
Other Gasoil	0.43	0.41	0.48	0.36	0.36	0.43	0.48	0.46	0.53	0.08	-0.01
Residual Fuel Oil	0.40	0.45	0.42	0.36	0.48	0.53	0.59	0.59	0.64	0.06	0.19
Other Products	0.41	0.49	0.47	0.38	0.51	0.60	0.68	0.62	0.70	0.08	0.26
Total	4.45	4.48	4.86	3.92	4.32	4.82	5.44	5.17	5.56	0.39	0.47
Germany											
LPG	0.10	0.10	0.10	0.10	0.11	0.09	0.09	0.09	0.11	0.03	0.01
Naphtha	0.41	0.38	0.42	0.39	0.37	0.34	0.34	0.39	0.45	0.06	0.04
Motor Gasoline	0.46	0.46	0.43	0.47	0.47	0.46	0.43	0.41	0.43	0.02	-0.01
Jet/Kerosene	0.18	0.18	0.17	0.19	0.19	0.17	0.16	0.15	0.15	0.00	-0.01
Diesel	0.67	0.68	0.64	0.68	0.72	0.69	0.65	0.61	0.64	0.02	-0.03
Other Gasoil	0.43	0.37	0.37	0.24	0.43	0.42	0.39	0.32	0.51	0.19	0.07
Residual Fuel Oil	0.15	0.15	0.16	0.14	0.15	0.15	0.16	0.13	0.17	0.03	0.00
Other Products	0.09	0.10	0.08	0.12	0.12	0.11	0.08	0.06	0.05	0.00	-0.02
Total	2.49	2.42	2.37	2.33	2.56	2.43	2.28	2.16	2.51	0.35	0.05
Italy											
LPG	0.11	0.10	0.12	0.08	0.08	0.11	0.13	0.12	0.15	0.02	0.01
Naphtha	0.12	0.09	0.11	0.10	0.08	0.08	0.08	0.07	0.07	0.00	-0.03
Motor Gasoline	0.24	0.23	0.22	0.24	0.24	0.22	0.22	0.20	0.16	-0.04	-0.07
Jet/Kerosene	0.10	0.10	0.09	0.10	0.12	0.09	0.09	0.08	0.07	-0.01	-0.02
Diesel	0.49	0.49	0.47	0.51	0.50	0.49	0.48	0.40	0.41	0.00	-0.09
Other Gasoil	0.12	0.11	0.11	0.09	0.10	0.13	0.13	0.11	0.13	0.03	0.00
Residual Fuel Oil	0.13	0.11	0.10	0.11	0.13	0.10	0.10	0.10	0.13	0.03	0.02
Other Products	0.23	0.23	0.23	0.24	0.22	0.21	0.20	0.19	0.19	0.00	-0.08
Total	1.53	1.46	1.45	1.47	1.47	1.43	1.42	1.26	1.31	0.04	-0.25
France											
LPG	0.15	0.14	0.17	0.12	0.12	0.14	0.16	0.16	0.19	0.03	0.01
Naphtha	0.13	0.13	0.13	0.14	0.13	0.12	0.14	0.14	0.14	0.00	0.00
Motor Gasoline	0.19	0.18	0.17	0.20	0.19	0.17	0.16	0.15	0.15	0.01	-0.02
Jet/Kerosene	0.15	0.15	0.14	0.15	0.16	0.15	0.14	0.14	0.14	-0.01	0.00
Diesel	0.69	0.70	0.69	0.71	0.71	0.69	0.69	0.65	0.68	0.03	-0.03
Other Gasoil	0.30	0.27	0.35	0.19	0.28	0.27	0.26	0.30	0.43	0.13	0.03
Residual Fuel Oil	0.09	0.08	0.08	0.08	0.08	0.09	0.08	0.08	0.11	0.03	0.03
Other Products	0.17	0.17	0.13	0.19	0.20	0.16	0.15	0.15	0.14	-0.01	0.00
Total	1.86	1.82	1.86	1.79	1.87	1.78	1.77	1.78	1.98	0.21	0.03
United Kingdom											
LPG	0.14	0.14	0.14	0.15	0.13	0.12	0.12	0.13	0.12	-0.02	-0.02
Naphtha	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.03	0.02	0.00	-0.01
Motor Gasoline	0.35	0.33	0.34	0.34	0.33	0.33	0.32	0.31	0.33	0.03	-0.01
Jet/Kerosene	0.33	0.33	0.34	0.32	0.33	0.32	0.32	0.28	0.32	0.04	-0.01
Diesel	0.45	0.45	0.45	0.45	0.45	0.47	0.46	0.41	0.47	0.06	0.01
Other Gasoil	0.12	0.12	0.11	0.11	0.13	0.11	0.10	0.10	0.11	0.01	-0.01
Residual Fuel Oil	0.06	0.06	0.07	0.06	0.06	0.06	0.07	0.05	0.05	0.00	-0.02
Other Products	0.14	0.15	0.15	0.16	0.15	0.13	0.13	0.13	0.14	0.01	-0.01
Total	1.62	1.60	1.62	1.61	1.61	1.56	1.53	1.43	1.56	0.12	-0.09
Canada											
LPG	0.35	0.38	0.41	0.35	0.36	0.39	0.42	0.40	0.35	-0.05	-0.04
Naphtha	0.08	0.08	0.09	0.08	0.08	0.07	0.08	0.08	0.09	0.02	0.01
Motor Gasoline	0.74	0.74	0.69	0.74	0.78	0.75	0.76	0.74	0.72	-0.01	0.05
Jet/Kerosene	0.11	0.11	0.11	0.10	0.12	0.11	0.11	0.12	0.12	0.00	0.01
Diesel	0.23	0.23	0.22	0.22	0.23	0.25	0.24	0.24	0.25	0.01	0.01
Other Gasoil	0.30	0.32	0.34	0.28	0.32	0.32	0.31	0.31	0.30	-0.01	-0.08
Residual Fuel Oil	0.10	0.09	0.11	0.09	0.08	0.09	0.11	0.09	0.11	0.01	-0.01
Other Products	0.30	0.29	0.28	0.29	0.32	0.27	0.25	0.22	0.24	0.02	-0.02
Total	2.21	2.24	2.25	2.15	2.29	2.26	2.29	2.20	2.19	-0.01	-0.07

1 Demand, measured as deliveries from refineries and primary stocks, comprises inland deliveries, international bunkers and refinery fuel. It includes crude for direct burning, oil from non-conventional sources and other sources of supply. Jet/kerosene comprises jet kerosene and non-aviation kerosene. Gasoil comprises diesel, light heating oil and other gasoils.

2 Latest official OECD submissions (MOS).

3 US figures exclude US territories.

Table 3
WORLD OIL PRODUCTION
(million barrels per day)

	2010	2011	2012	4Q11	1Q12	2Q12	3Q12	4Q12	Feb 12	Mar 12	Apr 12
OPEC											
Crude Oil											
Saudi Arabia	8.05	9.04		9.37	9.65				9.70	9.70	9.70
Iran	3.70	3.58		3.51	3.32				3.35	3.30	3.30
Iraq	2.36	2.67		2.68	2.70				2.62	2.83	3.03
UAE	2.31	2.50		2.54	2.61				2.59	2.65	2.67
Kuwait	2.03	2.24		2.43	2.42				2.40	2.42	2.44
Neutral Zone	0.53	0.59		0.60	0.60				0.60	0.60	0.60
Qatar	0.74	0.74		0.74	0.75				0.75	0.75	0.75
Angola	1.73	1.64		1.72	1.73				1.76	1.73	1.75
Nigeria	2.08	2.18		2.06	2.06				2.10	2.05	2.15
Libya	1.55	0.46		0.55	1.26				1.29	1.35	1.40
Algeria	1.21	1.18		1.16	1.16				1.14	1.14	1.14
Ecuador	0.47	0.50		0.49	0.48				0.48	0.48	0.48
Venezuela	2.53	2.50		2.40	2.46				2.46	2.44	2.44
Total Crude Oil[6]	29.30	29.82		30.24	31.19				31.23	31.44	31.85
Total NGLs[1,6]	5.34	5.78	6.36	5.91	6.18	6.23	6.48	6.52	6.18	6.18	6.23
Total OPEC[6]	34.64	35.60		36.14	37.37				37.41	37.62	38.08
OPEC: Historical Composition[6]	34.64	35.60		36.14	37.37				37.41	37.62	38.08
NON-OPEC[2]											
OECD											
North America	14.09	14.54	15.23	15.18	15.31	14.87	15.22	15.52	15.49	15.07	14.86
United States[5]	7.77	8.10	8.66	8.54	8.71	8.55	8.62	8.77	8.79	8.61	8.55
Mexico	2.96	2.94	2.87	2.92	2.90	2.89	2.85	2.82	2.92	2.90	2.89
Canada	3.35	3.50	3.70	3.71	3.70	3.43	3.75	3.93	3.77	3.57	3.42
Europe	4.14	3.83	3.60	3.83	3.87	3.57	3.35	3.61	3.91	3.81	3.74
UK	1.36	1.12	0.95	1.10	1.08	0.92	0.84	0.97	1.11	1.05	0.97
Norway	2.14	2.04	1.98	2.05	2.10	1.97	1.86	1.99	2.10	2.09	2.09
Others	0.65	0.68	0.67	0.68	0.69	0.68	0.66	0.66	0.70	0.68	0.69
Pacific	0.61	0.52	0.58	0.54	0.50	0.57	0.61	0.62	0.49	0.52	0.55
Australia	0.51	0.43	0.49	0.45	0.41	0.49	0.53	0.53	0.40	0.43	0.47
Others	0.10	0.09	0.08	0.09	0.09	0.08	0.08	0.09	0.09	0.09	0.08
Total OECD	18.84	18.89	19.41	19.55	19.69	19.01	19.19	19.75	19.89	19.40	19.15
NON-OECD											
Former USSR	13.55	13.58	13.75	13.57	13.75	13.79	13.64	13.80	13.76	13.76	13.71
Russia	10.45	10.58	10.70	10.67	10.68	10.68	10.72	10.71	10.68	10.68	10.65
Others	3.10	3.00	3.05	2.90	3.07	3.12	2.91	3.09	3.08	3.08	3.06
Asia	7.80	7.68	7.73	7.58	7.74	7.71	7.74	7.72	7.77	7.71	7.74
China	4.10	4.12	4.19	4.02	4.15	4.16	4.22	4.24	4.18	4.14	4.16
Malaysia	0.72	0.66	0.66	0.67	0.69	0.66	0.65	0.65	0.71	0.67	0.67
India	0.86	0.89	0.90	0.87	0.88	0.91	0.91	0.91	0.88	0.88	0.91
Indonesia	0.97	0.93	0.87	0.92	0.90	0.88	0.86	0.83	0.89	0.90	0.89
Others	1.14	1.08	1.10	1.10	1.11	1.11	1.10	1.10	1.11	1.12	1.11
Europe	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.13	0.14	0.14	0.14
Latin America	4.07	4.22	4.36	4.32	4.28	4.30	4.41	4.47	4.28	4.22	4.27
Brazil[5]	2.14	2.19	2.30	2.25	2.26	2.23	2.32	2.39	2.29	2.17	2.21
Argentina	0.69	0.67	0.67	0.69	0.67	0.67	0.66	0.66	0.67	0.67	0.67
Colombia	0.79	0.92	0.98	0.95	0.93	0.98	1.01	1.01	0.90	0.95	0.97
Others	0.45	0.44	0.42	0.43	0.42	0.42	0.42	0.41	0.42	0.42	0.43
Middle East[3]	1.74	1.65	1.43	1.48	1.42	1.42	1.44	1.42	1.38	1.43	1.43
Oman	0.87	0.89	0.91	0.89	0.89	0.91	0.93	0.93	0.87	0.91	0.91
Syria	0.39	0.33	0.18	0.20	0.18	0.18	0.17	0.17	0.18	0.19	0.19
Yemen	0.30	0.23	0.14	0.18	0.15	0.13	0.14	0.14	0.14	0.14	0.14
Others	0.19	0.20	0.19	0.20	0.20	0.20	0.19	0.19	0.20	0.20	0.20
Africa	2.51	2.56	2.31	2.59	2.41	2.26	2.26	2.30	2.32	2.29	2.27
Egypt	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71
Gabon	0.25	0.24	0.25	0.25	0.24	0.24	0.25	0.25	0.24	0.24	0.24
Others	1.56	1.61	1.35	1.63	1.45	1.30	1.30	1.34	1.36	1.34	1.31
Total Non-OECD	29.81	29.82	29.71	29.67	29.74	29.62	29.62	29.85	29.66	29.54	29.56
Processing Gains[4]	2.10	2.17	2.26	2.23	2.28	2.23	2.24	2.31	2.28	2.28	2.23
Global Biofuels[5]	1.83	1.83	1.93	1.80	1.57	1.93	2.24	1.99	1.58	1.56	1.93
TOTAL NON-OPEC[6]	52.58	52.71	53.31	53.26	53.27	52.80	53.28	53.90	53.40	52.78	52.88
Non-OPEC: Historical Composition[6]	52.58	52.71	53.31	53.26	53.27	52.80	53.28	53.90	53.40	52.78	52.88
TOTAL SUPPLY	87.22	88.31		89.40	90.64				90.82	90.40	90.96

1 Includes condensates reported by OPEC countries, oil from non-conventional sources, e.g. Venezuelan Orimulsion (but not Orinoco extra-heavy oil), and non-oil inputs to Saudi Arabian MTBE. Orimulsion production reportedly ceased from January 2007.
2 Comprises crude oil, condensates, NGLs and oil from non-conventional sources
3 Includes small amounts of production from Israel, Jordan and Bahrain.
4 Net volumetric gains and losses in refining and marine transportation losses.
5 As of the July 2010 OMR, Global Biofuels comprise all world biofuel production including fuel ethanol from the US and Brazil.
6 Total OPEC comprises all countries which were OPEC members at 1 January 2009. OPEC Historical Composition comprises countries which were OPEC members at that point in time. Total Non-OPEC excludes all countries that were OPEC members at 1 January 2009. Non-OPEC Historical Composition excludes countries that were OPEC members at that point in time.

Table 4

OECD INDUSTRY STOCKS[1] AND QUARTERLY STOCK CHANGES

	RECENT MONTHLY STOCKS[2] in Million Barrels					PRIOR YEARS' STOCKS[2] in Million Barrels			STOCK CHANGES in mb/d			
	Nov2011	Dec2011	Jan2012	Feb2012	Mar2012*	Mar2009	Mar2010	Mar2011	2Q2011	3Q2011	4Q2011	1Q2012
North America												
Crude	475.9	464.0	474.7	482.6	501.3	488.7	495.4	497.7	0.02	-0.36	-0.03	0.41
Motor Gasoline	254.5	259.0	271.4	266.2	258.9	249.0	259.8	249.5	-0.01	0.02	0.09	0.00
Middle Distillate	216.7	225.2	225.7	214.2	206.8	219.9	217.4	217.4	-0.04	0.16	-0.03	-0.20
Residual Fuel Oil	47.2	40.8	41.1	43.2	43.2	46.7	48.7	44.9	-0.01	-0.02	-0.02	0.03
Total Products[3]	698.4	697.7	704.0	687.1	681.9	690.8	675.4	653.1	0.29	0.30	-0.10	-0.17
Total[4]	1336.2	1312.6	1335.6	1327.4	1341.6	1332.3	1313.7	1295.2	0.49	0.03	-0.32	0.32
Europe												
Crude	303.0	285.9	290.7	303.8	307.1	355.1	330.3	322.9	-0.05	-0.11	-0.24	0.23
Motor Gasoline	94.5	95.0	97.5	96.9	93.9	97.1	103.7	100.3	-0.09	-0.03	0.07	-0.01
Middle Distillate	260.4	271.0	286.4	273.2	272.7	280.2	284.7	282.3	-0.14	-0.12	0.13	0.02
Residual Fuel Oil	63.2	60.5	59.4	59.4	60.6	73.6	73.9	67.0	-0.03	0.00	-0.04	0.00
Total Products[3]	536.5	544.9	560.4	547.7	544.4	563.0	570.5	562.1	-0.23	-0.10	0.14	-0.01
Total[4]	908.9	897.8	919.5	921.5	922.7	991.4	975.0	950.3	-0.25	-0.25	-0.08	0.27
Pacific												
Crude	156.2	155.8	154.3	162.0	163.3	170.2	164.7	157.6	0.02	-0.03	-0.01	0.08
Motor Gasoline	23.8	22.1	25.2	23.9	25.2	26.4	25.1	23.9	0.01	0.00	-0.03	0.03
Middle Distillate	68.5	61.0	63.3	54.7	54.2	56.6	57.9	54.5	0.14	0.01	-0.08	-0.08
Residual Fuel Oil	19.7	19.0	19.7	20.1	19.8	20.2	20.3	20.7	0.01	-0.01	-0.01	0.01
Total Products[3]	178.6	164.3	164.3	153.1	150.8	167.9	158.0	155.4	0.18	0.11	-0.19	-0.15
Total[4]	408.5	390.0	390.8	386.3	384.4	407.5	385.9	381.1	0.27	0.07	-0.24	-0.06
Total OECD												
Crude	935.0	905.7	919.6	948.4	971.8	1014.1	990.4	978.2	-0.01	-0.49	-0.29	0.73
Motor Gasoline	372.7	376.2	394.0	387.0	378.0	372.5	388.7	373.7	-0.09	-0.02	0.13	0.02
Middle Distillate	545.5	557.1	575.3	542.1	533.6	556.7	559.9	554.1	-0.04	0.05	0.03	-0.26
Residual Fuel Oil	130.0	120.4	120.2	122.7	123.5	140.4	142.8	132.7	-0.03	-0.03	-0.07	0.03
Total Products[3]	1413.5	1406.9	1428.7	1387.8	1377.1	1421.7	1403.9	1370.6	0.25	0.31	-0.16	-0.33
Total[4]	2653.5	2600.3	2645.9	2635.2	2648.7	2731.3	2674.5	2626.6	0.51	-0.15	-0.64	0.53

OECD GOVERNMENT-CONTROLLED STOCKS[5] AND QUARTERLY STOCK CHANGES

	RECENT MONTHLY STOCKS[2] in Million Barrels					PRIOR YEARS' STOCKS[2] in Million Barrels			STOCK CHANGES in mb/d			
	Nov2011	Dec2011	Jan2012	Feb2012	Mar2012*	Mar2009	Mar2010	Mar2011	2Q2011	3Q2011	4Q2011	1Q2012
North America												
Crude	696.0	696.0	696.0	696.0	696.0	712.8	726.6	726.5	0.00	-0.33	0.00	0.00
Products	0.7	0.7	0.7	1.0	1.0	2.0	2.0	0.0	0.00	0.00	0.01	0.00
Europe												
Crude	184.2	186.7	187.9	188.2	188.2	188.1	187.8	185.9	-0.01	-0.02	0.04	0.02
Products	235.2	234.1	231.2	231.0	231.0	234.2	240.3	232.6	0.05	-0.01	-0.02	-0.03
Pacific												
Crude	392.6	393.6	393.6	393.6	393.6	389.2	388.8	391.2	0.00	0.00	0.03	0.00
Products	20.0	20.0	20.0	19.7	20.0	19.2	20.0	20.0	0.00	-0.01	0.01	0.00
Total OECD												
Crude	1272.7	1276.2	1277.4	1277.7	1277.7	1290.0	1303.2	1303.6	-0.01	-0.36	0.07	0.02
Products	255.9	254.7	251.9	251.8	252.0	255.4	262.3	252.6	0.05	-0.03	0.00	-0.03
Total[4]	1529.9	1532.2	1530.7	1530.9	1531.2	1547.0	1566.7	1557.7	0.04	-0.38	0.07	-0.01

* estimated

1 Stocks are primary national territory stocks on land (excluding utility stocks and including pipeline and entrepot stocks where known) and include stocks held by industry to meet IEA, EU and national emergency reserve commitments and are subject to government control in emergencies.

2 Closing stock levels.

3 Total products includes gasoline, middle distillates, fuel oil and other products.

4 Total includes NGLs, refinery feedstocks, additives/oxygenates and other hydrocarbons.

5 Includes government-owned stocks and stock holding organisation stocks held for emergency purposes.

Table 5

TOTAL STOCKS ON LAND IN OECD COUNTRIES[1]

('millions of barrels' and 'days')

	End March 2011		End June 2011		End September 2011		End December 2011		End March 2012 [3]	
	Stock Level	Days Fwd[2] Demand	Stock Level	Days Fwd Demand	Stock Level	Days Fwd Demand	Stock Level	Days Fwd Demand	Stock Level	Days Fwd Demand
North America										
Canada	185.2	84	189.7	81	188.6	84	190.5	-	-	-
Mexico	45.0	22	46.5	22	46.1	22	44.4	-	-	-
United States[4]	1769.5	94	1807.6	96	1780.9	95	1752.1	-	-	-
Total[4]	2021.7	87	2065.9	88	2037.7	87	2009.1	87	2038.5	88
Pacific										
Australia	39.1	39	39.5	39	38.2	38	40.0	-	-	-
Japan	575.4	147	593.2	137	601.1	125	588.5	-	-	-
Korea	170.2	83	175.2	79	173.6	75	166.8	-	-	-
New Zealand	7.6	54	8.7	62	8.7	56	8.3	-	-	-
Total	792.3	112	816.5	106	821.6	99	803.6	92	798.0	111
Europe[5]										
Austria	19.4	77	19.6	70	18.0	68	19.4	-	-	-
Belgium	37.0	59	38.1	58	36.7	58	36.4	-	-	-
Czech Republic	21.5	106	21.7	109	20.1	109	20.7	-	-	-
Denmark	21.4	132	21.5	134	22.4	138	22.4	-	-	-
Finland	26.7	132	27.2	132	26.4	127	29.2	-	-	-
France	167.4	94	166.7	89	160.0	90	165.0	-	-	-
Germany	285.8	122	286.3	112	276.9	114	278.6	-	-	-
Greece	33.9	106	32.6	99	30.9	95	27.9	-	-	-
Hungary	17.4	124	17.3	118	16.2	112	15.4	-	-	-
Ireland	10.8	79	10.2	73	11.3	77	10.7	-	-	-
Italy	131.8	90	130.0	88	130.1	91	128.3	-	-	-
Luxembourg	0.5	9	0.6	9	0.7	11	0.6	-	-	-
Netherlands	125.7	124	117.8	114	114.3	115	101.4	-	-	-
Norway	21.1	93	23.5	96	24.5	97	25.9	-	-	-
Poland	62.8	109	64.6	105	65.2	110	64.5	-	-	-
Portugal	23.5	87	23.3	86	21.9	90	21.9	-	-	-
Slovak Republic	9.0	111	8.9	104	8.3	103	8.5	-	-	-
Spain	132.9	97	130.1	94	131.2	97	132.8	-	-	-
Sweden	33.7	101	32.5	101	32.6	104	31.5	-	-	-
Switzerland	36.6	168	37.2	150	37.0	153	35.7	-	-	-
Turkey	58.3	85	56.6	73	56.4	83	55.8	-	-	-
United Kingdom	92.8	57	84.9	53	84.1	54	87.1	-	-	-
Total	1370.3	97	1351.3	92	1325.3	94	1319.8	96	1343.3	98
Total OECD	4184.3	94	4233.7	92	4184.6	92	4132.5	91	4179.8	95
DAYS OF IEA Net Imports[6]	-	146	-	147	-	145	-	148	-	-

1 Total Stocks are industry and government-controlled stocks (see breakdown in table below). Stocks are primary national territory stocks on land (excluding utility stocks and including pipeline and entrepot stocks where known) they include stocks held by industry to meet IEA, EU and national emergency reserves commitments and are subject to government control in emergencies.
2 Note that days of forward demand represent the stock level divided by the forward quarter average daily demand and is very different from the days of net imports used for the calculation of IEA Emergency Reserves.
3 End March 2012 forward demand figures are IEA Secretariat forecasts.
4 US figures exclude US territories. Total includes US territories.
5 Data not available for Iceland.
6 Reflects stock levels and prior calendar year's net imports adjusted according to IEA emergency reserve definitions (see www.iea.org/netimports.asp). Net exporting IEA countries are excluded.

TOTAL OECD STOCKS

CLOSING STOCKS	Total	Government[1] controlled	Industry	Total	Government[1] controlled	Industry
	Millions of Barrels			*Days of Fwd. Demand[2]*		
1Q2009	4278	1547	2731	96	35	61
2Q2009	4306	1561	2745	95	35	61
3Q2009	4327	1564	2763	94	34	60
4Q2009	4205	1564	2641	92	34	57
1Q2010	4241	1567	2675	94	35	59
2Q2010	4319	1562	2757	93	33	59
3Q2010	4296	1549	2747	92	33	59
4Q2010	4230	1561	2670	91	34	58
1Q2011	4184	1558	2627	94	35	59
2Q2011	4234	1561	2673	92	34	58
3Q2011	4185	1526	2659	92	33	58
4Q2011	4133	1532	2600	91	34	57
1Q2012	4180	1531	2649	95	35	60

1 Includes government-owned stocks and stock holding organisation stocks held for emergency purposes.
2 Days of forward demand calculated using actual demand except in 1Q2012 (when latest forecasts are used).

Table 6

IEA MEMBER COUNTRY DESTINATIONS OF SELECTED CRUDE STREAMS[1]

(million barrels per day)

	2009	2010	2011	1Q11	2Q11	3Q11	4Q11	Dec 11	Jan 12	Feb 12	Year Earlier Feb 11	Year Earlier change
Saudi Light & Extra Light												
North America	0.52	0.69	0.69	0.71	0.72	0.47	0.85	0.93	0.91	0.76	0.61	0.15
Europe	0.59	0.66	0.83	0.70	0.79	0.93	0.88	0.84	0.86	0.70	0.68	0.02
Pacific	1.28	1.21	1.24	1.33	1.14	1.21	1.27	1.35	1.35	1.27	1.31	-0.04
Saudi Medium												
North America	0.40	0.36	0.37	0.33	0.36	0.40	0.40	0.42	0.41	0.56	0.34	0.23
Europe	0.02	0.00	0.02	-	0.02	0.05	0.01	0.00	0.02	0.03	-	-
Pacific	0.34	0.34	0.40	0.39	0.38	0.43	0.40	0.42	0.42	0.46	0.35	0.11
Saudi Heavy												
North America	0.03	0.02	0.02	0.02	0.03	0.03	0.01	-	-	-	0.02	-
Europe	0.02	0.00	0.01	0.00	0.00	0.03	0.03	0.03	0.01	0.04	-	-
Pacific	0.15	0.22	0.20	0.20	0.21	0.23	0.18	0.22	0.22	0.19	0.24	-0.05
Iraqi Basrah Light[2]												
North America	0.40	0.36	0.29	0.21	0.41	0.31	0.21	0.32	0.52	0.22	0.23	-0.01
Europe	0.12	0.09	0.11	0.03	0.10	0.19	0.11	0.08	0.16	0.15	0.00	0.15
Pacific	0.24	0.29	0.34	0.40	0.26	0.38	0.32	0.30	0.22	0.29	0.56	-0.27
Iraqi Kirkuk												
North America	0.06	0.03	0.07	0.11	0.07	0.05	0.06	0.11	0.03	0.10	0.07	0.03
Europe	0.31	0.27	0.27	0.21	0.31	0.32	0.26	0.28	0.22	0.20	0.22	-0.02
Pacific	-	-	-	-	-	-	-	-	-	-	-	-
Iranian Light												
North America	-	-	-	-	-	-	-	-	-	-	-	-
Europe	0.15	0.24	0.23	0.24	0.28	0.20	0.21	0.18	0.26	0.21	0.30	-0.09
Pacific	0.07	0.04	0.04	0.06	0.03	0.04	0.03	0.05	0.02	0.05	0.06	-0.01
Iranian Heavy[3]												
North America	-	-	-	-	-	-	-	-	-	-	-	-
Europe	0.40	0.49	0.55	0.34	0.59	0.73	0.54	0.46	0.44	0.24	0.24	0.00
Pacific	0.57	0.52	0.51	0.63	0.41	0.51	0.49	0.46	0.52	0.54	0.57	-0.03
Venezuelan Light & Medium												
North America	0.39	0.14	0.18	0.06	0.30	0.24	0.13	-	-	0.06	-	-
Europe	0.07	0.02	0.02	0.03	0.01	0.02	0.02	-	0.03	-	0.02	-
Pacific	-	-	-	-	-	-	-	-	0.03	-	-	-
Venezuelan 22 API and heavier												
North America	0.75	0.86	0.76	0.89	0.77	0.70	0.69	0.64	0.61	0.68	0.84	-0.16
Europe	0.07	0.06	0.05	0.04	0.05	0.06	0.05	0.06	0.06	0.05	0.06	-0.01
Pacific	-	-	-	-	-	-	-	-	-	-	-	-
Mexican Maya												
North America	0.93	0.91	0.82	0.82	0.80	0.84	0.84	0.78	0.64	0.83	0.80	0.03
Europe	0.10	0.11	0.12	0.14	0.12	0.12	0.12	0.13	0.09	0.17	0.16	0.01
Pacific	-	-	-	-	-	-	-	-	-	-	-	-
Mexican Isthmus												
North America	0.01	0.04	0.07	0.05	0.08	0.06	0.07	0.07	0.05	-	0.06	-
Europe	0.01	0.02	0.01	0.01	0.02	0.00	0.01	0.03	-	0.03	-	-
Pacific	-	-	-	-	-	-	-	-	-	-	-	-
Russian Urals												
North America	0.15	0.08	0.01	0.01	-	-	0.02	-	-	-	-	-
Europe	1.72	1.80	1.69	1.76	1.86	1.51	1.61	1.66	1.88	1.73	1.65	0.08
Pacific	-	-	-	-	-	-	-	-	-	-	-	-
Nigerian Light[4]												
North America	0.54	0.60	0.53	0.62	0.60	0.43	0.46	0.30	0.22	0.19	0.67	-0.48
Europe	0.32	0.34	0.45	0.40	0.40	0.54	0.48	0.56	0.68	0.52	0.44	0.09
Pacific	0.00	-	0.05	0.05	0.04	0.06	0.05	0.04	0.03	0.01	0.03	-0.02
Nigerian Medium												
North America	0.21	0.25	0.18	0.20	0.18	0.18	0.14	0.19	0.02	-	0.19	-
Europe	0.13	0.09	0.14	0.14	0.17	0.11	0.13	0.22	0.22	0.29	0.16	0.13
Pacific	-	-	-	-	-	-	-	-	-	-	-	-

1 Data based on monthly submissions from IEA countries to the crude oil import register (in '000 bbl), subject to availability. May differ from Table 8 of the Report.
IEA North America includes United States and Canada.
IEA Europe includes all countries in OECD Europe except Hungary. The Slovak Republic and Poland is excluded through December 2007 but included thereafter.
IEA Pacific data includes Australia, New Zealand, Korea and Japan.

2 Iraqi Total minus Kirkuk.

3 Iranian Total minus Iranian Light.

4 33° API and lighter (e.g., Bonny Light, Escravos, Qua Iboe and Oso Condensate).

Table 7
REGIONAL OECD IMPORTS[1,2]
(thousand barrels per day)

	2009	2010	2011	1Q11	2Q11	3Q11	4Q11	Dec-11	Jan-12	Feb-12	Year Earlier Feb-11	Year Earlier % change
Crude Oil												
North America	7353	7343	6703	6571	6928	6793	6519	6347	5942	5935	5723	4%
Europe	8893	9072	8986	8857	8846	9331	8905	8728	9402	9081	8698	4%
Pacific	6082	6249	6370	6645	6084	6260	6492	6823	6718	7145	6755	6%
Total OECD	22329	22663	22058	22072	21859	22384	21917	21898	22061	22160	21320	4%
LPG												
North America	13	8	8	20	4	4	3	1	0	2	9	-74%
Europe	260	270	307	313	284	304	327	277	323	295	313	-6%
Pacific	529	558	561	569	547	580	546	612	576	661	542	22%
Total OECD	802	836	876	903	836	888	877	889	900	958	865	11%
Naphtha												
North America	22	36	42	34	51	43	38	14	27	9	22	-59%
Europe	352	390	291	292	336	285	253	238	440	501	165	204%
Pacific	841	900	876	917	830	906	853	854	846	934	998	-6%
Total OECD	1215	1326	1209	1243	1217	1234	1144	1106	1313	1444	1184	22%
Gasoline[3]												
North America	878	789	754	677	981	703	654	606	719	594	640	-7%
Europe	193	174	217	223	221	216	208	167	260	289	280	3%
Pacific	96	64	74	72	61	71	92	101	59	63	109	-42%
Total OECD	1167	1027	1044	972	1262	990	953	874	1037	946	1029	-8%
Jet & Kerosene												
North America	62	76	73	63	86	81	63	30	22	67	66	2%
Europe	452	417	398	320	367	451	450	349	320	283	329	-14%
Pacific	53	40	50	58	43	45	55	42	49	85	62	37%
Total OECD	567	532	521	441	497	578	568	421	390	435	457	-5%
Gasoil/Diesel												
North America	55	49	34	46	30	32	29	11	36	24	22	7%
Europe	1035	1045	1014	1093	942	947	1075	939	1012	937	1089	-14%
Pacific	87	97	128	98	153	123	139	156	136	96	92	4%
Total OECD	1177	1191	1177	1238	1125	1102	1243	1106	1183	1058	1203	-12%
Heavy Fuel Oil												
North America	270	277	266	345	304	193	222	211	239	158	337	-53%
Europe	534	529	583	504	581	651	595	579	778	589	448	31%
Pacific	113	117	146	147	111	156	169	182	225	223	172	30%
Total OECD	917	923	995	996	996	1000	986	972	1242	971	958	1%
Other Products												
North America	870	805	873	857	896	903	834	906	890	689	759	-9%
Europe	770	666	708	690	782	730	629	570	484	628	737	-15%
Pacific	325	335	326	383	251	343	328	365	363	299	332	-10%
Total OECD	1964	1806	1907	1930	1930	1976	1792	1841	1737	1615	1828	-12%
Total Products												
North America	2171	2040	2049	2044	2355	1960	1842	1780	1932	1543	1855	-17%
Europe	3595	3491	3518	3436	3513	3584	3538	3118	3617	3522	3361	5%
Pacific	2045	2110	2162	2243	1995	2225	2184	2313	2254	2362	2307	2%
Total OECD	7810	7641	7729	7723	7862	7769	7564	7211	7803	7427	7523	-1%
Total Oil												
North America	9524	9382	8752	8615	9283	8753	8361	8127	7874	7478	7722	-3%
Europe	12488	12562	12504	12293	12359	12915	12443	11846	13018	12602	12060	4%
Pacific	8127	8360	8531	8888	8079	8485	8676	9136	8971	9506	9062	5%
Total OECD	30139	30304	29787	29795	29721	30153	29481	29109	29864	29587	28844	3%

1 Based on Monthly Oil Questionnaire data submitted by OECD countries in tonnes and converted to barrels.
2 Excludes intra-regional trade.
3 Includes additives.

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For information on the data sources, definitions, technical terms and general approach used in preparing the *Oil Market Report (OMR)*, *Medium-Term Oil and Gas Markets (MTOGM)* and *Annual Statistical Supplement* (current issue of the Statistical Supplement dated 10 August 2011), readers are referred to the *Users' Guide* at www.oilmarketreport.org/glossary.asp. It should be noted that the spot crude and product price assessments are based on daily Argus prices, converted when appropriate to US$ per barrel according to the Argus specification of products (Copyright © 2012 Argus Media Limited - all rights reserved).

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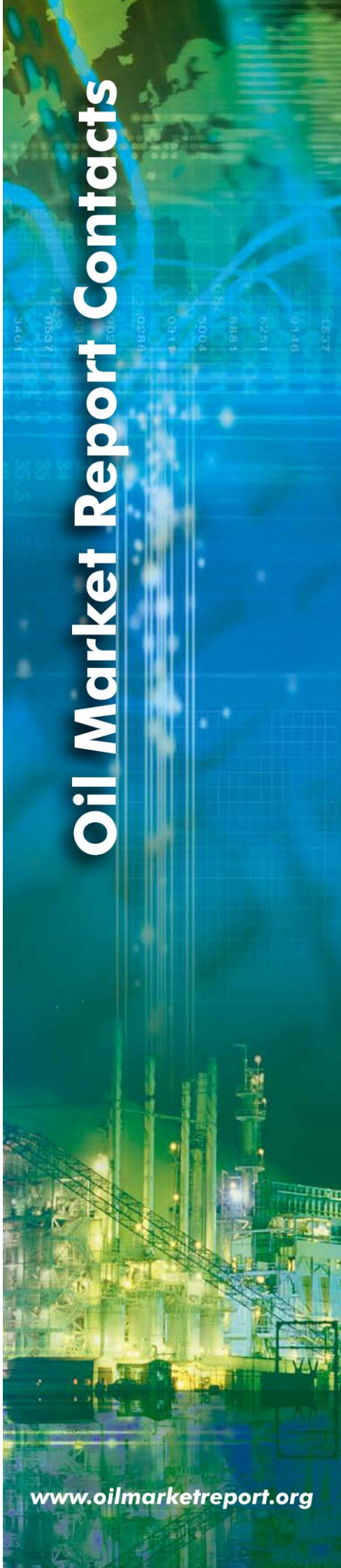

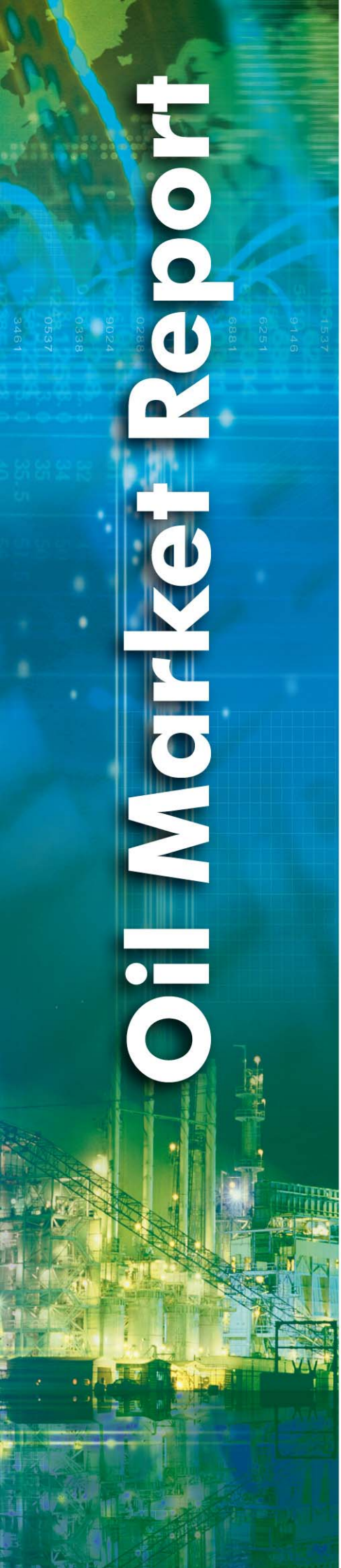

International Energy Agency

13 June 2012

HIGHLIGHTS

- **The springtime slump in oil markets accelerated in May in the wake of the deepening euro zone crisis,** mounting concern over a slowdown in Chinese growth and rising global oil supplies. Futures prices were off 20% from peak 2012 levels, with Brent last trading at around $97.50/bbl and WTI at $83.50/bbl.

- **A muted economic backdrop underpins forecast demand growth of 0.82 mb/d in 2012, resulting in average demand of 89.9 mb/d.** A lower GDP sensitivity this month illustrates downside demand risks, but upside potential exists too, amid uncertainty over summer power sector oil demand and non-OECD stockpiling.

- **Global oil supply rose by 0.2 mb/d to 91.1 mb/d in May. Non-OPEC liquids increased by 0.2 mb/d to 53.1 mb/d** and by 1.0 mb/d versus year ago. In 2012 rising North American supply more than offsets record-low North Sea output, as well as outages in the Sudans, Syria, and Yemen, taking non-OPEC supply growth to 0.7 mb/d.

- **OPEC crude supply edged lower in May, off 20 kb/d, to 31.87 mb/d,** with reduced output from Saudi Arabia and Iraq offset by higher production in Angola, Nigeria, and Libya. The 'call on OPEC crude and stock change' in 2H12 is around 1 mb/d higher than the 1H12 level, at 30.9 mb/d. OPEC 2012 NGL supply rises 0.4 mb/d to 6.2 mb/d.

- **OECD industry oil inventories rose by 17.3 mb in April, to 2 643 mb**. OECD commercial oil stocks have now narrowed the apparent deficit to the five-year average in absolute terms, while remaining 1.9 days above the five-year average. May preliminary data indicate a 20.1 mb increase in OECD industry inventories.

- **World refinery crude demand is set to surge seasonally by 2.8 mb/d between April's low and August,** as maintenance winds down. New and returning capacity in Asia and Europe also contribute, while ramp up at Motiva's expanded US plant could be delayed. Global crude runs rise from 74.3 mb/d in 2Q12 to 75.9 mb/d in 3Q12.

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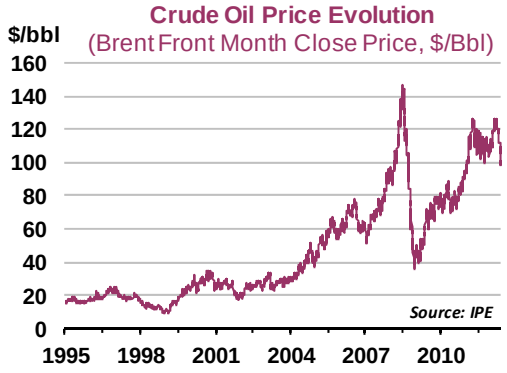
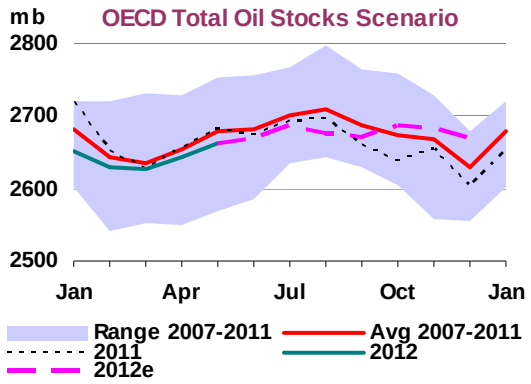
SPRING REPLENISHMENT

Market fundamentals have eased since early-2012. OPEC crude output for May is estimated at 31.9 mb/d, around 1.4 mb/d higher than in December 2011, and 2.8 mb/d above May 2011 levels. 1Q12 saw an implied global stock build of over 1 mb/d and supply is on track to exceed underlying global products demand by over 2 mb/d in 2Q12. With prices now $25/bbl below March highs, some of the relentlessly bullish market sentiment evident in the last 18 months has dissipated. Economic concerns have risen in prominence again, with euro zone and China uncertainties to the fore.

Some may be tempted to see the market as over-supplied, and there have been calls by a number of producers for 'over-production' to be reined-in. Memories are indeed short: crude prices remain very high in historical terms, and are acting as a drag on household and government budgets in OECD and emerging markets alike. High prices eventually stunt demand growth, directly if consumers pay full price for their oil, or indirectly via weaker activity levels and GDP growth if consumers are shielded from full price pass-through. Higher OPEC production sits against a backdrop of tight end-2011 inventories, stubbornly high prices and persistent uncertainty over non-OPEC and Iranian supply for this summer.





OECD stock replenishment this spring is both a normal, and welcome, seasonal trend, particularly given ongoing geopolitical uncertainties and low levels of OPEC spare capacity. Major non-OECD consumers too seem to have been accumulating crude in the early part of the year as a precautionary measure ahead of the full imposition of economic sanctions on Iran from late-June/early-July. A look at Chinese crude oil output, refinery throughput and trade data suggests substantial 'incremental' crude demand so far this year, in excess of the apparent oil products demand we show in our market balances. Not all of that has necessarily been fed into new strategic storage, but as noted previously, were China to fill new storage capacity steadily over the course of 2012, that could add 150-200 kb/d to underlying demand.

OPEC production may indeed trend slightly lower in the third and fourth quarters if the EU embargo and US sanctions crimp Iranian oil sales further. Preliminary April and May data on imports of Iranian crude are nearly 1 mb/d below late-2011 levels, and close to the market impact we have assumed since sanctions were first tightened. In months ahead, Iran may need to shut-in production volumes if export markets remain similarly constrained and storage fills up. Nobody knows exactly how oil supplies will develop this summer, although a mutually acceptable agreement at upcoming Iran/P5+1 talks would be everyone's preferred outcome. Nonetheless, G8 Ministers in May again reiterated that the possibility of renewed supply tightness in coming months means that an IEA collective action cannot be ruled out.

Looking ahead, if the euro zone or Chinese economy slows more quickly than envisaged here, weaker customer demand would naturally see producers scale back output. A simple extrapolation of current OPEC output through end-2012 could indeed result in OECD stock-overhang. But equally, starting from our base case assumptions, and adjusting for potentially lower Iranian output on the one hand, and for some further Chinese crude buying on the other, leaves an outlook (above) that is hardly overflowing with oil. The market can clearly now be characterised as 'better supplied', but 'over-supplied' looks something of a stretch, given the myriad uncertainties that lie ahead for the summer.

DEMAND

Summary

- **The global oil demand estimate for 2012 is scaled back by 0.1 mb/d to 89.9 mb/d.** Baseline revisions for 2009-2011, however, leave growth unchanged at 0.8 mb/d. Reports of a darkening global economic backdrop simply re-inforce our already-cautious view on 2012 demand. Subdued global economic growth of 3.5%, well down on the near-5% expansion seen before the global credit crunch, continue to cap expected 2012 growth.

- **Preliminary April OECD data nonetheless depict a relative improvement in the year-on-year (y-o-y) decline rate, to -0.7%** (to 43.9 mb/d), from the average fall of -1.9% seen in the previous four-quarters. Resurgent OECD Pacific demand led the way, up 4.8% (to 7.5 mb/d), supported by power sector demand in Japan. North American consumption fell by 1.2%, shallower than the average 2.2% drop seen in the previous four-quarters, while financially-challenged Europe maintained its near-3% decline rate.

- **Slowing activity levels saw non-OECD demand growth fall back sharply in April, according to preliminary estimates,** halving to 2.1% (43.9 mb/d) from 4.5% in March. A dramatic reversal in China's oil demand, down 0.6% after a rise of 3.1% in March, accounted for most of the deterioration, although early indications suggest a pick-up again in May. For the year as a whole, however, non-OECD demand is forecast to average 44.7 mb/d, up by 2.8% on the year.

- **A low-GDP sensitivity analysis, with 2012 GDP growth of 2.3% rather than 3.5%, would generate weaker 2012 demand growth of 0.34 mb/d.** This scenario illustrates some of the downside risks were euro zone or Chinese economic growth to slow markedly in coming months.

Global Oil Demand (2010-2012)

(million barrels per day)

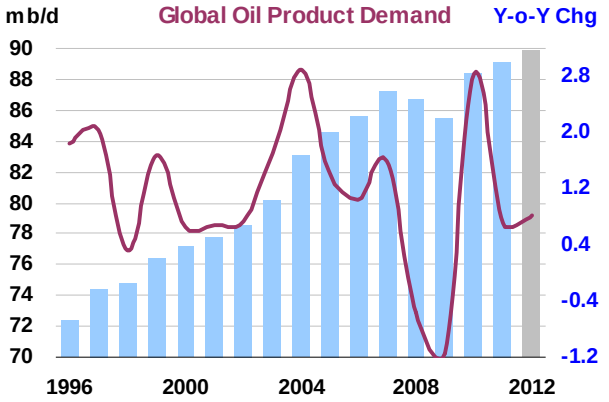
	1Q10	2Q10	3Q10	4Q10	2010	1Q11	2Q11	3Q11	4Q11	2011	1Q12	2Q12	3Q12	4Q12	2012
Africa	3.4	3.5	3.4	3.4	3.4	3.4	3.4	3.3	3.4	3.4	3.5	3.5	3.4	3.5	3.5
Americas	29.6	30.1	30.6	30.3	30.1	30.2	29.9	30.4	30.1	30.1	29.7	29.9	30.5	30.4	30.1
Asia/Pacific	27.3	27.1	26.8	28.4	27.4	28.7	27.4	27.4	28.9	28.1	29.6	28.0	28.1	29.5	28.8
Europe	15.1	15.1	15.7	15.7	15.4	14.9	14.9	15.5	14.9	15.0	14.4	14.4	15.1	14.8	14.7
FSU	4.2	4.2	4.4	4.4	4.3	4.3	4.5	4.7	4.7	4.6	4.6	4.7	4.8	4.8	4.7
Middle East	7.3	7.7	8.2	7.6	7.7	7.5	7.9	8.3	7.8	7.9	7.7	8.1	8.5	8.0	8.1
World	**86.9**	**87.6**	**89.1**	**89.8**	**88.4**	**89.1**	**87.9**	**89.5**	**89.8**	**89.1**	**89.5**	**88.5**	**90.5**	**91.0**	**89.9**
Annual Chg (%)	2.8	3.4	3.6	3.6	3.3	2.5	0.3	0.5	0.1	0.8	0.5	0.7	1.1	1.3	0.9
Annual Chg (mb/d)	2.4	2.8	3.1	3.1	2.8	2.2	0.3	0.4	0.0	0.7	0.4	0.7	1.0	1.2	0.8
Changes from last OMR (mb/d)	0.05	0.04	-0.03	-0.06	0.00	-0.08	-0.08	-0.12	-0.07	-0.09	0.03	-0.08	-0.13	-0.07	-0.06

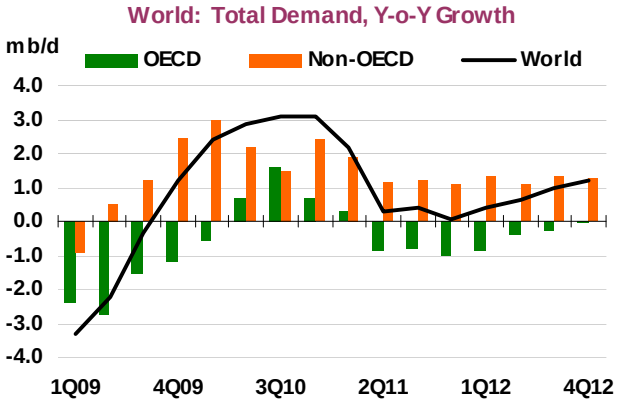
Global Overview

Confidence concerning the sustainability of the global economic recovery has ebbed this past month which, all else held equal, should accordingly dampen oil demand. However, despite downward data adjustments to the non-OECD baseline for 2010 and 2011, an offset derives from the recent weakening in oil prices. Employing an already cautious view on 1H12 economic growth, our projection for global oil demand growth of 0.8 mb/d in 2012 takes total consumption up to an average of 89.9 mb/d. We have also updated our occasional low-GDP sensitivity this month (see *Economic Risks Again Skewed to the Downside)*. Under such a low-case scenario global economic growth for 2012 is assumed to be one-third lower, at 2.3% as opposed to 3.5% in the base case. Under this projection, a more sedate expansion in demand of 0.34 mb/d would result for 2012, to average 89.4 mb/d.

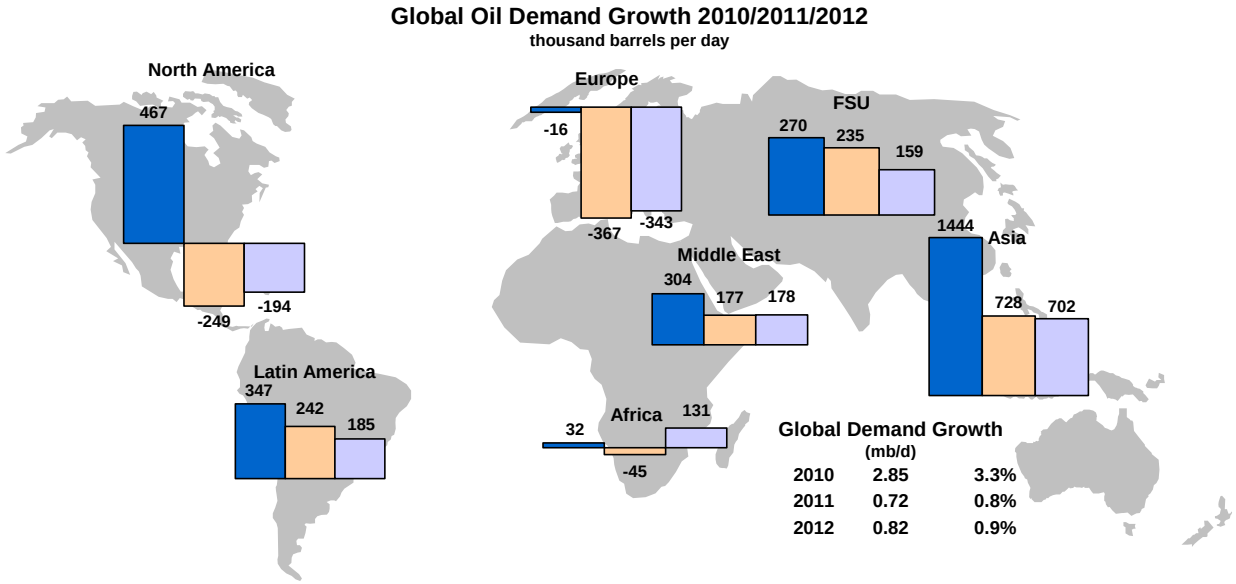
The low GDP case, by definition, remains for now a lower probability case than our base projection. That said, consumers' perceptions of a changing economic backdrop can greatly influence the key factors that impact upon economic growth itself, i.e. fears for the future can become self-reinforcing as businesses

curtail investments and consumers withhold spending. Only recently, during 12 May through 6 June, the search engine Google recorded an unprecedented rise in searches for the term 'recession', up 6000% on the previous 26 day period; hits on the phrase 'double dip' were up by 325%. Such a crude methodology is not meant to offer conclusive proof of change in the economic landscape but rather to draw the reader's eye to an escalation in fears, potentially self-fulfilling. Such concerns have become more pronounced as the very sustainability of the European Economic and Monetary Union (EMU) has increasingly come under threat, while the pace of economic momentum in both China and the US appears to have stalled. Rising public angst does not mean we have to lower our forecast, but rather justifies the inclusion of an additional low-case scenario.



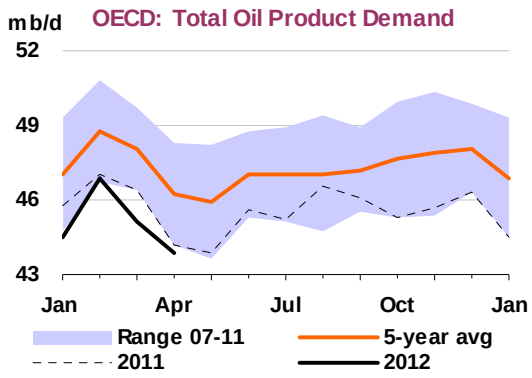


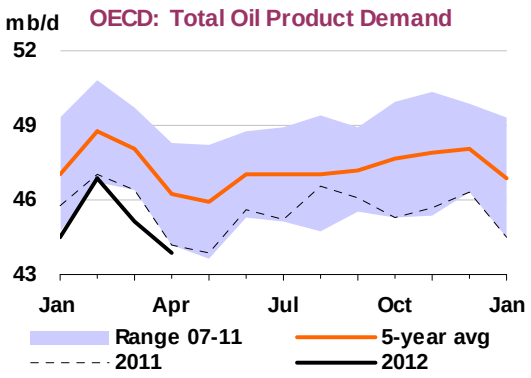
Numerous historical revisions, centred on annual data for the non-OECD, have also been made. For example, global oil demand for 2009 is now assessed at 85.5 mb/d, 55 kb/d less than carried in last month's report. Dominating the downside revisions were the economies of the former Soviet Union and the Middle East, both of which saw 2009 data reduced by more than 100 kb/d. For 2011, revisions curb global demand to 89.1 mb/d, which is 90 kb/d less than estimated previously.



OECD

Early estimates of OECD preliminary data for April depict a reduction in the y-o-y decline rate, with a 0.7% drop resulting as consumption averaged 43.9 mb/d for the month. The pace of contraction therefore slowed markedly compared with the -1.9% average seen during 2Q11 to 1Q12. OECD Pacific demand growth surged to 4.8%, while the rate of North American decline slowed from 2.2% to 1.2%. Amid heightened economic concerns, European oil demand remained on a near-3% downward trend.





Economic Risks Again Skewed to the Downside

Arguably, demand side risks in our projections so far in 2012 have been fairly well balanced. But amid renewed downside pressures, with mounting European debt concerns and the very sustainability of the EMU at the forefront of peoples' fears, another look at our lower GDP sensitivity may be in order. Additional worries have also arisen concerning momentum in both the Chinese and the US economies, the key growth engines for oil demand. China has taken on the mantle of the biggest single source of oil demand growth, while the US maintains its position as the largest global consumer. Concerns over the health of these economies are not new but are now arguably more intense. This is not to undermine the robustness of our existing base case for demand. However, global economic growth of 3.5% is still significantly down on the pre-credit crunch heights of near-5%. The possibility, although still slim, of much lower growth has undeniably risen this past month. To illustrate the scale of the issue, we again include a low-case projection, which assumes global economic growth one third lower in 2012, i.e. at 2.3%. Such an assumption entails a significant economic contraction in OECD Europe, as economic output falls by 0.2% as opposed to the 0.2% gain assumed in the base case. It also posits non-OECD growth of a weaker 3.9%, compared to 5.7% in the base case.

Oil Demand Sensitivity

(million barrels per day)

	2011	2012	2012 vs. 2011	
			%	mb/d
Base GDP				
Global GDP (y-o-y chg)	3.7%	3.5%		
OECD	45.6	45.2	-0.9%	-0.40
Non-OECD	43.4	44.7	2.8%	1.22
World	89.1	89.9	0.9%	0.82
Lower GDP				
Global GDP (y-o-y chg)	3.7%	2.3%		
OECD	45.6	45.1	-1.1%	-0.50
Non-OECD	43.4	44.3	1.9%	0.84
World	89.1	89.4	0.4%	0.34

If the global economy were to expand by only 2.3% in 2012, total world oil demand would come in at 89.4 mb/d. Growth for the year would thus amount to 0.34 mb/d, nearly 0.5 mb/d less than assumed within our base case analysis. The developing or non-OECD region is forecast to take the brunt of the downside revision seen in the low-case scenario, with non-OECD growth of 0.84 mb/d in 2012 as opposed to 1.22 mb/d in the base-case analysis. Emerging markets would be expected to endure the majority of any lost demand, as a consequence of the higher income elasticity of these non-OECD oil consumers. The greater significance of oil-intensive industry in non-OECD economies, in comparison to the OECD average, plus the less mature state of their transport markets, fuels this dichotomy. Furthermore, non-OECD nations tend to have less developed public transportation systems, less money to invest in new/cleaner technologies and reduced flexibility to change fuels in the short term. OECD demand would decline by a more rapid 0.5 mb/d in 2012, under the terms of the low-case scenario, as opposed to a predicted OECD decline of 0.4 mb/d in the base case.

OECD Demand based on Adjusted Preliminary Submissions - April 2012
(million barrels per day)

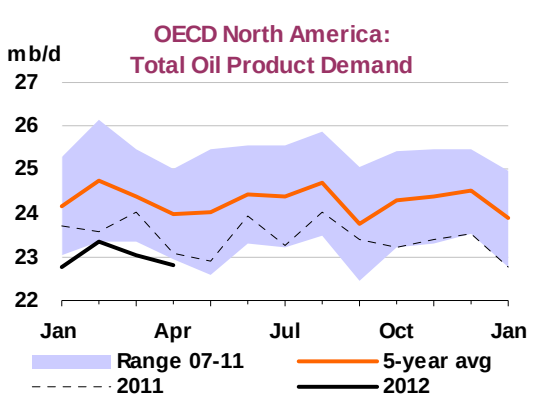
	Gasoline		Jet/Kerosene		Diesel		Other Gasoil		RFO		Other		Total Products	
	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa
OECD North America*	**10.24**	**-1.0**	**1.55**	**-6.3**	**4.17**	**9.0**	**0.63**	**-24.0**	**0.80**	**-14.4**	**5.43**	**-1.24**	**22.82**	**-1.2**
US50	8.68	-1.1	1.36	-7.5	3.61	10.0	0.21	-50.5	0.44	-26.6	4.10	-1.2	18.39	-1.6
Canada	0.74	2.1	0.11	3.8	0.21	3.6	0.27	1.7	0.09	2.5	0.70	-3.4	2.12	0.4
Mexico	0.77	-3.3	0.06	2.7	0.32	3.4	0.14	3.4	0.21	11.7	0.59	0.8	2.08	0.8
OECD Europe	**2.06**	**-5.6**	**1.16**	**-3.6**	**4.16**	**-4.0**	**1.41**	**5.0**	**1.16**	**-4.0**	**3.61**	**-1.3**	**13.57**	**-2.7**
Germany	0.46	0.7	0.18	-1.6	0.64	-5.3	0.33	70.3	0.19	24.6	0.61	-2.5	2.40	5.4
United Kingdom	0.33	-3.0	0.28	-6.9	0.42	-1.7	0.10	-8.8	0.07	2.7	0.32	-8.7	1.54	-4.8
France	0.17	-11.8	0.14	-3.8	0.71	-0.3	0.22	13.0	0.08	-4.7	0.49	11.1	1.82	2.2
Italy	0.20	-16.1	0.08	-14.8	0.43	-14.3	0.07	-19.4	0.09	-15.0	0.38	-13.9	1.25	-14.9
Spain	0.11	-13.1	0.12	-5.5	0.43	-8.0	0.14	-7.5	0.17	-8.4	0.31	-6.2	1.27	-7.8
OECD Pacific	**1.47**	**3.0**	**0.67**	**-13.2**	**1.06**	**3.8**	**0.45**	**-10.5**	**0.85**	**31.9**	**2.97**	**7.5**	**7.48**	**4.8**
Japan	0.91	3.8	0.40	-14.4	0.38	-2.0	0.35	-13.3	0.55	60.0	1.67	8.8	4.25	6.1
Korea	0.18	5.7	0.13	-21.9	0.27	15.3	0.10	0.0	0.27	-2.4	1.14	8.0	2.10	4.4
Australia	0.32	0.6	0.12	-0.2	0.36	2.8	0.00	0.0	0.02	-1.6	0.16	-5.4	0.97	0.2
OECD Total	**13.77**	**-1.3**	**3.38**	**-6.9**	**9.40**	**2.3**	**2.49**	**-7.0**	**2.81**	**0.8**	**12.00**	**0.8**	**43.86**	**-0.7**

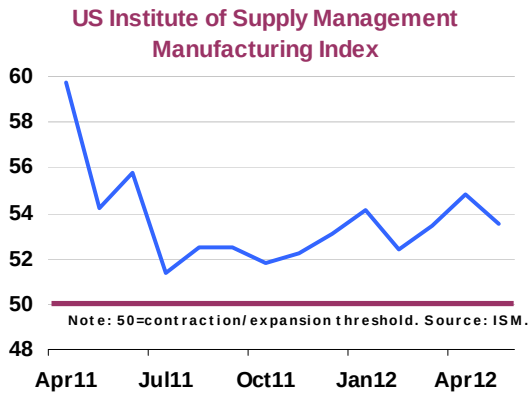
* Including US territories

The exceptional demand low of April 2011 – a consequence in part of the devastating Japanese tsunami – led the y-o-y adjustment. The preliminary data for Japan in April 2012 implies a 6.1% y-o-y gain (or 245 kb/d), to 4.3 mb/d, as low nuclear availability stimulated replacement demand for both residual fuel oil (up 120 kb/d) and crude oil for direct burn (up 175 kb/d) by power stations. Indeed, Japan accounted for over 40% of the total global expansion in oil demand estimated for April.

North America

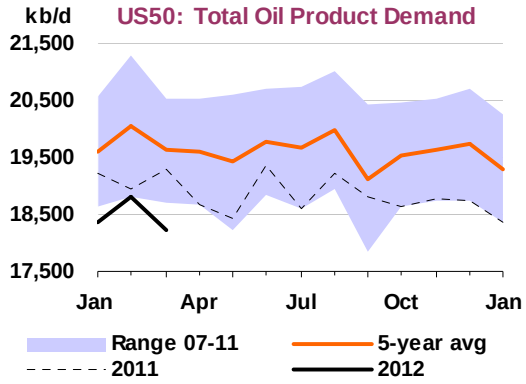
Demand for oil products in North America continues to decline, with revised March data showing a sizeable 1.0 mb/d y-o-y fall to 23.0 mb/d, and preliminary data for April depicting a further 0.3 mb/d drop to 22.8 mb/d. The North American decline rate abated somewhat in April, despite high product prices and the entrenched structural demand decline. All told, 2012 sees a 0.2 mb/d decline to 23.3 mb/d, with residual fuel oil (-9.4%) leading the contraction, as fuel switching to cheaper natural gas continues.

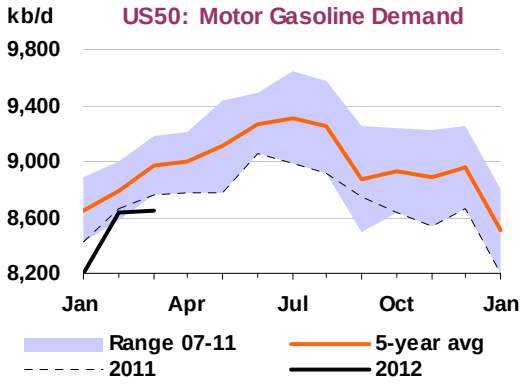




Revised **US** demand data for March averaged 18.2 mb/d, a y-o-y decline of 5.6%, with consumption lower across all of the main product categories. The sharpest contractions were seen in residual fuel oil, and naphtha, with reductions in excess of 20%. Relatively speaking, motor gasoline fell by a lesser degree, with demand down 1.3% to 8.6 mb/d, as the pace of the decline showed signs of bottoming-out following the falls of the past four years. Despite the optimism that had crept into the US economic news feed during late-2011/early-2012, cracks have started to appear, undermining the short-term demand prognosis. For example, the US economy expanded by an annualised 1.9% in 1Q12 (i.e. 0.5% in simple quarter-on-quarter terms), below the previously reported 2.2% (0.6%) level. Furthermore, the

employment statistics have deteriorated (with unemployment posting its first rise in nine months, to 8.2% in May) while the closely watched Philadelphia Fed Manufacturing index slipped to -5.8 in May, significantly down on the consensus expectation of +10. The Institute of Supply Management's Manufacturing Index, although still above the key 50 threshold that signals expanding confidence, slipped to 53.5 in May from 54.8 in April.

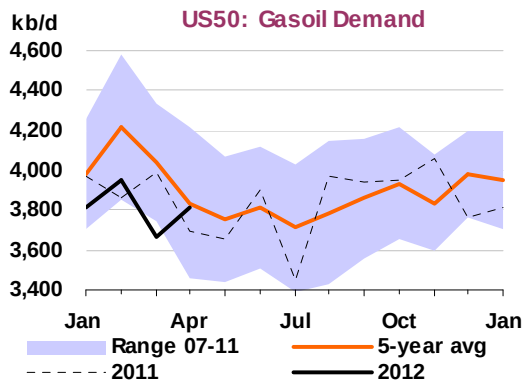


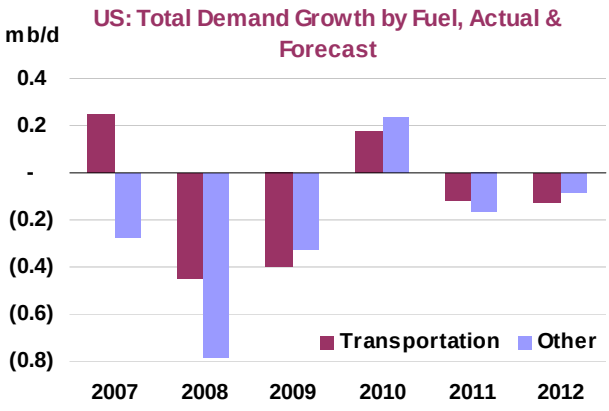


The relative improvement in US gasoline demand growth deserves additional analysis, having previously fallen by an average of 3.5% y-o-y in the final three-quarters of 2011. March's 1.3% drop is therefore mild in comparison. With the number of miles travelled already significantly reduced, there is little more that US drivers can do in the short-term to reduced demand. The sheer scale of the US vehicle fleet means that more fuel-efficient car purchases take a long time to filter through into sizeable chunks of the total vehicle fleet.

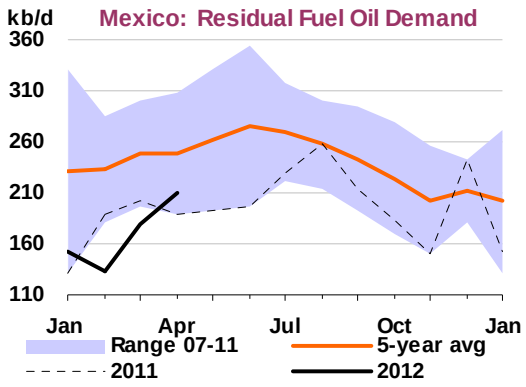
Early estimates of April demand reinforce a moderation in the y-o-y pace at which US demand declines; with a drop of 1.6% now estimated, taking total US consumption to 18.4 mb/d. Supported by April's manufacturing strength, gasoil demand led April's upside, with a 3.2% y-o-y gain to 3.8 mb/d. Some of gasoil/diesel's strength may have derived at the expense of heavy fuel oil ahead of the ECA's bunker fuel specification switch on 1 August 2012, but also gaining support as secondary/tertiary tank refills were pushed into April.

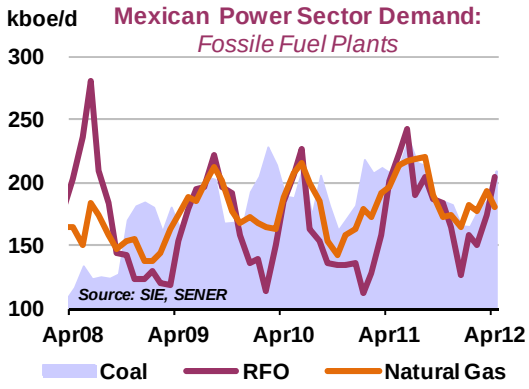
For the year as a whole, a US demand contraction of around 165 kb/d (-0.9%) to 18.7 mb/d is forecast, as the predicted decline rate falls throughout the year, supported by further price appeasement and a continuation of the gentle pace of economic recovery. Bucking the otherwise falling US demand trend in 2012 is likely to be the LPG & ethane category, gaining support as higher NGL supplies from shale deposits make US petrochemical production more cost competitive.





In **Mexico**, oil demand grew by an average of 0.8% in March and April, after falling by 2.6% in February. Preliminary data for April depict strong gains in residual fuel oil (11.7%), 'other products' (6.2%), gasoil/diesel (3.4%) and jet/kerosene (2.7%), while motor gasoline contracted by 3.3%. Solid residual fuel oil demand growth in the power sector accelerated beyond our previous expectations, as natural gas consumption fell unseasonably in thermoelectric plants. Demand is projected to remain solid during 2Q12, as a result of a severe drought undermining hydroelectric power generation. Gasoline demand, on the other hand, is forecast to remain flat during 2012, as consumers react to local fuel price rises outpacing inflation, yet remaining below international levels. Total oil product demand in 2012 is assumed to fall marginally to 2.1 mb/d, although heavily dependent upon the continued growth of the US economy.

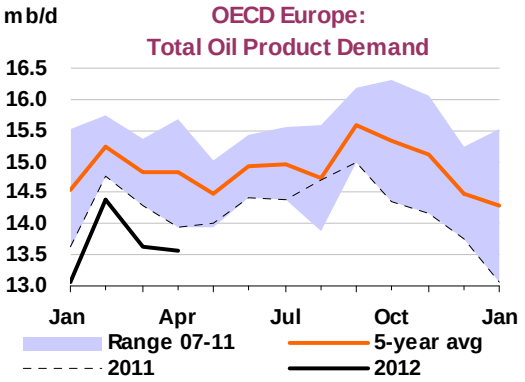


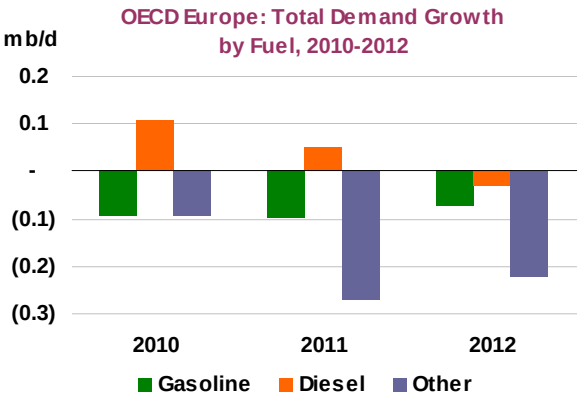


Europe

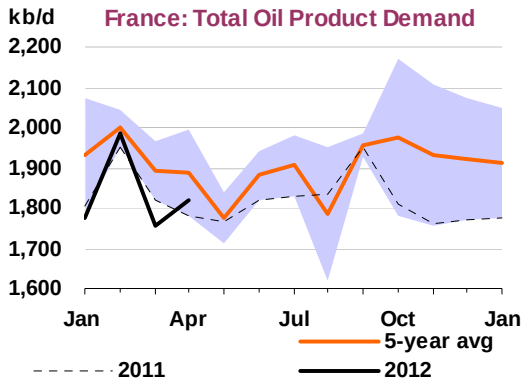
The economic woes of Europe continue to dampen oil demand, with a clear dichotomy in performance between northern Europe and the ailing economies on the Mediterranean. Overall demand in OECD Europe fell by 0.4 mb/d, according to preliminary April data, to 13.6 mb/d. European transportation fuels remained weak, with gasoline demand down by 125 kb/d y-o-y, to 2.1 mb/d, and diesel 175 kb/d lower, to 4.2 mb/d, as cash-strapped consumers struggled with near-record retail prices and weak consumer confidence.

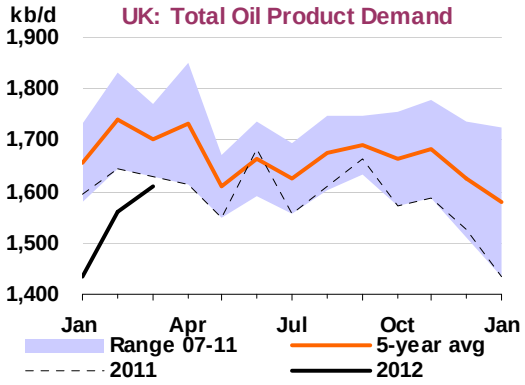
A continuation of the economic gloom that has plagued Europe recently is assumed to continue through 3Q12, before recovering in 4Q12 (assuming the European economy does not deteriorate further) when the heavy y-o-y declines are forecast to abate. This leaves a fairly pessimistic demand outlook for the year as a whole, with OECD European demand forecast to shed 345 kb/d to an average of around 13.9 mb/d. Back at its peak in 2006, OECD Europe consumed 15.7 mb/d, suggesting a loss of 1.7 mb/d in six years or an average of 290 kb/d each year.





German consumption reversed its recently falling trend, according to the preliminary data series for April, which showed a y-o-y gain of 120 kb/d to 2.4 mb/d, as the cold weather supported strong growth in heating oil demand. **France** similarly bucked the overall declining European demand trend in April. French consumption rose by 2.2% y-o-y to 1.8 mb/d, according to the preliminary data. Unusually cold weather conditions supported particularly strong demand for heating oil, up 13.0% to 220 kb/d. Transport fuels, however, performed poorly, falling on account of near-record retail prices. Gasoline demand fell by 11.8% in April to 175 kb/d, while diesel demand slipped 0.3% to 710 kb/d.



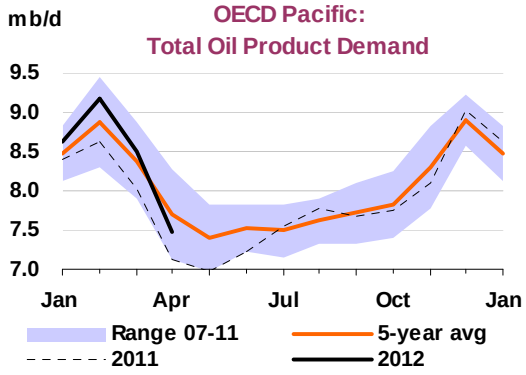


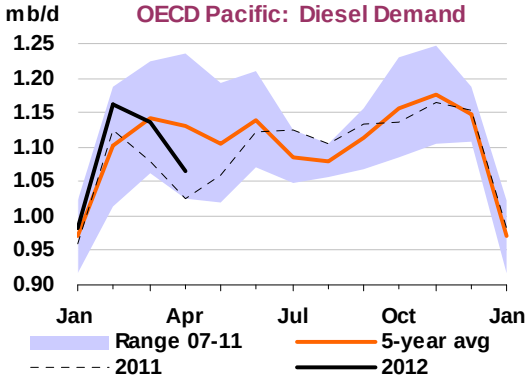
The **UK** consumed 1.6 mb/d of oil products in March, a y-o-y decline of 1.3%, with particularly sharp deteriorations in the residual fuel oil (-8.8%), jet/kerosene (-8.5%) and heating oil (-6.0%) categories. Transportation fuels bucked the overall falling UK consumption trend, as panic buying, ahead of a heavily anticipated distribution strike (that never happened) provided temporary relief to gasoline (+0.9%) and diesel (+1.8%). Total UK consumption for the year as a whole is expected at around 1.6 mb/d, a drop of 3.1% on 2011.

Oil demand in **Italy** fell even more sharply, down a staggering 14.9% in April to 1.2 mb/d, as the dire economic backdrop quelled consumption. Residual fuel oil demand notably collapsed in a reversal of 2011's surge in use to replace Libyan natural gas. The similarly harsh economic situations in **Spain** and **Greece** saw y-o-y drops in demand of 7.8% and 16.5%, respectively.

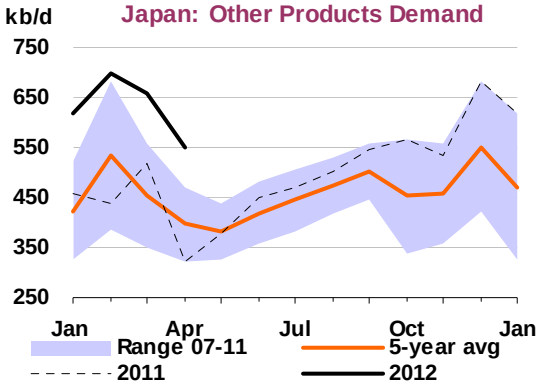
Pacific

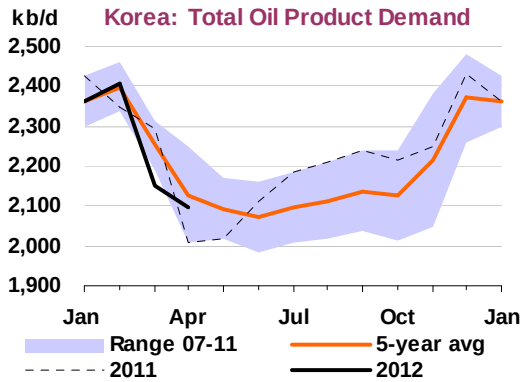
The strong OECD Pacific demand growth seen since the end of 2011 continued, according to the preliminary data feeds for April, up by 4.8% to 7.5 mb/d. Although power sector demand from Japan has led the upside, significant gains were also seen in OECD Pacific ground transportation fuels, with gasoline demand up 3.0% and diesel up 3.8%. Korea led the momentum here, up 5.7% and 15.3% respectively, largely on account of unseasonably low demand in the previous year. The Korean government is making stringent efforts to restrain demand growth (see next page).





In **Japan**, oil demand rose by 6.1% year-on-year in April, to 4.3 mb/d, following a sizeable 13% March increment triggered by cold weather, last year's tsunami-impacted demand and low electricity generation in the nuclear power plants. Japanese oil demand in 2012 is revised upwards by 70 kb/d over last month's estimate, as vigorous economic output drove electricity demand above 2011 levels. Confirming this trend, residual fuel oil climbed by 60% y-o-y in April, while 'other products', including direct crude burning, grew by 70% on the back of strong demand in thermoelectric plants. The power sector consumed 500 kb/d of oil products in April, a year-on-year increment of 300 kb/d, and demand is expected to accelerate to 600-700 kb/d in the summer. Currently, we assume that two nuclear reactors, located in the south and operated by Kansai Electric Company, will come back online in mid-July/early-August, but uncertainty remains, as the central government is required to approve the restart and stand by its decision. Our base case projection now assumes nine nuclear units restarted by December, compared with 16 previously. The summer will test our working assumptions, as well as Japanese efforts to manage electricity demand. Oil demand could be revised higher if significant delays to nuclear restarts materialise. Japanese total oil product demand in 2012 is seen at 4.6 mb/d, showing annual growth of 110 kb/d or 2.5%.





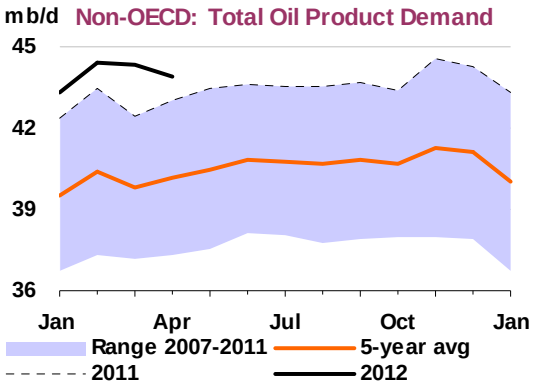
Having seen a sharp 4.4% y-o-y increase in demand in April, to 2.1 mb/d, **South Korea** announced on 23 May a range of policies that it hopes will limit consumption of oil products. Through a package of regulations and tax incentives, which will support the usage of hybrid/small cars and public transportation, the government hopes to save 26 million barrels of oil by 2015. The government intends to cut oil use, as a share of total energy consumption, to 33% in 2015 from its forecast of 37.5% for 2012. Of particular concern is its claims that the transport sector accounts for 32.7% of all oil used, a level that rose by 0.84% annually through the last 10 years, in contrast to the declines seen in Japan (-1.61%), Germany (-1.16%) and the US (-1.22%). Whereas Korean-produced cars currently average 15.5 km/litre, the intention is to raise this to 17 km/litre by 2015. Incentives will also be set up to encourage Korea's biggest oil consumer – industry – to economise, improve fuel efficiency and share energy-saving knowledge with other firms. Efforts to monitor air conditioning levels are also planned, with building temperatures tracked to prevent excessive usage, while incentives are created to limit peak hour usage. We envisage demand expanding by a relatively modest 0.8% in 2012, to 2.2 mb/d, with naphtha demand growing by 3.7% to 1.0 mb/d.

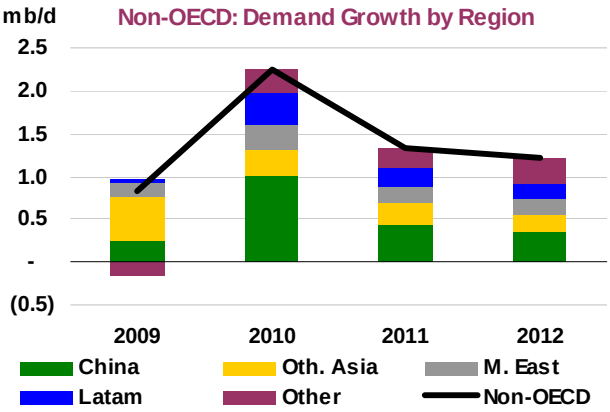
Non-OECD

The preliminary data for April depict a sharp deceleration in emerging market demand growth, to 2.1% from 4.5% in March, with transportation fuels showing the most dramatic slowdowns. Jet/kerosene, for example, saw y-o-y demand contract by 0.4% in April, after rising by 8.4% in March, with China accounting for the majority of the reversal, down 6.4%, after a gain of 44.1% in March. The Chinese month-to-month turnaround in growth is attributable to unseasonably low demand in both March 2011 and April 2012. The Chinese statistics were further compounded as the International Air Transport Association reported growth in domestic revenue passenger kilometres (RPKs) falling to 6.3% y-o-y in April, versus December's high of 12.3%.

Non-OECD: Demand by Product
(thousand barrels per day)

	Demand			Annual Chg (kb/d)		Annual Chg (%)	
	Feb-12	Mar-12	Apr-12	Mar-12	Apr-12	Mar-12	Apr-12
LPG & Ethane	4,688	4,606	4,593	49	107	1.1	2.4
Naphtha	2,689	2,581	2,639	-7	24	-0.3	0.9
Motor Gasoline	8,800	8,589	8,644	605	522	7.6	6.4
Jet Fuel & Kerosene	2,716	2,787	2,661	216	-12	8.4	-0.4
Gas/Diesel Oil	13,979	14,044	14,027	681	403	5.1	3.0
Residual Fuel Oil	5,620	5,674	5,564	38	43	0.7	0.8
Other Products	5,951	6,048	5,806	330	-191	5.8	-3.2
Total Products	**44,443**	**44,329**	**43,933**	**1,912**	**897**	**4.5**	**2.1**





After stuttering somewhat in 2Q12, up 2.4%, non-OECD demand growth is forecast to accelerate once again in the second half of the year, supported by what is still expected to be a strengthening economic backdrop for 3Q12 and 4Q12. For the year as a whole, non-OECD demand growth is projected at 2.8%, taking consumption to 44.7 mb/d. Transportation fuels are forecast to lead the upside – gasoline demand up by 4.2% to 8.7 mb/d and gas/diesel oil 3.2% higher at 14.1 mb/d – supported by the rapidly expanding non-OECD driver pool. Regionally, the strongest non-OECD demand growth in relative terms is envisaged in Africa, with demand growth of 3.9% foreseen (to 3.5 mb/d). Demand from the former Soviet Union should also rise strongly, up 3.5% to 4.7 mb/d, as Russia in particular has demonstrated a voracious appetite for transportation fuels in recent months.

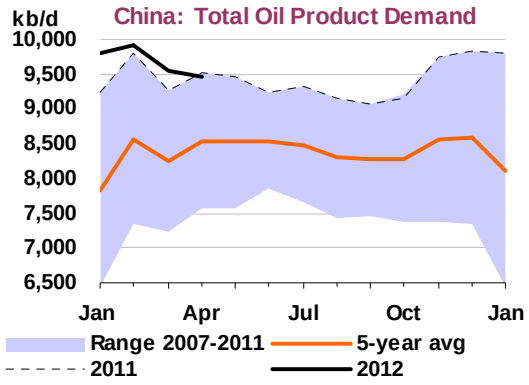
Non-OECD: Demand by Product
(thousand barrels per day)

	Demand			Annual Chg (kb/d)		Annual Chg (%)	
	2010	2011	2012	2011	2012	2011	2012
LPG & Ethane	4,356	4,588	4,689	232	101	5.3	2.2
Naphtha	2,586	2,559	2,587	-27	28	-1.1	1.1
Motor Gasoline	8,056	8,351	8,703	296	352	3.7	4.2
Jet Fuel & Kerosene	2,655	2,752	2,806	97	54	3.6	2.0
Gas/Diesel Oil	13,030	13,636	14,069	606	433	4.7	3.2
Residual Fuel Oil	5,519	5,579	5,638	60	59	1.1	1.1
Other Products	5,921	5,980	6,170	59	190	1.0	3.2
Total Products	**42,122**	**43,444**	**44,661**	**1,322**	**1,217**	**3.1**	**2.8**

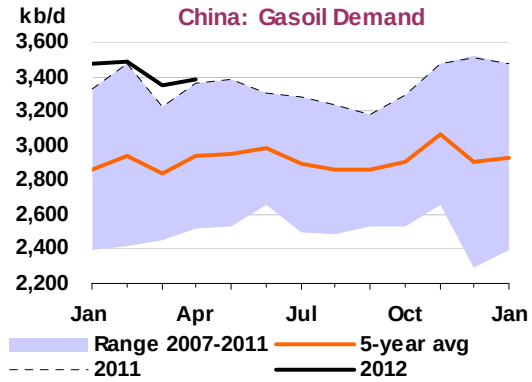
China

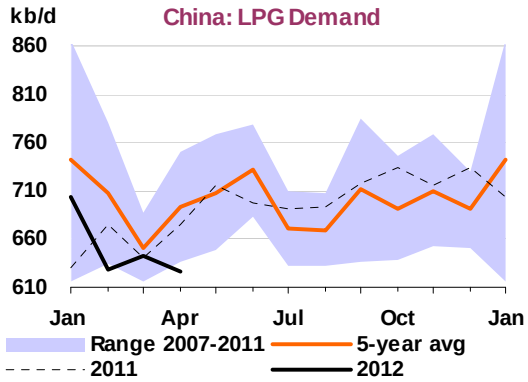
Demand growth in the world's fastest growing market – China – has clearly slowed. Preliminary estimates of apparent Chinese demand, i.e. net product imports plus refinery output, depicted 9.5 mb/d of oil products being consumed in April, a drop of 55 kb/d (or 0.6%) on the corresponding month a year

earlier. After stimulus-inflated oil demand growth averaging 1.0 mb/d during 4Q09-4Q10, momentum has since eased back considerably. In the last eight-months through April, y-o-y Chinese demand growth slipped to 125 kb/d, or roughly an eighth of earlier peak levels.



Consumption has eased back as Chinese economic momentum has subsided sharply. A quick glance at the Purchasing Managers' Index (PMI), compiled by HSBC/Markit (*sic*) clearly shows that the psychologically significant 50 threshold – which signifies the breakeven level between expectations of a contraction and an expansion – was broken in November and has since oscillated below the threshold. Industrially significant products, such as gasoil/diesel and LPG, have suffered particularly, as the manufacturing base has lost some of its appetite for these products.





Chinese demand growth is expected to resume in the second half of 2012, supported by a fresh acceleration in industrial output and the widely held belief that the Chinese government will enact measures to shore up the economy. Early-June has already seen a surprise interest rate cut and a lowering of reserve requirements at banks, thus easing monetary policy with further such moves anticipated. An infrastructure spending programme, albeit not on the scale of the 2008 stimulus, is also underway. (Such moves could also highlight the very real fears that the Chinese economy is set to slow markedly, see *Economic Risks Again Skewed to the Downside*). After expanding, by a predicted 1.8% y-o-y in 2Q12, to 9.6 mb/d, oil demand impetus is forecast to gather pace into the second half of the year, rising by 4.6% in 3Q12 (to 9.6 mb/d) and 4.7% in 4Q12 (to 10.0 mb/d). This leaves a growth assumption of 3.6%, or 0.3 mb/d, for the year as a whole, to an annual average of 9.7 mb/d. Transportation fuels garnered additional support in mid-June, as China's National Development and Reform Commission (NDRC) announced price reductions of 530 yuan ($83) per metric tonne for gasoline and 510 yuan ($80) for diesel. The reductions, despite being the most dramatic in the current pricing system's three and a half year history, pale in significance next to the decline in crude prices.

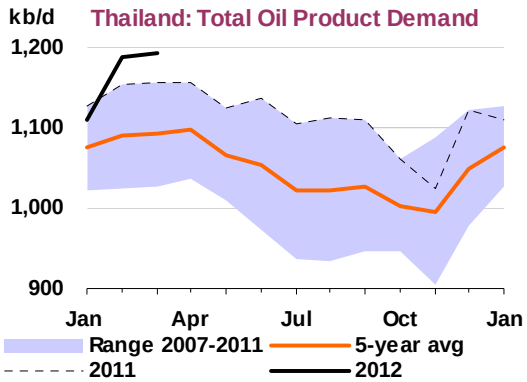
For the longer-term, official plans to cap total energy consumption are reportedly nearing completion, with the NDRC having already granted approval. Exact details have yet to emerge on the potential demand figures through to 2015, although an annual growth rate of around 5% can be assumed for total energy demand and a sub-5% expansion for oil.

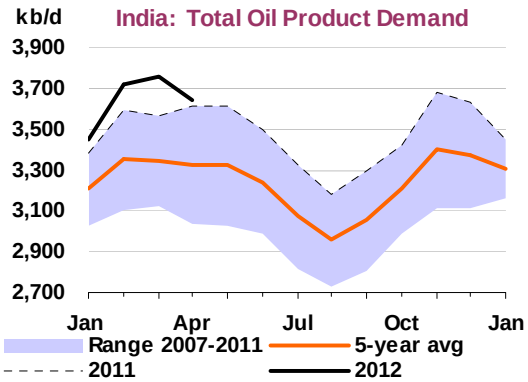
China: Demand by Product
(thousand barrels per day)

	Demand			Annual Chg (kb/d)		Annual Chg (%)	
	2010	2011	2012	2011	2012	2011	2012
LPG & Ethane	668	693	688	26	-5	3.9	-0.7
Naphtha	855	889	938	34	49	4.0	5.5
Motor Gasoline	1,546	1,655	1,765	109	110	7.1	6.6
Jet Fuel & Kerosene	357	390	403	33	13	9.3	3.3
Gas/Diesel Oil	3,137	3,335	3,422	198	87	6.3	2.6
Residual Fuel Oil	505	515	530	10	15	1.9	3.0
Other Products	1,886	1,919	1,991	32	72	1.7	3.8
Total Products	**8,954**	**9,396**	**9,738**	**442**	**342**	**4.9**	**3.6**

Other Non-OECD

LPG demand in **Thailand** looks likely to receive additional temporary support in 2012, as the government on 14 May announced that it was suspending plans to raise LPG prices. Local prices will now remain unchanged at a capped Baht 21.13 ($0.67) per kg in the three months through to 15 August. The move is a reversal of the government's September 2011 directive to remove subsidies, with the previous plan being that LPG prices rise by Satang 75/kg each month. Subsidised LPG demand has risen strongly in recent years, up by 10.2% in 2011 to 280 kb/d. A decline to a more modest growth rate of around 2% had been forecast for 2012, although the predicted pace of this slowdown has now been scaled back to 5%. Total oil demand growth of 1.8% is assumed for 2012, taking average consumption of oil products in Thailand to 1.1 mb/d for the year as a whole. Efforts to increase the use of ethanol in the gasoline mix should keep refinery-sourced gasoline demand growth under relative control in the longer term. The Department of Energy Development and Efficiency stated its intention on 30 May, citing preliminary plans for a more advantageous pricing structure (ethanol-blended-gasoline is already subsidized by the Oil Fund) and increased availability (currently 900 retail stations sell E20, a blend of gasoline that contains 20% ethanol, and that 25% of Thai cars can use).

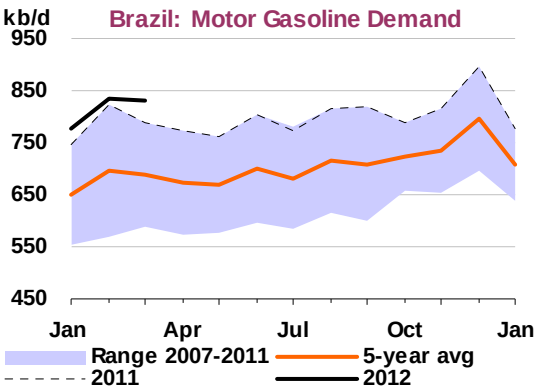


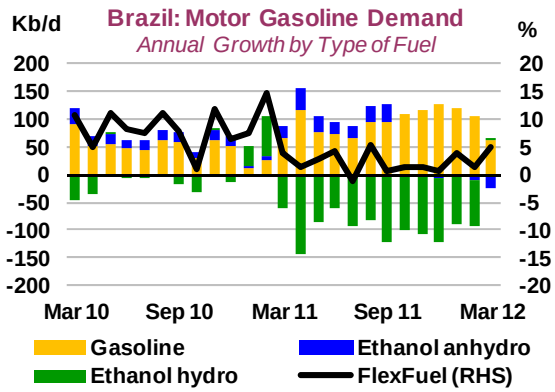


Our **Indian** demand forecast has been curtailed somewhat to reflect the big reduction in the preliminary data series for April. With consumption edging just 0.7% higher on a y-o-y basis in April, to 3.6 mb/d, demand growth of 3.2% is foreseen for the year as a whole, also to 3.6 mb/d (last month's assumed growth rate was 3.4%). The chief downside demand laggards in April were the heavy fuel oil (-25.8%), naphtha (-9.5%) and jet/kerosene (-13.3%) categories. Despite the recent deceleration in demand, numerous calls have been made for an increase in Indian retail fuel prices, as the sharp decline in the

domestic currency versus the US dollar put unsustainable pressures on government-run oil companies. The Indian Oil Minister, S. Jaipal Reddy put the annual cost at Rupees 80 billion ($1.5 billon) from each one rupee of devaluation against the dollar. The Junior Oil Minister, R.P.N. Singh claimed India imports 83% of its oil needs, which equates to just under 3 mb/d according to our forecasts – a burden of nearly $300 million dollars every day. Politically, reducing subsidies is tricky, as although they are uneconomic, they retain popular support. Any reduction in subsidies will likely sit beyond our short-term forecasting horizon, thus leaving our 2012 demand projections unaffected.

In **Brazil**, product demand expanded by 5.0% year-on-year in March, following a 2.1% increase in February. Product growth was led by gasoil/diesel (9.7%), jet/kerosene (8.2%) and motor gasoline (5.1%), while residual fuel dropped by 2.4%. Support for gasoil demand in March came from the start of the sugarcane, corn and soy harvest seasons. Jet fuel/kerosene demand is supported by strong growth in domestic aviation. Industry indicators from March showed that 'available seat kilometres' grew by 7.0% annually. However, the sector is slowing down as 'revenue passenger kilometres' grew only 1.3%. Motor gasoline demand accelerated as a result of lower prices of hydrous ethanol and strong seasonal demand. Refined gasoline continues to be competitive and the fuel of choice, but biofuel demand should pick up when ethanol stocks are replenished by the 2012/2013 sugarcane harvest. Brazil's total oil product demand is forecast at 2.8 mb/d in 2012, up 2.1% on the year earlier.





Other Latin American 2012 demand growth projections remain positive for most countries, bar Argentina which is struggling with stuttering economic activity. The **Chilean** prognosis remains unchanged for 2012, forecast to rise by 1.2% to 375 kb/d. Total oil product demand for **Peru** also maintained last month's projected 4.0% growth to 230 kb/d. Finally, our 2012 prognosis for **Colombia** is 290 kb/d, growing by 2.1%. Forecasting trends for Colombia remains a challenge, since the government has not published data beyond September 2011.

Latin America: Demand by Product

(thousand barrels per day)

	Demand			Annual Chg (kb/d)		Annual Chg (%)	
	2010	2011	2012	2011	2012	2011	2012
LPG & Ethane	633	669	681	36	12	5.7	1.8
Naphtha	216	194	194	-22	0	-10.3	0.1
Motor Gasoline	1,563	1,643	1,708	80	64	5.1	3.9
Jet Fuel & Kerosene	273	290	302	17	12	6.1	4.2
Gas/Diesel Oil	2,044	2,145	2,214	102	69	5.0	3.2
Residual Fuel Oil	806	847	879	42	31	5.2	3.7
Other Products	850	838	834	-13	-3	-1.5	-0.4
Total Products	**6,385**	**6,627**	**6,812**	**242**	**185**	**3.8**	**2.8**

SUPPLY

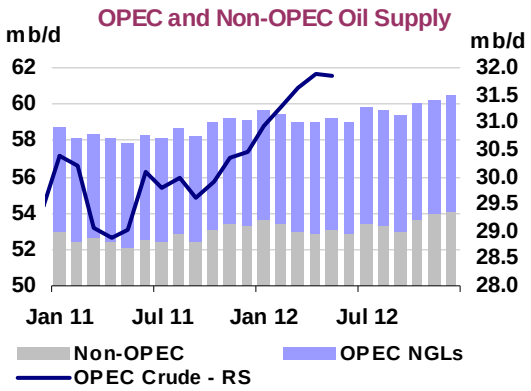
Summary

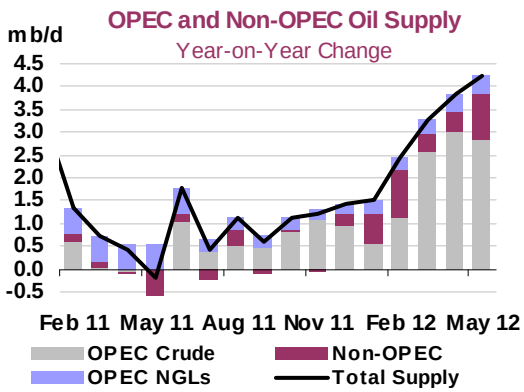
- **Global oil supply increased by 0.2 mb/d to 91.1 mb/d in May, with non-OPEC liquids production accounting for all of the increase.** Compared to a year ago, global oil production stood 4.2 mb/d higher, 70% of which stemmed from increasing output of OPEC crude.

- **Non-OPEC supply increased by 0.2 mb/d to 53.1 mb/d in May from the prior month and by 1.0 mb/d compared to May 2011.** In the last month, a seasonal rise in biofuels, rebounding Canadian syncrude, and US light tight oil production growth largely offset declining supply in the UK North Sea and continued outages in the Sudans, Syria, and Yemen. The outlook assumes that substantial production stoppages affecting these countries persist for much of 2012, keeping annual non-OPEC growth at 660 kb/d.

- **OPEC crude supply edged lower in May, down marginally by 20 kb/d, to 31.87 mb/d, with increased output from Angola, Nigeria, and Libya offsetting reduced supplies from Saudi Arabia and Iraq.** Crude oil production levels, however, are still flirting with four-year highs. OPEC NGLs are forecast to increase by 400 kb/d, to an average 6.2 mb/d in 2012, a downward revision of 100 kb/d from last month. Reductions centre in Iran and Algeria while growth stems primarily from Qatar and the UAE.

- **OPEC ministers are scheduled to meet on 14 June in Vienna to review the market outlook. However, with prices for benchmark Brent still near $100/bbl the producer group is expected to maintain the status quo**. The 'call on OPEC crude and stock change' is largely unchanged from last month, with 2012 pegged at an average 30.3 mb/d, although the call in 2H12 is around 1 mb/d higher than the 1H12 level, at 30.9 mb/d.





All world oil supply figures for May discussed in this report are IEA estimates. Estimates for OPEC countries, some US states, and Russia are supported by preliminary May supply data.

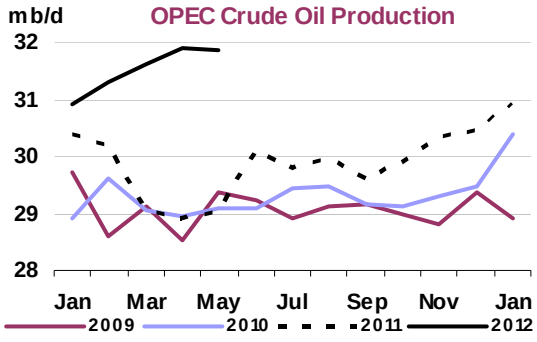
Note: Random events present downside risk to the non-OPEC production forecast contained in this report. These events can include accidents, unplanned or unannounced maintenance, technical problems, labour strikes, political unrest, guerrilla activity, wars and weather-related supply losses. Specific allowance has been made in the forecast for scheduled maintenance in all regions and for typical seasonal supply outages (including hurricane-related stoppages) in North America. In addition, from July 2007, a nationally allocated (but not field-specific) reliability adjustment has also been applied for the non-OPEC forecast to reflect a historical tendency for unexpected events to reduce actual supply compared with the initial forecast. This totals –200 kb/d for non-OPEC as a whole, with downward adjustments focused in the OECD.

OPEC Crude Oil Supply

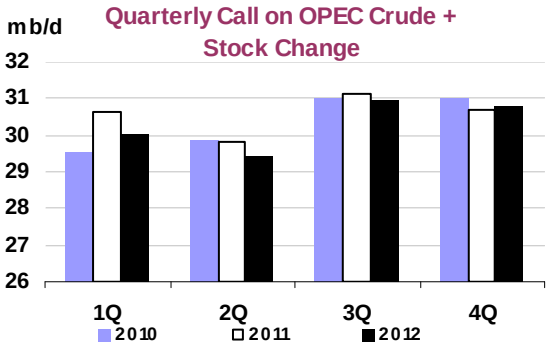
OPEC crude supply edged lower in May, down by 20 kb/d, to 31.87 mb/d, and ending a seven-month run of increases. Higher output from Angola, Nigeria, and Libya was offset by reduced supplies from Saudi Arabia and Iraq. Crude oil production levels, however, are still flirting with four-year highs. OPEC's 'effective' spare capacity in May is estimated at 2.38 mb/d.

OPEC ministers are scheduled to meet on 14 June in Vienna to review the market outlook. OPEC supply is now nearly 2 mb/d over the group's notional 30 mb/d output target agreed at its mid-December 2011 meeting. However, with prices for benchmark Brent still near $100/bbl, the producer group is expected to maintain the status quo. Indeed, the OPEC Secretariat has scheduled a relatively short meeting of one hour following the organisation's two-day OPEC International Seminar, which starts on 13 June.

The 'call on OPEC crude and stock change' is largely unchanged from last month, with the 2012 average pegged at 30.3 mb/d. However, the call is expected to increase from 29.8 mb/d in the January-June period to 30.9 mb/d in the second half of the year.

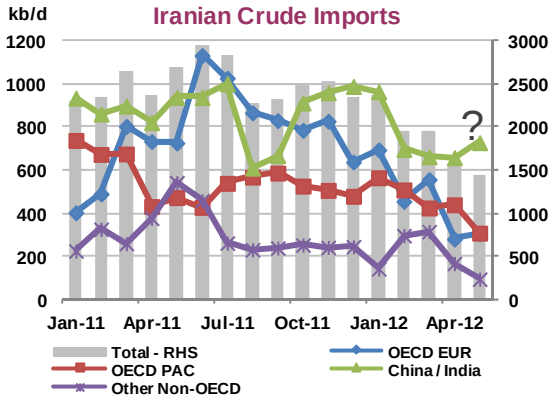


Entire series based on OPEC Composition as of January 2009 onwards (including Angola & Ecuador & excluding Indonesia)



Entire series based on OPEC Composition as of January 2009 onwards (including Angola & Ecuador & excluding Indonesia)

The full implementation of the most severe sanctions to date on Iran's oil and banking sectors is just weeks away, but so far it appears the National Iranian Oil Co (NIOC) has been able to maintain production in May at around 3.3 mb/d. Iran reportedly is offering longer credit terms to some customers, which effectively give buyers a price discount on its crude purchases. Implementation of full sanctions is assumed to ultimately lead to a cut of some 1 mb/d in Iranian supplies in 2H12 as storage tanks both onshore and offshore reach maximum capacity unless the country finds alternative outlets. Iranian output is down around 200 kb/d from around 3.5 mb/d at end-2011. Import and customs data for January-March indicate supplies fell by around 400 kb/d, with roughly half going into onshore storage facilities and floating vessels. Preliminary import data for April and May indicate supplies are now running much lower, at around 1.5 mb/d.



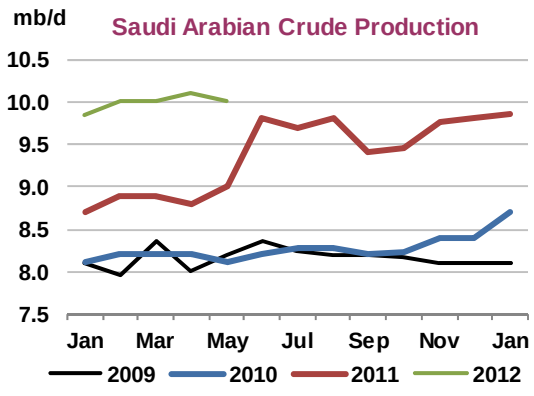
However, this data needs to be treated with caution until more comprehensive import and customs statistics become available in coming weeks, and some third-party sources cite April/May exports at higher levels of 1.8-1.9 mb/d. The problem is compounded by the fact that Iranian vessels are routinely switching off their tracking devices, rendering timely measurement of exports problematic. Iranian oil supplies held at sea rose by just over 10 mb by end-May to around 40-42 mb, shipping analysts say.

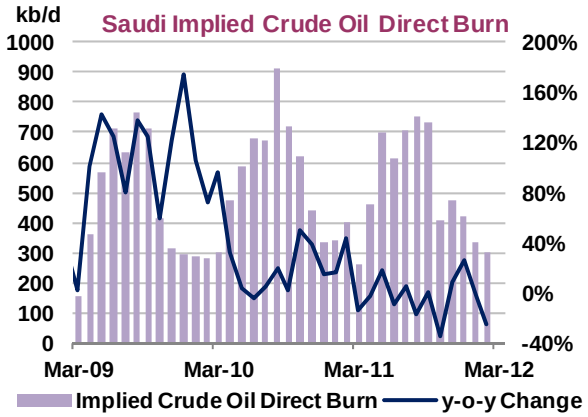
Approximately 17 VLCCs and 7 Suezmax vessels are reportedly engaged in floating storage operations. A further 20-25 mb is estimated to be held at onshore facilities.

Meanwhile, the US has now exempted 17 countries from sanctions effective 28 June after demonstrating that they have significantly reduced imports of Iranian crudes. China is the notable exception. The waiver is for 180 days and intended to allow countries more time to reduce imports from Iran further.

Going forward, it appears that the country's main European buyers have halved imports to around 300 kb/d in May and reports suggest volumes are expected to be halted altogether by the 1 July EU embargo deadline, with a plentiful supply of alternative crudes available to the region's refiners. Indeed, European buyers have already increased imports of Iraqi Basrah to replace Iranian barrels, from an average 100 kb/d in the first four months of the year compared with 450 kb/d in May. Less clear are the volumes of Iranian crude heading to non-OECD countries. Tanker data suggest Iranian exports to China and India rose in May by 70 kb/d to over 730 kb/d but, once again, data are preliminary. However, despite various proposals to ease sanctions on insurance coverage so far, strict rules are in place ahead of the deadline. EU companies are barred from insuring vessels carrying oil supplies from Iran as of 1 July. Asian buyers are also reporting that they are unable to find alternative insurance, although the Japanese government is promoting a bill that would compensate buyers of Iranian crude for the loss of insurance cover. Protection and Indemnity (P&I) clubs, which provide liability cover to over 95% of the world's tanker fleet, said they are adhering to new EU and US sanctions (see OMR 12 April 2012, *'Iranian Crude Supplies Tumble Under Weight of Sanctions'*).

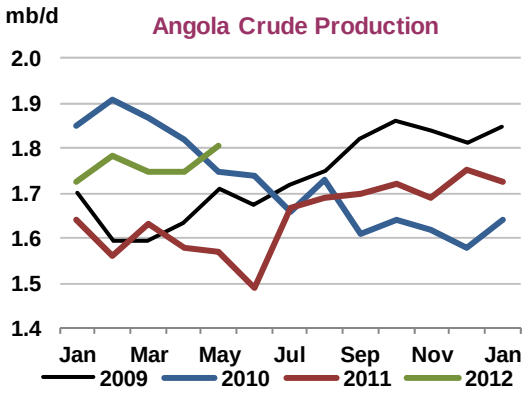
After hitting a three-decade high of 10.1 mb/d in April, production from **Saudi Arabia** is estimated to have declined in May by 100 kb/d, to 10 mb/d. Saudi Arabia could maintain output at the recent higher levels during the summer months to meet any increased demand from Asian and European buyers when sanctions on Iran come into full-force. In addition, higher production is needed to meet increased domestic demand for crude burn, as usage peaks at power and desalination plants during the April-September period. Last year crude burn rose by an average 660 kb/d during the peak season but this year's demand for crude burn is expected to be slightly lower, at around 550 kb/d, due to increased use of gas.

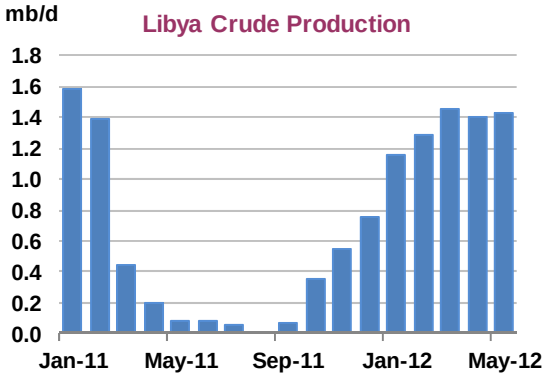




Iraqi crude oil production in May declined by 25 kb/d, to 2.89 mb/d from a downwardly revised 2.92 mb/d for April. Oil exports were down 56 kb/d to 2.45 mb/d, with weather-related delays hitting shipments from the southern terminal while pipeline outages impacted northern volumes. Basrah exports declined by 29 kb/d to 2.09 mb/d. Exports of Kirkuk crude were down 27 kb/d to 366 kb/d, including 8 kb/d trucked to Jordan. There were no exports from the Kurdish region, which normally feed into the Kirkuk crude stream, due to the protracted payment disputes between Baghdad and the Kurdistan Regional Government (KRG).

Angolan crude oil production in May rose to the highest level in two years thanks to a ramp-up in production from the 220 kb/d Pazflor field and limited start-up from the Kizomba D Satellite fields. Output rose by 55 kb/d to 1.81 b/d last month. In May, almost every field/installation produced without technical losses. Pazflor output accounted for six cargoes of 950,000 each, or 185 kb/d. New production from the Kizomba D satellite fields, which started on May 18, averaged around 25 kb/d by end month. Nameplate capacity at the Kizomba D satellite fields is 140 kb/d. Start-up of the 150 kb/d PSVM fields is on track for 3Q12. However, planned maintenance at the Total-operated 250 kb/d deep-water Girassol complex is expected to curb production in June.





Libyan production increased by 20 kb/d in May, to 1.42 mb/d. Continued repair and maintenance work at the Sarir and Mesla fields is curbing output there. Meanwhile, **Nigerian** output rose to the highest level in nine months due to the steady ramp-up in production at the 180 kb/d deep-water Usan field. Nigerian output rose by 30 kb/d in May, to 2.18 mb/d.

OPEC Crude Production

(million barrels per day)

	Mar 2012 Supply	Apr 2012 Supply	May 2012 Supply	2Q12 Sustainable Production Capacity[1]	Spare Capacity vs May 2012 Supply	3Q12 Average Sustainable Production Capacity	3Q12 Production Capacity Versus 2Q12 Capacity
Algeria	1.14	1.14	1.14	1.18	0.04	1.18	0.00
Angola	1.75	1.75	1.80	1.85	0.05	1.90	0.05
Ecuador	0.48	0.48	0.48	0.52	0.04	0.54	0.02
Iran	3.30	3.30	3.30	3.47	0.17	3.42	(0.05)
Kuwait[2]	2.72	2.74	2.74	2.89	0.15	2.89	0.00
Libya	1.45	1.40	1.42	1.45	0.03	1.51	0.06
Nigeria[3]	2.05	2.15	2.18	2.55	0.37	2.59	0.04
Qatar	0.75	0.75	0.75	0.75	0.00	0.78	0.03
Saudi Arabia[2]	10.00	10.10	10.00	11.88	1.88	11.88	0.00
UAE	2.65	2.67	2.67	2.79	0.12	2.79	0.00
Venezuela[4]	2.55	2.49	2.49	2.60	0.11	2.69	0.09
OPEC-11	**28.84**	**28.97**	**28.97**	**31.92**	**2.94**	**32.15**	**0.23**
Iraq	2.79	2.92	2.89	3.06	0.17	3.20	**0.14**
Total OPEC	**31.63**	**31.89**	**31.86**	**34.97**	**3.11**	**35.35**	**0.38**
(excluding Iraq, Nigeria, Libya and Iran)					*2.38)*		

1 Capacity levels can be reached within 30 days and sustained for 90 days.
2 Includes half of Neutral Zone production.
3 Nigeria's current capacity estimate excludes some 200 kb/d of shut-in capacity.
4 Includes upgraded Orinoco extra-heavy oil assumed at 385 kb/d in May.

OPEC NGLs

OPEC NGLs output is forecast to average 6.2 mb/d in 2012, a downward revision of 100 kb/d from last month. Reductions largely centred on Iran and Algeria. In Iran, sanctions are continuing to delay gas

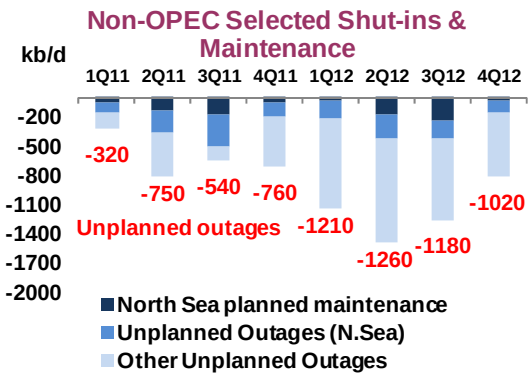
project developments and constrain planned growth, with condensate and NGLs capacity now forecast to average 530 kb/d in 2012 compared with 545 kb/d in 2011. In Algeria, start-up of the 130 kb/d El Merk project has been delayed until 1Q13 compared with a previously anticipated 4Q12 launch.

Nonetheless, total OPEC NGLs are now on course to increase by 435 kb/d this year, to 6.2 mb/d. Qatar and the UAE will account for about one-third of the rise, in line with new projects brought onstream. In **Qatar**, the single largest increase is coming from the 100 kb/d Pearl II GTL project, with smaller increments from the continued ramp-up of Qatargas Train 6 & 7 and Rasgas 3. In the **UAE**, the ramp up in supplies from the Offshore Associated Gas (OAG) project, launched in second-half 2011, is forecast to reach 60 kb/d in 2012.

The return of **Libyan** supplies will also contribute to year-on-year growth of around 60 kb/d, to an average 90 kb/d for 2012. **Algeria, Angola** and **Nigeria** will add around 35 kb/d each, to 655 kb/d, 125 kb/d and 450 kb/d, respectively.

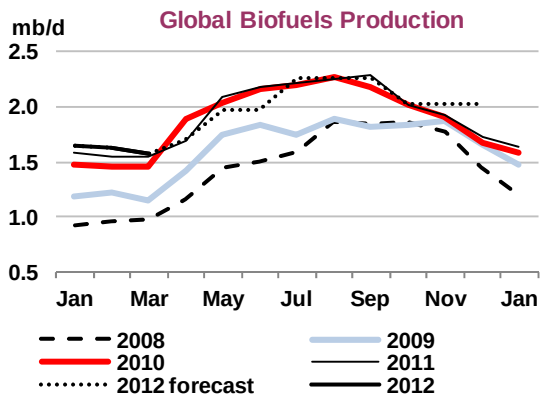
Non-OPEC Overview

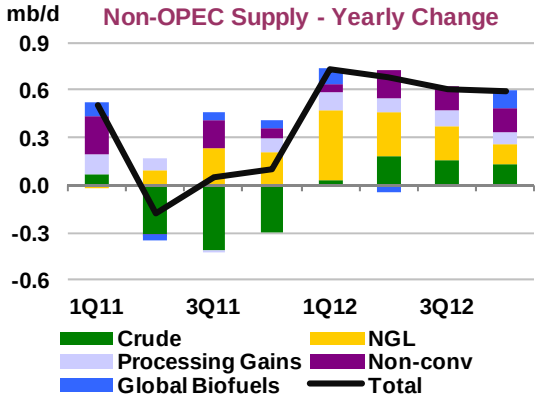
After a strong 740 kb/d rise in 1Q12, preliminary estimates show the pace of growth in non-OPEC supplies accelerating to over 1 mb/d in April and May to 53.1 mb/d. Growth is centred in North America, where rising production of light tight oil should propel non-OPEC output to all-time record levels of almost 54 mb/d in 4Q12. The fast-paced growth is forecast to abate somewhat in 3Q12 during seasonal North Sea maintenance and assumed storm-related shut ins. Seasonal maintenance, forecasted at -260 kb/d in 3Q12, should reduce North Sea output to 2.9 mb/d, which is around 9% lower than 3Q11. Non-OPEC supplies should therefore grow by 660 kb/d year-on-year for 2012, to average 53.4 mb/d.



Continued sabotage of energy facilities in Yemen and Syria, no end in sight to the transit dispute between Sudan and South Sudan, and unplanned mechanical outages and labour unrest in the North Sea and Latin America, respectively, are mitigating rapid North American supply growth to the tune of around -1.3 mb/d in 2Q12. With the exception of Total's successful plugging of the leaking gas well in the UK, there has been no improvement in the outages from last month's estimate. We assume that the situation in Syria is likely to get worse before it gets better. Moreover, just when Yemeni authorities began making progress on repairing the Marib pipeline, which has cut exports and production by around 120 kb/d, saboteurs blew it up. Although more than four months without the flow of oil production and transit revenues in South Sudan and Sudan should motivate continuing negotiations, it will also exacerbate domestic tensions in each country and raise the risk of cross-border conflict near oil-producing regions.

Overall, we now hold a slightly rosier view of non-OPEC supplies in 2012, that are around 90 kb/d higher than last month's estimate. North American liquids production growth is also more than counteracting other new downward adjustments in the Middle East, Africa, and the North Sea. Baseline upwards adjustments to OECD Europe biofuels and Russian NGLs also add to the positive news. With the advantage of new annual data, we have revised biofuels output up by 100 kb/d in 2011 to 1.9 mb/d and by 70 kb/d for 2010. Revisions centre mainly in Spain, Germany, France, and Italy. As a result, global biofuels should grow by around 40 kb/d in 2012 to 2.0 mb/d, which is around 40 kb/d higher than last month's estimate.

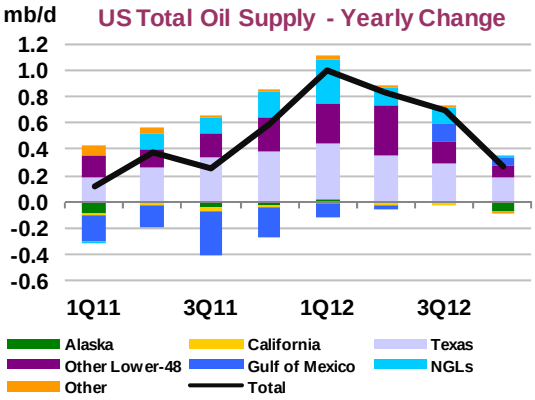


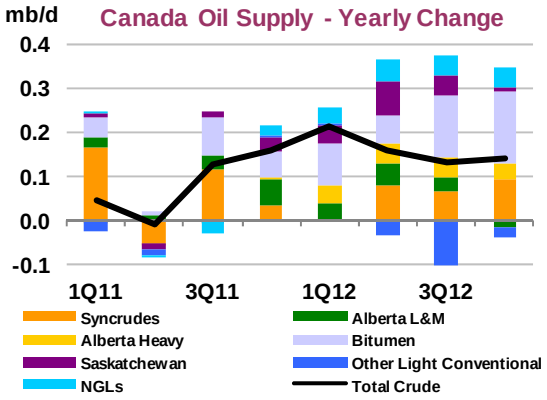


OECD

North America

Canada—February actual: Canadian oil output slid from a record high of 3.8 mb/d in December 2011 to an estimated 3.6 mb/d in March due to unplanned maintenance at synthetic crude oil production facilities. Synthetic crude output rebounded more quickly to around 800 kb/d in April after Suncor completed its unplanned maintenance. Although CNRL's output is expected to regain 100 kb/d this summer, Canadian Oil Sand's Mildred Lake coker maintenance is underway and has reduced output by around 130 kb/d to 200 kb/d in May and June. Alberta's production outlook has been raised due in part to historical data revisions that have been carried through the forecast, and also due to higher-than-expected tight oil production. In sum, Canada's production is increased by 70 kb/d in 2012 and should average around 3.8 mb/d.



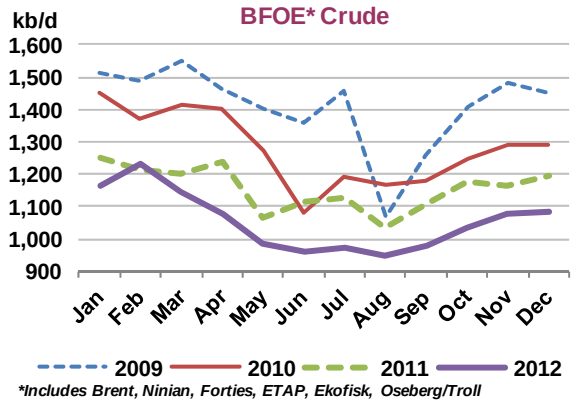


US – April preliminary, Alaska actual, other states estimated: Production from light tight oil formations and the Gulf of Mexico (GOM) supported US crude production levels of around 6.3 mb/d in April. May weekly data indicate production will remain at around that level and will be supported by supplies of almost 0.6 mb/d from North Dakota's Bakken and 1.8 mb/d from Texas. Despite the precipitous decline in WTI prices over the last month, most light tight oil plays remain profitable, although further Bakken price declines below $80/bl could begin to have an impact on marginal plays that rely heavily on rail-based transit. Both Continental Resources and Oxy recently reported that cost inflation may require an adjustment to growth targets in the Bakken. US Liquids and crude production should grow by 10% (830 kb/d) and 12% (670 kb/d) year-on-year in 2Q12, respectively. NGL supplies did not decline as expected in March and April despite heavy maintenance, as producers put some of the production in storage instead of reducing output. Planned maintenance at GOM facilities, as well as a seasonal assumption of -100 kb/d in hurricane impacts, should offset the fast-paced growth from light tight oil during 3Q12. Lower-48 crude production and higher NGL supplies are the main sources of the +0.3 mb/d revision to 2Q12 production, and the higher baseline production level has been carried through the forecast for 2012. In sum, US liquids production is expected to grow by 8.6% (700 kb/d) to 8.8 mb/d in 2012.

North Sea

North Sea crude and condensate production is expected to fall by 290 kb/d to 3.1 mb/d in 2Q12 and by 210 kb/d in 3Q12 to 2.9 mb/d from the prior quarter. If forecasts of planned maintenance come to fruition, the North Sea would register its two worst quarterly output performances in over two decades this summer. Broadly speaking, economic factors may cause operators to defer or fast-track maintenance to months outside of the normal June-August period. Unplanned outages in the North Sea are curbing output by 270 kb/d on average in 2Q12. Although these unplanned outages are expected to subside somewhat to 220 kb/d in 3Q12, we planned maintenance levels will curb output by 260 kb/d in 3Q12 and reduce North Sea supplies by half a million b/d. Output of crude streams linked to Dated Brent prices are estimated to have fallen below 1 mb/d in May to 980 kb/d, and preliminary June and July loading schedules do not show any marked improvement. With the onset of seasonal maintenance, we conservatively assume that volumes from the BFOE streams will not exceed 1.0 mb/d again until October.

UK—March preliminary, February actual: UK offshore crude production fell by 40 kb/d in March to 930 kb/d and is expected to average only 790 kb/d in 2Q12 or around 20% lower than the prior year. Total was able to successfully plug the leak at the Elgin/Franklin complex, which shut in around 65 kb/d of oil production from the Elgin, Franklin, and Shearwater fields in late March. However, we do not expect a gradual return to normal production rates until the fourth quarter. Although the latest monthly statistics available for February show the Buzzard field's production rate had reached over 200 kb/d, near its normal rate of 210 kb/d, isolated problems with the field's compressor in April and May cause us to conservatively estimate that the field does not rise above production rates of 170 kb/d through the rest of 2012. In sum, UK oil production is expected to fall by around 14% in 2012 to average just 960 kb/d, compared to a decline of almost 18% last year. The outlook for 2012 has not been materially altered for 2012, but it assumes slightly higher output for the Beryl and Forties fields after Apache indicated additional wells are being drilled.



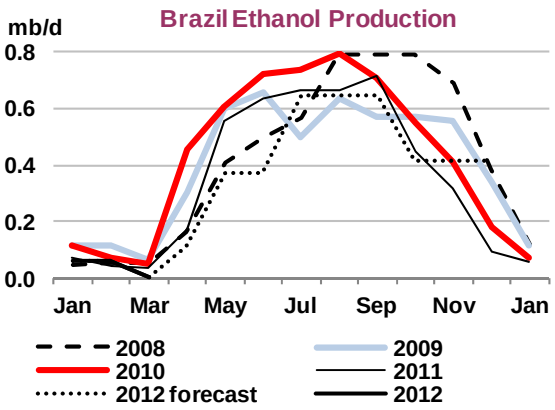
Norway—April preliminary, March actual: Norway's liquids production fell only slightly by 10 kb/d to stay around 2.0 mb/d in April, and crude production rose by 20 kb/d to average 1.6 mb/d. Lingering unplanned outages and maintenance at the Snorre, Gullfaks, and Grane fields has masked the addition of new oil fields Oselvar, Gaupe, and Marulk in April. Gaupe should reach around 10 kb/d by the end of 2012, Oselvar is a tie-back to the Ula platform and should bring production at Ula to 25 kb/d. With final data for March, crude production in 1Q12 fell 8% to 1.7 mb/d. Due to problems with the risers at the Snorre field that continually keep production from the field below normal, we have reduced the 2012 Norway liquids estimate by around 20 kb/d to 1.95 mb/d in 2012, which is around 4% lower than 2011. Looking forward, Norway's output could be impacted by a Baker Hughes worker strike. News reports indicate that workers are striking at twelve rigs, which is affecting drilling and maintenance but not production. Crude production from the fields at risk totals 180 kb/d. This most recent strike comes after a widespread government worker strike in late May and early June that included boat pilots.

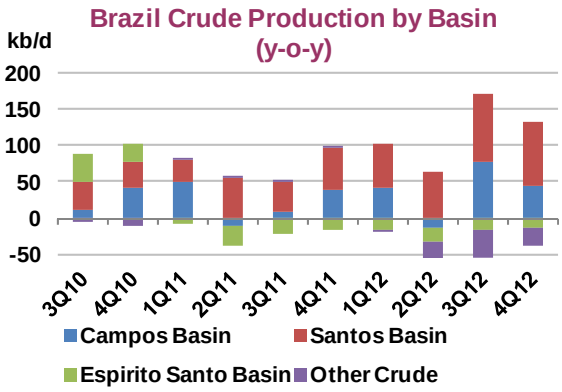
Non-OECD

Latin America

Brazil—April actual: Heavy Campos basin maintenance and a shut-in at the Frade field kept Brazilian crude production at 2.0 mb/d in April. Production from the Marlim, Marlim Leste, and Marlim Sul fields has fallen by over 70 kb/d to 590 kb/d since February, though output is expected to have rebounded in May and

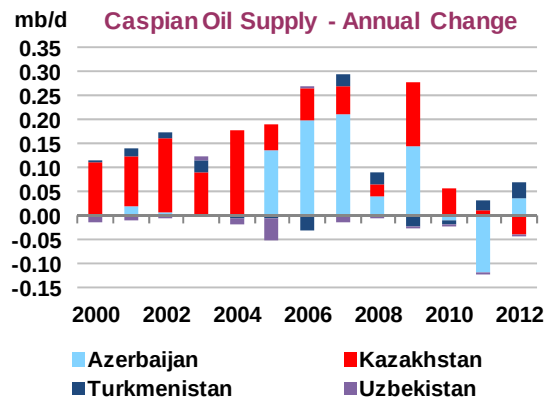
June. In April, Roncador's production rose by over 20 kb/d to 260 kb/d. Rising output from the Waimea, Marlim Sul, Peregrino, and Lula fields will offset declines elsewhere and will raise 2012 output by 70 kb/d to 2.2 mb/d. The 2012/13 harvest season has begun, and recent production estimates from the Agriculture Ministry (MAPA) for March and April suggested a slightly tempered estimate for ethanol production in upcoming months, and we have lowered the estimate for the year by around 40 kb/d to 370 kb/d, the same average level as last year.

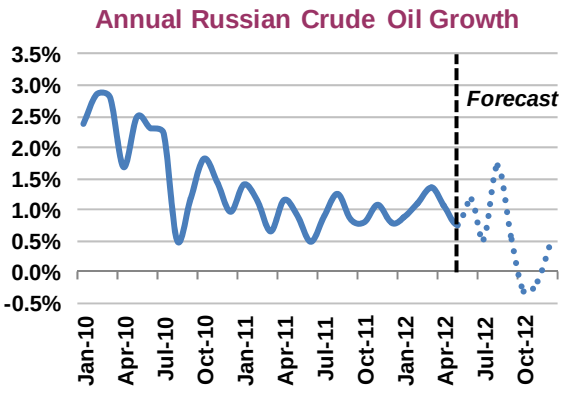




Former Soviet Union

Russia—May preliminary: Russian crude production in May stayed on par with April's level at around 10.0 mb/d, turning in a 0.8% increase year on year. TNK-BP's Uvat expansion has continued, with production reaching 130 kb/d, and the company is maintaining Samotlor's decline rate at around -7% during 2012, which is around two percentage points worse than during 2010. The Samotlor oil field accounts for a quarter of TNK-BP's overall production of 1.5 mb/d and currently produces around 350 kb/d. With the uncertainty regarding the shareholder makeup of TNK-BP, observers will want to watch for any worsening performance at TNK-BP's legacy assets. In the meantime, the outlook for Russian crude and NGLs production remains largely the same as last month's estimate. A baseline increase in gas plant liquids production for 2010 and 2011 has been carried through the forecast, and we have reduced Vankor's output levels slightly for the remainder of 2012 based on recent data. Sakhalin-1 is now only averaging 150 kb/d, compared to around 170 kb/d in 1H11 and will not increase output markedly until the Arktun-Dagi field comes online in 2014. In sum, Russian liquids production this year should grow by 1.0% (110 kb/d) to 10.7 mb/d.





Kazakhstan—April actual: Liquids production fell by 40 kb/d to 1.6 mb/d in April, after averaging 1.7 mb/d in 1Q12, with the onset of maintenance on field process lines at the Chevron-operated Tengiz field. Heavier maintenance in 3Q12 at the gas reinjection facilities is expected to almost halve the 500-kb/d facility's output. News reports continue to indicate that the North Caspian Operating

Consortium (NCOC) plans to bring online the Kashagan field in December 2012, although levels of production associated with commercial exports are not expected until the summer of 2013. The field is expected to ramp up from 75 kb/d to around 350 kb/d in the first phase. The NCOC agreed on a long-term contract with the government whereby foreign members of NCOC will cover Kazmunaigaz's share of project costs (totalling almost $1 billion) and that NCOC is now able to sell up to 83% of Kashagan gas on the domestic market at the expense of gas reinjection.

FSU net exports surged to 9.68 mb/d in April (+600 kb/d m-o-m), their highest level in a year after refineries underwent maintenance and producers made more crude available for export. The beleaguered tanker industry benefitted from a 650 kb/d hike in seaborne crude exports with Baltic cargoes increasing by a significant 430 kb/d on the month. Following its end-March start up, the Baltic port of Ust Luga ramped up to average 240 kb/d in April. Russian producers maximised seaborne exports by shipping 120 kb/d more crude by Primorsk and 120 kb/d via the Polish port of Gdansk. The Gdansk shipments are notable because it was the first time the port had been used since November 2011, even in light of Russia's aim to reduce dependence on transit countries. Looking forward, Ust Luga is scheduled to ship 400 kb/d in May. Producers are expected to divert volumes from Primorsk while port maintenance is underway.

Elsewhere, Black Sea shipments rose by 230 kb/d following an increase in Kazakhstani volumes. In the East, the ESPO pipeline is now operating above its nameplate capacity with 310 kb/d and 320 kb/d shipped to Kozmino and through the Chinese spur, respectively. FSU product exports rose by 100 kb/d to 2.89 mb/d, driven by a 120 kb/d increase in fuel oil exports. The exports grew in tandem with the opening of the River Volga navigation season that aids the movement of product from inland refineries to ports. This offset a 70 kb/d decrease in gasoil, which fell after refiners reportedly maintained domestic deliveries of 10-ppm diesel at the expense of exports.

FSU Net Exports of Crude & Petroleum Products

(million barrels per day)

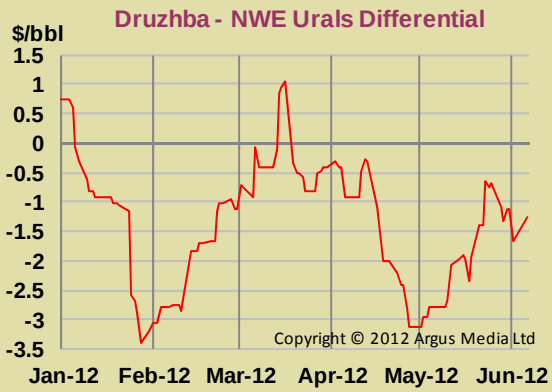
	2010	2011	2Q2011	3Q2011	4Q2011	1Q2012	Feb 12	Mar 12	Apr 12	Latest month vs. Mar 12	Latest month vs. Apr 11
Crude											
Black Sea	2.10	1.93	1.87	1.87	1.92	1.83	1.89	1.78	2.01	0.23	0.04
Baltic	1.60	1.50	1.57	1.37	1.56	1.48	1.42	1.48	1.91	0.43	0.18
Arctic/FarEast	0.74	0.67	0.69	0.65	0.65	0.62	0.63	0.61	0.61	0.00	-0.12
BTC	0.77	0.70	0.76	0.69	0.64	0.73	0.74	0.75	0.74	-0.01	-0.06
Crude Seaborne	**5.22**	**4.80**	**4.89**	**4.58**	**4.77**	**4.66**	**4.69**	**4.62**	**5.27**	**0.65**	**0.05**
Druzhba Pipeline	1.13	1.17	1.12	1.18	1.24	1.24	1.25	1.24	1.10	-0.14	-0.04
Other Routes	0.42	0.53	0.54	0.54	0.50	0.51	0.50	0.54	0.49	-0.04	-0.05
Total Crude Exports	**6.76**	**6.50**	**6.55**	**6.30**	**6.51**	**6.42**	**6.44**	**6.40**	**6.86**	**0.47**	**-0.04**
Of Which: Transneft[1]	4.00	4.18	4.16	4.09	4.31	4.18	4.20	4.12	4.52	0.40	0.16
Products											
Fuel oil[2]	1.54	1.58	1.82	1.59	1.46	1.50	1.38	1.50	1.62	0.12	-0.16
Gasoil	0.88	0.77	0.79	0.72	0.69	0.85	0.82	0.90	0.83	-0.07	-0.02
Other Products	0.43	0.43	0.53	0.36	0.33	0.42	0.45	0.38	0.43	0.05	-0.13
Total Product	**2.85**	**2.77**	**3.14**	**2.66**	**2.49**	**2.78**	**2.65**	**2.79**	**2.89**	**0.10**	**-0.30**
Total Exports	**9.61**	**9.27**	**9.68**	**8.96**	**9.00**	**9.19**	**9.09**	**9.18**	**9.75**	**0.57**	**-0.34**
Imports	0.07	0.08	0.08	0.10	0.08	0.12	0.13	0.09	0.07	-0.02	0.00
Net Exports	**9.54**	**9.19**	**9.60**	**8.86**	**8.92**	**9.08**	**8.95**	**9.09**	**9.68**	**0.59**	**-0.34**

Sources: Argus Media Ltd, IEA estimates

[1]Transneft data exclude Russian CPC volumes.

[2]Includes Vacuum Gas Oil

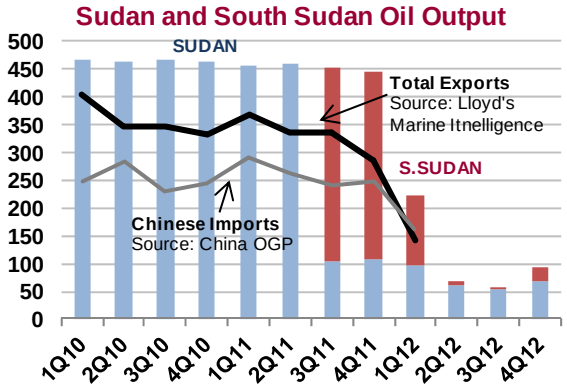
Druzhba Flows Lower as Seaborne Urals Heads to the Mediterranean



The start-up of the Ust Luga terminal appears to have initially taken crude away from the Druzhba pipeline, where flows decreased by 140 kb/d m-o-m in April after exporters found seaborne routes more profitable. April data indicate reduced deliveries to Poland (-60 kb/d m-o-m), the Czech Republic (-30 kb/d), Slovakia (-30 kb/d), Germany (-20 kb/d) and Hungary (-10 kb/d). Recent reports indicate that Russian companies were not supplying the Czech Republic with full, requested volumes in May. This decision by producers appears motivated by price, after the differential of Urals shipped through the Druzhba against seaborne NWE Urals collapsed by $3/bbl in April. Extra demand from Mediterranean refiners looking to replace Iranian supplies, combined with continued low freight costs, drew in supplies from the Baltic. Therefore, in this case the extra flexibility in the Transneft system which Ust Luga affords appears to have been utilised to fulfil incremental demand and allow producers to orient their exports towards the most profitable outlets. Given the continuing Iranian sanctions, this trend could continue for the foreseeable future.

Africa

Negotiations between the governments of **Sudan** and **South Sudan** ended at the beginning of June with little progress, but discussions will continue on 21 June. Meanwhile, production of over 300 kb/d in South Sudan remains shut in, and there is no evidence that any volumes from the South are being exported by truck. The sides remain at odds over their border and over the amount of transit fees that South Sudan should pay to Sudan. Sudan threatened new hostilities as South Sudan continues to dispute the 2009 Permanent Court of Arbitration ruling that said that Heglig and other oil producing areas are not part of the disputed Abyei area. As the dispute between the countries enters its sixth month, with concomitant implications for both countries' economies, South Sudan recently announced it would raise taxes and customs duties. However, austerity measures and efforts to triple non-oil revenue pale in comparison to oil revenue flows. A World Bank analysis published by the *Sudan Tribune* on its website in May estimated how long it would take for the country's reserves to be depleted. Assuming the government reduces expenditures by a quarter, reserves could last until August; and if they are reduced by around 40% (which is unlikely), reserves could last until October. The analysis warned that the sharp decline in dollar-based oil revenues would rapidly increase inflation and depreciate the exchange rate.



Middle East

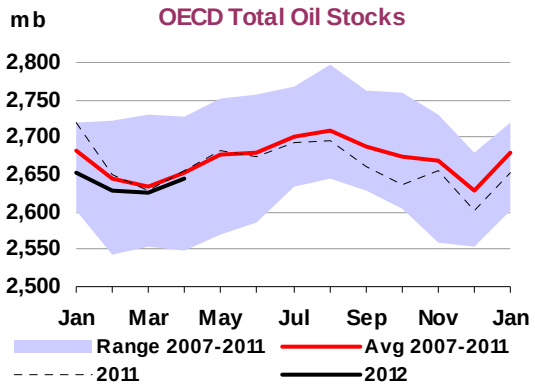
Crude and condensate production from **Oman** rose by over 50 kb/d to 910 kb/d in March, yet a PDO dispute with contractors for around a week at the end of May was expected to have stunted otherwise increasing EOR production. 2Q12 crude and condensate production is expected to remain at 900 kb/d. Production in **Yemen** continues to suffer from sabotage. News reports indicated that tribesmen had bombed the Marib pipeline again, just as repairs were finally being completed. The 270-mile line used to bring about 120 kb/d of oil from the Marib and Shabwa areas. The 270-kb/d Shabwa-Bir Ali pipeline, which carries Block 4 crude to the Bir Ali terminal, is still down after attacks in April. 2H12 production is expected to average only around 140 kb/d, around 70 kb/d lower than the same period in 2011 and around 110 kb/d lower than 1H11. Exports averaged only 100 kb/d in March and April.

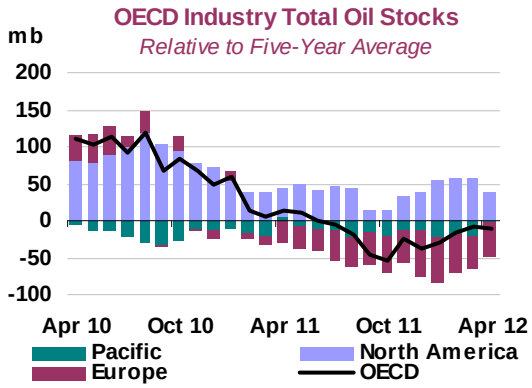
OECD STOCKS

Summary

- **OECD industry oil inventories rose by 17.3 mb in April, to 2 643 mb,** in line with the five-year average month-on-month increase of 19.4 mb. OECD commercial oil stocks have now narrowed the apparent deficit to the five-year average in absolute terms, while remaining 1.9 days above the five-year average, at 59.4 days of forward demand cover.

- **Preliminary data indicate a 20.1 mb increase in May OECD industry inventories,** in line with a five-year average 25.1 mb build. Crude oil stocks rose by 21.5 mb while product holdings fell by 1.9 mb. 'Other products' stocks increased sharply by 18.9 mb but were offset by gasoline, middle distillate and fuel oil holdings, which declined by 6.9 mb, 9.8 mb and 4.1 mb, respectively





OECD Inventories at End-April and Revisions to Preliminary Data

OECD industry total oil inventories rose by 17.3 mb in April, to 2 643 mb, in line with the five-year average increase of 19.4 mb. Although OECD commercial oil stocks have now recovered close to the five-year average in absolute terms, they nonetheless have tracked below this metric for eleven successive months. However, in terms of forward demand cover, OECD commercial oil holdings remained 1.9 days above the five-year average, at 59.4 days. This equates to a 0.1 day decrease from the previous month and a 0.2 day rise on a year-on-year basis. Regionally, the absolute surplus of stocks versus the five-year average in North America diminished, while the deficit in Europe widened slightly, and the Pacific shortfall narrowed significantly.

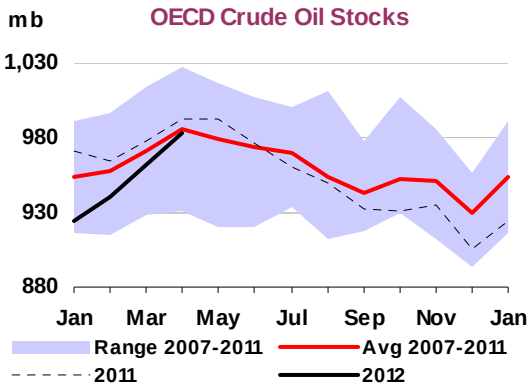
Preliminary Industry Stock Change in April 2012 and First Quarter 2012

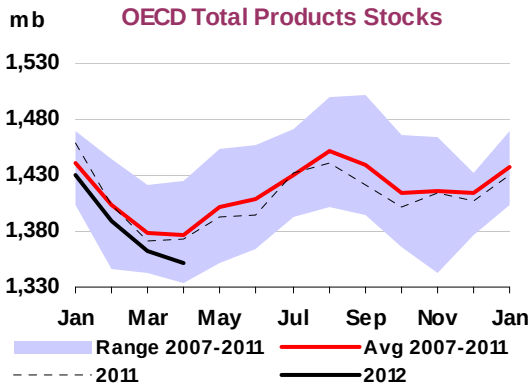
	April 2012 (preliminary) *(million barrels)*				April 2012 (preliminary) *(million barrels per day)*				First Quarter 2012 *(million barrels per day)*			
	N. Am	Europe	Pacific	Total	N. Am	Europe	Pacific	Total	N. Am	Europe	Pacific	Total
Crude Oil	**13.9**	**-4.0**	**11.6**	**21.6**	**0.46**	**-0.13**	**0.39**	**0.72**	**0.36**	**0.27**	**-0.01**	**0.61**
Gasoline	-13.7	3.3	-0.7	-11.0	-0.46	0.11	-0.02	-0.37	-0.05	-0.02	0.04	-0.03
Middle Distillates	-13.1	-0.2	2.5	-10.8	-0.44	-0.01	0.08	-0.36	-0.24	0.02	-0.07	-0.28
Residual Fuel Oil	-2.4	-2.4	0.4	-4.5	-0.08	-0.08	0.01	-0.15	0.02	-0.02	0.01	0.01
Other Products	12.7	-0.2	4.1	16.6	0.42	-0.01	0.14	0.55	-0.04	-0.05	-0.10	-0.20
Total Products	**-16.5**	**0.5**	**6.3**	**-9.6**	**-0.55**	**0.02**	**0.21**	**-0.32**	**-0.30**	**-0.07**	**-0.13**	**-0.51**
Other Oils[1]	-1.2	0.7	5.9	5.4	-0.04	0.02	0.20	0.18	0.12	0.05	0.00	0.17
Total Oil	**-3.8**	**-2.8**	**23.8**	**17.3**	**-0.13**	**-0.09**	**0.79**	**0.58**	**0.18**	**0.24**	**-0.14**	**0.27**

1 Other oils includes NGLs, feedstocks and other hydrocarbons.

Crude stocks soared by 21.6 mb to 983 mb, compared to the five-year average month-on-month build of 13.9 mb. After nine consecutive months below the historical trend, crude stocks rose slightly above the five-year average in April. North America and Pacific stocks led the increase, up by 13.9 mb and 11.6 mb, respectively while European stocks declined by 4.0 mb. Lower refinery runs resulting from maintenance amid ongoing surplus supply from the Middle East drove crude oil inventories up sharply.

In the meantime, product inventories fell more sharply by 9.6 mb, thus widening the deficit against the five-year average to 24.8 mb from 16.3 mb in March. Most of the product stock draw centred on North America, with gasoline and middle distillate stocks falling by 13.7 mb and 13.1 mb, respectively. Meanwhile, product stocks in both Europe and the Pacific rose by 0.5 mb and 6.3 mb, respectively.





OECD stocks were revised 22.6 mb lower for March, upon receipt of more complete monthly submissions from member countries. This implies a 2.5 mb stockdraw in March inventory levels, instead of preliminary estimates of a 13.5 mb increase. Downward adjustments were centred on North American oil inventories and OECD Pacific crude stocks. All of the major categories except for 'other oils' in North America showed a downward revision, with notably crude oil, gasoline and 'other products' stocks amended down by 4.7 mb, 4.0 mb and 4.2 mb, respectively. OECD Pacific crude inventories were adjusted down by 8.6 mb, all of which stemmed from Japan. However, higher-than-initially-estimated crude oil holdings in Europe, and 'other oils' stocks in North America, provided a partial offset to the downward revisions.

Revisions versus 11 May 2012 Oil Market Report

(million barrels)

	North America		*Europe*		*Pacific*		*OECD*	
	Feb-12	Mar-12	Feb-12	Mar-12	Feb-12	Mar-12	Feb-12	Mar-12
Crude Oil	**-4.6**	**-4.7**	**-3.3**	**3.0**	**0.0**	**-8.6**	**-7.9**	**-10.3**
Gasoline	0.0	-4.0	-0.4	-1.0	0.0	0.2	-0.4	-4.8
Middle Distillates	0.0	-3.2	-0.2	0.5	0.0	0.4	-0.2	-2.3
Residual Fuel Oil	0.0	-0.3	0.6	-1.6	0.0	-0.2	0.6	-2.1
Other Products	0.0	-4.2	0.5	-3.5	0.0	1.0	0.5	-6.6
Total Products	**0.0**	**-11.7**	**0.4**	**-5.5**	**0.0**	**1.4**	**0.4**	**-15.8**
Other Oils[1]	0.6	3.4	0.3	0.4	0.0	-0.4	0.9	3.5
Total Oil	**-4.1**	**-13.0**	**-2.5**	**-2.1**	**0.0**	**-7.5**	**-6.6**	**-22.6**

1 Other oils includes NGLs, feedstocks and other hydrocarbons.

Preliminary data indicate a 20.1 mb increase in May OECD industry inventories, in line with a five-year average 25.1 mb build. Crude oil and 'other products' stocks led the increase, rising by 21.5 mb and 18.9 mb, respectively while product holdings excluding 'other products' stocks fell by a total of 20.8 mb. Gasoline, middle distillate and fuel oil holdings fell by 6.9 mb, 9.8 mb and 4.1 mb, respectively. As a result, total product inventories edged down by 1.9 mb.

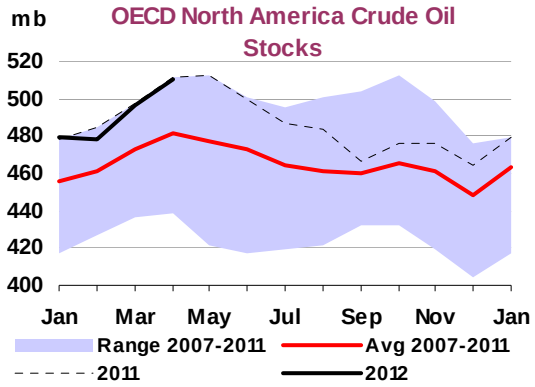
Analysis of Recent OECD Industry Stock Changes

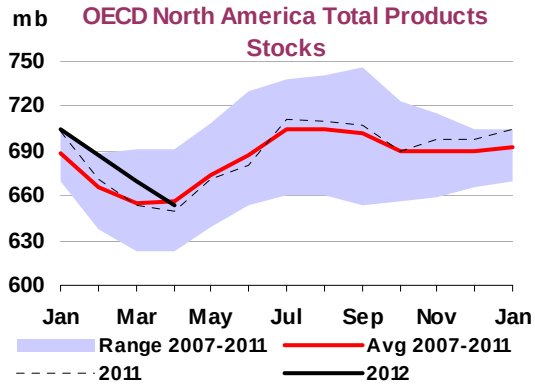
OECD North America

North American industry oil inventories fell by 3.8 mb to 1 325 mb in April, in contrast with a typical seasonal build of 15.3 mb, in the process narrowing the surplus versus the five-year average to 38.2 mb, from 57.2 mb in March. Crude oil holdings rose by 13.9 mb, most of which stemmed from the US.

Continued weak refinery runs in the midst of strong domestic output and healthy imports drove US crude inventories higher, notably at Cushing.

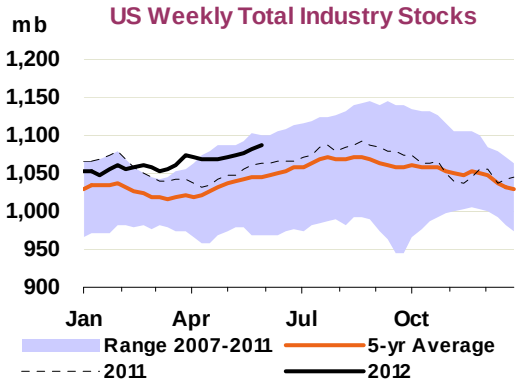
Meanwhile, product inventories plummeted by 16.5 mb as declines in gasoline and middle distillate stocks outweighed an increase in 'other products' holdings. Gasoline inventories decreased by 13.7 mb as refiners switched over from winter to summer grades and US gasoline demand rose month-on-month, despite still remaining weak on an annual basis. Continued strong US middle distillate exports and higher domestic demand led middle distillate holdings down by 13.1 mb, well toward the lower end of the five-year range. Meanwhile, 'other products' stocks rose by 12.7 mb, providing a partial offset.

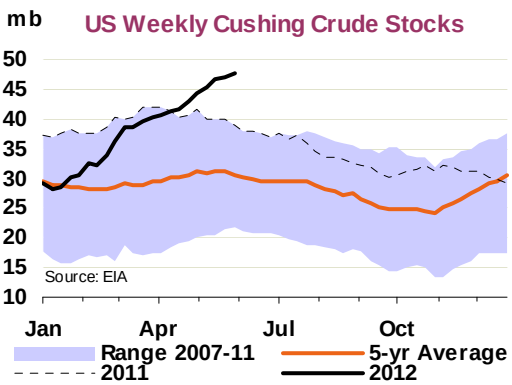




US weekly data show oil inventories rose by 17.3 mb in May, in line with a five-year average 19.1 mb build. Crude oil inventories increased by 7.7 mb as higher crude imports and domestic production outweighed a seasonal increase in refinery runs. Over the past 11 weeks, crude inventories have increased by more than 38 mb. Crude stock levels at Cushing, Oklahoma rose by 4.5 mb to a new record high of 47.8 mb. Cushing inventories increased even after the 17 May reversal of the Seaway pipeline, which has the capacity to ship 150 kb/d from Cushing to Houston, started on. In the meantime, the US EIA's semi-annual survey put working storage capacity at Cushing at 61.9 mb in March, up by 6.9 mb from the end of September 2011.

Moreover, refined product inventories also rose by 9.7 mb, led by a 19.5 mb surge in 'other products' stocks. In contrast, gasoline, middle distillate and fuel oil holdings declined by a total of 9.8 mb, partly offsetting the increase in 'other products' stocks. Gasoline stocks decreased by 5.4 mb on higher demand. Gasoline stockpiles have fallen by 29 mb from this year's February peak of 232 mb. Despite weak demand, strong exports drove middle distillate stocks down by 2.8 mb. Fuel oil holdings also fell by 1.5 mb.

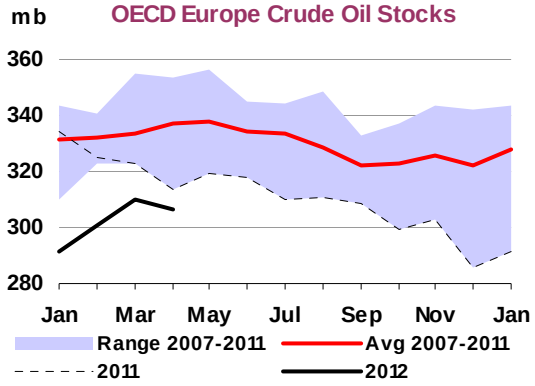


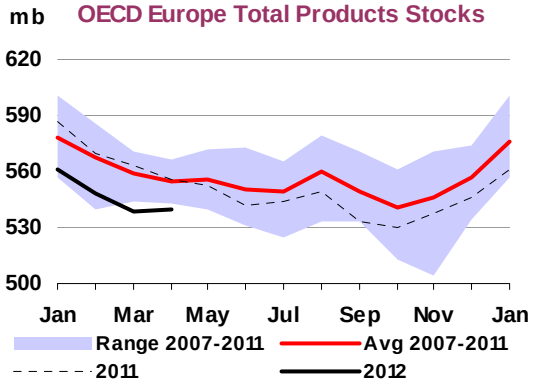


OECD Europe

Industry oil inventories in Europe fell by 2.8 mb in April to 918 mb, in line with the five-year average draw of 1.4 mb. European oil stocks have remained stubbornly below their seasonal norms for thirteen consecutive months. However, in terms of days of forward demand cover, total oil holdings in Europe look more comfortable, having stood above the five-year average for nine successive months.

Crude oil inventories fell by 4.0 mb to 306 mb, in contrast with a five-year average 3.6 mb build. In the meantime, refined product inventories edged up by 0.5 mb to 539 mb, thus reducing the deficit versus the five-year average to 15.5 mb from 20.1 mb in March. Gasoline holdings rose by 3.3 mb, while middle distillate, fuel oil and 'other products' stocks fell by 0.2 mb, 2.4 mb and 0.2, respectively, offsetting most of the gain in gasoline inventories. German end-user heating oil stocks fell by one percentage point to 48% fill at end-April.

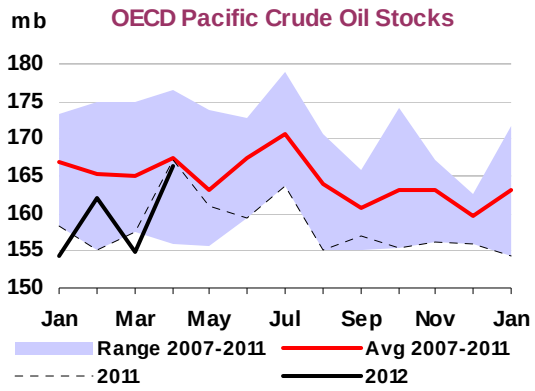


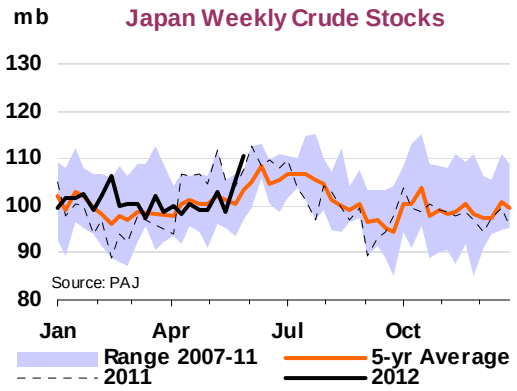


May preliminary data from Euroilstock point to an 11.3 mb stock draw, in contrast with a five-year average 2.6 mb build in the EU-15 and Norway. Refined product inventories led the drop, decreasing by 14.3 mb as every major product category showed declines. Gasoline, middle distillate and fuel oil fell by 1.8 mb, 9.4 mb and 3.2 mb, respectively. 'Other products' and 'other oils' stock estimates remained unchanged from last month. In the meantime, crude oil inventories rose by 3.1 mb. Refined product stocks held in independent storage in Northwest Europe also fell in May. Gasoil led the decline, as regional demand for diesel rose and a backwardated price structure discouraged refiners from storing the product.

OECD Pacific

Commercial oil inventories in the OECD Pacific surged by 23.8 mb to 401 mb in April, compared with a five-year average increase of 5.5 mb. Therefore Pacific inventories now stand closer to historical norms in both absolute and forward cover terms, after nearly a year of relative tightness. Lower refinery runs and increased crude arrivals from the Middle East drove crude inventories up by 11.6 mb. Korean crude stocks rose by 9.1 mb while crude holdings in Japan increased by 2.7 mb. 'Other oils' stocks also added to the increase, rising by 5.9 mb. Moreover, product stocks also rose by 6.3 mb, compared with a five-year average 1.3 mb increase, creeping back within the five-year range. Middle distillate, fuel oil and 'other products' holdings rose by 2.5 mb, 0.4 mb and 4.1 mb, respectively while gasoline stocks edged down by 0.7 mb.



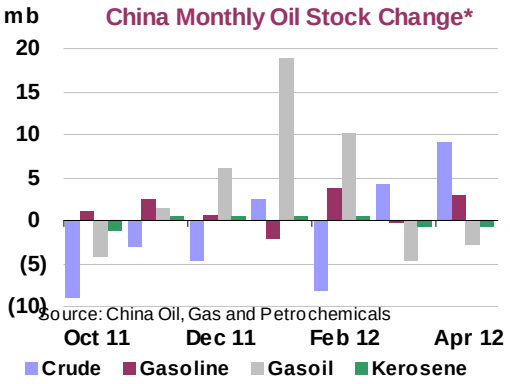


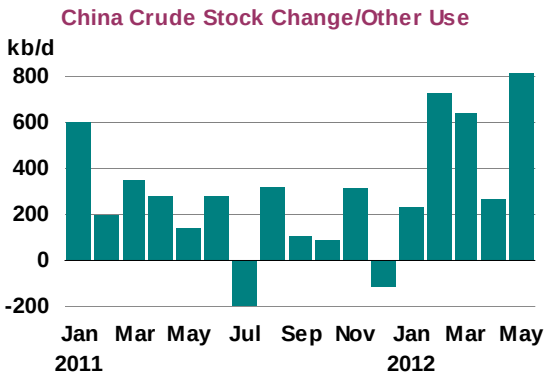
Weekly data from the PAJ suggest a further increase of 14.1 mb in Japanese industry oil inventories in May. Crude oil stocksreportedly rose by 10.7 mb, as refiners cut runs with refinery maintenance in full swing and stored more crude for direct crude burn ahead of summer. Despite this, with demand for petroleum products remaining lukewarm, refined product holdings also rose by 2.7 mb. Gasoline, middle distillate and fuel oil stocks increased by 0.3 mb, 2.4 mb and 0.6 mb, respectively while 'other products' holdings fell by 0.6 mb.

Recent Developments in Singapore and China Stocks

According to *China Oil, Gas and Petrochemicals (OGP)*, Chinese commercial oil inventories rose in April by an equivalent of 8.6 mb (data are reported in terms of percentage stock change). Commercial crude oil holdings increased by 4.4% (9.1 mb) while product inventories fell by 0.6% (0.5 mb) on lower refinery runs. Gasoil and Kerosene stocks declined by 3.1% (2.8 mb) and 6.0% (0.7 mb), while gasoline inventories increased by 5.3% (0.3 mb).

In the meantime, the most recent simplified balance between Chinese domestic crude production, net imports and refinery runs shows a difference of around 600 kb/d (equivalent to more than 90 mb) for the first five months of this year. Although this may, in part, reflect direct crude burn or unaccounted for refiner demand, some of this is likely also to represent crude oil flows into strategic storage.



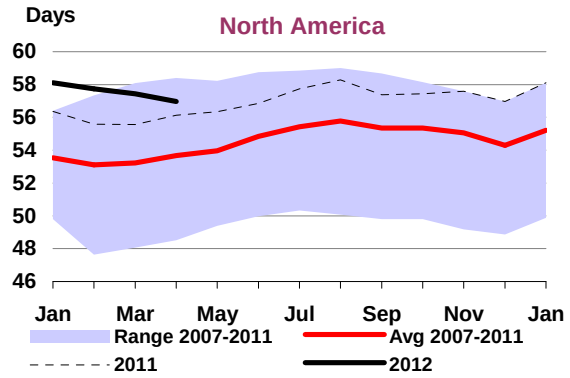


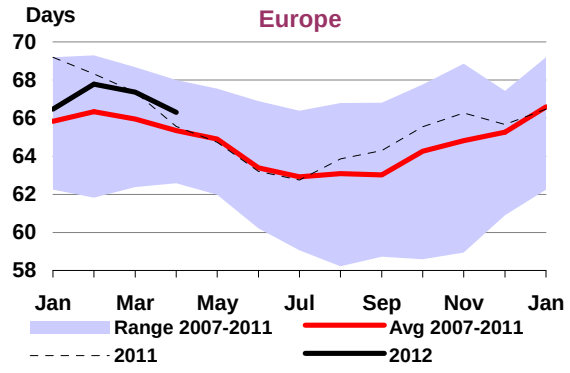
Singapore onshore inventories fell by 0.6 mb to 38.0 mb in May. Light distillate holdings led the decline, down by 1.5 mb on higher demand from Indonesia and Vietnam. Middle distillate holdings edged down by 0.1 mb, as strong demand from Australia and Vietnam more than offset an increase in imports from South Korea. In the meantime, fuel oil holdings rebounded by 1.0 mb after a big decline in April, due mostly to easing imports from the West while bunker demand improved.

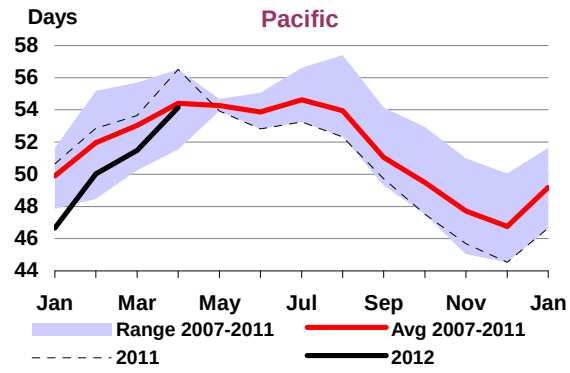
Regional OECD End-of-Month Industry Stocks

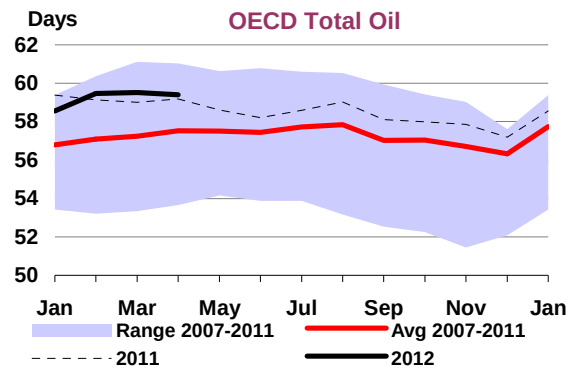
(in days of forward demand and millions barrels of total oil)

Days[1]

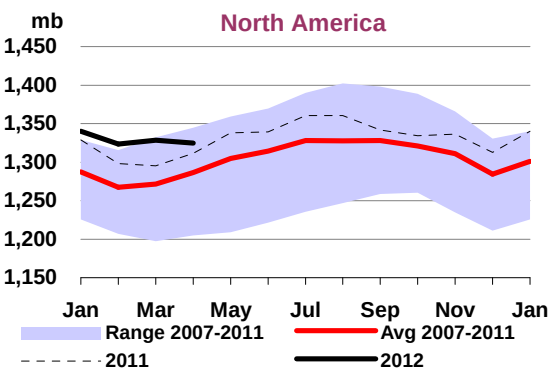


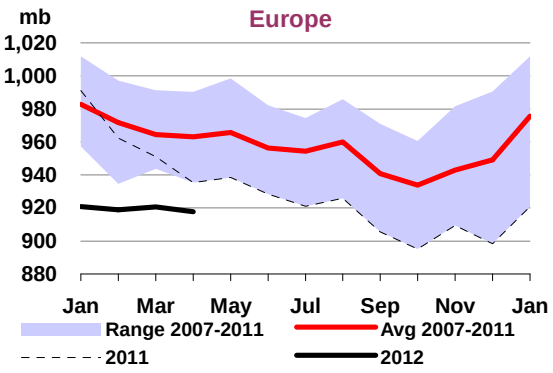


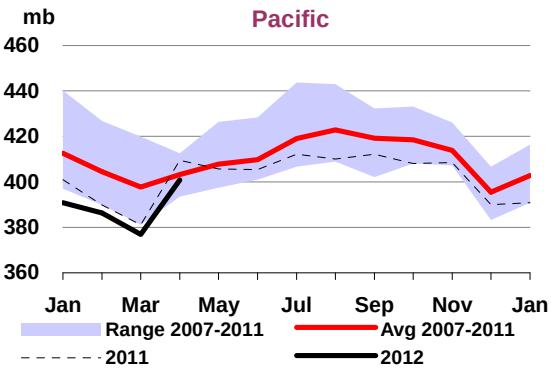


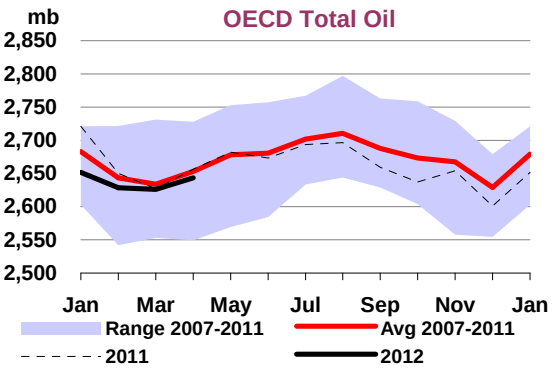


Million Barrels









1 Days of forward demand are based on average demand over the next three months

PRICES

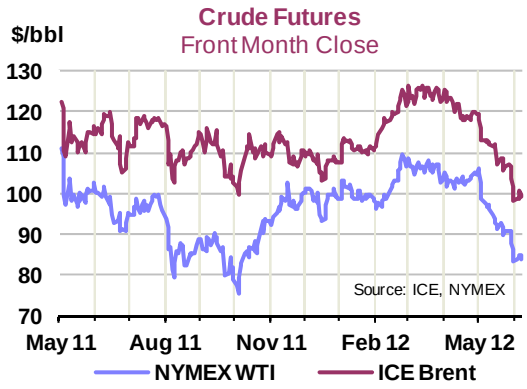
Summary

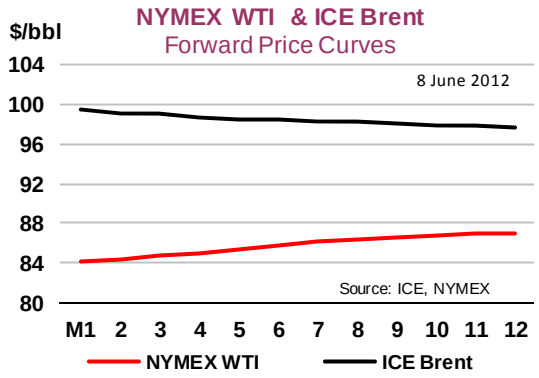
- **The springtime slump in oil markets accelerated in May in the wake of the deepening euro zone crisis, mounting concern over a slowdown in Chinese growth and rising global oil supplies.** Futures prices in May plummeted to the lowest level in six months, with Brent falling below the $100/bbl threshold for the first time in 15 months on 1 June. At writing, Brent crude was trading at around $97.50/bbl and WTI at $83.50/bbl.

- **The precarious macroeconomic outlook heightened risk aversion in global commodity markets and triggered a massive liquidation by investors in oil futures.** Net-long futures positions of money managers in CME WTI contracts fell to the lowest level since early September 2010.

- **Refined product crack spreads were mixed in May. Fuel oil showed exceptional strength in Asia, in part due to continued Japanese demand**, while gasoline on the US Gulf Coast strengthened due to a downward correction in LLS. By contrast, European crack spreads were mostly weaker. Light distillates, and naphtha in particular, saw the largest declines on weak petrochemical demand.

- **Tanker oversupply once again weighed heavily on freight rates in May for many benchmark routes. Despite continued high demand for Middle Eastern crudes** and brisk spot market chartering activity, rates on the benchmark VLCC Middle East Gulf – Japan route steadily eroded over the month after a plethora of vessels returned to the tonnage pool.



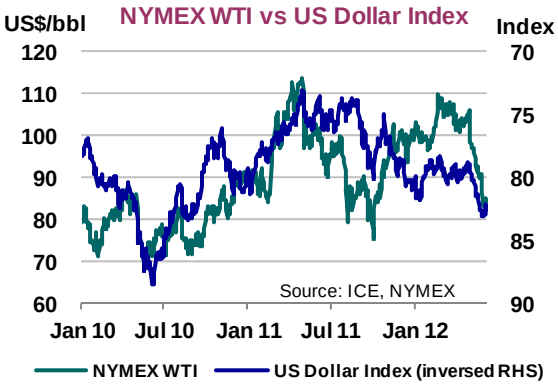


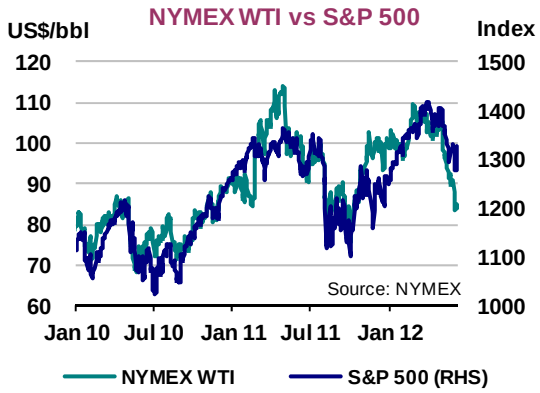
Market Overview

The springtime downturn in oil markets accelerated in May and into early June in the wake of the deepening euro zone crisis, mounting concern over a slowdown in Chinese growth and rising global oil supplies. Futures prices in May plummeted to the lowest level in around six months, with Brent posting a $10.20/bbl decline while WTI was off by around $8.65/bbl, to $110.29/bbl and $94.72/bbl, respectively. Prices were down by a further $10/bbl in the first week of June, with Brent on 1 June falling below $100/bbl for the first time in 15 months. Prices briefly rebounded following EU ministers' agreement to provide a massive €100 billion bank bailout for beleaguered Spain on 10 June, but then quickly resumed their downward trend, with Brent last trading at $97.50/bbl and WTI at $83.50/bbl.

Resurgent worries over the euro zone crisis also saw oil prices more closely track the broader financial and equity markets in recent months. The precarious macroeconomic outlook, especially acute sovereign debt issues in Spain and Greece, heightened risk aversion in global financial and commodity markets and triggered a massive liquidation by investors in oil futures. Net long positions held by money managers in CME WTI contracts fell to the lowest level since early September 2010.

While managing the financial crisis in Spain and Greece is currently the central focus of the policymakers, the more downbeat market sentiment was reinforced after the ECB and the US Federal Reserve opted not to inject any further monetary stimulus for the global economy. A string of dismal manufacturing data from economic pillars Germany and China also added downward pressure on markets, albeit the Chinese government appears determined to ensure economic activity remains robust.

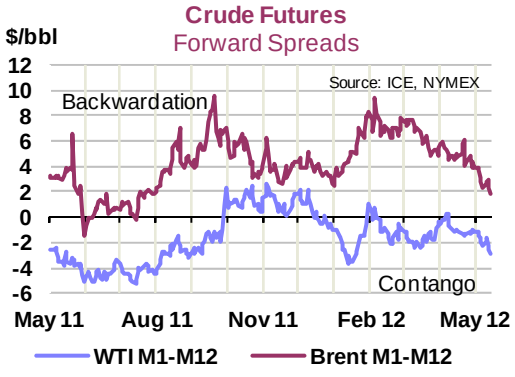




Price bias to the upside stemming from worries over the impact of sanctions targeting Iran's oil exports and financial sector has subsided with just weeks to go before full implementation of EU and US sanctions. Market concerns have eased against the backdrop of the steady rise in global crude supplies in recent months and falling crude prices. A growing consensus has emerged that the market is better positioned to cope with the envisaged loss of Iranian crude supplies from 1 July, in large part due to rising production from both OPEC and non-OPEC producers. Nonetheless, G8 leaders reiterated that the potential for any further tightening in supplies means that collective action by IEA member states remains an option that cannot be ruled out.

OPEC production is flirting near 4-year highs. Iran's European customers were particularly worried about the impact of sanctions but it appears, to a large extent, that Iranian crude supplies have been replaced by both Iraq and Saudi Arabia. While OPEC supplies are 1.86 mb/d above the collective 30 mb/d target agreed in December 2011, independent industry analysts do not expect ministers to announce a cut at the 14 June conference in Vienna. Non-OPEC output remains plagued by unplanned outages in the North Sea, Syria, Yemen, the Sudans and elsewhere. Indeed, unplanned non-OPEC outages are forecast to average 1.26 mb/d in 2Q12 and 1.18 mb/d in 3Q12. Nonetheless, non-OPEC supplies are on track to increase by 800 kb/d from 2Q12 to 4Q12, in part due to a steady ramp up in light, tight oil production in the US. The rise in US domestic oil output and stocks has forced a number of foreign suppliers, especially producers of higher-quality light crude such as Nigeria and Algeria, to seek markets instead in Europe and Asia.

Indeed, rising output of US domestic crude, increased flows from Canada and record stock levels at Cushing, Oklahoma saw the WTI M1-M12 contango (prompt minus forward) widen to -$2.25/bbl in early June compared with -$1.09/bbl in May and -$1.47/bbl in April. Increased crude supplies in Europe, especially from Libya, Iraq and Saudi Arabia, are also adding downward pressure on the front end of the forward curve for Brent. As a result, the Brent M1-M12 backwardation has narrowed sharply, to around $2.50/bbl in early June compared with $4.54/bbl in May, just under $6/bbl in April and $7.15/bbl in March.



Despite the multitude of economic, financial and fundamental factors adding downward pressure, the 20-25% plunge in prices from peak February levels may reflect the bottom, analysts say. Supply side fundamentals certainly look more comfortable, but likely stronger 2H12 refiner and final product demand, allied to remaining uncertainties about supplies from Iran could provide something of a price floor. The end of the seasonally weak second-quarter refining period is expected to lead to an increase in throughput rates of 1.6 mb/d, to 75.9 mb/d, in 3Q12. Similarly, global oil demand is now expected to rise by 2 mb/d between 2Q12 and 3Q12, to 90.5 mb/d.

Further uncertainties abound, with market players closely following several scheduled geopolitical and economic happenings in coming weeks, including elections in Greece, Libya and Egypt, the Iran/P5+1 talks scheduled for Moscow and G20 summit in Mexico, both taking place on 17-18 June, and the formal onset of US sanctions and the EU embargo after 28 June and 1 July, respectively.

Prompt Month Oil Futures Prices

(monthly and weekly averages, $/bbl)

	Mar	Apr	May	May-Apr Avg Chg	% Chg	Week Commencing: 07 May	14 May	21 May	28 May	04 Jun
NYMEX										
Light Sweet Crude Oil	106.21	103.35	94.72	-8.63	-9.1	96.99	93.12	91.13	87.09	84.44
RBOB	140.39	136.65	123.90	-12.75	-10.3	126.03	122.57	121.96	118.09	112.69
No.2 Heating Oil	135.55	132.55	122.59	-9.96	-8.1	125.31	121.29	119.15	114.27	111.48
No.2 Heating Oil ($/mmbtu)	23.27	22.75	21.04	-1.71	-8.1	21.51	20.82	20.45	19.62	19.14
Henry Hub Natural Gas ($/mmbtu)	2.30	2.05	2.49	0.45	17.9	2.44	2.58	2.65	2.40	2.37
ICE										
Brent	124.54	120.49	110.29	-10.20	-9.2	112.82	110.03	107.23	103.51	99.55
Gasoil	138.19	134.94	125.21	-9.73	-7.8	127.59	124.27	121.97	118.60	114.25
Prompt Month Differentials										
NYMEX WTI - ICE Brent	-18.34	-17.14	-15.57	1.57		-15.82	-16.91	-16.10	-16.43	-15.10
NYMEX No.2 Heating Oil - WTI	29.34	29.20	27.87	-1.33		28.31	28.17	28.02	27.18	27.04
NYMEX RBOB - WTI	34.18	33.31	29.19	-4.12		29.04	29.45	30.83	31.00	28.25
NYMEX 3-2-1 Crack (RBOB)	32.57	31.94	28.75	-3.19		28.80	29.02	29.89	29.73	27.85
NYMEX No.2 - Natural Gas ($/mmbt	20.97	20.71	18.55	-2.16		19.07	18.25	17.80	17.22	16.77
ICE Gasoil - ICE Brent	13.64	14.45	14.92	0.46		14.78	14.24	14.74	15.09	14.70

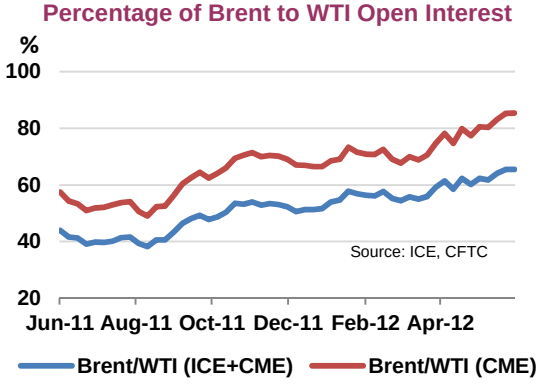
Source: ICE, NYMEX

Futures Markets

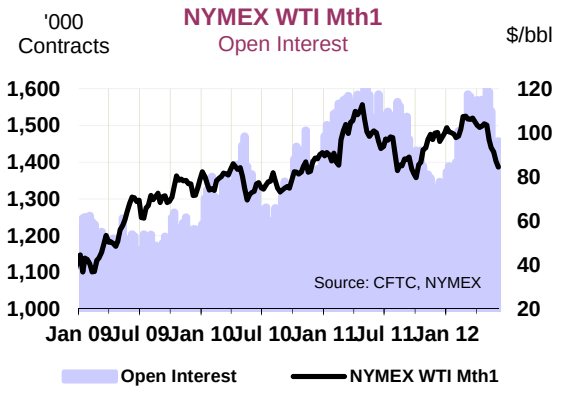
Activity Levels

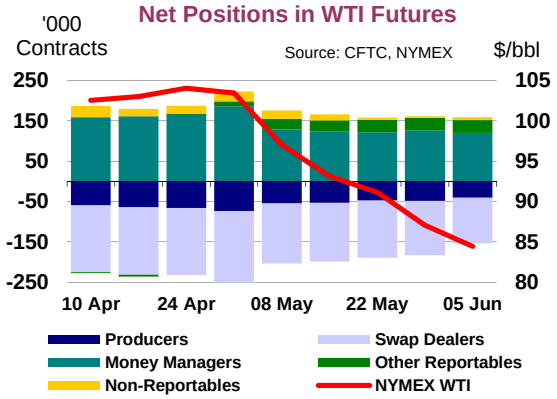
The ratio of Brent futures in London ICE to New York and London WTI oil positions tested a fresh peak at 65.4% on 5 June. The surge was triggered by more than 9.1% and 3.1% declines in NYMEX WTI and ICE WTI open interest, respectively, from 1 May to 5 June 2012. The increase in the ratio of Brent to WTI open interest is sharper when ICE WTI contracts are excluded, rising by 7.91% to 85.3% over the same period. Similar trends are observed in volume comparisons. Total volumes of trade in CME WTI contracts declined by 18% in May 2012 compared to May 2011 (from 15.1 million to 12.4 million contracts). Year-to-date volume also declined by 19.1% in 2012. In comparison, Brent monthly volume increased from 11.1 million to 13.5 million contracts for May 2011 and 2012, respectively. Year-to-date volume in Brent futures in London ICE contracts also increased by 16%, from 52.3 million to 60.7 million contracts. These developments in open interest and volume suggest that in the very near future open interest in Brent will easily exceed open interest in CME WTI contracts.

Percentage of Brent to WTI Open Interest



Open interest in all oil major derivatives contracts declined between 1 May and 29 May. Open interest in New York CME WTI futures and options contracts declined by 9.1% to 2.3 million. Meanwhile, open interest in futures-only contracts declined by 10.1% to a four-month low of 1.44 million from 1.6 million. Over the same period, open interest in London ICE WTI contracts dropped to 0.44 million and 0.51 million contracts in futures-only and combined contracts, respectively. On the other hand, open interest in ICE Brent futures contracts declined by less than 1% to 1.23 million contracts. However, open interest in Brent and WTI contracts recovered some of their decline in the week to 5 June. Open interest in WTI futures and options increased by 5.9% to 2.44 million contracts while recovery in futures-only contracts was limited at 1.1%, to 1.46 million contracts. ICE WTI open interest increased to 0.44 million and 0.54 million contracts over the same period in futures-only and combined contracts, respectively. ICE Brent futures activity also rose by 1.2% to reach 1.24 million contracts between 29 May and 5 June 2012.





Money managers cut their bets on rising WTI crude oil prices for a third consecutive month, shedding 66 191 contracts to reach 119 910, the lowest level since early September 2010. This is against the backdrop of increasing risk that the euro zone debt crisis could turn into a full-blown currency crisis, and a worsening outlook for global economic activity amid lower than expected Chinese growth and weak US job growth. Net long futures position of money managers in CME WTI contracts is now only half the level observed at the end of February. Money managers also cut their bullish bets on WTI prices in London, from 12 183 to 4 987 contracts. It is noteworthy that they were net-short in the week ending 15 May and 29 May. Similarly, money managers reduced their bets on rising Brent prices by more than 50% from 115 227 to 57 303 futures contracts, the lowest level since November 2011.

Producers also reduced their net futures short positions from 74 134 to 40 865 contracts between 1 May and 5 June, the lowest level since 2006 when disaggregated data was made available to the public. They held 16.7% of the short and 13.9% of the long contracts in CME WTI futures-only contracts. Swap dealers, who accounted for 28.7% and 36.5% of the open interest on the long side and short side, respectively, reduced their bets on falling prices by 36.4% to hold 112 797 net futures short positions over the same period. Producers' trading activity in the London WTI contracts followed an opposite pattern to CME WTI contracts. Producers in London ICE WTI contracts reduced their net long positions from 48 726 to 21 071 contracts. Swap dealers, on the other hand, followed a similar pattern with respect to their trading in CME WTI contracts and reduced their net short positions from 57 226 to 39 019 contracts.

NYMEX RBOB futures and combined open interest declined by more than 2.4% to 292 481 and 314 513, respectively, over the same period. Open interest in NYMEX heating oil futures contracts increased by almost 3.9% to 316 412 contracts, while open interest in natural gas futures market was down by 4% to 1.21 million contracts.

Index investors' long exposure in commodities in April 2012 increased by $5.3 billion to $308.1 billion in notional value. The notional value of long exposures in both on- and off-WTI Light Sweet Crude Oil futures contracts increased by $1.2 billion in April. The number of long futures equivalent contracts increased to 560 000, equivalent to $58.7 billion in notional value.

Positions on NYMEX Light Sweet Crude Oil (WTI) Futures Contracts

Thousand Contracts

05 June 2012	Long	Short	Net	Long/Short	Δ Net from Prev. Week	Δ Net Vs Last Month
Producers' Positions	202.6	243.4	-40.9	*Short*	↑ 7.8	↑ 33.3
Swap Dealers' Positions	175.5	288.3	-112.8	*Short*	↑ 22.0	↑ 64.5
Money Managers' Positions	186.9	66.9	119.9	*Long*	↓ -6.3	↓ -66.2
Others' Positions	139.5	112.6	26.9	*Long*	↓ -25.7	↓ -13.6
Non-Reportable Positions	80.7	73.9	6.8	*Long*	↑ 2.3	↓ -18.0
Open Interest			**1456.6**		↑ 16.5	↓ -145.4

Source: CFTC

Market Regulation

On 10 May 2012, the Commodity Futures Trading Commission (CFTC) approved a final rule on the core principles and other requirements of designated contract markets (DCMs), which will be one of the venues along with swap execution facilities (SEFs) where cleared swaps must be transacted. The final rule incorporates 23 core principles, which require DCMs to have proper tools to prevent manipulation and other distortions; to adopt position limits for each contract that trades on the DCM; to make available to the public daily information on settlement prices, volume, open interest, daily opening and closing ranges for actively traded contracts on the DCM; to keep records of all activities related to their business as contract markets; to establish and enforce rules regarding customer dispute resolution procedures; and to establish and maintain a risk oversight programme and emergency and disaster recovery procedure. However, the CFTC delayed the vote on a controversial rule on Core Principle 9, otherwise known as the '85 percent rule'. Under the proposal, any contract in which less than 85 percent of a contract's trading occurring on an exchange's centralised market must be delisted, should be reclassified as a swap and traded on the SEF. The purpose of this rule is to bring trading to centralised markets to boost price discovery. However, industry participants argue that this rule would reduce market liquidity and increase risk as well as prevent financial innovation in centralised markets. The CFTC will reconsider this rule after it finalises the rules related to SEFs, which are expected in July 2012.

The CFTC also again proposed an order amending the effective date for the provisions in the swap regulatory regime established by Dodd-Frank Act that would have gone into effect on 16 July 2011. The order extends the effective date for swap regulation until 31 December 2012, or until the Commission's rules and regulations go into effect, whichever is sooner. This is the third substantial delay amid agency struggles to keep pace with rule-making deadlines mandated by the Dodd-Frank Act. Critics note that the Agency has not finalised the definition of a swap, which is now expected to be considered later in June. Without the definition of a swap, some final rules, such as swap reporting and position limits, could be further delayed.

On 18 May 2012, the CFTC approved a proposed rule that amends the CFTC's aggregation provision for limits on speculative positions as a response to a petition from the Working Group of Commercial Energy Firms (WGCEF). The proposed rules define three tiers for purposes of aggregation. First, if the ownership interest is less than 10 percent, the entity is not required to aggregate positions with those of the owned entity. Second, the proposed amendment requires any person with an ownership or equity interest in an entity of between 10 percent and 50 percent to aggregate with those of the owned entity's positions

unless independence of trading can be demonstrated; i.e. trading must be conducted in separate locations, different traders must be doing the trading, information about individual trades or trading strategies may not be shared between entities, and risk management systems must not allow the sharing of trades or trading strategies. Third, the proposed rule still calls for the aggregation requirement if one entity owns greater than 50 percent of another entity.

The CFTC also approved a final rule on swap data record keeping and reporting requirements for historical swaps on 18 May 2012. The final rule separates historical swaps into two categories: transition swaps (swaps entered into between the law's enactment date and the applicable compliance date for swap data record-keeping and reporting) and pre-enactment swaps (swaps executed prior to the passage of the Dodd-Frank Act). For transition swaps that were in existence on or after 25 April 2011, counterparties are required to keep records of specified, minimum primary economic terms for a swap of the asset class in question. Swap dealers (SDs) and major swap participants (MSPs) must keep the required records in electronic form (unless they were originally created and are exclusively maintained in paper form), while non-SD/MSP counterparties are permitted to keep them in either electronic or paper form. In addition, the counterparty to a transition swap must keep a confirmation, master agreement or credit support agreement concerning the historical swap in its possession on or after April 25, 2011. For pre-enactment swaps that expired prior to 25 April 2011, the reporting party must report such information relating to the terms of the transaction as was in the reporting counterparty's possession at 25 April 2011. Counterparties are required to keep the records they have, in any form elected by the counterparty. The required records must be retained throughout the existence of a historical swap and for five years following its final termination or expiration. The rule also calls for historical swaps data to be made available to regulators through swap data depositories (SDRs).

Bank Losses Sharpen Focus on Proprietary Trading

On 10 May 2012, JP Morgan, the largest US bank by assets, announced that poorly designed and executed hedging strategies had caused more than $2 billion in derivatives trading losses from transactions in London. Given the prominence of the company in derivatives trading (estimated to account for over 10% in notional value of OTC derivatives trading in late-2011), this raises important questions about regulatory oversight, the pace and extent of financial reform and ultimately (even though energy markets were not directly involved) the functioning of energy derivatives markets.

The Trades in Question

According to news reports, JP Morgan trades can be classified as directional bets, although some might argue that it is a complex hedging strategy to cover overall portfolio risk. In the simplest terms, the company initially purchased credit default swaps (CDS) on high yield bonds to hedge their loan book. Money could have been made if the economy deteriorated. In the event, as the US economy showed some improvement, this strategy did not perform well in terms of making money although it is the appropriate strategy in terms of risk management. In the second stage, JP Morgan sold substantial amounts of under-priced swaps on a basket of investment-grade corporate bonds, a traded index of credit default swaps, on the expectation that the economy would further improve.

It is especially this portion of the trades that are being questioned, and whether this constituted a hedge or a proprietary trade. Some have argued that this was a hedge against future obligations for which the firm is naturally short. Others argued that this is actually proprietary trading, which would have been prohibited under the Volcker rule. The company's large position eventually created a material gap between the index price and the sum of the prices on the underlying CDS in such a way that buying protection on the index was cheaper than buying protection via individual company CDS. Instead of unwinding their position in the index, JP Morgan further took the opposite position to hedge their exposures in the index by buying CDS on the investment-grade bonds of individual companies, which led to further losses for the company. We expect that debates surrounding these trades will have important implications for at least three contentious issues; namely the Volcker rule, the Lincoln swaps push-out rule, and the cross-border application of the Dodd-Frank Act.

Bank Losses Sharpen Focus on Proprietary Trading *(continued)*

Implications for the Volcker Rule

As explained in the *February OMR*, the proposed Volcker rule prohibits proprietary trading while allowing transactions related to underwriting, market-making, risk mitigating hedging, trading in certain US government obligations, and trading on behalf of customers. For example, the proposed rule allows for banking entities' risk-mitigating activities for their portfolio. The statute defines proprietary trading as engaging in the purchase or sale of certain financial assets as a principal for the trading account of a covered banking entity. The rule further provides guidance on what banking entities must do to prove that they are not undertaking proprietary trading but engaging in permitted activities, such as hedging, market-making or trading on behalf of customers. Finally, the proposed rule provides detailed limitations on the permitted activities. For instance, if their permitted activity would endanger the safety or soundness of the banking entity or the financial stability of the United States, then it is considered proprietary trading and it is prohibited.

The determination of what constitutes proprietary trading and what constitutes legitimate trading activity, such as hedging or market-making, remains under debate, although the final rule will now likely narrow hedging exemptions. Some suggest that portfolio hedging should not be considered as a legitimate hedging activity, and therefore should not be permitted. Also, regulators might interpret market-making activity more narrowly than the proposed rules. While recent events might boost popular support for more restrictive rules, they do not remove the need for thorough cost-benefit analysis on measures which might reduce liquidity in the market, adversely affecting price discovery and the transfer of risk functions of derivatives markets.

Implications for the Lincoln Swaps Push-Out Rule

The Lincoln rule specifically requires federally insured banking entities to move their risky trades, such as swap trading in uncleared credit-default swaps and energy and metal swaps, among others, from a banking unit into separately capitalised affiliates, while allowing exemptions for certain traditional bank derivatives activities, such as hedging and trades in interest-rate swaps. The rule is expected to be in effect starting on 16 July 2013. Banks lobbied against this rule and the US House Committee on Financial Services amended the Lincoln rule on 11 May to allow a wider range of swaps to stay in-house. However, due to the recent JP Morgan losses, the US House Committee on Agriculture granted an extension for further consideration, ending not later than 16 July 2012. It will be interesting to see whether and how recent events trigger a major regulatory rethink in the US Congress.

Implications for Cross-Border Application of the Dodd-Frank Act

The extent to which the Dodd-Frank Act will govern cross-border activities is an important issue in light of the global nature of the swap market. The Dodd-Frank Act gives broad authority to the CFTC over the global swaps markets by Section 722. Section 722 provides that the CFTC's jurisdiction shall not apply to activities outside of the US unless they have a direct and significant connection with activities in, or effect on, commerce of the US.

The CFTC is yet to vote on interpretive guidance extending the Dodd-Frank Act to some overseas swap trading, but the Commission is likely to release its guidance on 21 June 2012. The US banking sector has argued that broader oversight of cross-border derivatives activities will diminish their competitiveness in global swaps markets with their foreign-based competitors. Others suggest that JP Morgan's losses are a reminder of how trades overseas by subsidiaries and branches of US firms can quickly affect domestic banking units.

Implications for Energy Derivatives Markets

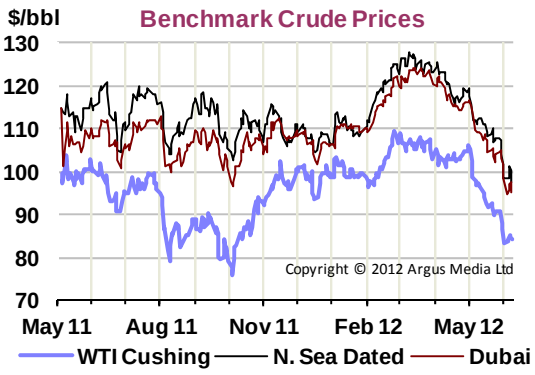
Although JP Morgan losses were not related to energy derivatives trading, the implications of any resultant new interpretation of the Volcker, Lincoln and cross-border application of the Dodd-Frank Acts will certainly affect energy markets, where banking institutions have been the biggest liquidity providers through their hedging, market-making and speculative activities. Commercial traders have raised their concerns on the impact of the Volcker rule and other rules on market liquidity and their unintended consequences of higher trading costs. They were already lobbying for more exemptions from commercial banks' trading bans ahead

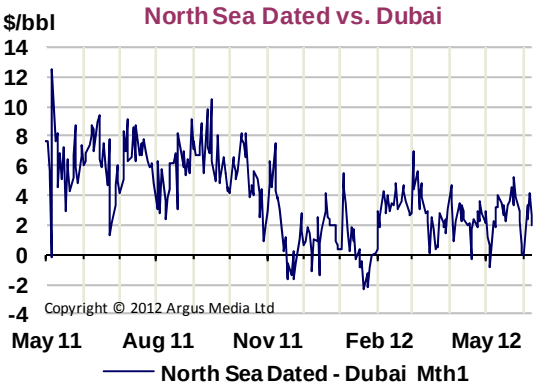
Bank Losses Sharpen Focus on Proprietary Trading (continued)

of the events surrounding JP Morgan, but might struggle now to win their case, not least if a narrower interpretation of hedging and market-making activities gains momentum. Cross-border application of the Dodd-Frank Act might complicate the international harmonisation of regulation if the CFTC's guidance goes beyond its own jurisdiction. Genuinely increasing transparency and reducing systemic risks in the global swaps market will need such harmonised rules, and moreover rules that have been subject to proper cost-benefit analysis.

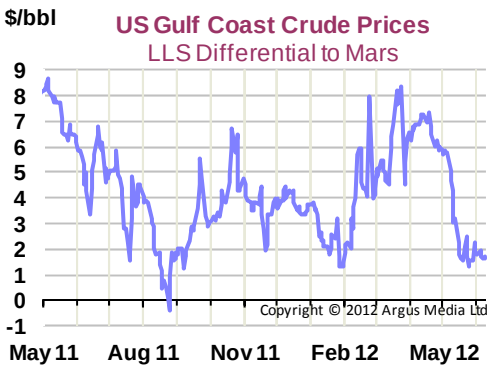
Spot Crude Oil Prices

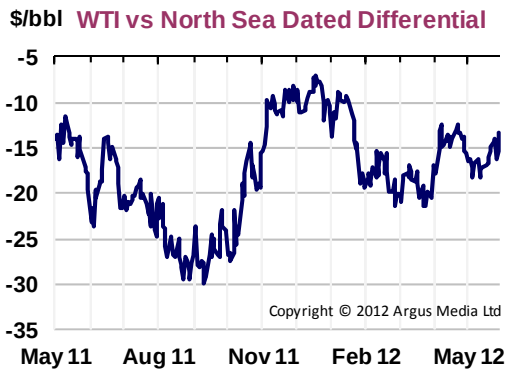
Spot crude oil prices plummeted by around $18-25/bbl over May and into early June in tandem with crude futures. Burgeoning global oil supplies weighed heavily on markets while worsening economic woes heightened fears of demand destruction. Spot prices for benchmark crudes plummeted $8-10/bbl on average in May, with North Sea Dated averaging $110.25/bbl and WTI $94.68/bbl. Spot prices for Dubai posted the sharpest monthly decline, down by nearly $10/bbl to an average $107.32/bbl on rising supplies of OPEC Middle East crudes. The price differential for Dubai minus North Sea Dated averaged $2.93/bbl in May versus $2.29/bbl in April.





A surplus of light, sweet crude was especially pronounced in the US and Europe, which in turn led to a narrowing in the sweet-sour crude price spread. Rising US production of light, tight oil from the Midcontinent and rising flows of Canadian crude backed out foreign supplies of higher quality crude that are typically in strong demand during the summer driving season. US imports of Nigerian crude likely fell by 500 kb/d in May. As a result, a surplus of Nigerian, Algerian and other gasoline-rich crudes weighed on European crude markets.



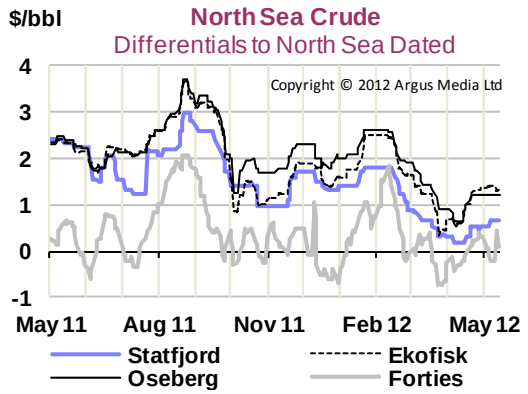


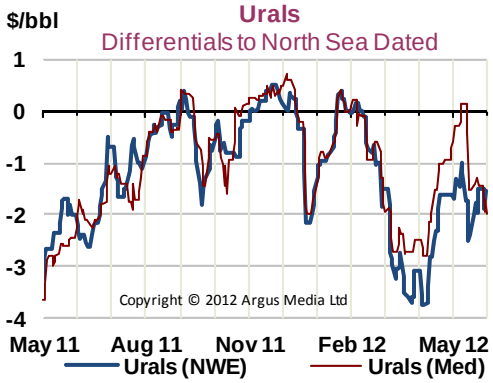
US markets are awash with crude supplies, with stocks nationwide at their highest level since June 1990. In addition to increased domestic output and supplies from Canada, seasonally lower refinery

throughput rates have reduced demand. Refinery runs are expected to rise sharply in the third quarter, even though the ramp up of the Saudi Aramco-Shell Motiva refinery, which recently completed its 325 kb/d expansion to 600 kb/d, is now uncertain. An unscheduled outage in early June forced a shutdown of the new crude unit. While the duration of the outage is uncertain, some sources say it could be months before the plant can operate at full capacity. US imports of Saudi crude were up around 400 kb/d in recent months, with all of the extra supply reportedly earmarked for its Motiva joint venture, now the largest refinery in the US. A surplus of light crudes, coupled with field maintenance work in the Gulf of Mexico affecting heavier grades, have led to a sharp narrowing of the price spread for grades such as Light Louisiana Sweet (LLS) against heavier, sour Mars. The spread between the two grades narrowed sharply by early June, to around $1.75/bbl compared with around $3/bbl in May and about $6.65/bbl in April.

Crude oil inventories at the pivotal Cushing storage facilities rose to record levels of 47.8 mb following the addition of new tanks and despite the start-up of the Seaway pipeline 17 May. The much-anticipated reversal of the Seaway pipeline southbound is likely to have only minimal impact on high stock levels at Cushing, given initial capacity of 150 kb/d. Pipeline capacity is expected to be increased to 400 kb/d by early 2013. In the meantime, rising Canadian flows and pipeline bottlenecks have led to crude in the land-locked Midcontinent and Canada selling at heavy discounts to US Gulf Coast grades.

The reversal of Seaway has moreover had only a marginal impact on the WTI-Brent price spread, given the glut of crude at Cushing. WTI's discount to North Sea dated narrowed in May, to -$15.57/bbl compared with -$16.28/bbl in April. By early June the spread had come in further, to around -$14.70/bbl.





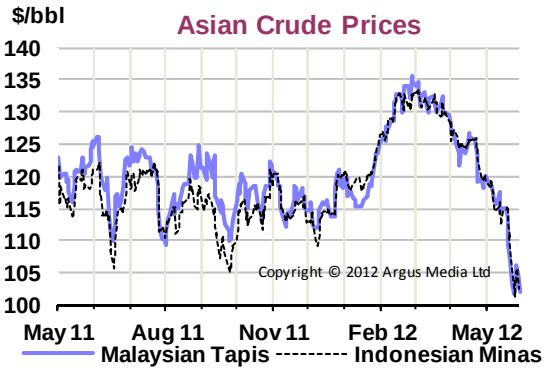
In Europe, fears that the loss of Iranian crude would wreak havoc for refiners have so far proved exaggerated amid weak regional runs. Backed out of the US, a wave of African crudes is on offer in Europe. Latest tanker data also show imports into the region from Iraq have surged. Imports of Iraqi Basrah crude jumped to an estimated 450 kb/d in May, compared with an average 100 kb/d in the first four months of the year. Partially offsetting the surplus, North Sea crudes have been selling into Korea at a brisk pace, following the end-2011 trade agreement between the European Union and Korea, which essentially waives a 3% import tax that Korean refiners previously paid. Low VLCC rates have also helped make the eastward flows economic, with multiple North Sea cargoes arriving in April and May.

The May Brent-Urals price spread in the Mediterranean narrowed on stronger demand for medium sour crudes, in part due to increased demand for the Russian grade as a replacement for Iranian barrels. The discount for Urals to Brent in the Mediterranean averaged -$0.75/bbl in May compared with -$2.11/bbl in April before widening again in early June, to around $1.90/bbl on increased supplies into the region.

In Asia, demand for heavy sweet crudes from Japanese utilities remained strong, but prices for prized grades eased on extra supplies from Vietnam due to the scheduled turnaround at the Dung Quat

refinery. Both Malaysian Minas and Indonesian Tapis were also down sharply, off by around $23/bbl by early June from April levels, to $102.60/bbl and $102/bbl, respectively.

Exceptionally weak naphtha demand also limited buying interest in light crudes, while stronger fuel oil cracks have increased the premium for heavier, sour crudes. Mirroring the narrowing sweet-sour price spread in the region, Saudi Aramco lowered the differentials for price formulas for Arab Extra Light and Super Light grades by $0.25-0.30/bbl for July, but raised them for Arab Heavy by $0.75/bbl. Arab Light and Arab Medium price formulas were increased by $0.20/bbl and $0.40/bbl respectively. Asian buyers account for more than 5 mb/d of Saudi crude exports.



Spot Crude Oil Prices and Differentials

(monthly and weekly averages, $/bbl)

	Mar	Apr	May	May-Apr Avg Chg	%	Week Commencing: 07 May	14 May	21 May	28 May	04 Jun
Crudes										
North Sea Dated	125.28	119.57	110.25	-9.32	-7.8	112.02	110.16	108.21	103.81	99.59
Brent (Asia) Mth 1	124.91	120.65	110.81	-9.84	-8.2	112.57	110.57	108.12	105.64	98.57
WTI (Cushing) Mth 1	106.15	103.29	94.68	-8.61	-8.3	96.99	93.12	90.98	87.09	84.44
Urals (Mediterranean)	123.24	117.46	109.50	-7.96	-6.8	111.47	110.06	107.29	102.44	97.70
Dubai	122.53	117.28	107.32	-9.96	-8.5	109.07	107.12	104.11	102.63	96.15
Tapis (Dated)	132.50	126.53	117.07	-9.46	-7.5	119.42	117.56	115.67	109.59	103.57
Differential to North Sea Dated										
WTI (Cushing)	-19.13	-16.28	-15.57	0.71		-15.02	-17.04	-17.23	-16.73	-15.14
Urals (Mediterranean)	-2.04	-2.11	-0.75	1.36		-0.55	-0.10	-0.92	-1.37	-1.88
Dubai	-2.75	-2.29	-2.93	-0.64		-2.95	-3.04	-4.10	-1.18	-3.44
Tapis (Dated)	7.22	6.96	6.82	-0.14		7.40	7.40	7.46	5.78	3.98
Prompt Month Differential										
Forward Cash Brent Mth1-Mth2	0.64	0.22	0.50	0.27		0.36	0.68	0.69	0.46	0.37
Forward WTI Cushing Mth1-Mth2	-0.48	-0.48	-0.33	0.15		-0.35	-0.36	-0.24	-0.33	-0.30
Forward Dubai Mth1-Mth2	1.41	0.42	0.42	0.00		0.34	0.64	0.25	0.41	0.85

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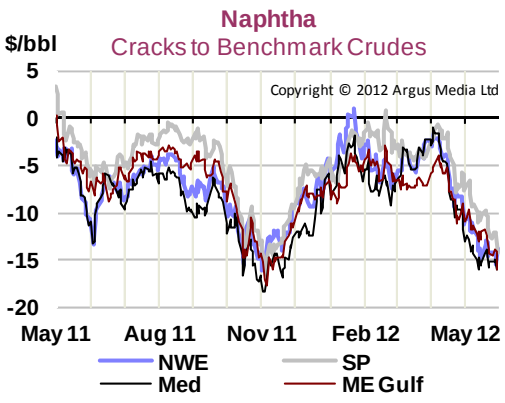
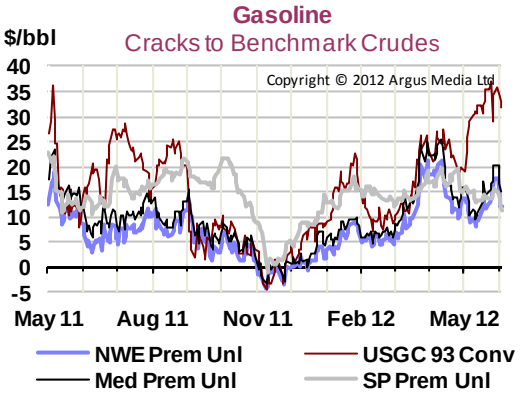
Spot Product Prices

Spot product prices fell across the board in May, in tandem with the dive in crude prices. Light distillates, and naphtha in particular, saw the largest declines on weak petrochemical demand. In contrast, gasoline crack spreads in the US Gulf strengthened due to a downward correction in benchmark crude LLS, while fuel oil crack spreads mostly improved month-on-month, supported by ongoing strength in Japanese utility demand.

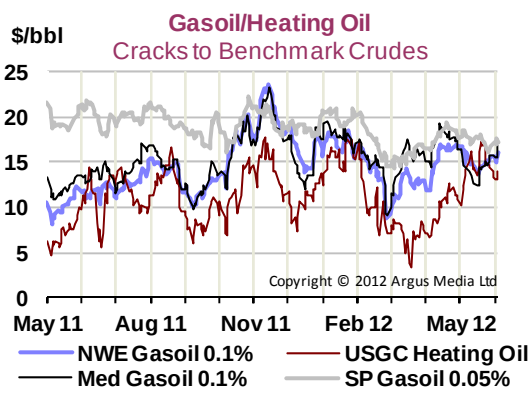


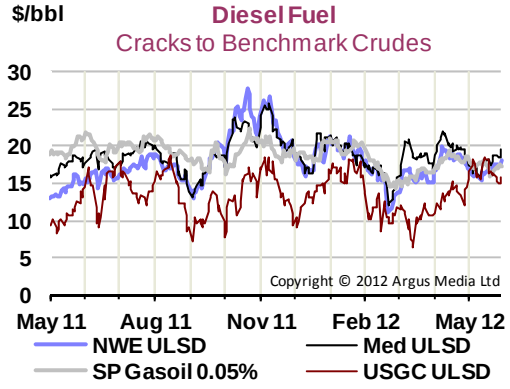


Naphtha markets continued to struggle in May, and crack spreads fell by $7.76-9.12/bbl month-on-month in Europe, and a lesser $6/bbl in Asia, leaving naphtha at a $9-13/bbl discount to crude in May, not far from the low levels last seen in November 2011. Poor demand from the petrochemical sector continued to pressure prices, as several Asian crackers were running at reduced capacity or were shut down due to planned maintenance. The unplanned shutdown of one of the large naphtha crackers at Formosa, Taiwan around mid-month also contributed. Further adding to the downward pressure were lower prices for propane, a competing feedstock. On top of that, supplies increased with refineries coming back from maintenance.

Gasoline markets in Europe and Singapore weakened in May, with crack spreads narrowing in Northwest Europe by $5.22/bbl to Brent, and by $6.59/bbl to Urals in the Mediterranean. In Singapore, crack spread differentials fell by $3.49/bbl versus Dubai on average. By contrast, Super Unleaded gasoline crack spreads in the US Gulf strengthened by $4.46/bbl to LLS in May.

Prices in the US Gulf were supported by expectations of stronger demand with the start-up of the summer driving season at month-end as well as somewhat lower prices at the pump. Continuous gasoline stock draws throughout the month were also supportive for the prices. Furthermore, LLS came under pressure with the reversal of the Seaway pipeline mid-May and more light, sweet Eagle Ford volumes available at the Gulf Coast, and this also contributed to the stronger crack spreads.



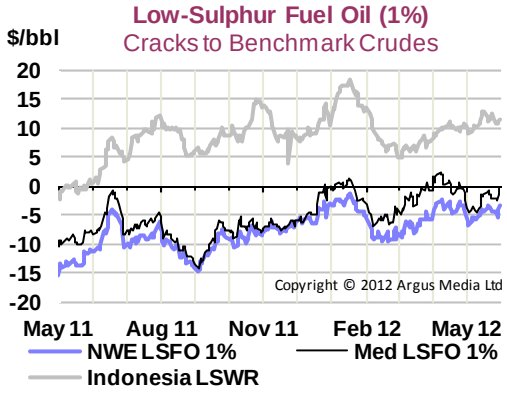


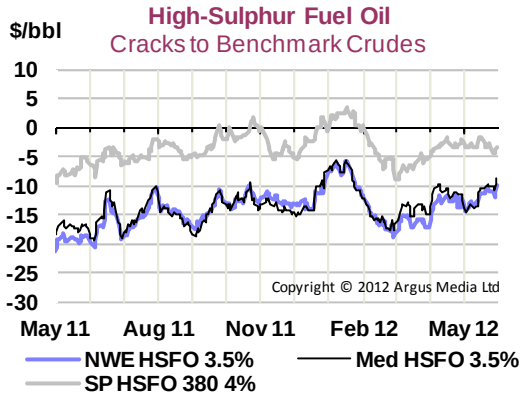
European gasoline crack spreads, although weakening month-on-month from high April levels, trended up during the course of May with support coming from an open arbitrage to the US in the second half of the month, as well as robust West African demand. The news of the closure of Petroplus' Coryton refinery in the UK also helped pushed crack spreads higher at the end of the month. In Singapore, strong demand continued to be supportive for gasoline markets. The shut-down of the Dung Quat refinery in Vietnam tightened supplies and light distillate stocks in Singapore drew throughout May to the bottom of the five-year range.

Middle distillate crack spreads eased slightly in all regions in May bar the US Gulf Coast where the weakness in LLS resulted in improved price differentials. Diesel crack spreads to Brent in Northwest Europe fell by $0.87/bbl, and by $1.95/bbl to Urals in the Mediterranean. The euro zone crisis and high flat prices have muted European demand, but lower export volumes of diesel arriving from Russia provided support, and stocks in the ARA region declined in May towards the five-year average.

In the US Gulf, ULSD crack spreads rose by $3.18/bbl versus LLS. Prices were supported by stronger demand from southern Latin America as winter is approaching, and an open arbitrage to Europe. US distillate stocks were drawing in May, leaving stocks at month-end in the lower end of the five-year range. Meanwhile, Singapore gasoil cracks weakened by $0.13/bbl as a partly closed arbitrage to Europe weighed on prices.

Fuel oil markets remained strong in May, and in Singapore LSWR cracked fuel price differentials improved by $1.47/bbl versus Dubai. Meanwhile, LSFO discounts to Brent widened by $0.62/bbl in Northwest Europe and by $2.73/bbl to Urals in the Mediterranean. Although widening, average monthly discounts of $4.57/bbl and $2.25/bbl respectively are still robust. With the last nuclear unit taken off line early May, strong Japanese utility demand, together with maintenance at nuclear plants in South Korea, provided support for the LSFO market. In Europe, markets softened in part due to increased supply and a partly closed arbitrage.





HSFO discounts narrowed by $1.21/bbl in Northwest Europe and widened a minor $0.35/bbl in the Mediterranean. In Singapore, HSFO discounts narrowed by $1.07/bbl month-on-month. Tightness in on-spec bunker fuel supplies was one of the factors supporting prices both in Europe and Singapore in May.

Spot Product Prices

(monthly and weekly averages, $/bbl)

	Mar	Apr	May	May-Apr Chg	May-Apr %	Week Commencing: 07 May	14 May	21 May	28 May	04 Jun	Mar	Apr	May	Chg
Rotterdam, Barges FOB											**Differential to North Sea Dated**			
Premium Unl 10 ppm	134.99	136.35	121.81	-14.54	-10.7	123.56	119.52	120.44	118.18	112.25	9.72	16.78	11.56	-5.22
Naphtha	120.07	115.69	98.61	-17.08	-14.8	101.87	98.57	94.28	90.13	84.98	-5.21	-3.88	-11.64	-7.76
Jet/Kerosene	137.39	135.31	126.61	-8.70	-6.4	128.80	126.00	123.89	120.29	115.13	12.12	15.74	16.36	0.62
ULSD 10ppm	140.08	137.36	127.17	-10.19	-7.4	129.44	126.24	124.25	120.75	117.22	14.80	17.79	16.92	-0.87
Gasoil 0.1%	137.21	134.62	125.51	-9.11	-6.8	127.90	124.92	122.48	118.92	114.99	11.93	15.05	15.26	0.21
LSFO 1%	117.68	115.62	105.68	-9.93	-8.6	106.55	104.48	103.71	100.00	95.35	-7.60	-3.95	-4.57	-0.62
HSFO 3.5%	108.74	106.00	97.89	-8.11	-7.6	98.70	97.04	96.06	92.98	88.67	-16.54	-13.57	-12.36	1.21
Mediterranean, FOB Cargoes											**Differential to Urals**			
Premium Unl 10 ppm	135.96	137.55	123.00	-14.55	-10.6	124.76	120.69	121.63	119.36	113.40	12.72	20.10	13.50	-6.59
Naphtha	117.63	113.37	96.29	-17.08	-15.1	99.55	96.30	91.94	87.79	82.62	-5.61	-4.09	-13.21	-9.12
Jet Aviation fuel	136.42	134.22	125.48	-8.74	-6.5	127.67	124.90	122.72	119.12	113.92	13.18	16.76	15.98	-0.78
ULSD 10ppm	140.56	137.25	127.34	-9.91	-7.2	129.31	126.94	124.44	120.56	116.55	17.33	19.80	17.84	-1.95
Gasoil 0.1%	137.43	134.74	124.11	-10.63	-7.9	126.07	123.30	120.88	117.48	113.73	14.19	17.28	14.61	-2.67
LSFO 1%	119.93	117.94	107.25	-10.69	-9.1	108.47	106.06	104.87	101.06	96.28	-3.30	0.48	-2.25	-2.73
HSFO 3.5%	108.28	105.73	97.43	-8.31	-7.9	98.33	96.52	95.36	92.29	87.97	-14.95	-11.72	-12.07	-0.35
US Gulf, FOB Pipeline											**Differential to LLS**			
Super Unleaded	141.65	146.25	136.38	-9.87	-6.8	137.23	136.35	135.55	133.29	131.34	14.51	23.85	28.31	4.46
Unleaded	134.38	134.43	120.41	-14.01	-10.4	122.70	119.80	117.31	116.10	113.63	7.24	12.02	12.34	0.32
Jet/Kerosene	136.67	135.25	124.91	-10.33	-7.6	127.88	123.81	121.01	116.23	113.33	9.54	12.84	16.84	4.00
ULSD 10ppm	137.28	135.02	123.87	-11.15	-8.3	126.88	122.56	120.01	115.38	112.82	10.15	12.62	15.80	3.18
No. 6 3%*	111.58	108.55	98.56	-9.99	-9.2	100.49	97.39	95.78	91.91	88.51	-15.55	-13.85	-9.51	4.34
Singapore, FOB Cargoes											**Differential to Dubai**			
Premium Unleaded	136.60	135.06	121.61	-13.44	-10.0	124.48	120.83	117.88	116.72	109.70	14.07	17.78	14.29	-3.49
Naphtha	119.30	114.54	98.56	-15.98	-13.9	102.34	98.61	93.75	91.67	83.38	-3.22	-2.74	-8.76	-6.02
Jet/Kerosene	136.25	133.29	123.44	-9.85	-7.4	125.78	122.92	120.33	117.95	111.60	13.72	16.02	16.12	0.11
Gasoil 0.05%	138.06	135.04	124.95	-10.09	-7.5	127.33	124.54	121.87	119.21	113.38	15.53	17.76	17.63	-0.13
LSWR Cracked	129.20	126.52	118.03	-8.49	-6.7	119.14	117.00	116.04	114.40	107.15	6.68	9.24	10.71	1.47
HSFO 180 CST	117.86	115.05	106.16	-8.89	-7.7	107.53	105.36	103.81	102.08	94.33	-4.67	-2.23	-1.16	1.07
HSFO 380 CST 4%	115.93	113.53	104.45	-9.08	-8.0	106.42	103.98	101.69	99.49	92.19	-6.60	-3.75	-2.87	0.88

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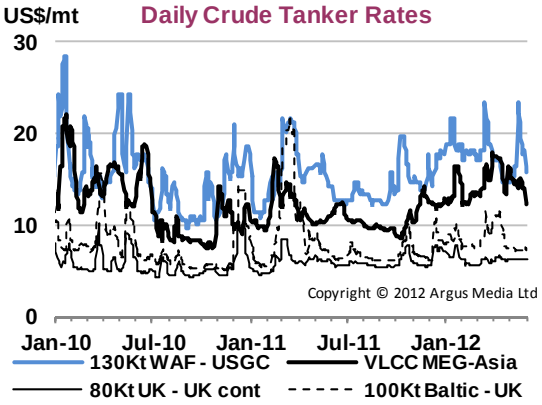
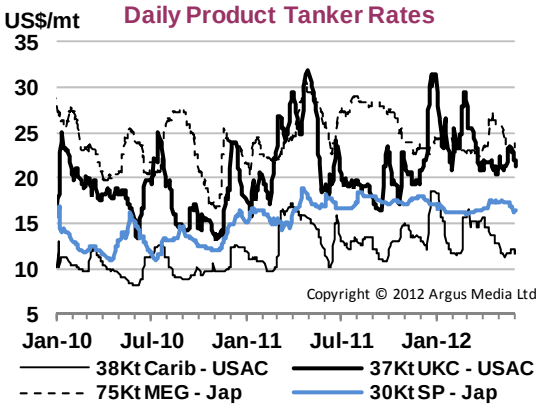
Freight

Despite continued strong demand for Middle Eastern crudes and brisk spot market chartering activity, tanker oversupply once again weighed heavily on freight rates in May for many benchmark routes. Rates on the benchmark VLCC Middle East Gulf – Japan route steadily eroded over the month after a plethora of vessels returned to the tonnage pool, off approximately $16/mt in early May to under $12.50/mt by early June. Indeed, the continued depressed state of VLCC markets has helped the economics of long-haul trades. Recently, a combination of a free trade agreement between the European Union and Korea and low VLCC rates has helped to send North Sea crudes eastwards with multiple cargoes arriving in April and May.

The Suezmax West Africa – US Gulf Coast route was characterised by extreme volatility over the month. In mid-May a convergence of urgent cargoes for prompt delivery took the market by surprise and rapidly tightened tonnage, with rates spiking at over $23/mt, before plummeting back rapidly to below $16/mt by month end as demand waned and supply built. Meanwhile, despite reportedly high fixings in the Baltic, fundamentals in northern European markets remained well balanced and rates remained stable.





Product tanker markets fared little better than those for crude. Rates on the UK – US Atlantic Coast clean trade weakened by approximately $3/mt over the month. Indeed, even with the recent shuttering of a large portion of US Atlantic Coast refining capacity, a combination of depressed US gasoline demand and increased pipeline-supplied product coming from the Gulf Coast has changed the complexion of these markets. However, if supply delivered by the Colonial pipeline is insufficient during the summer driving season, volumes of transatlantic trade could once again increase. Oversupply was especially evident in East of Suez markets, which generally weakened over the month. The 75 Kt Middle East Gulf – Japan trade fell from approximately $26/mt to $23/mt over the month while, after initially holding its own, the Singapore – Japan trade declined to under $16.50/mt by early-June.

REFINING

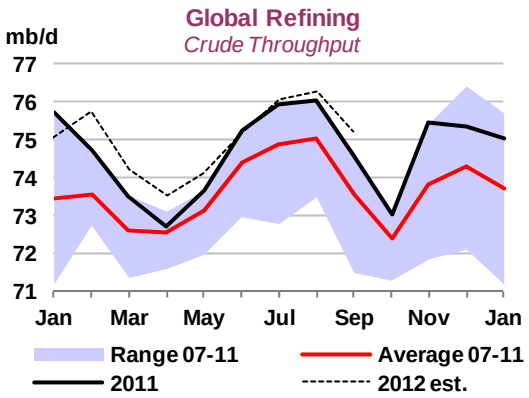
Summary

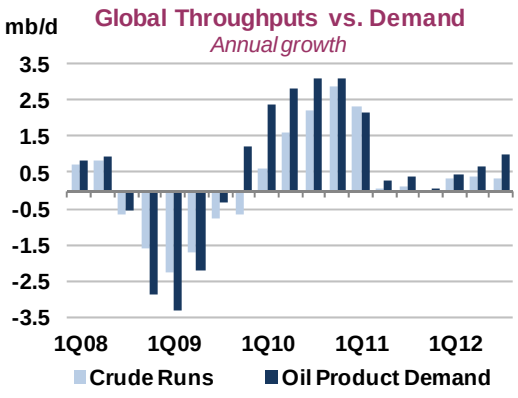
- **2Q12 global refinery crude throughput estimates are largely unchanged since last month's report, averaging 74.3 mb/d**, or 390 kb/d above a year earlier. Growth derives largely from non-OECD Asian countries, while Latin American and OECD runs are constrained by recent capacity rationalisation. 1Q12 crude run estimates have been lifted by 190 kb/d since last month's report, on higher than expected Asian and, to a lesser extent, Middle Eastern utilisation rates.

- **World refinery crude demand is set to surge seasonally by almost 2.8 mb/d between April's low and August**, as plants in all key refining centres complete maintenance. New capacity in China and India, as well as the restart of some Petroplus plants in Europe, will also contribute to higher runs. The ramp-up of Motiva's expanded US plant is now uncertain after an unscheduled outage in early June. On a quarterly basis, 3Q12 runs are 1.6 mb/d higher than 2Q12, at 75.9 mb/d, or +345 kb/d year-on-year.

- **OECD crude throughputs declined a further 135 kb/d in April, to average 35.5 mb/d**, largely unchanged from both April 2011 and last month's forecast. Lower runs in the Pacific led the decline, as Japanese refiners began seasonal maintenance and outages reduced runs in Australia and New Zealand. Sharp increases in US runs in May were partly offset by further cuts in Japan, though overall OECD runs are set to rise towards a seasonal peak of 37.4 mb/d in August.

- **Refinery margins saw diverging trends in May**, with US West Coast margins improving and the majority of rates in other refining centres falling, despite the sharp decline in crude oil prices. A significant narrowing of gasoline and naphtha cracks pushed margins lower. US Gulf Coast LLS margins were an exception, due to a sharper downward correction in LLS prices compared to other crudes. Dubai hydroskimming margins in Singapore, although still negative, also improved slightly on improving fuel oil cracks.





Global Refinery Overview

Global refinery crude demand is estimated to have fallen to a seasonal low of 73.5 mb/d in April, with runs increasing from May as most refiners completed spring maintenance work. Continued work in Russia and China, and an escalation in planned outages in the Pacific, still saw crude demand relatively subdued in May. From June onwards, global refinery throughputs are expected to rise sharply, however, to a seasonal peak of 76.3 mb/d in August. On a quarterly basis, runs rise from 74.3 mb/d in 2Q12 to 75.9 mb/d in 3Q12. With the arrival of March data for a number of non-OECD countries, 1Q12 estimates have been raised by 190 kb/d, to 75.0 mb/d, largely on higher-than-expected Asian operations. Annual throughputs growth is expected to average 365 kb/d in 2Q12-3Q12, as demand for oil products also recovers from the very low levels seen over the previous four quarters.

Monthly data for March were higher than expected, in particular for several Asian countries, leading to a significant upwards revision to March and 1Q12 estimates. Middle Eastern crude runs were also higher than expected. Preliminary data for April, on the other hand, were mostly in line with last month's forecast, as slightly lower European and Russian runs mostly offset the higher Asian baseline. April throughputs are seen as the seasonal low in global refinery runs, with maintenance in several regions, notably the Atlantic Basin. Only the OECD Pacific is expected to increase shutdowns from April to June, providing a partial offset to increasing throughputs elsewhere.

Global Refinery Crude Throughput[1]

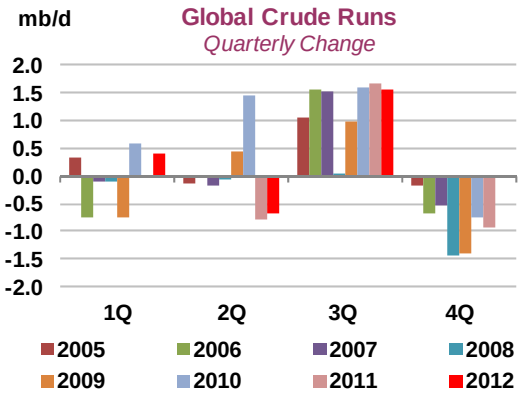
(million barrels per day)

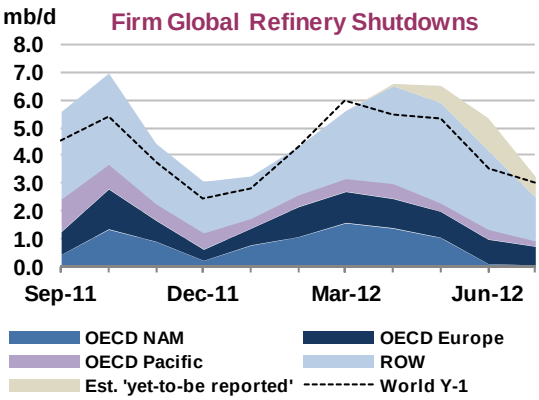
	Feb 12	Mar 12	**1Q2012**	Apr 12	May 12	Jun 12	**2Q2012**	Jul 12	Aug 12	Sep 12	**3Q2012**
North America	17.8	17.4	**17.6**	17.4	18.0	18.3	**17.9**	18.6	18.6	18.2	**18.4**
Europe	12.2	11.6	**12.0**	11.7	11.8	12.1	**11.8**	12.2	12.3	12.1	**12.2**
Pacific	6.9	6.6	**6.8**	6.5	6.2	6.1	**6.3**	6.3	6.5	6.3	**6.3**
Total OECD	**36.9**	**35.7**	**36.3**	**35.5**	**36.0**	**36.5**	**36.0**	**37.0**	**37.4**	**36.6**	**37.0**
FSU	6.7	6.4	**6.6**	6.4	6.2	6.7	**6.4**	6.7	6.7	6.5	**6.6**
Non-OECD Europe	0.4	0.5	**0.4**	0.5	0.5	0.5	**0.5**	0.5	0.5	0.5	**0.5**
China	9.3	9.1	**9.2**	9.0	9.1	9.2	**9.1**	9.4	9.3	9.3	**9.3**
Other Asia	9.4	9.5	**9.4**	9.3	9.5	9.4	**9.4**	9.4	9.2	9.4	**9.3**
Latin America	5.0	5.0	**5.0**	4.9	4.9	4.8	**4.9**	5.0	4.9	4.9	**4.9**
Middle East	6.0	5.8	**5.9**	5.7	6.0	6.0	**5.9**	6.1	6.1	6.1	**6.1**
Africa	2.2	2.2	**2.2**	2.2	2.0	2.1	**2.1**	2.0	2.1	2.1	**2.1**
Total Non-OECD	**38.9**	**38.5**	**38.7**	**38.0**	**38.1**	**38.7**	**38.2**	**39.1**	**38.9**	**38.7**	**38.9**
Total	**75.8**	**74.2**	**75.0**	**73.5**	**74.1**	**75.2**	**74.3**	**76.1**	**76.3**	**75.2**	**75.9**

1 Preliminary and estimated runs based on capacity, known outages, economic run cuts and global demand forecast

Note: US Virgin Islands included in North America and not Latin America as previously

Despite generally worsening refining economics, global crude runs are assessed 585 kb/d higher in May compared to April, at 74.1 mb/d. Most of this increase came from the US, which saw runs rising almost 0.6 mb/d month-on-month. In addition to the completion of regular maintenance work, the start up of Motiva's 375 kb/d Port Arthur expansion and the return of BP's Cherry Point refinery after a prolonged outage provided support. Runs are expected to have risen also in the Middle East, Other Asia and China as major turnarounds drew to a close.





The continued ramp up of runs at new capacity in Asia, and the resumption of operations at four of Petroplus' five European refineries over coming months, could again put further downward pressure on margins and force economic run cuts if oil product demand growth disappoints. The ramp-up of Motiva's expanded Gulf Coast refinery is now in question, following an unscheduled outage in early June. While the timing of the restart is unclear, some sources indicate the new crude unit could be offline for two to

five months. Global crude runs still stand to rise seasonally to 76.3 mb/d in August, an almost 2.8 mb/d increase from April's low, based on available capacity, seasonal patterns and expected demand growth.

Refinery margins saw diverging trends in May, with US West Coast margins improving and the majority of rates in other refining centres falling, despite the sharp fall in crude oil prices. A significant narrowing of gasoline and naphtha cracks pushed margins lower. US Gulf Coast LLS margins were an exception, due to a sharper downward correction in LLS prices compared to other crudes. Dubai hydroskimming margins in Singapore also improved slightly on improving fuel oil cracks, though remained negative.

Selected Refining Margins in Major Refining Centres

($/bbl)

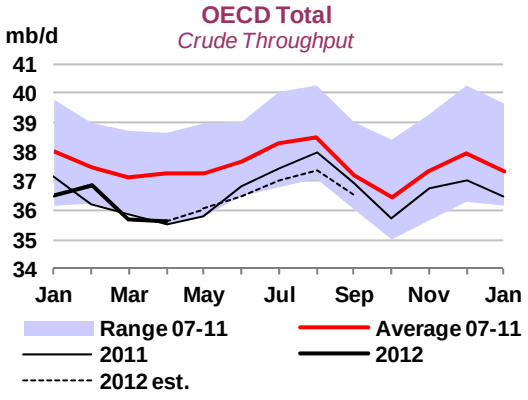
		Monthly Average				Change	Average for week ending:				
		Mar 12	Apr 12	May 12		May 12-Apr 12	04 May	11 May	18 May	25 May	01 Jun
NW Europe	Brent (Cracking)	1.68	4.88	2.35	↓	-2.53	3.02	2.65	1.44	2.02	2.89
	Urals (Cracking)	4.13	6.64	3.63	↓	-3.01	4.07	3.76	2.41	3.80	4.39
	Brent (Hydroskimming)	-2.13	0.77	-1.01	↓	-1.78	0.08	-0.68	-1.78	-1.62	-0.79
	Urals (Hydroskimming)	-3.78	-1.54	-3.03	↓	-1.49	-2.36	-3.04	-4.07	-3.06	-2.39
US Gulf Coast	LLS (Cracking)	0.52	4.85	6.71	↑	1.86	2.59	5.03	8.09	8.72	9.89
	Mars (Cracking)	-0.65	3.49	2.56	↓	-0.93	0.95	1.51	2.86	3.41	4.36
	Mars (Coking)	1.52	6.55	4.97	↓	-1.58	3.11	4.06	5.27	5.77	7.00
	Maya (Coking)	3.19	6.67	2.02	↓	-4.65	0.51	2.28	2.42	2.24	4.19
US West Coast	ANS (Cracking)	1.62	0.03	6.08	↑	6.05	3.87	9.42	5.87	5.42	3.68
	Kern (Cracking)	4.10	3.96	9.84	↑	5.88	6.55	12.62	9.36	10.98	7.71
	Kern (Coking)	9.44	6.60	8.92	↑	2.32	7.82	12.41	9.19	8.07	5.84
Singapore	Dubai (Hydroskimming)	-4.71	-2.63	-2.32	↑	0.31	-2.55	-1.97	-2.52	-1.96	-2.58
	Tapis (Hydroskimming)	-8.51	-6.01	-6.55	↓	-0.54	-6.31	-6.24	-6.76	-7.28	-5.54
	Dubai (Hydrocracking)	-2.08	-0.01	-0.19	↓	-0.18	-0.27	0.05	-0.34	0.15	-0.43
	Tapis (Hydrocracking)	-8.90	-6.35	-7.64	↓	-1.29	-6.95	-7.35	-7.84	-8.49	-6.85

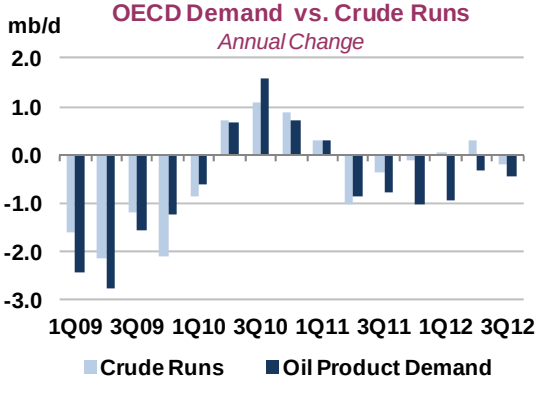
For the purposes of this report, refining margins are calculated for various complexity configurations, each optimised for processing the specific crude in a specific refining centre on a 'full-cost' basis. Consequently, reported margins should be taken as an indication, or proxy, of changes in profitability for a given refining centre. No attempt is made to model or otherwise comment upon the relative economics of specific refineries running individual crude slates and producing custom product sales, nor are these calculations intended to infer the marginal values of crudes for pricing purposes.

Sources: Purvin & Gertz Inc.

OECD Refinery Throughput

OECD crude throughputs declined by a further 135 kb/d in April, to average 35.5 mb/d. Both North American and European refinery runs were mostly unchanged from the prior month, while Japanese utilisation rates fell with the onset of the maintenance season. Refinery outages in New Zealand and Australia further reduced Pacific runs, to 6.5 mb/d. Overall OECD rates were also largely unchanged from the previous year and last month's forecast, with slightly downwardly revised European rates (-110 kb/d) partly offset by higher North American data (+55 kb/d).





Official monthly March submissions were largely in line with preliminary estimates for the OECD as a whole, though masking some regional divergences. While North America was revised up by 100 kb/d on higher US and Canadian data, the Pacific was revised down by 105 kb/d. In all, OECD crude intake averaged 35.7 mb/d in March, down 1.2 mb/d from February and 0.2 mb/d below year-earlier levels.

Refinery Crude Throughput and Utilisation in OECD Countries
(million barrels per day)

							Change from		Utilisation rate[1]	
	Nov 11	Dec 11	Jan 12	Feb 12	Mar 12	Apr 12	*Mar 12*	*Apr 11*	Apr 12	Apr 11
US[2]	14.96	14.84	14.42	14.66	14.55	14.54	0.00	0.24	84.5%	81.7%
US Virgin Islands	0.27	0.27	0.27	0.19	0.00	0.00	0.00	-0.30	0.0%	86.6%
Canada	1.63	1.68	1.59	1.74	1.70	1.64	-0.06	0.07	89.2%	85.6%
Mexico	1.18	1.16	1.21	1.25	1.18	1.22	0.04	-0.04	74.1%	82.0%
OECD North America	**18.04**	**17.95**	**17.49**	**17.85**	**17.43**	**17.40**	**-0.03**	**-0.04**	**84.1%**	**83.5%**
France	1.38	1.41	1.17	1.09	1.04	1.04	0.00	-0.15	66.5%	67.6%
Germany	1.96	1.95	1.93	1.91	1.80	1.86	0.06	0.01	87.4%	86.7%
Italy	1.52	1.55	1.57	1.50	1.39	1.33	-0.06	-0.19	60.8%	69.4%
Netherlands	0.97	1.03	1.06	1.10	1.02	1.09	0.07	0.29	84.9%	62.2%
Spain	1.10	1.09	1.09	1.15	1.08	1.05	-0.04	-0.05	69.0%	77.9%
United Kingdom	1.45	1.46	1.48	1.50	1.48	1.45	-0.03	-0.06	79.9%	83.5%
Other OECD Europe	3.75	3.83	3.85	3.92	3.81	3.84	0.03	0.19	77.4%	73.8%
OECD Europe	**12.13**	**12.29**	**12.14**	**12.16**	**11.62**	**11.66**	**0.03**	**0.05**	**75.4%**	**74.8%**
Japan	3.20	3.37	3.45	3.49	3.47	3.38	-0.09	0.29	73.7%	65.7%
South Korea	2.64	2.62	2.65	2.64	2.46	2.48	0.02	-0.11	90.5%	94.4%
Other OECD Pacific	0.72	0.77	0.76	0.74	0.70	0.63	-0.07	-0.15	67.3%	83.3%
OECD Pacific	**6.56**	**6.76**	**6.85**	**6.87**	**6.63**	**6.49**	**-0.14**	**0.03**	**78.5%**	**77.0%**
OECD Total	**36.73**	**37.00**	**36.48**	**36.88**	**35.68**	**35.55**	**-0.13**	**0.04**	**80.0%**	**78.6%**

1 Expressed as a percentage, based on crude throughput and current operable refining capacity

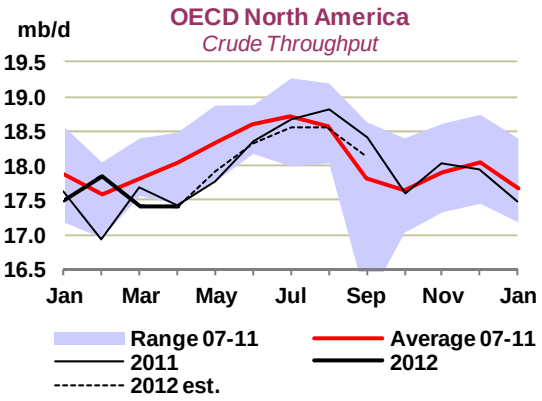
2 US50

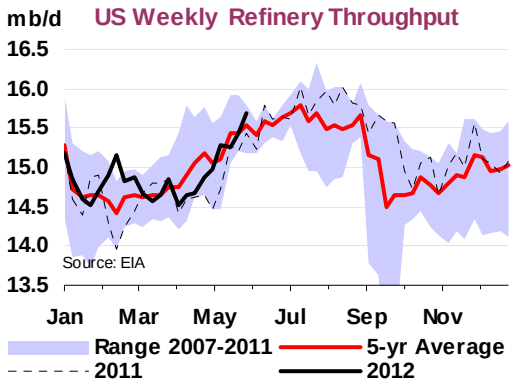
Preliminary weekly data for May show US refinery crude intake surging 585 kb/d month-on-month, to average 15.1 mb/d. The seasonal increase was only slightly lower than our forecast and ran some 350 kb/d above year-earlier levels. Offsetting the increase in the US, Japanese runs fell by 455 kb/d in May, shown in preliminary weekly data from the Petroleum Association of Japan (PAJ). The decline corresponded with an increase in maintenance activity and was in line with expectations. Preliminary data for Euroilstocks, released 11 June, indicate that European refinery utilisation rates remained weak in May, pressured by poor margins, contracting demand and limited export opportunities. In all, OECD crude intake is expected to rise from a low of 35.5 mb/d in April to a seasonal peak of 37.4 mb/d in August, with seasonal increases in the US and Europe accounting for the increase and the Pacific recovering after maintenance lows in the May-July period.

North American crude run estimates have been lifted by 100 kb/d and 55 kb/d for March and April respectively, with the submission of final and preliminary monthly data. Both months' throughputs were below year-earlier levels, with maintenance and unscheduled outages cutting runs over and above cuts stemming from recent refinery closures on the East Coast and on the US Virgin Islands.

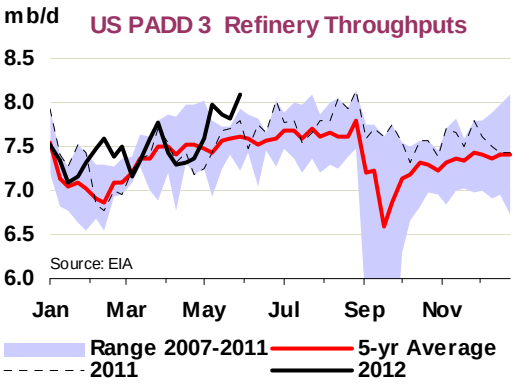
US refinery throughputs were expected to rise sharply from May onwards as maintenance wound down, and indeed weekly data show US runs up 585 kb/d month-on-month. The increase stemmed from the Gulf Coast (+430 kb/d) and the West Coast (+235 kb/d). Other regions were slightly lower or unchanged versus April. US East Coast runs fell even further (-30 kb/d) to a recent low of 825 kb/d in the week

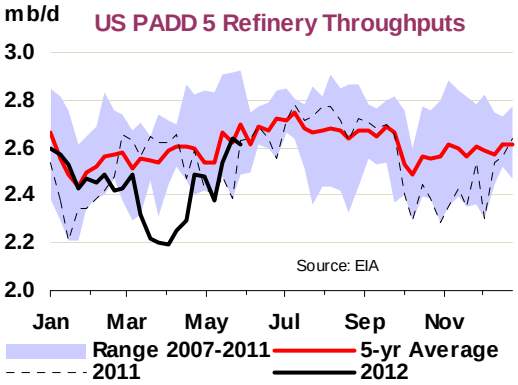
ending 18 May. A fire at Sunoco's 330 kb/d Philadelphia refinery on 9 May reduced runs temporarily, though operations were fully restored by end-month.





Gulf Coast runs rose seasonally in May, as maintenance was completed and refiners boosted operations to replenish product inventories ahead of the summer driving season. Both gasoline and diesel stocks are at the bottom of their historical range. The completion of Motiva's 325 kb/d Port Arthur expansion saw runs surge late-month. A mechanical issue forced an unscheduled shutdown of the new crude unit in early June, however, and may curb output from the expanded plant in the short term and possibly for several months. While little information on the issues and potential restart was available at the time of writing, some sources said the new units could be off for two to five months. West Coast crude intake was lifted by the restart of BP's 225 kb/d Cherry Point refinery from 7 May, with full production reached at end-May. The refinery had been shut since 17 February due to a fire at the plant's central crude distillation unit.

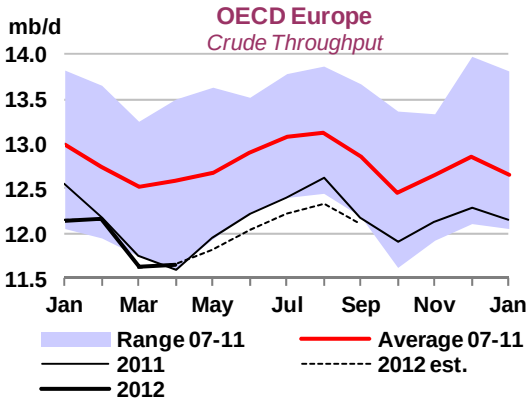


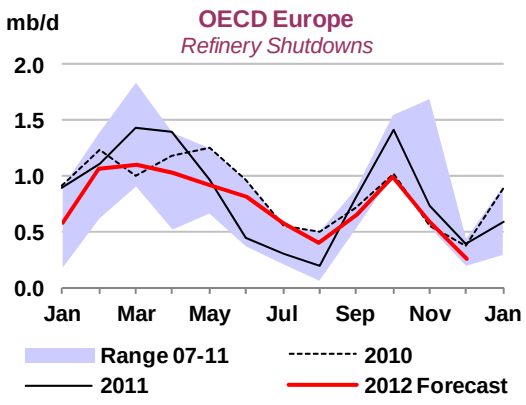


European refinery intake was 110 kb/d lower than expected in April, with French and Italian runs particularly weak. Total European runs averaged 11.7 mb/d, only marginally higher than March's 11.6 mb/d, and just 50 kb/d above year-earlier levels. Submitted monthly data for March were overall in line with our previous estimates. April crude runs remained low on still-substantial refinery maintenance and outages. In Finland, an unscheduled outage at Neste's Porvoo plant took runs 60 kb/d lower than a month earlier, although this was already factored into the forecast and brought forward planned maintenance from the second half of the year. The shutdown of Petroplus' Antwerp, Petit Couronne, Ingolstadt and Cressier plants also played into the lower runs.

New owner Gunvor reportedly estarted the 108 kb/d Antwerp refinery in mid-May after a five-month shutdown. The company picked up another one of the Petroplus plants, the German Ingolstadt unit, in early June, and is planning to restart it as soon as possible. The deal is expected to close by October, and we assume the plant to resume operations in early 4Q12. In France, the Petit Couronne plant is set to

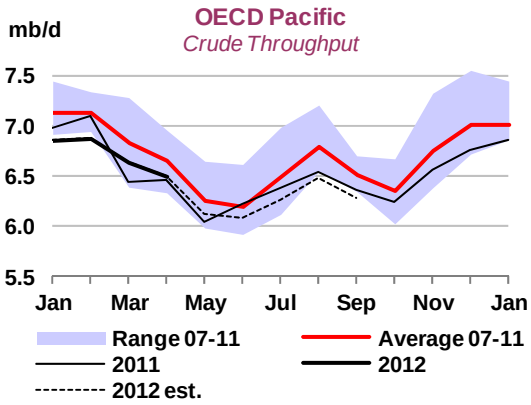
resume operations at reduced rates on 14 June. French throughputs will likely remain below year earlier levels, however, due to the shutdown of Berre l'Etang in January 2012 and Reichstett in May 2011. Switzerland's Cressier plant is expected to restart in July/August after Vitol agreed to purchase the plant last month. The UK's Coryton plant, however, has not managed to find a buyer, and as crude supplies ran out on 6 June, the plant also had to halt operations. The administrator, while continuing to look for a buyer, is now proceeding towards a full closure, which could take up to three months.

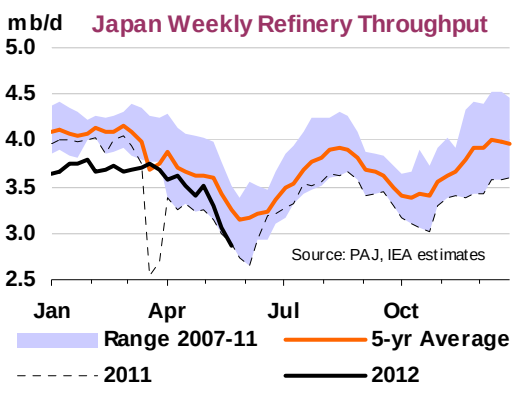




Pacific crude runs were revised down by 105 kb/d for March, following lower data for Japan and Australia. March throughputs are now assessed at 6.6 mb/d, some 185 kb/d above year-earlier levels. March 2011 refinery operations were stunted by the devastating earthquake and tsunami hitting Japan. Preliminary data for April show overall Pacific crude intake only marginally lower at 6.5 mb/d. Slightly weaker Japanese runs due to the start of maintenance, and outages in New Zealand and Australia led the 140 kb/d monthly decline. The Marsden Point, New Zealand refinery underwent maintenance in April and May and Shell's Australian Geelong refinery had to take a unit offline for repairs in April after an emergency. Preliminary weekly data from the PAJ for May were in line with expectations, down 455 kb/d from a month earlier. Maintenance is expected to curb regional runs further in June, to a seasonal low of 6.1 mb/d, before rebounding from July onwards.

Shell announced on 7 June that it will bring forward the planned closure of its 80 kb/d Clyde refinery in Australia from mid-2013 to September of this year, due to poor industry margins and intense competition from complex refineries in Asia, according to a company statement. The plant will be turned into a fuel terminal.

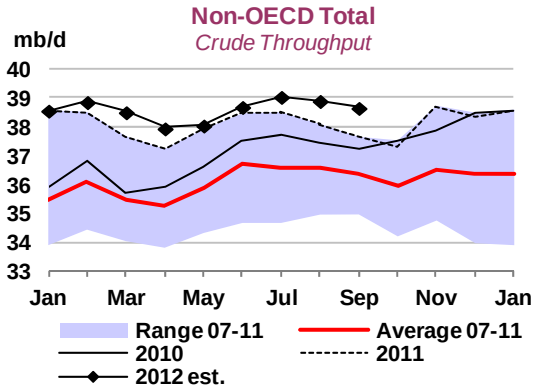


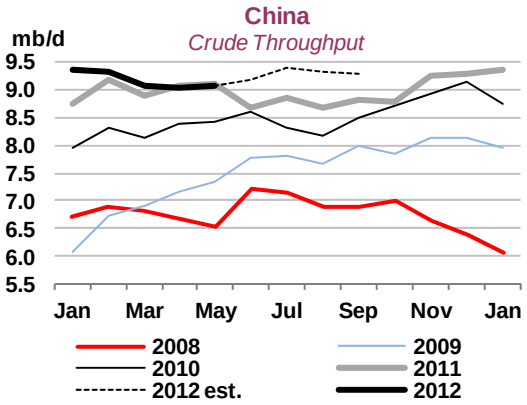


Non-OECD Refinery Throughput

Non-OECD refinery throughputs were stronger than expected in the first quarter, and have been revised up by 190 kb/d since last month's report. Crude runs in March were particularly strong in Asia, reaching

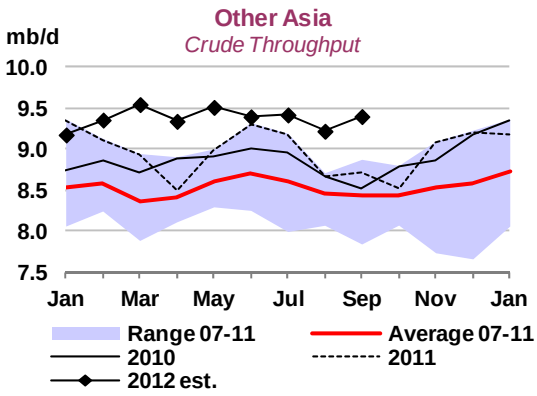
an estimated record-high of 9.5 mb/d. Middle Eastern runs also fell less than expected, with Kuwaiti runs rebounding from maintenance over January and February. Year-on-year increases of some 875 kb/d in March, stemmed largely from Asia - with Singapore, China, India, Taiwan and Thailand all providing significant growth. Saudi Arabia and Russia also reported annual increases in crude intake of around 150 kb/d each. For the current quarter, non-OECD crude runs are assessed 0.4 mb/d lower compared to 1Q12, before rebounding sharply in 3Q12, reaching a peak of 39.1 mb/d in July.

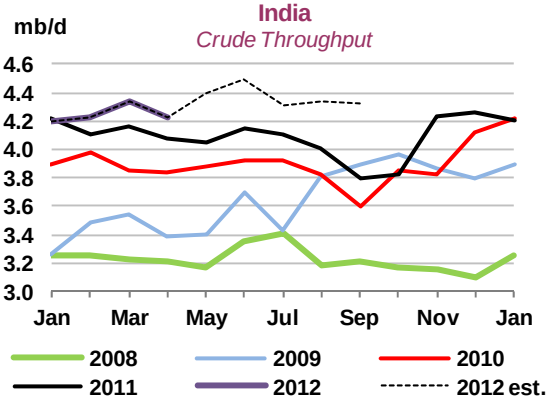




Chinese refinery runs were relatively unchanged in April, down 45 kb/d from March, at just over 9 mb/d, and only slightly lower than forecast. In May, throughputs rose to only 9.1 mb/d (0.2 mb/d less than previously expected), as refinery maintenance remained high, at around 700 kb/d (unchanged from April). While lower recent international crude prices have improved economics for domestic refiners, companies have said that they were still operating at a loss. China lowered retail prices of motor fuel by 5% on 8 June. The cut is the second in a month.

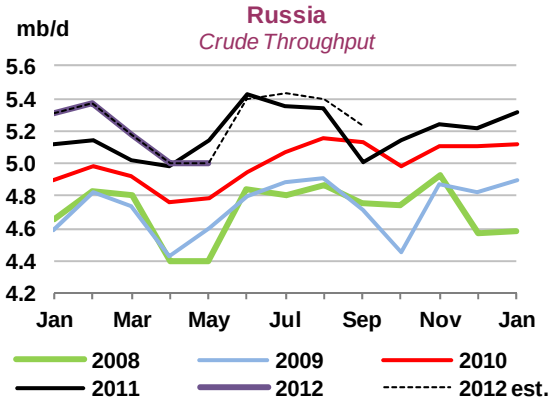
Other Asian refinery runs reached a record-high of 9.5 mb/d in March, some 600 kb/d above a year earlier. Growth came from Singapore, India, Taiwan and Thailand, and was well above expectations. **Indian** crude runs for April fell 110 kb/d m-o-m, to an estimate of 4.2 mb/d, adjusting for data for the Reliance, Bina and Bathinda refineries not yet included in official government statistics. The number was in line with our previous forecast and up by some 160 kb/d on a year earlier. The fire-damaged Numaligarh refinery restarted at end-May after a fire broke out in mid-April at the 60 kb/d plant.

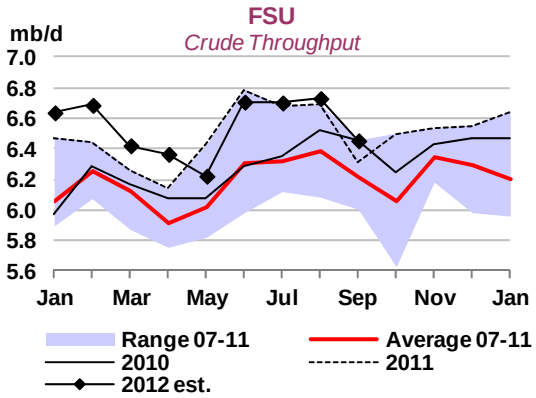




Elsewhere, **Vietnam's** Dung Quat refinery shut for four weeks from 15 May for turnarounds. The shutdown freed up more Bach Ho crude for spot sales. The refinery was forced to shut down in mid-May after problems with a gasoline unit, and the outage could be extended to end-June. **Taiwan's** refinery crude intake in March was 180 kb/d higher than expected, at 940 kb/d. Earlier news reports of a crude unit being taken offline for safety checks may have been inaccurate. In the **Philippines**, Shell's 110 kb/d Tabangao refinery in Batangas underwent maintenance in late-April and early-May.

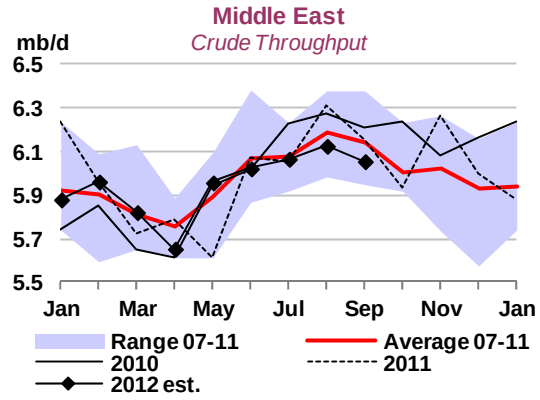
Preliminary May data for **Russia** from CDU-TEK show crude processing flat from April's depressed levels of 5.0 mb/d. Earlier maintenance schedules had indicated less maintenance in May than April, though more recent information show almost 0.8 mb/d of capacity still offline last month. As a result, we have revised lower Russian throughputs for May by 310 kb/d compared to last month's report. Final April data were in line with earlier estimates. As maintenance winds down, runs are set to rise sharply in June. Much of the increase will come from TNK-BP's 340 kb/d Ryazan and Lukoil's Nizhny Novgorod plants, as well as from Rosneft's Samara and Achinsk refineries. A fire at Surgutneftegaz's 350 kb/d Kirishi refinery on 13 May shut the plant's new hydrotreater and could delay the start up of 10 ppm diesel output.





FSU throughputs were further depressed in May by the shutdown of Lithuania's only refinery, the Mazeikiai refinery. The plant, which has a design capacity of around 300 kb/d but recent throughputs of around 160 kb/d, shut for a five-week maintenance programme ending on 3 June. PKN Orlen announced it had abandoned plans to sell their Lithuanian subsidiary Orlen Lietuva, and instead will upgrade the refinery to further improve its energy efficiency and economics. Kazakhstan's Pavlodar refinery will shut down for maintenance on 25 June. Transneft reduced crude supplies to the plant in May, from a usual 500 kt to only 275 kt. As a result, the plant processed only 410 kt in May and plans to run 350 kt in June.

Elsewhere, **Libya**'s 220 kb/d Ras Lanuf refinery has still not resumed operations and the timing of the restart is still uncertain. Apparently, disagreement between NOC and refinery operator, Lerco, over crude supplies is holding up the restart. We are now excluding operations here for the outlook until further information becomes available. In the **Middle East**, crude runs are set to rise from May onwards with higher throughputs in **Saudi Arabia** after Ras Tanura completed maintenance in early May. Maintenance work in **Kuwait** will provide a partial offset, however, as the Mina Al Ahmadi refinery shuts for work in May and June. The maintenance does not include the crude unit, but is expected to result in slightly lower runs. **Latin American** crude runs fell below year-earlier levels in March, with the closure of Valero's 235 kb/d Aruba refinery from end-March. The plant, which only restarted in early 2011 after a 17-month shutdown was already operating at reduced rates due to poor margins. Hovensa's 350 kb/d St. Croix refinery in the US Virgin Islands was shut in mid-February but is accounted for in the North American regional total.



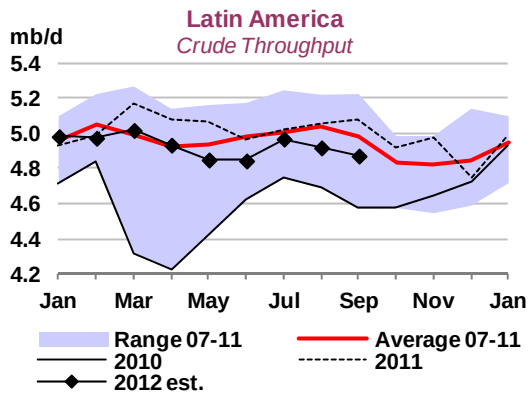


Table 1
WORLD OIL SUPPLY AND DEMAND
(million barrels per day)

	2008	2009	1Q10	2Q10	3Q10	4Q10	2010	1Q11	2Q11	3Q11	4Q11	2011	1Q12	2Q12	3Q12	4Q12	2012
OECD DEMAND																	
North America	24.2	23.3	23.4	23.7	24.1	23.8	23.8	23.8	23.3	23.6	23.4	23.5	23.0	23.1	23.6	23.5	23.3
Europe	15.4	14.7	14.4	14.3	15.0	14.9	14.7	14.2	14.1	14.7	14.1	14.3	13.7	13.7	14.4	14.0	13.9
Pacific	8.1	7.7	8.2	7.3	7.6	8.1	7.8	8.3	7.1	7.7	8.3	7.9	8.8	7.3	7.7	8.2	8.0
Total OECD	47.6	45.6	46.0	45.4	46.7	46.8	46.2	46.3	44.5	45.9	45.8	45.6	45.5	44.1	45.6	45.7	45.2
NON-OECD DEMAND																	
FSU	4.2	4.1	4.2	4.2	4.4	4.4	4.3	4.3	4.5	4.7	4.7	4.6	4.6	4.7	4.8	4.8	4.7
Europe	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.7	0.7	0.8	0.8	0.8
China	7.7	7.9	8.5	8.9	8.8	9.5	9.0	9.4	9.4	9.2	9.6	9.4	9.7	9.6	9.6	10.0	9.7
Other Asia	9.8	10.3	10.5	10.8	10.4	10.8	10.6	10.9	10.9	10.6	11.1	10.9	11.1	11.1	10.8	11.3	11.1
Latin America	6.0	6.0	6.1	6.4	6.5	6.5	6.4	6.4	6.6	6.8	6.7	6.6	6.6	6.8	7.0	6.9	6.8
Middle East	7.2	7.4	7.3	7.7	8.2	7.6	7.7	7.5	7.9	8.3	7.8	7.9	7.7	8.1	8.5	8.0	8.1
Africa	3.3	3.4	3.4	3.5	3.4	3.4	3.4	3.4	3.4	3.3	3.4	3.4	3.5	3.5	3.4	3.5	3.5
Total Non-OECD	39.0	39.9	40.9	42.2	42.4	43.0	42.1	42.7	43.4	43.6	44.1	43.4	44.0	44.4	44.9	45.3	44.7
Total Demand[1]	86.7	85.5	86.9	87.6	89.1	89.8	88.4	89.1	87.9	89.5	89.8	89.1	89.5	88.5	90.5	91.0	89.9
OECD SUPPLY																	
North America[4]	13.3	13.6	13.9	13.9	14.0	14.4	14.1	14.3	14.2	14.4	15.2	14.5	15.5	15.3	15.4	15.6	15.4
Europe	4.8	4.5	4.5	4.1	3.8	4.1	4.1	4.0	3.7	3.5	3.7	3.8	3.8	3.5	3.3	3.6	3.5
Pacific	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.5
Total OECD	18.7	18.8	19.1	18.7	18.4	19.1	18.8	18.8	18.5	18.5	19.5	18.8	19.7	19.4	19.2	19.8	19.5
NON-OECD SUPPLY																	
FSU	12.8	13.3	13.5	13.5	13.5	13.7	13.5	13.7	13.6	13.5	13.6	13.6	13.7	13.8	13.6	13.8	13.7
Europe	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
China	3.8	3.9	4.0	4.1	4.1	4.2	4.1	4.2	4.2	4.1	4.0	4.1	4.2	4.1	4.2	4.2	4.2
Other Asia[2]	3.7	3.6	3.7	3.7	3.7	3.7	3.7	3.6	3.5	3.5	3.6	3.6	3.6	3.6	3.5	3.5	3.6
Latin America[2,4]	3.7	3.9	4.0	4.1	4.1	4.1	4.1	4.2	4.2	4.2	4.3	4.2	4.3	4.2	4.4	4.4	4.3
Middle East	1.7	1.7	1.7	1.7	1.7	1.8	1.7	1.8	1.7	1.7	1.5	1.6	1.4	1.4	1.4	1.4	1.4
Africa[2]	2.6	2.6	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.6	2.6	2.5	2.4	2.2	2.2	2.3	2.3
Total Non-OECD	28.4	29.1	29.6	29.7	29.8	30.0	29.8	30.1	29.8	29.7	29.7	29.8	29.7	29.5	29.5	29.8	29.6
Processing Gains[3]	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.2	2.2	2.3	2.2	2.2	2.3	2.3
Global Biofuels[4]	1.4	1.6	1.5	2.0	2.2	1.9	1.9	1.6	2.0	2.2	1.9	1.9	1.6	1.9	2.3	2.0	1.9
Total Non-OPEC[2]	50.6	51.5	52.2	52.5	52.6	53.2	52.6	52.7	52.4	52.6	53.3	52.7	53.4	53.0	53.3	53.9	53.4
Non-OPEC: Historical Composition[2]	49.6	51.5	52.2	52.5	52.6	53.2	52.6	52.7	52.4	52.6	53.3	52.7	53.4	53.0	53.3	53.9	53.4
OPEC																	
Crude[5]	31.6	29.1	29.2	29.0	29.4	29.3	29.2	29.9	29.3	29.8	30.2	29.8	31.3				
NGLs	4.5	4.9	5.2	5.2	5.5	5.6	5.4	5.8	5.7	5.8	5.9	5.8	6.1	6.1	6.3	6.4	6.2
Total OPEC[2]	36.1	34.0	34.4	34.2	34.9	34.9	34.6	35.6	35.1	35.6	36.1	35.6	37.4				
OPEC: Historical Composition[2]	37.1	34.0	34.4	34.2	34.9	34.9	34.6	35.6	35.1	35.6	36.1	35.6	37.4				
Total Supply[6]	86.7	85.5	86.5	86.8	87.5	88.1	87.2	88.3	87.4	88.2	89.4	88.3	90.7				
STOCK CHANGES AND MISCELLANEOUS																	
Reported OECD																	
Industry	0.3	-0.1	0.4	0.9	-0.1	-0.8	0.1	-0.5	0.5	-0.1	-0.6	-0.2	0.3				
Government	0.0	0.1	0.0	-0.1	-0.1	0.1	0.0	0.0	0.0	-0.4	0.1	-0.1	0.0				
Total	0.3	0.0	0.4	0.9	-0.2	-0.7	0.1	-0.5	0.5	-0.5	-0.6	-0.3	0.3				
Floating Storage/Oil in Transit	0.0	0.3	-0.2	0.1	-0.2	-0.3	-0.2	0.2	-0.2	-0.2	0.0	-0.1	-0.4				
Miscellaneous to balance[7]	-0.3	-0.3	-0.6	-1.7	-1.2	-0.7	-1.0	-0.5	-0.8	-0.6	0.1	-0.4	1.3				
Total Stock Ch. & Misc	0.0	0.0	-0.4	-0.8	-1.7	-1.7	-1.1	-0.8	-0.5	-1.3	-0.5	-0.8	1.2				
Memo items:																	
Call on OPEC crude + Stock ch.[8]	31.6	29.1	29.5	29.9	31.0	31.0	30.4	30.6	29.8	31.1	30.7	30.6	30.1	29.4	30.9	30.8	30.3
Adjusted Call on OPEC + Stock ch.[9]	31.3	28.8	29.0	28.1	29.8	30.3	29.3	30.2	29.0	30.6	30.8	30.2	31.4	28.9	30.4	30.3	30.3

1 Measured as deliveries from refineries and primary stocks, comprises inland deliveries, international marine bunkers, refinery fuel, crude for direct burning, oil from non-conventional sources and other sources of supply.
2 Other Asia includes Indonesia throughout. Latin America excludes Ecuador throughout. Africa excludes Angola throughout.
Total Non-OPEC excludes all countries that were members of OPEC at 1 January 2009. Non-OPEC Historical Composition excludes countries that were OPEC members at that point in time.
Total OPEC comprises all countries which were OPEC members at 1 January 2009. OPEC Historical Composition comprises countries which were OPEC members at that point in time.
3 Net volumetric gains and losses in the refining process and marine transportation losses.
4 As of the July 2010 OMR, Global Biofuels comprise all world biofuel production including fuel ethanol from the US and Brazil.
5 As of the March 2006 OMR, Venezuelan Orinoco heavy crude production is included within Venezuelan crude estimates. Orimulsion fuel remains within the OPEC NGL and non-conventional category, but Orimulsion production reportedly ceased from January 2007.
6 Comprises crude oil, condensates, NGLs, oil from non-conventional sources and other sources of supply.
7 Includes changes in non-reported stocks in OECD and non-OECD areas.
8 Equals the arithmetic difference between total demand minus total non-OPEC supply minus OPEC NGLs.
9 Equals the "Call on OPEC + Stock Ch." with "Miscellaneous to balance" added for historical periods and with an average of "Miscellaneous to balance" for the most recent 8 quarters added for forecast periods.

Table 1A
WORLD OIL SUPPLY AND DEMAND: CHANGES FROM LAST MONTH'S TABLE 1

(million barrels per day)

	2008	2009	1Q10	2Q10	3Q10	4Q10	2010	1Q11	2Q11	3Q11	4Q11	2011	1Q12	2Q12	3Q12	4Q12	2012
OECD DEMAND																	
North America	-	-	-	-	-	-	-	-	-	-	-	-	-0.1	0.1	-	-	-
Europe	-	-	0.1	0.1	0.1	0.1	0.1	-	-	-	-	-	-	-	-0.1	-	-
Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-	0.1	-	0.1	0.1
Total OECD	-	-	0.1	0.1	0.1	0.1	0.1	-	-	-	-	-	-0.1	0.2	-	0.1	0.1
NON-OECD DEMAND																	
FSU	-	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Europe	-	-	-	-	-	-	-	0.1	0.1	-	0.1	0.1	0.1	0.1	0.1	0.1	0.1
China	-	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.3	-0.1	-0.1	-0.2
Other Asia	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2
Latin America	-	-	-	-	-	-	-	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Middle East	-	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.2	-0.2	-0.2	-0.1
Africa	-	-	-	-	-	-0.1	-	-	-	-	-	-	-	-	-	-	-
Total Non-OECD	0.1	-0.1	-	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0.1	-0.3	-0.1	-0.1	-0.1
Total Demand	0.1	-0.1	-	-	-	-0.1	-	-0.1	-0.1	-0.1	-0.1	-0.1	-	-0.1	-0.1	-0.1	-0.1
OECD SUPPLY																	
North America	-	-	-	-	-	-	-	-	-	-	-	-	0.2	0.4	0.1	0.1	0.2
Europe	-	-	-	-	-	-	-	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total OECD	-	-	-	-	-	-	-	-0.1	-0.1	-0.1	-0.1	-0.1	-	0.3	-	-	0.1
NON-OECD SUPPLY																	
FSU	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Asia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Latin America	-	-	-	-	-	-	-	-	-	-	-	-	-	-0.1	-0.1	-0.1	-
Middle East	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Non-OECD	-	-	-	-	-	-	-	-	-	-	-	-	-	-0.1	-0.1	-0.1	-0.1
Processing Gains	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Global Biofuels	-	-	-	-	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-	-0.1	-	-	-
Total Non-OPEC	-	-	-	-	0.1	-	-	-	-	-	-	-	0.1	0.2	-	-	0.1
Non-OPEC: historical composition	-	-	-	-	0.1	-	-	-	-	-	-	-	0.1	0.2	-	-	0.1
OPEC																	
Crude	-	-	-	-0.1	-0.1	-0.1	-0.1	-	-	-	-	-	0.1				
NGLs	-	-	-	-	0.1	0.1	0.1	0.1	-	-	-	-	-0.1	-0.1	-0.1	-0.2	-0.1
Total OPEC	-	-	-	-0.1	-	-	-	0.1	-	-	-	-	-				
OPEC: historical composition	-	-	-	-0.1	-	-	-	0.1	-	-	-	-	-				
Total Supply	-	-	-	-	-	-	-	0.1	-	-	-	-	0.1				
STOCK CHANGES AND MISCELLANEOUS REPORTED OECD																	
Industry	-	-	-	-	-	-	-	-	-	-	-	-	-0.3				
Government	-	-	-	-	-	-	-	-	-	-	-	-	-				
Total	-	-	-	-	-	-	-	-	-	-	-	-	-0.3				
Floating Storage/Oil in Transit	-	-	-	-	-	-	-	-	-	-	-	-	-				
Miscellaneous to balance	-0.1	0.1	-	-0.1	0.1	0.1	-	0.1	0.1	0.1	-	0.1	0.3				
Total Stock Ch. & Misc	-0.1	0.1	-	-0.1	0.1	0.1	-	0.1	0.1	0.1	-	0.1	-				
Memo items:																	
Call on OPEC crude + Stock ch.	0.1	-0.1	-	-	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1	-	-0.1	0.1	-0.1	-	0.1	-
Adjusted Call on OPEC + Stock ch.	-	-	-	-0.1	-0.1	-0.1	-0.1	-	-	-	-	-	0.4	-0.1	0.1	0.2	0.2

When submitting their monthly oil statistics, OECD Member countries periodically update data for prior periods. Similar updates to non-OECD data can occur.

Table 2

SUMMARY OF GLOBAL OIL DEMAND

	2009	1Q10	2Q10	3Q10	4Q10	2010	1Q11	2Q11	3Q11	4Q11	2011	1Q12	2Q12	3Q12	4Q12	2012
Demand (mb/d)																
North America	23.29	23.41	23.69	24.10	23.83	23.76	23.79	23.31	23.56	23.39	23.51	23.04	23.14	23.56	23.53	23.32
Europe	14.66	14.41	14.35	15.00	14.90	14.67	14.22	14.12	14.69	14.09	14.28	13.68	13.67	14.35	14.03	13.93
Pacific	7.69	8.23	7.35	7.62	8.07	7.82	8.34	7.10	7.68	8.29	7.85	8.76	7.32	7.73	8.17	7.99
Total OECD	45.64	46.05	45.38	46.72	46.81	46.24	46.34	44.53	45.93	45.77	45.64	45.48	44.13	45.64	45.73	45.24
Asia	18.25	19.05	19.71	19.18	20.33	19.57	20.34	20.28	19.76	20.66	20.26	20.82	20.67	20.41	21.37	20.82
Middle East	7.42	7.32	7.73	8.19	7.62	7.72	7.53	7.88	8.33	7.84	7.90	7.67	8.07	8.52	8.03	8.07
Latin America	6.04	6.15	6.39	6.52	6.47	6.38	6.40	6.59	6.80	6.71	6.63	6.63	6.77	6.96	6.87	6.81
FSU	4.05	4.24	4.18	4.42	4.43	4.32	4.33	4.48	4.70	4.70	4.56	4.63	4.65	4.79	4.78	4.71
Africa	3.37	3.37	3.48	3.37	3.38	3.40	3.41	3.37	3.25	3.39	3.36	3.50	3.50	3.45	3.49	3.49
Europe	0.75	0.72	0.72	0.72	0.75	0.73	0.72	0.74	0.76	0.77	0.75	0.75	0.74	0.75	0.77	0.75
Total Non-OECD	39.88	40.86	42.21	42.41	42.99	42.12	42.73	43.35	43.60	44.08	43.44	44.01	44.41	44.89	45.32	44.66
World	85.52	86.90	87.59	89.13	89.79	88.37	89.07	87.89	89.53	89.84	89.09	89.49	88.54	90.53	91.04	89.91
of which: US50	18.77	18.87	19.15	19.47	19.23	19.18	19.17	18.82	18.89	18.71	18.90	18.47	18.64	18.93	18.88	18.73
Europe 5*	8.98	8.87	8.75	9.15	9.01	8.95	8.73	8.57	8.90	8.55	8.69	8.31	8.24	8.62	8.44	8.40
China	7.95	8.51	8.94	8.81	9.54	8.95	9.42	9.41	9.18	9.57	9.40	9.75	9.58	9.60	10.02	9.74
Japan	4.39	4.82	4.07	4.36	4.57	4.45	4.86	3.92	4.32	4.82	4.48	5.30	4.09	4.33	4.66	4.59
India	3.26	3.39	3.46	3.14	3.39	3.34	3.51	3.58	3.26	3.57	3.48	3.64	3.65	3.38	3.70	3.59
Russia	2.89	3.02	3.02	3.26	3.21	3.13	3.07	3.28	3.49	3.47	3.33	3.33	3.43	3.57	3.52	3.46
Brazil	2.54	2.57	2.69	2.79	2.77	2.71	2.67	2.75	2.87	2.85	2.79	2.78	2.81	2.90	2.88	2.84
Saudi Arabia	2.47	2.33	2.73	3.02	2.54	2.66	2.47	2.84	3.09	2.72	2.78	2.56	2.96	3.23	2.83	2.90
Canada	2.16	2.15	2.17	2.29	2.23	2.21	2.25	2.15	2.29	2.26	2.24	2.20	2.14	2.27	2.24	2.21
Korea	2.19	2.31	2.18	2.16	2.35	2.25	2.36	2.04	2.21	2.30	2.23	2.30	2.09	2.24	2.33	2.24
Mexico	2.07	2.07	2.10	2.05	2.07	2.07	2.05	2.06	2.09	2.11	2.08	2.06	2.07	2.07	2.09	2.07
Iran	2.08	2.07	2.05	2.05	2.06	2.06	2.06	2.01	2.00	2.00	2.02	2.05	2.00	1.97	2.00	2.01
Total	59.75	61.00	61.29	62.55	62.97	61.96	62.61	61.44	62.60	62.93	62.40	62.75	61.70	63.12	63.60	62.80
% of World	69.9%	70.2%	70.0%	70.2%	70.1%	70.1%	70.3%	69.9%	69.9%	70.1%	70.0%	70.1%	69.7%	69.7%	69.9%	69.8%
Annual Change (% per annum)																
North America	-3.7	-0.1	3.3	3.6	1.2	2.0	1.6	-1.6	-2.2	-1.9	-1.0	-3.1	-0.7	0.0	0.6	-0.8
Europe	-4.7	-4.5	-0.6	2.8	2.5	0.0	-1.3	-1.6	-2.0	-5.5	-2.6	-3.8	-3.2	-2.3	-0.4	-2.4
Pacific	-4.6	1.2	0.4	4.7	0.6	1.7	1.4	-3.3	0.7	2.7	0.5	5.0	3.1	0.7	-1.4	1.8
Total OECD	-4.2	-1.3	1.6	3.5	1.5	1.3	0.6	-1.9	-1.7	-2.2	-1.3	-1.9	-0.9	-0.6	-0.1	-0.9
Asia	4.3	12.0	7.0	3.4	6.8	7.2	6.8	2.9	3.0	1.6	3.5	2.4	1.9	3.3	3.4	2.8
Middle East	2.3	5.3	3.6	3.1	4.5	4.1	2.8	1.9	1.6	2.9	2.3	1.9	2.4	2.3	2.4	2.3
Latin America	0.8	5.1	5.8	6.7	5.3	5.7	4.0	3.2	4.3	3.6	3.8	3.7	2.7	2.3	2.5	2.8
FSU	-4.7	8.6	6.2	5.0	7.1	6.7	2.1	7.2	6.3	6.1	5.4	6.9	3.8	2.0	1.6	3.5
Africa	2.6	-1.0	0.9	0.5	3.4	1.0	1.0	-3.1	-3.5	0.3	-1.3	2.9	3.9	5.9	3.0	3.9
Europe	-4.2	-5.8	-5.3	-2.3	2.4	-2.8	0.6	2.4	5.5	3.4	3.0	3.4	0.2	-1.2	-0.3	0.5
Total Non-OECD	2.1	7.8	5.4	3.7	5.9	5.6	4.6	2.7	2.8	2.5	3.1	3.0	2.4	3.0	2.8	2.8
World	-1.3	2.8	3.4	3.6	3.6	3.3	2.5	0.3	0.5	0.1	0.8	0.5	0.7	1.1	1.3	0.9
Annual Change (mb/d)																
North America	-0.89	-0.01	0.75	0.83	0.29	0.47	0.38	-0.38	-0.54	-0.44	-0.25	-0.75	-0.17	0.00	0.14	-0.19
Europe	-0.73	-0.68	-0.09	0.40	0.37	0.00	-0.19	-0.23	-0.31	-0.82	-0.39	-0.54	-0.45	-0.34	-0.06	-0.35
Pacific	-0.37	0.10	0.03	0.34	0.05	0.13	0.11	-0.24	0.05	0.22	0.04	0.42	0.22	0.05	-0.12	0.14
Total OECD	-1.98	-0.59	0.70	1.58	0.71	0.60	0.30	-0.85	-0.79	-1.04	-0.60	-0.87	-0.41	-0.29	-0.04	-0.40
Asia	0.76	2.04	1.29	0.63	1.30	1.31	1.29	0.58	0.58	0.33	0.69	0.48	0.39	0.66	0.71	0.56
Middle East	0.17	0.37	0.27	0.25	0.33	0.30	0.21	0.15	0.13	0.22	0.18	0.14	0.19	0.20	0.19	0.18
Latin America	0.05	0.30	0.35	0.41	0.32	0.35	0.25	0.20	0.28	0.23	0.24	0.24	0.18	0.16	0.17	0.19
FSU	-0.20	0.34	0.24	0.21	0.29	0.27	0.09	0.30	0.28	0.27	0.24	0.30	0.17	0.10	0.08	0.16
Africa	0.09	-0.03	0.03	0.02	0.11	0.03	0.03	-0.11	-0.12	0.01	-0.05	0.10	0.13	0.19	0.10	0.13
Europe	-0.03	-0.04	-0.04	-0.02	0.02	-0.02	0.00	0.02	0.04	0.03	0.02	0.02	0.00	-0.01	0.00	0.00
Total Non-OECD	0.83	2.97	2.15	1.50	2.38	2.25	1.87	1.14	1.20	1.09	1.32	1.29	1.06	1.29	1.24	1.22
World	-1.15	2.38	2.84	3.08	3.09	2.85	2.17	0.29	0.40	0.05	0.72	0.42	0.65	1.00	1.20	0.82
Revisions to Oil Demand from Last Month's Report (mb/d)																
North America	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.11	0.08	0.04	0.02	0.01
Europe	0.00	0.09	0.09	0.07	0.08	0.08	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	-0.05	-0.02	-0.02
Pacific	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.13	0.03	0.08	0.07
Total OECD	0.00	0.09	0.09	0.07	0.08	0.08	0.00	0.00	0.00	0.00	0.00	-0.06	0.19	0.02	0.08	0.06
Asia	0.07	0.05	0.06	0.06	0.06	0.06	0.05	0.05	0.06	0.06	0.06	0.05	-0.16	0.04	0.04	-0.01
Middle East	-0.11	-0.08	-0.08	-0.08	-0.08	-0.08	-0.11	-0.14	-0.14	-0.13	-0.13	-0.05	-0.18	-0.18	-0.17	-0.14
Latin America	0.04	0.04	0.04	0.04	0.04	0.04	0.06	0.07	0.08	0.07	0.07	0.11	0.08	0.09	0.09	0.09
FSU	-0.13	-0.13	-0.13	-0.13	-0.13	-0.13	-0.12	-0.12	-0.12	-0.12	-0.12	-0.12	-0.06	-0.10	-0.12	-0.10
Africa	0.04	0.03	0.02	-0.03	-0.07	-0.01	-0.03	0.01	-0.04	-0.01	-0.02	0.05	-0.02	-0.04	-0.05	-0.01
Europe	0.04	0.05	0.05	0.04	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0.05	0.05	0.05	0.05
Total Non-OECD	-0.05	-0.04	-0.05	-0.10	-0.14	-0.08	-0.09	-0.08	-0.12	-0.08	-0.09	0.10	-0.27	-0.15	-0.15	-0.12
World	-0.05	0.05	0.04	-0.03	-0.06	0.00	-0.08	-0.08	-0.12	-0.07	-0.09	0.03	-0.08	-0.13	-0.07	-0.06
Revisions to Oil Demand Growth from Last Month's Report (mb/d)																
World	-0.15	0.14	0.05	0.01	0.01	0.05	-0.13	-0.12	-0.09	-0.02	-0.09	0.11	0.00	-0.01	0.01	0.03

* France, Germany, Italy, Spain and UK

Table 2a

OECD REGIONAL OIL DEMAND[1]

(million barrels per day)

	2010	2011	2Q11	3Q11	4Q11	1Q12	Jan 12	Feb 12	Mar 12 [2]	Latest month vs. Feb 12	Latest month vs. Mar 11
North America											
LPG&Ethane	2.95	2.99	2.71	2.76	3.14	3.19	3.23	3.26	3.10	-0.16	-0.06
Naphtha	0.37	0.35	0.36	0.34	0.35	0.34	0.36	0.34	0.34	0.00	-0.08
Motor Gasoline	10.57	10.33	10.45	10.49	10.22	10.06	9.75	10.19	10.26	0.07	-0.06
Jet/Kerosene	1.65	1.65	1.68	1.71	1.60	1.58	1.53	1.60	1.62	0.02	-0.02
Gasoil/Diesel Oil	4.82	4.92	4.77	4.86	5.03	4.89	4.87	5.01	4.79	-0.22	-0.28
Residual Fuel Oil	0.93	0.85	0.87	0.76	0.80	0.76	0.76	0.70	0.81	0.11	-0.13
Other Products	2.46	2.43	2.47	2.64	2.25	2.21	2.26	2.23	2.12	-0.11	-0.36
Total	23.76	23.51	23.31	23.56	23.39	23.04	22.76	23.34	23.04	-0.29	-1.00
Europe											
LPG&Ethane	0.98	0.98	0.96	0.94	0.97	1.02	1.00	1.09	0.97	-0.12	-0.08
Naphtha	1.29	1.15	1.17	1.11	1.07	1.25	1.22	1.30	1.25	-0.05	0.03
Motor Gasoline	2.21	2.12	2.18	2.20	2.06	1.92	1.83	1.92	2.00	0.09	-0.09
Jet/Kerosene	1.25	1.25	1.26	1.36	1.19	1.10	1.05	1.12	1.12	0.00	-0.09
Gasoil/Diesel Oil	6.14	6.05	5.75	6.19	6.20	5.89	5.57	6.36	5.77	-0.59	-0.33
Residual Fuel Oil	1.28	1.24	1.22	1.25	1.20	1.19	1.14	1.29	1.14	-0.16	-0.13
Other Products	1.52	1.49	1.57	1.63	1.40	1.31	1.26	1.31	1.37	0.06	0.00
Total	14.67	14.28	14.12	14.69	14.09	13.68	13.07	14.39	13.62	-0.77	-0.69
Pacific											
LPG&Ethane	0.84	0.83	0.80	0.79	0.86	0.98	1.01	0.96	0.95	-0.02	0.14
Naphtha	1.68	1.69	1.55	1.73	1.71	1.76	1.83	1.81	1.64	-0.16	-0.03
Motor Gasoline	1.57	1.54	1.47	1.62	1.58	1.53	1.46	1.58	1.55	-0.03	0.03
Jet/Kerosene	0.87	0.85	0.64	0.63	0.96	1.16	1.21	1.28	1.01	-0.27	-0.03
Gasoil/Diesel Oil	1.62	1.62	1.53	1.59	1.71	1.69	1.56	1.82	1.71	-0.11	0.05
Residual Fuel Oil	0.74	0.75	0.65	0.75	0.82	0.94	0.93	0.98	0.92	-0.06	0.19
Other Products	0.49	0.56	0.47	0.56	0.66	0.70	0.63	0.75	0.71	-0.04	0.13
Total	7.82	7.85	7.10	7.68	8.29	8.76	8.63	9.18	8.49	-0.68	0.47
OECD											
LPG&Ethane	4.78	4.80	4.47	4.50	4.97	5.19	5.24	5.32	5.01	-0.30	0.00
Naphtha	3.34	3.20	3.08	3.18	3.13	3.36	3.40	3.44	3.23	-0.21	-0.08
Motor Gasoline	14.36	13.99	14.10	14.31	13.85	13.51	13.04	13.69	13.81	0.13	-0.12
Jet/Kerosene	3.78	3.75	3.58	3.70	3.75	3.84	3.79	4.00	3.75	-0.25	-0.14
Gasoil/Diesel Oil	12.58	12.59	12.05	12.64	12.94	12.48	12.00	13.20	12.28	-0.92	-0.56
Residual Fuel Oil	2.94	2.84	2.74	2.77	2.82	2.89	2.83	2.98	2.87	-0.11	-0.07
Other Products	4.47	4.47	4.51	4.83	4.31	4.21	4.15	4.29	4.20	-0.09	-0.23
Total	46.24	45.64	44.53	45.93	45.77	45.48	44.46	46.90	45.15	-1.75	-1.21

1 Demand, measured as deliveries from refineries and primary stocks, comprises inland deliveries, international bunkers and refinery fuel. It includes crude for direct burning, oil from non-conventional sources and other sources of supply. Jet/kerosene comprises jet kerosene and non-aviation kerosene. Gasoil comprises diesel, light heating oil and other gasoils. North America comprises US 50 states, US territories, Mexico and Canada.

2 Latest official OECD submissions (MOS).

Table 2b

OIL DEMAND IN SELECTED OECD COUNTRIES[1]

(million barrels per day)

										Latest month vs.	
	2010	2011	2Q11	3Q11	4Q11	1Q12	Jan 12	Feb 12	Mar 12 [2]	Feb 12	Mar 11
United States[3]											
LPG	2.17	2.18	1.96	1.99	2.31	2.38	2.47	2.44	2.24	-0.20	-0.07
Naphtha	0.26	0.26	0.27	0.25	0.26	0.26	0.28	0.24	0.25	0.00	-0.06
Motor Gasoline	8.99	8.74	8.87	8.89	8.61	8.49	8.19	8.64	8.64	0.01	-0.12
Jet/Kerosene	1.45	1.44	1.49	1.50	1.39	1.36	1.32	1.38	1.39	0.00	-0.03
Gasoil	3.80	3.85	3.75	3.78	3.92	3.81	3.82	3.95	3.67	-0.28	-0.33
Residual Fuel Oil	0.54	0.48	0.51	0.36	0.43	0.42	0.44	0.40	0.42	0.02	-0.13
Other Products	1.97	1.93	1.97	2.12	1.77	1.75	1.83	1.78	1.64	-0.14	-0.34
Total	19.18	18.90	18.82	18.89	18.71	18.47	18.36	18.82	18.24	-0.59	-1.07
Japan											
LPG	0.48	0.50	0.50	0.45	0.52	0.63	0.65	0.62	0.63	0.00	0.15
Naphtha	0.77	0.72	0.65	0.74	0.70	0.72	0.75	0.72	0.68	-0.03	-0.02
Motor Gasoline	1.00	0.98	0.92	1.04	1.00	0.96	0.91	0.98	0.99	0.00	0.02
Jet/Kerosene	0.55	0.53	0.36	0.34	0.62	0.82	0.84	0.92	0.71	-0.21	0.02
Diesel	0.41	0.41	0.39	0.41	0.43	0.42	0.37	0.45	0.45	0.00	0.04
Other Gasoil	0.43	0.41	0.36	0.36	0.43	0.48	0.46	0.53	0.46	-0.07	0.01
Residual Fuel Oil	0.40	0.45	0.36	0.48	0.53	0.61	0.59	0.64	0.60	-0.05	0.22
Other Products	0.41	0.49	0.38	0.51	0.60	0.66	0.62	0.70	0.66	-0.04	0.14
Total	4.45	4.48	3.92	4.32	4.82	5.30	5.17	5.56	5.17	-0.39	0.60
Germany											
LPG	0.10	0.10	0.10	0.11	0.09	0.10	0.09	0.11	0.11	-0.01	0.01
Naphtha	0.41	0.38	0.39	0.37	0.34	0.40	0.39	0.45	0.37	-0.08	-0.06
Motor Gasoline	0.46	0.46	0.47	0.47	0.46	0.43	0.41	0.43	0.44	0.01	-0.01
Jet/Kerosene	0.18	0.18	0.19	0.19	0.17	0.16	0.15	0.15	0.17	0.02	0.00
Diesel	0.67	0.68	0.68	0.72	0.69	0.65	0.61	0.64	0.69	0.06	0.00
Other Gasoil	0.43	0.37	0.24	0.43	0.42	0.35	0.32	0.51	0.24	-0.27	-0.09
Residual Fuel Oil	0.15	0.15	0.14	0.15	0.15	0.15	0.13	0.17	0.15	-0.02	-0.02
Other Products	0.09	0.10	0.12	0.12	0.11	0.06	0.06	0.05	0.08	0.03	0.00
Total	2.49	2.42	2.33	2.56	2.43	2.30	2.16	2.51	2.24	-0.27	-0.17
Italy											
LPG	0.11	0.10	0.08	0.08	0.11	0.12	0.12	0.15	0.09	-0.06	-0.02
Naphtha	0.12	0.09	0.10	0.08	0.08	0.08	0.07	0.07	0.10	0.03	-0.01
Motor Gasoline	0.24	0.23	0.24	0.24	0.22	0.19	0.20	0.16	0.20	0.04	-0.03
Jet/Kerosene	0.10	0.10	0.10	0.12	0.09	0.08	0.08	0.07	0.08	0.01	-0.02
Diesel	0.49	0.49	0.51	0.50	0.49	0.42	0.40	0.41	0.45	0.05	-0.04
Other Gasoil	0.12	0.11	0.09	0.10	0.13	0.11	0.11	0.13	0.10	-0.03	0.00
Residual Fuel Oil	0.13	0.11	0.11	0.13	0.10	0.11	0.10	0.13	0.10	-0.03	0.00
Other Products	0.23	0.23	0.24	0.22	0.21	0.19	0.19	0.19	0.19	-0.01	-0.01
Total	1.53	1.46	1.47	1.47	1.43	1.30	1.26	1.31	1.32	0.01	-0.13
France											
LPG	0.15	0.14	0.12	0.12	0.14	0.17	0.16	0.19	0.15	-0.03	0.00
Naphtha	0.13	0.13	0.14	0.13	0.12	0.14	0.14	0.14	0.14	0.00	0.02
Motor Gasoline	0.19	0.18	0.20	0.19	0.17	0.15	0.15	0.15	0.16	0.01	-0.01
Jet/Kerosene	0.15	0.15	0.15	0.16	0.15	0.14	0.14	0.14	0.14	0.00	0.00
Diesel	0.69	0.70	0.71	0.71	0.69	0.68	0.65	0.68	0.70	0.01	-0.01
Other Gasoil	0.30	0.27	0.19	0.28	0.27	0.33	0.30	0.43	0.26	-0.17	-0.03
Residual Fuel Oil	0.09	0.08	0.08	0.08	0.09	0.09	0.08	0.11	0.08	-0.03	0.00
Other Products	0.17	0.17	0.19	0.20	0.16	0.14	0.15	0.14	0.13	0.00	-0.02
Total	1.86	1.82	1.79	1.87	1.78	1.84	1.78	1.98	1.76	-0.23	-0.06
United Kingdom											
LPG	0.14	0.14	0.15	0.13	0.12	0.13	0.13	0.12	0.13	0.02	0.00
Naphtha	0.03	0.03	0.03	0.02	0.02	0.03	0.03	0.02	0.03	0.00	0.00
Motor Gasoline	0.35	0.33	0.34	0.33	0.33	0.33	0.31	0.33	0.35	0.02	0.00
Jet/Kerosene	0.33	0.33	0.32	0.33	0.32	0.30	0.28	0.32	0.31	-0.01	-0.03
Diesel	0.45	0.45	0.45	0.45	0.47	0.45	0.41	0.47	0.47	0.01	0.01
Other Gasoil	0.12	0.12	0.11	0.13	0.11	0.11	0.10	0.11	0.12	0.01	-0.01
Residual Fuel Oil	0.06	0.06	0.06	0.06	0.06	0.05	0.05	0.05	0.05	0.00	0.00
Other Products	0.14	0.15	0.16	0.15	0.13	0.14	0.13	0.14	0.15	0.01	0.01
Total	1.62	1.60	1.61	1.61	1.56	1.53	1.43	1.56	1.61	0.05	-0.02
Canada											
LPG	0.35	0.38	0.35	0.36	0.39	0.37	0.31	0.37	0.42	0.05	0.00
Naphtha	0.08	0.08	0.08	0.08	0.07	0.09	0.08	0.09	0.09	0.00	-0.01
Motor Gasoline	0.74	0.74	0.74	0.78	0.75	0.73	0.74	0.72	0.74	0.01	0.05
Jet/Kerosene	0.11	0.11	0.10	0.12	0.11	0.12	0.12	0.12	0.12	0.00	0.01
Diesel	0.23	0.23	0.22	0.23	0.25	0.25	0.24	0.25	0.25	0.01	0.05
Other Gasoil	0.30	0.31	0.28	0.32	0.32	0.30	0.31	0.30	0.31	0.01	-0.03
Residual Fuel Oil	0.10	0.09	0.09	0.08	0.09	0.10	0.08	0.10	0.11	0.02	0.02
Other Products	0.30	0.29	0.29	0.32	0.27	0.24	0.22	0.24	0.25	0.01	-0.04
Total	2.21	2.24	2.15	2.29	2.26	2.20	2.10	2.20	2.29	0.10	0.05

1 Demand, measured as deliveries from refineries and primary stocks, comprises inland deliveries, international bunkers and refinery fuel. It includes crude for direct burning, oil from non-conventional sources and other sources of supply. Jet/kerosene comprises jet kerosene and non-aviation kerosene. Gasoil comprises diesel, light heating oil and other gasoils.
2 Latest official OECD submissions (MOS).
3 US figures exclude US territories.

Table 3
WORLD OIL PRODUCTION
(million barrels per day)

	2010	2011	2012	4Q11	1Q12	2Q12	3Q12	4Q12	Mar 12	Apr 12	May 12
OPEC											
Crude Oil											
Saudi Arabia	7.97	9.04		9.37	9.65				9.70	9.80	9.70
Iran	3.70	3.58		3.51	3.32				3.30	3.30	3.30
Iraq	2.36	2.67		2.68	2.69				2.79	2.92	2.89
UAE	2.31	2.50		2.54	2.61				2.65	2.67	2.67
Kuwait	2.03	2.24		2.43	2.42				2.42	2.44	2.44
Neutral Zone	0.53	0.59		0.60	0.60				0.60	0.60	0.60
Qatar	0.74	0.74		0.74	0.75				0.75	0.75	0.75
Angola	1.73	1.64		1.72	1.75				1.75	1.75	1.80
Nigeria	2.08	2.18		2.06	2.06				2.05	2.15	2.18
Libya	1.55	0.46		0.55	1.30				1.45	1.40	1.42
Algeria	1.21	1.18		1.16	1.16				1.14	1.14	1.14
Ecuador	0.47	0.50		0.49	0.48				0.48	0.48	0.48
Venezuela	2.53	2.50		2.40	2.51				2.55	2.49	2.49
Total Crude Oil[6]	29.22	29.81		30.24	31.29				31.63	31.89	31.86
Total NGLs[1,6]	5.39	5.79	6.23	5.87	6.07	6.15	6.34	6.36	6.07	6.15	6.15
Total OPEC[6]	34.61	35.61		36.11	37.36				37.70	38.03	38.01
OPEC: Historical Composition[6]	34.61	35.61		36.11	37.36				37.70	38.03	38.01
NON-OPEC[2]											
OECD											
North America	14.07	14.54	15.45	15.19	15.47	15.32	15.36	15.65	15.42	15.41	15.33
United States[5]	7.76	8.09	8.79	8.55	8.79	8.84	8.69	8.82	8.88	8.88	8.90
Mexico	2.96	2.94	2.89	2.92	2.92	2.92	2.88	2.84	2.94	2.94	2.92
Canada	3.35	3.50	3.77	3.71	3.75	3.55	3.79	3.99	3.60	3.59	3.51
Europe	4.13	3.76	3.53	3.74	3.77	3.51	3.30	3.55	3.69	3.64	3.51
UK	1.36	1.11	0.96	1.10	1.09	0.92	0.84	0.98	1.06	0.96	0.89
Norway	2.14	2.04	1.95	2.05	2.08	1.95	1.83	1.95	2.04	2.03	1.97
Others	0.64	0.60	0.62	0.59	0.60	0.64	0.62	0.62	0.59	0.65	0.65
Pacific	0.61	0.52	0.54	0.54	0.49	0.54	0.57	0.58	0.48	0.52	0.53
Australia	0.51	0.43	0.46	0.45	0.40	0.45	0.50	0.50	0.40	0.43	0.45
Others	0.10	0.09	0.08	0.09	0.09	0.08	0.08	0.08	0.08	0.08	0.08
Total OECD	18.82	18.81	19.53	19.46	19.73	19.36	19.23	19.78	19.59	19.56	19.37
NON-OECD											
Former USSR	13.55	13.60	13.72	13.59	13.75	13.75	13.61	13.79	13.75	13.71	13.75
Russia	10.45	10.60	10.70	10.69	10.71	10.68	10.71	10.72	10.71	10.68	10.69
Others	3.10	3.00	3.02	2.90	3.04	3.07	2.90	3.07	3.04	3.02	3.06
Asia	7.80	7.68	7.74	7.58	7.77	7.71	7.76	7.74	7.79	7.67	7.74
China	4.10	4.12	4.19	4.02	4.17	4.13	4.22	4.25	4.19	4.07	4.16
Malaysia	0.72	0.66	0.67	0.67	0.70	0.67	0.66	0.65	0.69	0.67	0.67
India	0.86	0.89	0.90	0.87	0.88	0.91	0.91	0.91	0.88	0.91	0.91
Indonesia	0.97	0.93	0.87	0.92	0.91	0.88	0.86	0.83	0.90	0.89	0.88
Others	1.14	1.08	1.11	1.10	1.11	1.12	1.11	1.11	1.12	1.13	1.12
Europe	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.13	0.14	0.14	0.14
Latin America	4.07	4.22	4.32	4.32	4.28	4.23	4.35	4.41	4.22	4.16	4.27
Brazil[5]	2.14	2.19	2.27	2.25	2.26	2.17	2.28	2.35	2.17	2.11	2.21
Argentina	0.69	0.67	0.66	0.69	0.67	0.66	0.65	0.65	0.67	0.67	0.66
Colombia	0.79	0.92	0.98	0.95	0.93	0.97	1.00	1.01	0.95	0.96	0.97
Others	0.45	0.44	0.42	0.43	0.42	0.42	0.42	0.41	0.42	0.43	0.42
Middle East[3]	1.74	1.65	1.42	1.47	1.40	1.43	1.43	1.41	1.39	1.46	1.40
Oman	0.87	0.89	0.91	0.89	0.89	0.90	0.93	0.93	0.91	0.91	0.88
Syria	0.39	0.33	0.16	0.19	0.17	0.16	0.16	0.16	0.17	0.17	0.16
Yemen	0.30	0.23	0.15	0.18	0.14	0.16	0.14	0.14	0.11	0.19	0.16
Others	0.19	0.20	0.19	0.20	0.20	0.20	0.19	0.19	0.20	0.20	0.20
Africa	2.51	2.55	2.29	2.57	2.40	2.25	2.24	2.28	2.28	2.26	2.23
Egypt	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71
Gabon	0.25	0.24	0.25	0.25	0.24	0.24	0.25	0.25	0.24	0.24	0.24
Others	1.56	1.59	1.33	1.61	1.44	1.29	1.29	1.32	1.33	1.30	1.28
Total Non-OECD	29.81	29.82	29.63	29.67	29.74	29.50	29.53	29.76	29.57	29.40	29.52
Processing Gains[4]	2.10	2.17	2.26	2.23	2.28	2.23	2.24	2.31	2.28	2.23	2.23
Global Biofuels[5]	1.89	1.92	1.95	1.89	1.62	1.88	2.26	2.03	1.57	1.70	1.96
TOTAL NON-OPEC[6]	52.62	52.72	53.37	53.25	53.36	52.97	53.26	53.88	53.01	52.90	53.09
Non-OPEC: Historical Composition[6]	52.62	52.72	53.37	53.25	53.36	52.97	53.26	53.88	53.01	52.90	53.09
TOTAL SUPPLY	87.22	88.33		89.36	90.72				90.70	90.93	91.10

1 Includes condensates reported by OPEC countries, oil from non-conventional sources, e.g. Venezuelan Orimulsion (but not Orinoco extra-heavy oil), and non-oil inputs to Saudi Arabian MTBE. Orimulsion production reportedly ceased from January 2007.
2 Comprises crude oil, condensates, NGLs and oil from non-conventional sources
3 Includes small amounts of production from Israel, Jordan and Bahrain.
4 Net volumetric gains and losses in refining and marine transportation losses.
5 As of the July 2010 OMR, Global Biofuels comprise all world biofuel production including fuel ethanol from the US and Brazil.
6 Total OPEC comprises all countries which were OPEC members at 1 January 2009. OPEC Historical Composition comprises countries which were OPEC members at that point in time. Total Non-OPEC excludes all countries that were OPEC members at 1 January 2009. Non-OPEC Historical Composition excludes countries that were OPEC members at that point in time.

Table 4

OECD INDUSTRY STOCKS[1] AND QUARTERLY STOCK CHANGES

	RECENT MONTHLY STOCKS[2] in Million Barrels					PRIOR YEARS' STOCKS[2] in Million Barrels			STOCK CHANGES in mb/d			
	Dec2011	Jan2012	Feb2012	Mar2012	Apr2012*	Apr2009	Apr2010	Apr2011	2Q2011	3Q2011	4Q2011	1Q2012
North America												
Crude	464.0	478.8	478.0	496.7	510.5	497.9	497.6	511.4	0.02	-0.36	-0.03	0.36
Motor Gasoline	259.0	271.4	266.2	254.9	241.3	242.0	253.8	238.9	-0.01	0.02	0.09	-0.05
Middle Distillate	225.2	225.7	214.2	203.5	190.4	225.3	217.0	212.4	-0.04	0.16	-0.03	-0.24
Residual Fuel Oil	40.8	41.1	43.2	42.9	40.4	43.0	51.8	47.7	-0.01	-0.02	-0.02	0.02
Total Products[3]	697.7	704.5	687.1	670.2	653.7	691.6	684.5	649.4	0.29	0.30	-0.10	-0.30
Total[4]	1312.6	1340.2	1323.3	1328.6	1324.9	1344.7	1334.6	1311.4	0.49	0.03	-0.32	0.18
Europe												
Crude	285.9	291.2	300.5	310.1	306.2	342.2	353.6	313.7	-0.05	-0.11	-0.24	0.27
Motor Gasoline	95.0	97.4	96.5	92.9	96.3	94.4	96.0	95.3	-0.09	-0.03	0.07	-0.02
Middle Distillate	271.0	286.6	272.9	273.2	273.0	285.0	280.6	280.2	-0.14	-0.12	0.13	0.02
Residual Fuel Oil	61.1	59.9	60.0	59.0	56.6	74.8	75.5	68.5	-0.03	0.00	-0.04	-0.02
Total Products[3]	545.6	561.2	548.1	538.9	539.4	566.2	564.1	555.9	-0.23	-0.10	0.14	-0.07
Total[4]	898.4	920.9	919.0	920.6	917.8	980.6	990.3	935.4	-0.25	-0.25	-0.08	0.24
Pacific												
Crude	155.8	154.3	162.0	154.7	166.4	166.5	176.4	167.2	0.02	-0.03	-0.01	-0.01
Motor Gasoline	22.1	25.2	23.9	25.4	24.7	27.9	26.8	27.1	0.01	0.00	-0.03	0.04
Middle Distillate	61.0	63.3	54.7	54.6	57.1	58.9	54.5	60.5	0.14	0.01	-0.08	-0.07
Residual Fuel Oil	19.0	19.7	20.1	19.6	19.9	21.2	20.5	22.0	0.01	-0.01	-0.01	0.01
Total Products[3]	164.3	164.3	153.1	152.2	158.6	166.7	155.9	168.0	0.18	0.11	-0.19	-0.13
Total[4]	390.0	390.8	386.4	376.9	400.8	402.6	397.9	409.5	0.27	0.07	-0.24	-0.14
Total OECD												
Crude	905.7	924.2	940.5	961.5	983.1	1006.6	1027.6	992.3	-0.01	-0.49	-0.29	0.61
Motor Gasoline	376.2	394.0	386.6	373.2	362.2	364.3	376.6	361.3	-0.09	-0.02	0.13	-0.03
Middle Distillate	557.2	575.5	541.9	531.3	520.5	569.2	552.2	553.1	-0.04	0.05	0.03	-0.28
Residual Fuel Oil	120.9	120.8	123.3	121.4	117.0	139.0	147.8	138.2	-0.04	-0.03	-0.07	0.01
Total Products[3]	1407.6	1430.1	1388.3	1361.3	1351.6	1424.5	1404.5	1373.3	0.24	0.31	-0.16	-0.51
Total[4]	2601.0	2651.8	2628.6	2626.1	2643.4	2727.9	2722.8	2656.3	0.51	-0.15	-0.64	0.27

OECD GOVERNMENT-CONTROLLED STOCKS[5] AND QUARTERLY STOCK CHANGES

	RECENT MONTHLY STOCKS[2] in Million Barrels					PRIOR YEARS' STOCKS[2] in Million Barrels			STOCK CHANGES in mb/d			
	Dec2011	Jan2012	Feb2012	Mar2012	Apr2012*	Apr2009	Apr2010	Apr2011	2Q2011	3Q2011	4Q2011	1Q2012
North America												
Crude	696.0	696.0	696.0	696.0	696.0	718.8	726.6	726.5	0.00	-0.33	0.00	0.00
Products	0.7	0.7	1.0	1.0	1.0	2.0	2.0	0.0	0.00	0.00	0.01	0.00
Europe												
Crude	186.7	187.9	188.2	189.1	189.1	185.5	184.4	185.6	-0.01	-0.02	0.04	0.03
Products	234.1	231.2	231.0	230.6	230.6	237.5	237.7	234.5	0.05	-0.01	-0.02	-0.04
Pacific												
Crude	393.6	393.6	393.6	393.6	393.5	388.1	390.0	391.1	0.00	0.00	0.03	0.00
Products	20.0	20.0	19.7	20.0	20.0	19.2	20.0	20.0	0.00	-0.01	0.01	0.00
Total OECD												
Crude	1276.2	1277.4	1277.7	1278.6	1278.6	1292.4	1301.0	1303.3	-0.01	-0.36	0.07	0.03
Products	254.7	251.9	251.8	251.6	251.6	258.7	259.7	254.5	0.05	-0.03	0.00	-0.03
Total[4]	1532.2	1530.7	1530.9	1531.6	1531.6	1552.7	1562.1	1559.2	0.04	-0.38	0.07	-0.01

* estimated

1 Stocks are primary national territory stocks on land (excluding utility stocks and including pipeline and entrepot stocks where known) and include stocks held by industry to meet IEA, EU and national emergency reserve commitments and are subject to government control in emergencies.

2 Closing stock levels.

3 Total products includes gasoline, middle distillates, fuel oil and other products.

4 Total includes NGLs, refinery feedstocks, additives/oxygenates and other hydrocarbons.

5 Includes government-owned stocks and stock holding organisation stocks held for emergency purposes.

Table 5

TOTAL STOCKS ON LAND IN OECD COUNTRIES[1]

('millions of barrels' and 'days')

	End March 2011		End June 2011		End September 2011		End December 2011		End March 2012 [3]	
	Stock Level	Days Fwd[2] Demand	Stock Level	Days Fwd Demand	Stock Level	Days Fwd Demand	Stock Level	Days Fwd Demand	Stock Level	Days Fwd Demand
North America										
Canada	185.2	84	189.7	81	188.6	84	190.5	85	180.7	-
Mexico	45.0	22	46.5	22	46.1	22	44.4	22	44.8	-
United States[4]	1769.5	94	1807.6	96	1780.9	95	1752.1	96	1778.0	-
Total[4]	2021.7	87	2065.9	88	2037.7	87	2009.1	88	2025.6	88
Pacific										
Australia	39.1	39	39.5	39	38.2	38	40.0	40	38.0	-
Japan	575.4	147	593.2	137	601.1	125	588.5	111	579.5	-
Korea	170.2	83	175.2	79	173.6	75	166.8	72	164.0	-
New Zealand	7.6	54	8.7	62	8.7	56	8.3	52	9.0	-
Total	792.3	112	816.5	106	821.6	99	803.6	92	790.5	108
Europe[5]										
Austria	19.4	77	19.6	70	18.0	68	19.4	72	19.6	-
Belgium	37.0	59	38.1	58	36.7	58	36.4	56	34.8	-
Czech Republic	21.5	106	21.7	109	20.1	109	20.7	118	20.2	-
Denmark	21.4	132	21.5	134	22.4	138	22.4	142	21.1	-
Finland	26.7	132	27.2	132	26.4	127	29.2	146	29.9	-
France	167.4	94	166.7	89	160.0	90	165.0	90	164.7	-
Germany	285.8	122	286.3	112	276.9	114	278.6	121	281.2	-
Greece	33.9	106	32.6	99	30.9	95	27.9	81	29.1	-
Hungary	17.4	124	17.3	118	16.2	112	15.4	125	17.2	-
Ireland	10.8	79	10.2	73	11.3	77	10.7	84	11.7	-
Italy	131.8	90	130.0	88	130.1	91	128.3	99	130.5	-
Luxembourg	0.5	9	0.6	9	0.7	11	0.6	10	0.5	-
Netherlands	125.7	124	117.8	114	114.3	115	101.4	102	119.6	-
Norway	21.1	93	23.5	96	24.5	97	25.9	111	29.1	-
Poland	62.8	109	64.6	105	65.2	110	64.5	123	64.5	-
Portugal	23.5	87	23.3	86	21.9	90	21.9	89	20.9	-
Slovak Republic	9.0	111	8.9	104	8.3	103	8.5	116	9.0	-
Spain	132.9	97	130.1	94	131.2	97	132.8	99	134.3	-
Sweden	33.7	101	32.5	101	32.6	104	31.5	105	29.6	-
Switzerland	36.6	168	37.2	150	37.0	153	35.7	151	35.3	-
Turkey	58.3	85	56.6	73	56.4	83	55.8	83	57.4	-
United Kingdom	93.5	58	85.4	53	84.7	54	87.8	57	81.5	-
Total	1371.0	97	1351.8	92	1325.9	94	1320.5	96	1341.7	98
Total OECD	4185.0	94	4234.2	92	4185.2	92	4133.2	91	4157.7	94
DAYS OF IEA Net Imports[6]	-	143	-	147	-	144	-	143	-	144

1 Total Stocks are industry and government-controlled stocks (see breakdown in table below). Stocks are primary national territory stocks on land (excluding utility stocks and including pipeline and entrepot stocks where known) they include stocks held by industry to meet IEA, EU and national emergency reserves commitments and are subject to government control in emergencies.
2 Note that days of forward demand represent the stock level divided by the forward quarter average daily demand and is very different from the days of net imports used for the calculation of IEA Emergency Reserves.
3 End March 2012 forward demand figures are IEA Secretariat forecasts.
4 US figures exclude US territories. Total includes US territories.
5 Data not available for Iceland.
6 Reflects stock levels and prior calendar year's net imports adjusted according to IEA emergency reserve definitions (see www.iea.org/netimports.asp). Net exporting IEA countries are excluded.

TOTAL OECD STOCKS

CLOSING STOCKS	Total	Government[1] controlled	Industry	Total	Government[1] controlled	Industry
	Millions of Barrels			*Days of Fwd. Demand[2]*		
1Q2009	4278	1547	2731	96	35	61
2Q2009	4306	1561	2745	95	35	61
3Q2009	4327	1564	2763	94	34	60
4Q2009	4205	1564	2641	91	34	57
1Q2010	4241	1567	2675	93	34	59
2Q2010	4319	1562	2757	92	33	59
3Q2010	4296	1549	2747	92	33	59
4Q2010	4230	1561	2670	91	34	58
1Q2011	4185	1558	2627	94	35	59
2Q2011	4234	1561	2673	92	34	58
3Q2011	4185	1526	2660	92	33	58
4Q2011	4133	1532	2601	91	34	57
1Q2012	4158	1532	2626	94	35	60

1 Includes government-owned stocks and stock holding organisation stocks held for emergency purposes.
2 Days of forward demand calculated using actual demand except in 1Q2012 (when latest forecasts are used).

Table 6

IEA MEMBER COUNTRY DESTINATIONS OF SELECTED CRUDE STREAMS[1]

(million barrels per day)

	2009	2010	2011	2Q11	3Q11	4Q11	1Q12	Jan 12	Feb 12	Mar 12	Year Earlier Mar 11	Year Earlier change
Saudi Light & Extra Light												
North America	0.52	0.69	0.69	0.72	0.47	0.85	0.84	0.91	0.76	0.84	0.70	0.15
Europe	0.59	0.66	0.83	0.79	0.93	0.88	0.76	0.86	0.70	0.71	0.68	0.03
Pacific	1.28	1.21	1.24	1.14	1.21	1.27	1.37	1.35	1.27	1.48	1.39	0.09
Saudi Medium												
North America	0.40	0.36	0.37	0.36	0.40	0.40	0.47	0.42	0.56	0.42	0.34	0.08
Europe	0.02	0.00	0.02	0.02	0.05	0.01	0.05	0.02	0.03	0.09	-	-
Pacific	0.34	0.34	0.40	0.38	0.43	0.40	0.46	0.42	0.46	0.52	0.42	0.10
Saudi Heavy												
North America	0.03	0.02	0.02	0.03	0.03	0.01	-	-	-	-	0.02	-
Europe	0.02	0.00	0.01	0.00	0.03	0.03	0.04	0.01	0.04	0.07	-	-
Pacific	0.15	0.22	0.20	0.21	0.23	0.18	0.21	0.22	0.19	0.23	0.18	0.05
Iraqi Basrah Light[2]												
North America	0.40	0.36	0.29	0.41	0.31	0.21	0.39	0.55	0.22	0.40	0.24	0.17
Europe	0.12	0.09	0.11	0.10	0.19	0.11	0.14	0.16	0.15	0.10	0.03	0.07
Pacific	0.24	0.29	0.34	0.26	0.38	0.32	0.26	0.22	0.29	0.27	0.35	-0.07
Iraqi Kirkuk												
North America	0.06	0.03	0.07	0.07	0.05	0.06	0.06	0.03	0.10	0.04	0.12	-0.07
Europe	0.31	0.27	0.27	0.31	0.32	0.26	0.20	0.22	0.20	0.18	0.23	-0.05
Pacific	-	-	-	-	-	-	-	-	-	-	-	-
Iranian Light												
North America	-	-	-	-	-	-	-	-	-	-	-	-
Europe	0.15	0.24	0.23	0.28	0.20	0.21	0.25	0.26	0.21	0.27	0.26	0.00
Pacific	0.07	0.04	0.04	0.03	0.04	0.03	0.03	0.02	0.05	0.02	0.07	-0.05
Iranian Heavy[3]												
North America	-	-	-	-	-	-	-	-	-	-	-	-
Europe	0.40	0.49	0.55	0.59	0.73	0.54	0.33	0.44	0.24	0.29	0.45	-0.16
Pacific	0.57	0.52	0.51	0.41	0.51	0.49	0.48	0.52	0.54	0.38	0.69	-0.31
Venezuelan Light & Medium												
North America	0.39	0.14	0.18	0.30	0.24	0.13	0.07	-	0.06	0.16	-	-
Europe	0.07	0.02	0.02	0.01	0.02	0.02	0.01	0.03	-	-	0.04	-
Pacific	-	-	-	-	-	-	0.01	0.03	-	-	-	-
Venezuelan 22 API and heavier												
North America	0.75	0.86	0.76	0.77	0.70	0.69	0.68	0.61	0.68	0.75	0.85	-0.10
Europe	0.07	0.06	0.05	0.05	0.06	0.05	0.08	0.06	0.05	0.11	0.04	0.07
Pacific	-	-	-	-	-	-	-	-	-	-	-	-
Mexican Maya												
North America	0.93	0.91	0.82	0.80	0.84	0.84	0.72	0.64	0.83	0.69	0.77	-0.09
Europe	0.10	0.11	0.12	0.12	0.12	0.12	0.12	0.09	0.17	0.10	0.14	-0.05
Pacific	-	-	-	-	-	-	-	-	-	-	-	-
Mexican Isthmus												
North America	0.01	0.04	0.07	0.08	0.06	0.07	0.04	0.05	-	0.05	0.10	-0.04
Europe	0.01	0.02	0.01	0.02	0.00	0.01	0.02	-	0.03	0.03	-	-
Pacific	-	-	-	-	-	-	-	-	-	-	-	-
Russian Urals												
North America	0.15	0.08	0.01	-	-	0.02	-	-	-	-	0.02	-
Europe	1.72	1.80	1.69	1.86	1.51	1.61	1.75	1.88	1.73	1.63	1.85	-0.22
Pacific	-	-	-	-	-	-	-	-	-	-	-	-
Nigerian Light[4]												
North America	0.54	0.60	0.53	0.60	0.43	0.46	0.25	0.22	0.19	0.32	0.44	-0.12
Europe	0.32	0.34	0.45	0.40	0.54	0.48	0.51	0.68	0.52	0.32	0.34	-0.02
Pacific	0.00	-	0.05	0.04	0.06	0.05	0.03	0.03	0.01	0.03	0.06	-0.03
Nigerian Medium												
North America	0.21	0.25	0.18	0.18	0.18	0.14	0.04	0.02	-	0.11	0.13	-0.02
Europe	0.13	0.09	0.14	0.17	0.11	0.13	0.26	0.22	0.29	0.26	0.19	0.07
Pacific	-	-	-	-	-	-	-	-	-	-	-	-

1 Data based on monthly submissions from IEA countries to the crude oil import register (in '000 bbl), subject to availability. May differ from Table 8 of the Report.
IEA North America includes United States and Canada.
IEA Europe includes all countries in OECD Europe except Hungary. The Slovak Republic and Poland is excluded through December 2007 but included thereafter.
IEA Pacific data includes Australia, New Zealand, Korea and Japan.

2 Iraqi Total minus Kirkuk.

3 Iranian Total minus Iranian Light.

4 33° API and lighter (e.g., Bonny Light, Escravos, Qua Iboe and Oso Condensate).

Table 7
REGIONAL OECD IMPORTS[1,2]
(thousand barrels per day)

	2009	2010	2011	2Q11	3Q11	4Q11	1Q12	Jan-12	Feb-12	Mar-12	Year Earlier Mar-11	Year Earlier % change
Crude Oil												
North America	7353	7343	6703	6928	6793	6519	6019	5942	5927	6182	6532	-5%
Europe	8893	9072	8986	8846	9331	8905	9132	9402	9081	8908	8674	3%
Pacific	6082	6249	6370	6084	6260	6492	6753	6718	7145	6422	6433	0%
Total OECD	22329	22663	22058	21859	22384	21917	21904	22062	22153	21513	22023	-2%
LPG												
North America	13	8	8	4	4	3	2	0	2	3	16	-83%
Europe	260	284	307	284	304	327	311	323	294	314	303	4%
Pacific	529	558	561	547	580	546	651	576	661	717	532	35%
Total OECD	802	850	876	836	888	877	964	900	958	1034	851	22%
Naphtha												
North America	22	36	42	51	43	38	15	27	9	9	57	-84%
Europe	352	416	291	336	285	253	434	440	495	369	263	40%
Pacific	841	900	876	830	906	853	832	846	934	721	776	-7%
Total OECD	1215	1352	1209	1217	1234	1144	1280	1313	1438	1099	1097	0%
Gasoline[3]												
North America	878	789	754	981	703	654	680	719	594	720	697	3%
Europe	193	174	217	221	216	208	244	260	274	200	170	17%
Pacific	96	64	74	61	71	92	74	59	63	100	55	82%
Total OECD	1167	1027	1044	1262	990	954	998	1037	931	1021	923	11%
Jet & Kerosene												
North America	62	76	74	86	81	63	41	22	67	36	58	-37%
Europe	452	419	398	367	451	450	292	320	283	272	254	7%
Pacific	53	40	50	43	45	55	71	49	85	80	49	65%
Total OECD	567	534	522	497	578	568	404	390	436	388	360	8%
Gasoil/Diesel												
North America	55	49	34	30	32	29	31	36	24	33	33	-1%
Europe	1035	1049	1014	942	947	1075	1026	1013	954	1108	1039	7%
Pacific	87	97	128	153	123	139	138	136	96	179	123	45%
Total OECD	1177	1194	1177	1125	1102	1243	1195	1184	1074	1319	1195	10%
Heavy Fuel Oil												
North America	270	277	266	304	193	222	213	239	158	239	380	-37%
Europe	534	529	583	581	651	595	634	778	592	529	525	1%
Pacific	113	117	146	111	156	169	208	225	223	176	133	32%
Total OECD	917	923	995	996	1000	986	1055	1242	973	944	1038	-9%
Other Products												
North America	870	805	874	896	903	837	753	890	689	676	852	-21%
Europe	770	705	708	782	730	629	595	485	655	648	672	-4%
Pacific	325	335	326	251	343	328	341	363	299	360	401	-10%
Total OECD	1964	1845	1908	1930	1976	1794	1689	1738	1643	1685	1925	-12%
Total Products												
North America	2171	2040	2051	2355	1960	1845	1735	1932	1543	1716	2093	-18%
Europe	3595	3575	3518	3513	3584	3538	3535	3618	3547	3441	3226	7%
Pacific	2045	2110	2162	1995	2225	2184	2316	2254	2362	2334	2070	13%
Total OECD	7810	7725	7731	7862	7769	7566	7585	7804	7452	7491	7389	1%
Total Oil												
North America	9524	9382	8754	9283	8753	8364	7754	7875	7471	7898	9008	-12%
Europe	12488	12646	12504	12359	12915	12443	12667	13020	12628	12349	11900	4%
Pacific	8127	8360	8531	8079	8485	8676	9069	8971	9506	8756	8503	3%
Total OECD	30139	30388	29789	29721	30153	29483	29489	29866	29606	29004	29412	-1%

1 Based on Monthly Oil Questionnaire data submitted by OECD countries in tonnes and converted to barrels.
2 Excludes intra-regional trade.
3 Includes additives.

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User's Guide and Glossary to the IEA *Oil Market Report*

For information on the data sources, definitions, technical terms and general approach used in preparing the *Oil Market Report (OMR)*, *Medium-Term Oil and Gas Markets (MTOGM)* and *Annual Statistical Supplement* (current issue of the Statistical Supplement dated 10 August 2011), readers are referred to the *Users' Guide* at www.oilmarketreport.org/glossary.asp. It should be noted that the spot crude and product price assessments are based on daily Argus prices, converted when appropriate to US$ per barrel according to the Argus specification of products (Copyright © 2012 Argus Media Limited - all rights reserved).

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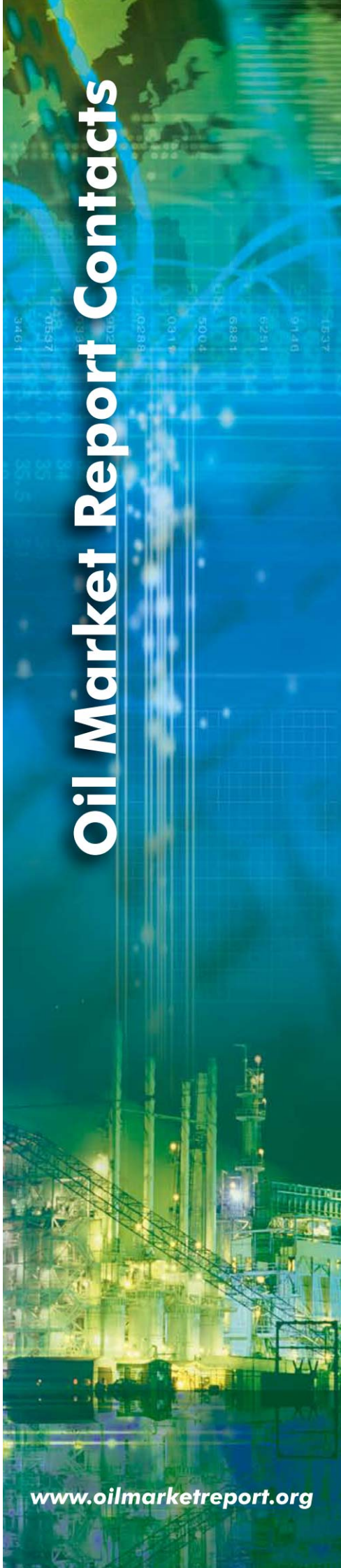

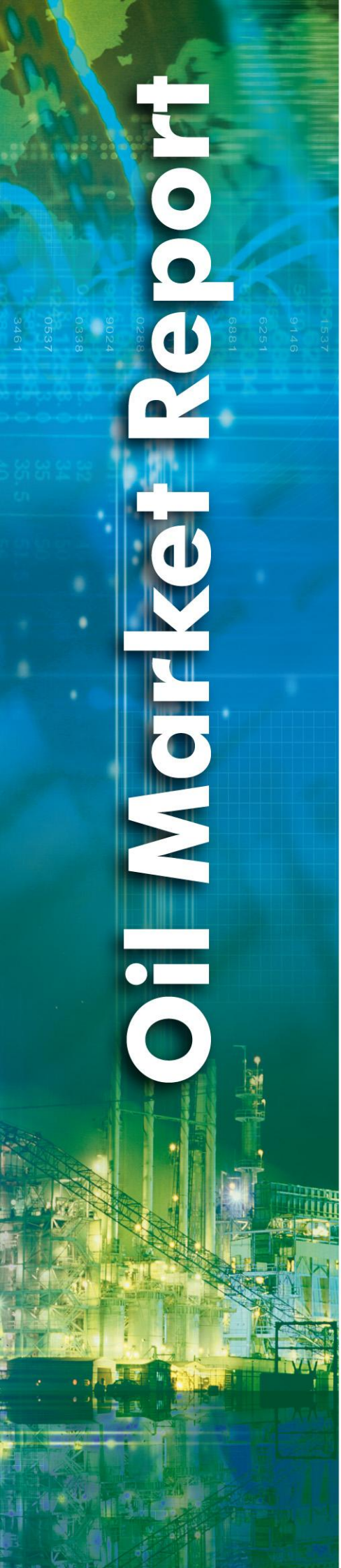

International Energy Agency

12 July 2012

HIGHLIGHTS

- **Muted economic recovery in 2013 supports a 1.0 mb/d rise in oil demand to 90.9 mb/d.** While stronger than the estimated 0.8 mb/d gain envisaged for 2012, growth remains well below the pre-credit crunch trend. Non-OECD demand overtakes that expected for the OECD in 2013, with 2Q13 the potential inflection point.

- **Rising volumes of North American and Brazilian supply should support non-OPEC growth near 0.7 mb/d in 2013, to average 53.9 mb/d.** This is after unplanned outages in 2011 and 2012 reduced growth to just 0.2 and 0.4 mb/d, respectively. OPEC NGLs output averages 6.5 mb/d next year, after growth of 0.4 mb/d in 2012 and 0.3 mb/d in 2013.

- **Following relatively weak 2011 refinery capacity growth, 2012 sees net additions of over 1 mb/d of distillation, with a further 1.3 mb/d in 2013,** exceeding demand growth and potentially capping refining margins. Upgrading and desulphurisation additions are a combined 2.6 mb/d and 2.8 mb/d this year and next, amid higher fuel quality standards.

- **OPEC June crude supply was close to recent highs at 31.8 mb/d, ahead of incoming US sanctions and an EU oil embargo on Iran.** The 'call on OPEC crude and stock change' rises to 31.2 mb/d in 3Q12, easing to average 30.5 mb/d during 4Q12-4Q13. Installed 2013 OPEC crude capacity rises by only 250 kb/d to 35 mb/d, as assumed decline in Iran partly offsets gains elsewhere.

- **OECD industry oil stocks rose by 15.4 mb in May, to 2 672 mb,** lagging a five-year average build of 25.1 mb. Forward demand cover fell by 0.8 days to 58.9 days from April, albeit still 1.4 days above the five-year average. Preliminary data indicate a 7.2 mb decline in June OECD industry inventories, in contrast with a five-year average 2.3 mb build.

- **Oil futures were volatile over June and early July, amid conflicting pressures on prices.** Benchmark crudes mostly plummeted in June after worsening euro zone woes and with a backdrop of rising global inventory. Prices reversed course towards end-June and into early July, with benchmark WTI last trading around $85/bbl and Brent at $99/bbl.

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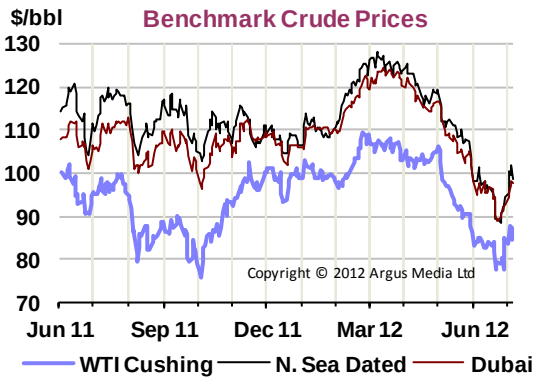
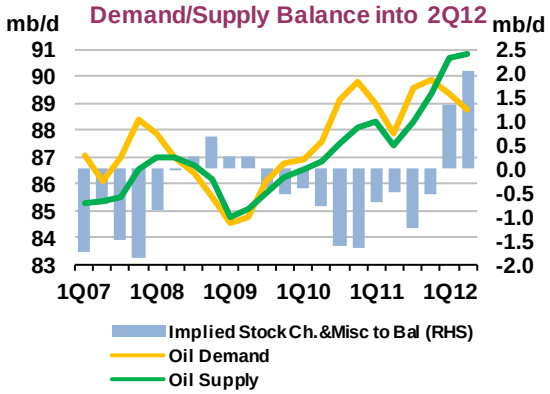
FROM *COL* TO 'CALL'

The recent track of crude prices resembles the mountain *cols* endured by the peloton of this year's *Tour de France*. Steep descent from March's Iran-derived peak was followed by a late-June climb, on resurgent Middle East Gulf tensions, alongside the threat of a Norwegian Shelf shut-in. Supply-side risks will likely continue to provide a price floor through 2012. Even a late-June, $89/bbl Brent low represented scant relief for beleaguered importers, already facing budgetary and balance of payments problems. While the economic risks encompassed in our weaker GDP and demand profile this month also hint at something of a price ceiling, the latent potential of emerging market demand growth and ongoing risk of nasty supply surprises could keep prices stubbornly high in absolute terms. This arguably represent as much of a policy challenge as does the perceived bogeyman of price volatility.





Physical market fundamentals have clearly eased since the start of the year, with an implied global stock build in 2Q12 of 2.1 mb/d, following hard on the heels of the 1.3 mb/d seen in the first quarter. Those who cite scant rationale from fundamentals for the recent fall in prices might do well to take note. However, only 15% of the implied stock build seems to have occurred in the OECD, emphasising again the need for better data on non-OECD stock levels and floating storage. With an underlying 'call on OPEC crude and stock change' for 2H12 now estimated at near 31 mb/d, OPEC producers may follow through on their mid-June pledge to curb output from current elevated levels if customers request less oil. While strict adherence to the previous 30 mb/d quota risks a renewed and potentially damaging price surge, lower production may in any case derive from the tightening restrictions on Iran's exports.

Our first detailed look at 2013 suggests an underlying 'call' oscillating between 30-31 mb/d, with a low of 29.7 mb/d in 2Q13 and a high of 30.9 mb/d in 3Q13. Economic and oil demand growth recover after an anaemic 1Q12-3Q12, with demand growth settling near +1.0 mb/d y-o-y from 4Q12 onwards. As well as providing all of 2013's growth, non-OECD total demand overtakes that of the OECD from 2Q13 onwards, a phenomenon already observed in the refining sector, where non-OECD throughputs have surged ahead of OECD crude runs since 2010. The recent start-up of nuclear capacity in Japan potentially diminishes one of the remaining props for OECD demand seen in 2011/2012. Meanwhile, China may not be the +1.0 mb/d per year demand behemoth it was in 2010, but still generates 30-40% of expected annual growth.

The recurrent supply-side problems that have been evident throughout 2011 and 2012 cause us to extend our mature oilfield contingency factor (effectively a downward adjustment) to 0.5 mb/d for 2013, acknowledging that the best laid plans of upstream companies can often go awry. Nonetheless, with non-OPEC supply potentially gaining 0.7 mb/d in 2013 (mostly from the Americas), and OPEC crude and NGL capacity rising by a further 0.5 mb/d combined, at this stage there looks to be enough supply flexibility to avoid prices enduring another category 1 climb…geopolitical surprises aside, that is.

DEMAND

Summary

- **This month sees the roll-out of our detailed global demand forecast to 2013, and although an acceleration in growth is foreseen, the predicted pace of expansion remains relatively muted at 1.0 mb/d.** Global oil product demand will average 90.9 mb/d for 2013, with non-OECD demand exceeding that for the OECD for the first time ever in 2Q13, a trend that is unlikely to be reversed. Non-OECD demand is forecast at 45.7 mb/d in 2013, 0.6 mb/d more than OECD demand.

- **Non-OECD Asia is forecast to lead the demand upside in 2013, gaining 2.9% to 21.5 mb/d**, with strong momentum maintained by highly supportive demographic and economic developments. Large gains also envisaged in oil-rich-producing regions; with former Soviet Union and the Middle East offering respective growth forecasts of 2.4% (to 4.8 mb/d) and 2.5% (to 8.3 mb/d).

- **The exceptionally testing global economic backdrop, of the early summer months, has led to a reduction in underlying economic assumptions.** GDP growth of 3.3% is now assumed for 2012 (down from the IMF's previous 3.5% projection), accelerating to 3.8% in 2013 (previously 4.1%).

- **The 2012 global demand outlook is modestly curtailed to 89.89 mb/d, 15 kb/d less than last month as the weaker economic backdrop marginally outweighs higher base data.** Revised data submissions for 2Q12 resulted in an additional 245 kb/d of oil demand, to 88.8 mb/d, with Japan alone accounting for an extra 155 kb/d, to 4.2 mb/d, with replacement demand from the Japanese power sector the dominant contributor.

Global Oil Demand (2011-2013)

(million barrels per day)

	1Q11	2Q11	3Q11	4Q11	2011	1Q12	2Q12	3Q12	4Q12	2012	1Q13	2Q13	3Q13	4Q13	2013
Africa	3.4	3.4	3.2	3.4	3.3	3.5	3.5	3.4	3.5	3.4	3.5	3.5	3.5	3.5	3.5
Americas	30.2	29.9	30.4	30.1	30.2	29.6	29.9	30.5	30.3	30.1	29.8	30.0	30.6	30.5	30.3
Asia/Pacific	28.7	27.4	27.5	29.0	28.1	29.6	28.3	28.2	29.6	29.0	30.2	28.9	28.6	30.0	29.4
Europe	14.9	14.9	15.5	14.9	15.0	14.4	14.4	15.0	14.7	14.6	14.3	14.3	15.0	14.7	14.6
FSU	4.3	4.5	4.7	4.7	4.5	4.6	4.7	4.8	4.8	4.7	4.7	4.8	4.9	4.9	4.8
Middle East	7.5	7.9	8.3	7.8	7.9	7.7	8.1	8.5	8.0	8.1	7.9	8.3	8.7	8.2	8.3
World	**89.0**	**87.9**	**89.6**	**89.9**	**89.1**	**89.4**	**88.8**	**90.4**	**90.9**	**89.9**	**90.5**	**89.9**	**91.3**	**91.8**	**90.9**
Annual Chg (%)	2.4	0.4	0.5	0.1	0.8	0.4	1.0	1.0	1.2	0.9	1.2	1.2	1.0	0.9	1.1
Annual Chg (mb/d)	2.1	0.3	0.4	0.1	0.7	0.3	0.9	0.9	1.1	0.8	1.1	1.1	0.9	0.8	1.0
Changes from last OMR (mb/d)	-0.05	0.02	0.02	0.02	0.00	-0.12	0.24	-0.09	-0.10	-0.02					

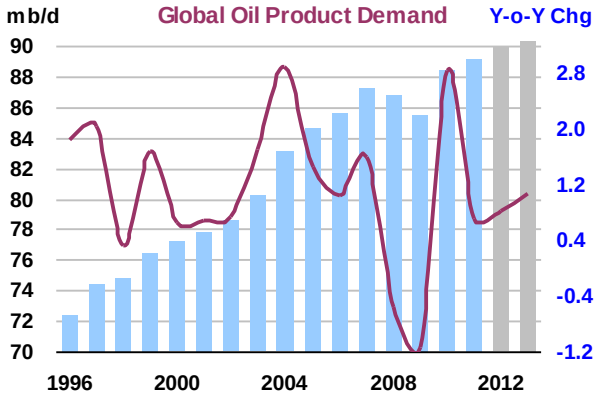
Global Overview

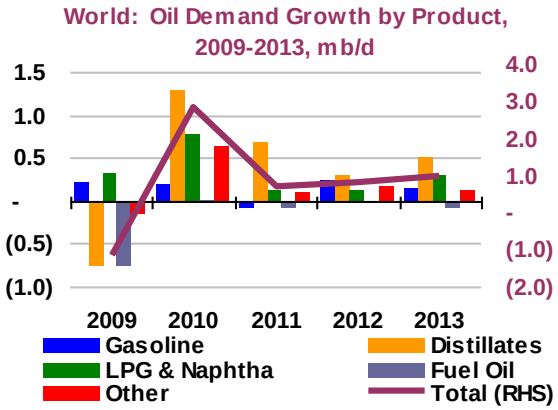
This month's report extends the outlook for global oil product demand to 2013, with growth of 1.0 mb/d (or 1.1%) forecast, taking total demand to an average of 90.9 mb/d. After two years of relatively flat growth – up by 0.7 mb/d in 2011 and an anticipated 0.8 mb/d in 2012 – the predicted 1.0 mb/d growth rate for 2013 is unmistakeably an acceleration, albeit a very modest one. Underpinning the predicted uptick in growth in 2013 is a combination of the strengthening economic backdrop and mildly lower oil prices, as incorporated in the prevailing rolling three-month average futures strip. Economic growth of around 3.8% is assumed for 2013, half a percentage point up on the downgraded 2012 growth rate of 3.3% (see *Lower Economic Assumptions*). The forward price curve, meanwhile, assumes an additional real price contraction of over 7% in 2013, marginally supporting demand.

Non-OECD oil demand is expected to rise above that for the OECD in 2013, with respective average consumption rates of 45.7 mb/d and 45.1 mb/d anticipated. We envisage the non-OECD's ascendancy to be confirmed in 2Q13, and to be sustained thereafter. Of the main product categories, gasoil led this reversal, as non-OECD gasoil demand overtook its OECD counterpart in 2Q09. OECD consumption of

gasoline, naphtha and jet/kerosene demand however remain ahead of that in the non-OECD; OECD gasoline demand forecast at 13.8 mb/d in 2013 is 4.9 mb/d above non-OECD consumption, while the respective differences for naphtha and jet/kerosene are forecast at 550 mb/d and 810 mb/d.

The outlook for oil demand in 2012 has been very slightly curtailed since last month, revised down by 15 kb/d to 89.89 mb/d. The reduction in the global growth estimate for 2012 has occurred despite higher base data, with the 2Q12 demand estimate now 245 kb/d higher than last month's report at 87.78 mb/d, and lower underlying economic projections (see *Lower Economic Assumptions*) proving decisive. Japan provided the majority of the base data revisions, with an additional 155 kb/d of consumption added to the 2Q12 estimate. Global oil demand growth in 2012 is thus forecast to remain relatively entrenched at around 0.8 mb/d or 0.9%. Non-OECD demand dominates from a growth perspective, up 1.2% or 1.2 mb/d, to 44.6 mb/d.





Lower Economic Assumptions

The exceptionally challenging macroeconomic backdrop endured these past two months has forced the IEA to curb the economic assumptions that underlie the demand model. Economic expectations have worsened from those contained in the IMF's April WEO which we previously deployed. Concerns are mounting on the sustainability of the euro zone, there has been a definite easing in China's economic impetus and the US outlook has weakened. This leads to a reduction of expected 2012 GDP growth from 3.5% to 3.3%.

With all else held equal, this weaker economic backdrop would curtail the 2012 demand projection. However, the negative demand-side impact has been diminished by a sharp upwards revision in base data for April (+275 kb/d) and May (+500 kb/d), both largely attributable to y-o-y changes in Japan. Global oil demand growth should thus remain buttressed at around 0.8 mb/d in 2012.

Economic growth will then likely strengthen in 2013, albeit not to the heady heights of 4.1% previously assumed by the IMF. Ongoing debt concerns across the developed world will likely see associated austerity measures curtailing government, business and consumer expenditure levels alike. A global economic growth rate of 3.8% is assumed for 2013, up by half a percentage point on the 2012 estimate but well down on the previous IMF assumption, which was conditional on a relatively strong economic recovery. (Note: the IMF plans to release updated forecasts in mid-July.) Driven by these revised economic projections, global oil demand growth of 1.0 mb/d or 1.1% is expected for 2013.

Real GDP Growth
OMR dated 12 July 2012

% change	2012	2013
WORLD	**3.3**	**3.8**
OECD	**1.3**	**1.9**
OECD, North America	2.0	2.5
OECD, Europe	0.1	1.1
OECD, Pacific	2.5	2.4
Non-OECD	**5.5**	**5.8**
Africa	4.9	4.7
Latin America	3.8	4.1
China (excl. Hong Kong)	8.2	8.5
Other Asia	5.5	6.0
Non-OECD Europe	1.4	2.2
FSU	3.1	3.1
Middle East	3.2	3.0

Sources: IMF, IEA

Current vs. Previous
OMR dated 12 July 2012

	2012	2013
WORLD	**(0.2)**	**(0.2)**
OECD	**(0.2)**	**(0.2)**
OECD, North America	(0.2)	0.0
OECD, Europe	(0.1)	(0.4)
OECD, Pacific	-	-
Non-OECD	**(0.2)**	**(0.3)**
Africa	(0.0)	(0.1)
Latin America	(0.0)	(0.1)
China (excl. Hong Kong)	(0.1)	(0.3)
Other Asia	(0.2)	(0.3)
Non-OECD Europe	(0.5)	(0.7)
FSU	(1.0)	(1.0)
Middle East	(0.0)	(0.1)

OECD

The preliminary data series for May depicts a strong improvement in OECD demand, with a near flattening in y-o-y growth apparently ending the previously heavily falling trend. May's 60 kb/d y-o-y decline is a sharp strengthening from the average 750 kb/d decline of the previous 14 months. Gasoline dominates the OECD change, as May's 45 kb/d correction was much shallower than the 14-month average of -340 kb/d. North America and, to a lesser degree, the OECD Pacific account for the most notable gasoline changes. Having endured a 14-month average decline of 210 kb/d, preliminary North American gasoline demand showed a 65 kb/d y-o-y gain in May.

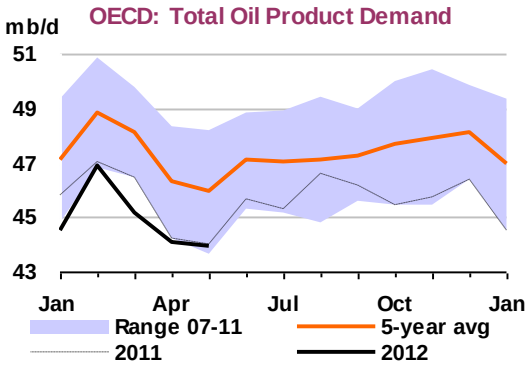
OECD Demand based on Adjusted Preliminary Submissions - May 2012

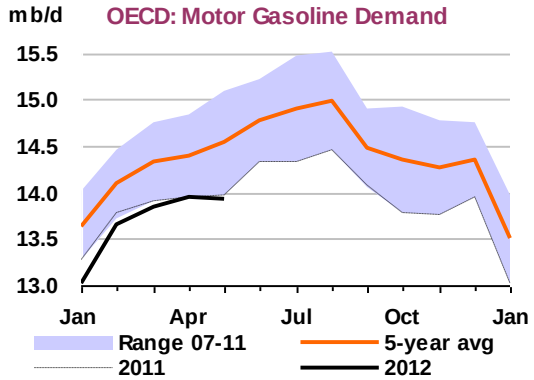
(million barrels per day)

	Gasoline		Jet/Kerosene		Diesel		Other Gasoil		RFO		Other		Total Products	
	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa
OECD North America*	**10.42**	**0.6**	**1.60**	**-1.7**	**4.06**	**2.1**	**0.68**	**-6.1**	**0.68**	**-20.5**	**5.39**	**-0.87**	**22.83**	**-0.7**
US50	8.80	0.2	1.41	-2.1	3.43	1.5	0.22	-18.2	0.35	-25.0	4.08	-0.1	18.29	-0.7
Canada	0.75	2.0	0.10	1.7	0.24	2.1	0.28	-2.1	0.09	9.8	0.66	-8.8	2.12	-1.8
Mexico	0.81	4.0	0.05	0.6	0.34	8.5	0.15	8.5	0.15	-30.8	0.60	3.6	2.10	1.0
OECD Europe	**2.03**	**-5.2**	**1.23**	**-1.0**	**4.26**	**-4.3**	**1.39**	**4.2**	**1.14**	**-6.7**	**3.47**	**-4.3**	**13.52**	**-3.5**
Germany	0.45	-6.7	0.19	2.9	0.66	-6.1	0.31	8.1	0.16	21.7	0.54	-9.5	2.33	-3.1
United Kingdom	0.34	-1.9	0.30	2.4	0.47	4.3	0.10	-2.2	0.05	-15.0	0.27	-10.9	1.53	-1.6
France	0.18	-8.2	0.15	-0.5	0.67	-3.6	0.21	14.8	0.07	-9.2	0.45	2.5	1.72	-0.7
Italy	0.20	-9.6	0.08	-5.4	0.47	-8.7	0.08	-3.9	0.09	-23.2	0.35	-10.3	1.28	-10.0
Spain	0.11	-8.5	0.12	-6.8	0.43	-6.1	0.13	-4.8	0.17	-8.9	0.28	-8.6	1.23	-7.2
OECD Pacific	**1.49**	**0.3**	**0.57**	**1.3**	**1.15**	**5.1**	**0.42**	**4.5**	**0.78**	**29.2**	**3.17**	**11.4**	**7.57**	**8.4**
Japan	0.93	-0.1	0.31	1.6	0.43	10.6	0.31	4.7	0.47	35.0	1.78	16.8	4.22	11.5
Korea	0.20	5.6	0.12	3.2	0.29	7.0	0.10	4.7	0.28	22.8	1.19	6.0	2.18	7.8
Australia	0.31	-1.0	0.12	0.2	0.38	-1.7	0.00	0.0	0.02	-5.4	0.18	-0.1	1.02	-1.1
OECD Total	**13.94**	**-0.3**	**3.40**	**-1.0**	**9.47**	**-0.6**	**2.49**	**1.2**	**2.60**	**-3.1**	**12.03**	**1.0**	**43.93**	**-0.1**

* Including US territories

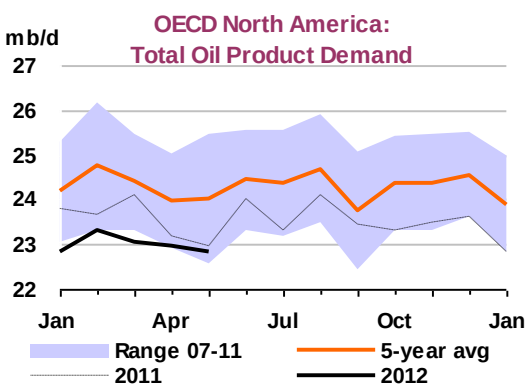
A large portion of the recent relative improvement in the y-o-y data results from the artificially depressed levels of OECD demand in April/May 2011, a consequence of the Japanese tsunami. Whether the rebound evident in June 2011 demand is repeated this year remains questionable, given the weakening economy. All told, structural OECD demand decline is expected to become re-established for the rest of 2012, even if the pace of decline ebbs in 2013 with stronger economic growth.

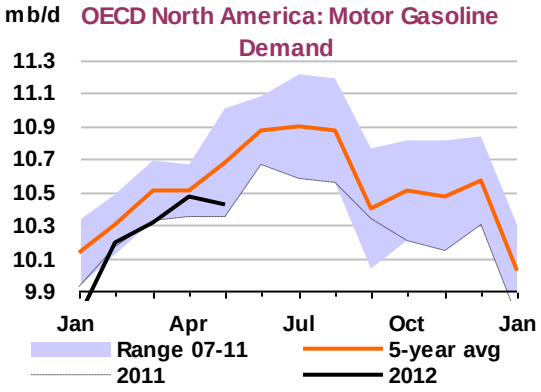




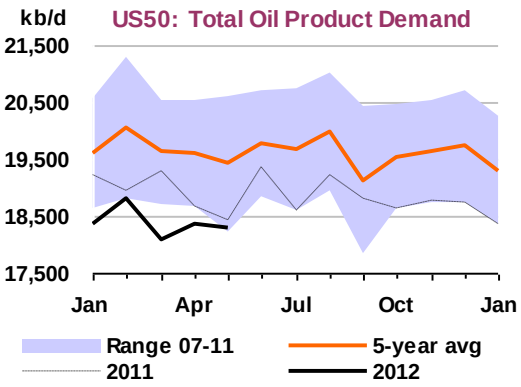
North America

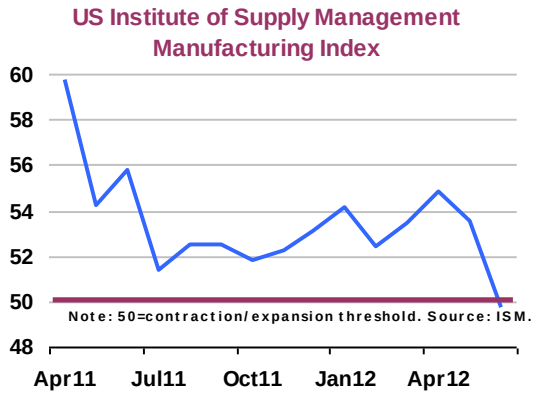
Tentative signs that the weakening North American oil demand trend is bottoming-out continued. Preliminary May data showed a 0.7% y-o-y contraction, after April's confirmed 0.8% drop, a relative improvement on the previous 12-month average of -2.1%. Reversing its previously lagging trend, gasoline led the recent North American improvement, with preliminary consumption growth of 0.6% estimated for May, to 10.4 mb/d, after April's 1.2% gain.





Preliminary estimates of **US** demand (excluding territories) in May depict a 0.7% y-o-y contraction, to 18.3 mb/d, whereas the 14-month average is -2.6%. Absolute gains in diesel (+1.5%) and LPG (+0.5%) led the way, as these products gained support from the burgeoning US light tight oil boom. Modest signs of life in the US housing market have emerged, which if they become entrenched could support a recuperation in domestic consumer sentiment and, in turn, the demand for oil.





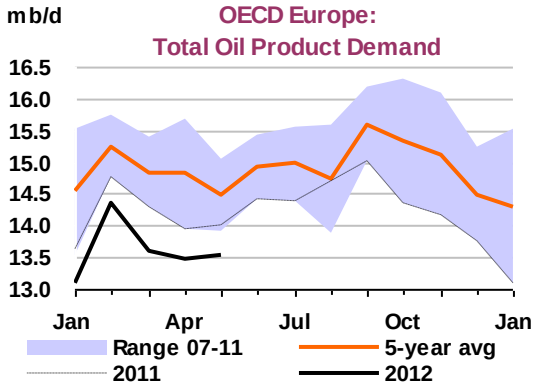
Caution is maintained however concerning the short-term US demand outlook. Not only did consumption rise very sharply on a month-on-month basis in June 2011 (+5%), which could depress the y-o-y measure for June 2012, but also underlying economic sentiment has since deteriorated. From an oil consumption perspective, the all-important US manufacturing sector has fared particularly badly recently, a worrisome indicator for distillates in particular, as the Institute of Supply Management's Manufacturing index fell below the key 50-threshold for June. Such a sub-50 reading implies expectations of deteriorating manufacturing activity, the first time this has occurred since July 2009.

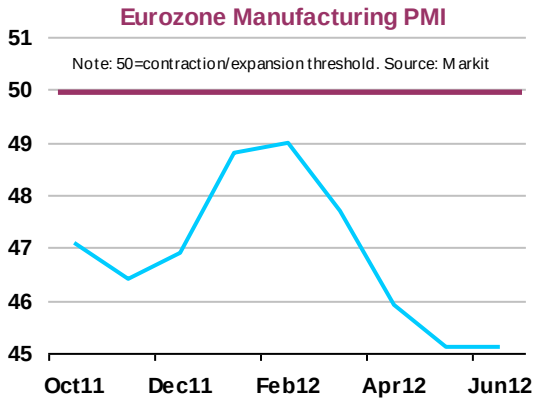
US consumption is forecast to remain in negative y-o-y territory through the very short term, before returning to a rising trend once again in the winter of 2012. Not only should the underlying economics marginally improve in the later stages of the year, but also an assumed resumption of more normal winter weather conditions are expected to support heating oil demand following the exceptionally mild climate of 2011/2012. For 2012 as a whole, US consumption of around 18.7 mb/d is anticipated, down 1.0% on the year. Demand is expected to level off at 18.7 mb/d in 2013, as the impact of continued US efficiency gains offsets the supportive influence from slightly stronger economic growth and lower (but nonetheless still elevated) prices.

Europe

The European demand outlook has similarly deteriorated since last month's report, as the ongoing economic malaise has been confirmed by weaker-than-expected recent oil data. Consumption in OECD

Europe averaged 13.5 mb/d in April, 95 kb/d less than assumed in last month's report and a y-o-y decline of 0.5 mb/d or 3.4%. The preliminary series for May points towards a continuation of this 13.5 mb/d demand level, a further y-o-y drop of 0.5 mb/d.

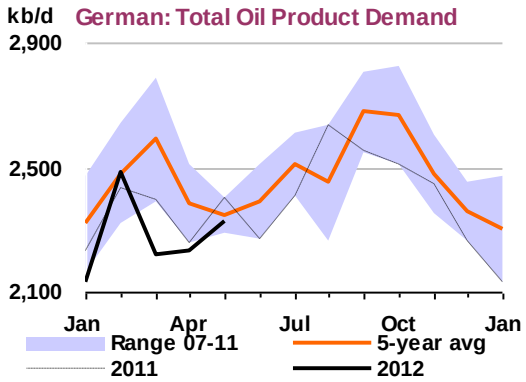


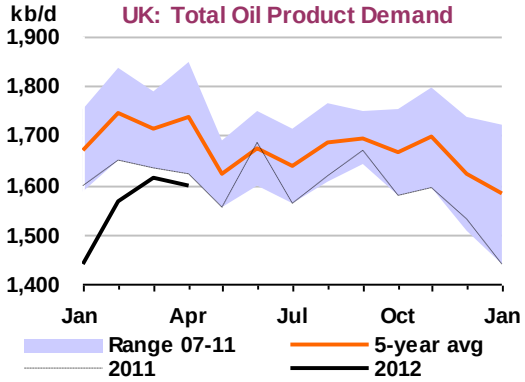


Looking ahead, the weak economic backdrop is likely to continue, a sentiment encapsulated by the continued sub-50 euro zone Manufacturing Purchasing Managers' Index (PMI) for June. Demand faces a 3.4% drop to 13.6 mb/d in 3Q12, with the decline moderating in 4Q12 to 0.8%, partly a response to the sharp 5.1% decline seen in 4Q11. The predicted pace at which European demand falls eases back significantly in 2013, to -0.4%, taking demand in OECD Europe to 13.8 mb/d. This relative improvement is underpinned by a combination of a slightly stronger macroeconomic climate, lower prices and a flattening in efficiency gains amid suppressed investment in more efficient capital stock.

Germany consumed 2.3 mb/d of oil products in May, according to the preliminary data series, a y-o-y decline of 3.1%. Alongside downward-revised April data, consumption for the year as a whole is now forecast to average 2.4 mb/d, a decline of 0.9% on 2011 and a sharp deterioration on the previous projection of a 0.4% loss. Significantly lower gasoline estimates lead the reversal, with a projected decline of 0.9% now assumed for 2012, whereas previously a 0.5% gain was assumed; the revised series for April (-4.3% y-o-y, previously +0.7%) and May (-6.7%, previously -0.7%) forced a change in the German gasoline outlook. A modest 0.1% expansion is foreseen in 2013, supported by the slightly more robust macroeconomic environment.

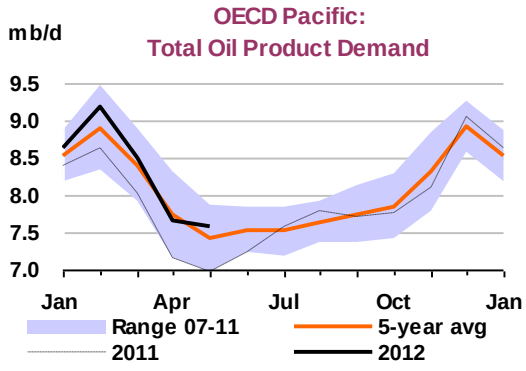
The **UK** consumed roughly 1.6 mb/d of oil products in April, a modest 1.3% y-o-y decline and 55 kb/d higher than our earlier estimate. Jet fuel demand held up amid sterling exchange rates which are conducive to tourism. Despite retaining a degree of pessimism on the UK consumption trend for 2012, the projected decline rate has been scaled back to -2.8% (from -3.1% a month earlier), given the higher base data. Consumption should flatten in 2013 on the cautious assumption that the underlying macroeconomic environment picks up, with GDP growth of around 1.5% assumed.

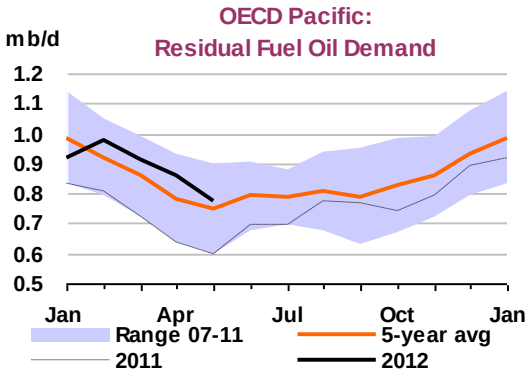




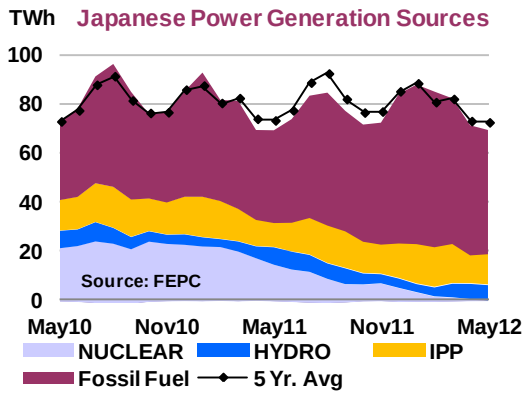
Pacific

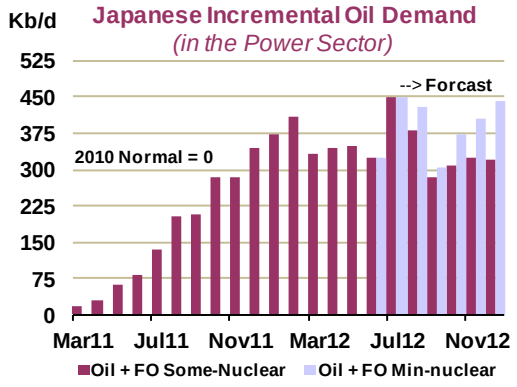
The Japanese power sector continues to dominate the OECD Pacific demand story, as the sector short of nuclear capacity made strident efforts to garner alternative supplies, notably residual fuel oil and 'other' products, including crude for direct burn. Total OECD Pacific demand averaged 7.6 mb/d according to preliminary data for May, a rise of 8.4% on May 2011. Fuel oil (up 29.2%, to 0.8 mb/d) and 'other' products (+34.6%, to 0.6 mb/d) led the way, although big gains were seen elsewhere, as year-earlier consumption was depressed by the impact of the earthquake and tsunami.





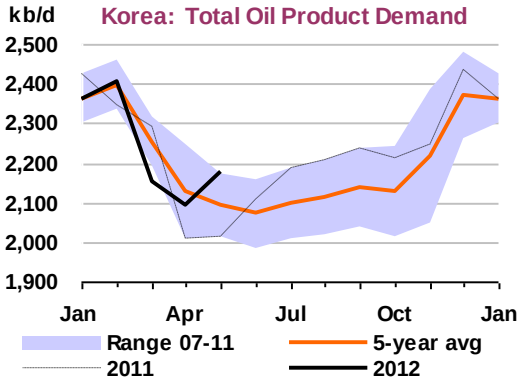
Japanese demand in April and May has been revised up by 150 kb/d and 200 kb/d, respectively, on stronger demand for light and middle distillates due to the lagged reconstruction efforts. Oil demand in 2012 is now expected to grow by 4.1%, or 180 kb/d, to 4.6 mb/d, as power plant outages continue. Two nuclear plants, that provided 1 812 MW each, will restart in July, ameliorating power generation constraints. Summer oil demand for power remains a key uncertainty amid new thermal capacity additions and voluntary demand restraint. Our outlook assumes either 'minimal nuclear' (i.e. 2 reactors) or 'some nuclear' (i.e. up to 6 reactors or 6 390 MW of generating capacity) coming back by end-2012. Incremental demand above 2010 levels reaches 380 kb/d in the 'minimal nuclear' and 350 kb/d in the 'some nuclear' case. The difference between the scenarios for 2H12 is estimated at 55 kb/d. Under our base case, 'some nuclear' model, Japanese oil product demand is expected to contract by 3% in 2013, or 150 kb/d, to 4.5 mb/d, as an assumed 15% to 20% of previous normal nuclear generation (23 TWh) returns to displace residual fuel and direct crude burning.

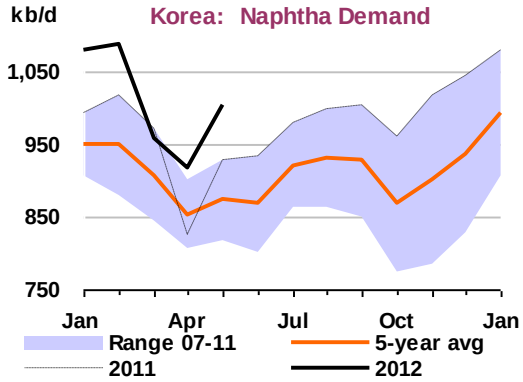




Exceptionally strong **Korean** demand in May, up 7.8% y-o-y to 2.2 mb/d, led to a 55 kb/d upgrade in our 2Q12 forecast compared to last month and a 10 kb/d increase in our projection for the year as a whole. South Korean consumption in 2012 is now forecast to average 2.3 mb/d, a gain of 1.1%. A modest decline of around 0.2% is then assumed for 2013, with the growth forecast curbed by government efforts to curtail oil demand (see *13 June 2012 OMR*) and ongoing macroeconomic uncertainty. The big increase

in Korean demand seen in May was reflected across most of the main oil products, although fuel oil (+22.8%) and naphtha (9.2%) posted particularly sharp y-o-y gains. Naphtha's May rise, alongside strong April data (+11.3%), confirmed March's (-1.3%) dip to be an anomaly caused by additional seasonal maintenance of petrochemical facilities. The still relatively strong industrial backdrop (+2.6% y-o-y) maintains support from the expanding South Korean petrochemical sector.





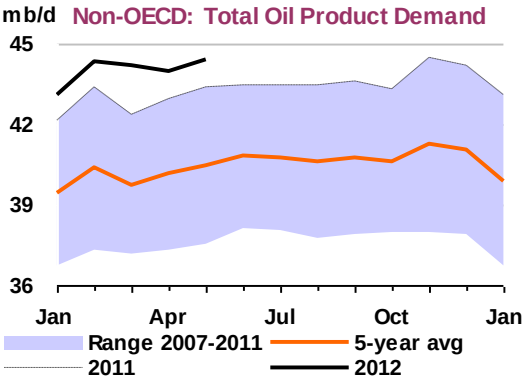
Non-OECD

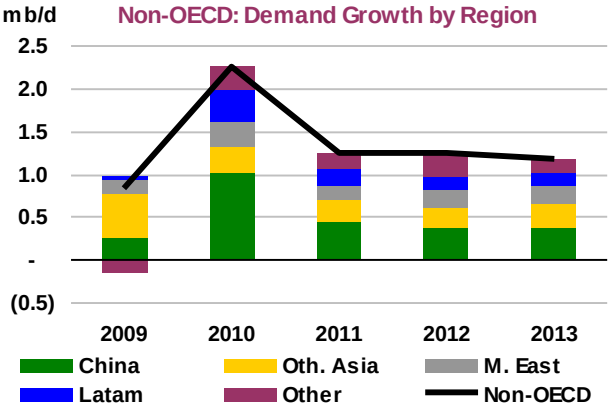
Non-OECD demand remains the engine of global oil demand growth, with the latest preliminary estimates for May pointing towards a 2.5% y-o-y gain to 44.4 mb/d. Naphtha demand led the way, up 6.5% to 2.7 mb/d, as the Chinese petrochemical sector continues to expand rapidly on a y-o-y basis. Strong growth has also been seen in the key transportation markets, with gasoline demand up 2.8% (to 8.6 mb/d), jet/kerosene up 2.9% (to 2.7 mb/d) and gasoil up 3.0% (to 14.0 mb/d), although gasoil also received additional support from the still strong non-OECD industrial sector.

Non-OECD: Demand by Product
(thousand barrels per day)

	Demand			Annual Chg (kb/d)		Annual Chg (%)	
	Mar-12	Apr-12	May-12	Apr-12	May-12	Apr-12	May-12
LPG & Ethane	4,579	4,529	4,564	58	53	1.3	1.2
Naphtha	2,585	2,588	2,731	-31	166	-1.2	6.5
Motor Gasoline	8,574	8,582	8,562	465	235	5.7	2.8
Jet Fuel & Kerosene	2,793	2,661	2,747	-11	78	-0.4	2.9
Gas/Diesel Oil	13,967	13,871	14,030	284	412	2.1	3.0
Residual Fuel Oil	5,631	5,629	5,546	134	116	2.4	2.1
Other Products	6,080	6,115	6,250	103	3	1.7	0.1
Total Products	**44,210**	**43,976**	**44,430**	**1,002**	**1,063**	**2.3**	**2.5**

Non-OECD oil demand growth near-3% is forecast in 2012, to 44.6 mb/d. In comparison an OECD demand estimate of 45.3 mb/d is assumed. Further non-OECD growth of 2.5% is foreseen for 2013, taking total non-OECD demand to 45.7 mb/d, while the respective estimate for the OECD is 45.1 mb/d. As already noted, this marks the volumetric ascendancy of non-OECD demand over that for the OECD, a trend that is unlikely to ever be reversed. Transportation fuels are expected to continue to drive growth, albeit at a moderated level in the light of the challenging economic backdrop now faced by most non-OECD countries (in terms of weaker export potential) and some, albeit slow, progress in reducing subsidies.





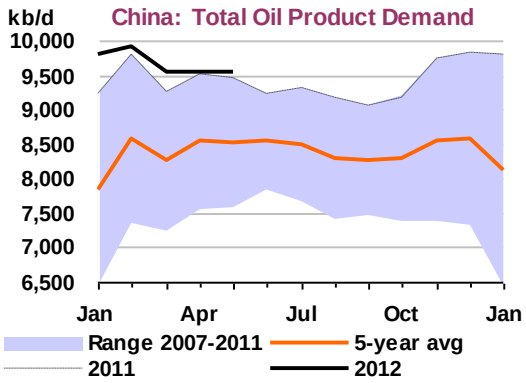
Non-OECD: Demand by Product

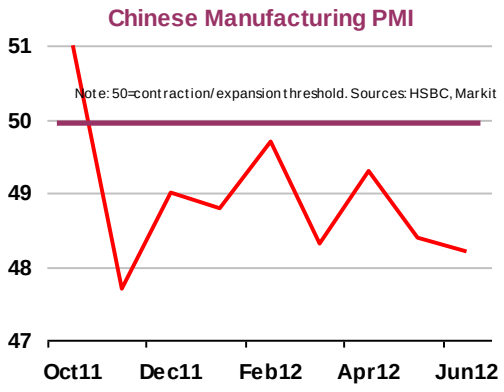
(thousand barrels per day)

	Demand			Annual Chg (kb/d)		Annual Chg (%)	
	2011	2012	2013	2012	2013	2012	2013
LPG & Ethane	4,573	4,664	4,878	91	214	2.0	4.6
Naphtha	2,558	2,592	2,631	34	39	1.3	1.5
Motor Gasoline	8,347	8,688	8,911	341	224	4.1	2.6
Jet Fuel & Kerosene	2,749	2,810	2,865	61	55	2.2	2.0
Gas/Diesel Oil	13,595	14,000	14,397	405	397	3.0	2.8
Residual Fuel Oil	5,546	5,632	5,652	86	20	1.5	0.4
Other Products	5,985	6,206	6,384	221	178	3.7	2.9
Total Products	**43,353**	**44,592**	**45,718**	**1,239**	**1,126**	**2.9**	**2.5**

China

The Chinese apparent demand outlook for 2012 has been revised marginally upwards, despite continued signs of weaker underlying economic conditions, as historical data have tended to be revised higher. Amended April statistics, for example, were 90 kb/d higher than the preliminary numbers, while estimates for May are 10 kb/d above last month. Nevertheless, demand growth has eased back sharply recently, from the average expansion of 12.7% seen in 2010, with y-o-y growth of 0.3% now assumed for April and 0.8% in May.





Near-5% growth is forecast to resume in the second half of 2012, leading to an average annual expansion in oil demand of 3.9%, amid cautious optimism that the Chinese authorities will provide sufficient stimulus measures to support such a growth rate. July's interest rate cut (the second successive monthly reduction); a large infrastructure spending programme; and massive injections of money into the financial markets tend to support this view. Economic growth of 8.2% is assumed for 2012, accelerating

to 8.5% in 2013. Oil growth could then ease back to a more sustainable 3.7% in 2013, taking total Chinese demand to 10.1 mb/d, as many of the aforementioned government-led measures are forecast to recede.

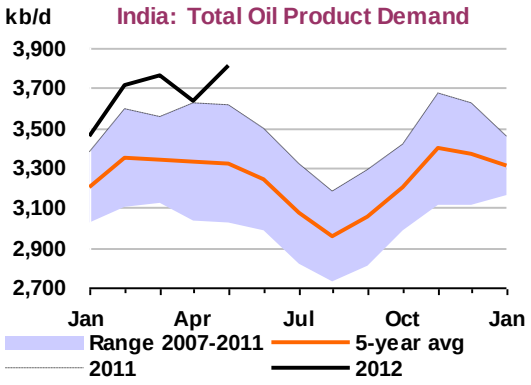
China: Demand by Product
(thousand barrels per day)

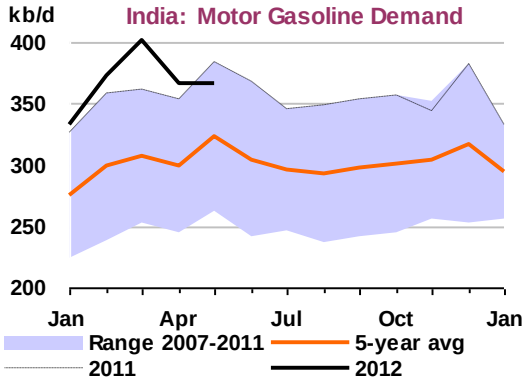
	Demand			Annual Chg (kb/d)		Annual Chg (%)	
	2011	2012	2013	2012	2013	2012	2013
LPG & Ethane	693	688	699	-5	11	-0.7	1.5
Naphtha	889	939	990	49	52	5.5	5.5
Motor Gasoline	1,655	1,778	1,832	123	54	7.4	3.0
Jet Fuel & Kerosene	390	416	427	25	12	6.5	2.8
Gas/Diesel Oil	3,335	3,424	3,544	89	120	2.7	3.5
Residual Fuel Oil	515	532	534	17	3	3.3	0.5
Other Products	1,919	1,983	2,094	64	112	3.3	5.6
Total Products	**9,396**	**9,758**	**10,121**	**363**	**362**	**3.9**	**3.7**

Transportation and industrial fuels such as naphtha are forecast to provide the greatest upside momentum to Chinese demand in 2013. Gasoil/diesel leads the way, with projected 2013 demand up 3.5% to 3.5 mb/d, on strong growth in both transport and industry. Naphtha, meanwhile, should see demand growth of around 5.5% in 2013, to 1.0 mb/d, as the Chinese petrochemical industry makes further competitive inroads against international rivals outside of North America.

Other Non-OECD

The **Indian** outlook for 2012 has been raised and demand is foreseen accelerating still further in 2013, as government-induced plans to raise infrastructure spending will likely support stronger growth for commercial fuel usage. These gains come on the back of the surprisingly strong preliminary demand numbers for May, which showed a 5.4% y-o-y gain, or 110 kb/d more oil than we had assumed last month. Consumption of unsubsidised gasoline bucked the otherwise strongly rising demand trend, falling for the first time since November, down 4.6% y-o-y to 365 kb/d. India is forecast to consume an average of 3.6 mb/d in 2012, up 3.3% on the year earlier. Growth should then accelerate to 3.5% in 2013, to 3.7 mb/d, as moves to reduce subsidies remain impeded by inflationary concerns and political opposition.





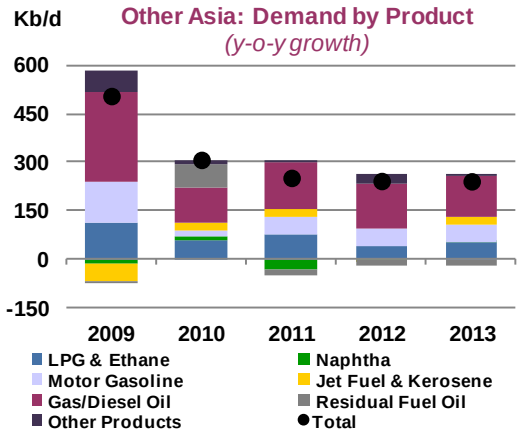
Other Asia: Demand by Product

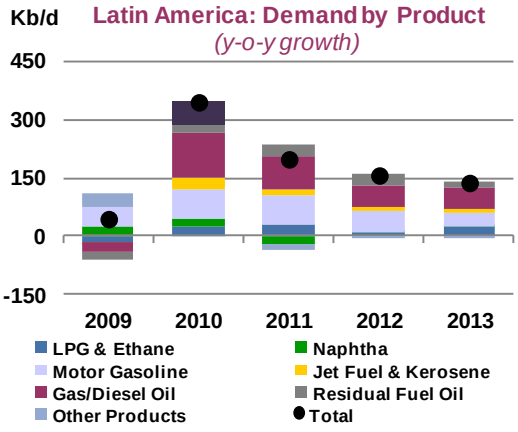
(thousand barrels per day)

	Demand			Annual Chg (kb/d)		Annual Chg (%)	
	2011	2012	2013	2012	2013	2012	2013
LPG & Ethane	1,125	1,166	1,219	41	52	3.7	4.5
Naphtha	987	984	986	-3	2	-0.3	0.2
Motor Gasoline	1,597	1,652	1,702	55	50	3.5	3.0
Jet Fuel & Kerosene	961	961	985	0	24	0.0	2.5
Gas/Diesel Oil	3,395	3,531	3,657	136	126	4.0	3.6
Residual Fuel Oil	1,733	1,717	1,696	-16	-21	-0.9	-1.2
Other Products	1,070	1,100	1,108	29	8	2.7	0.7
Total Products	**10,867**	**11,110**	**11,352**	**243**	**242**	**2.2**	**2.2**

Excludes Mainland China

Demand in the **other Asia** region, which includes India but not China, has been revised up marginally, by 5 kb/d in 2011 and by 50 kb/d in 2012, following updates to the base data for **Indonesia**. Total other Asian product demand in both 2012 and 2013 is forecast to grow by an average of 2.2%, or 240 kb/d, to 11.1 mb/d and 11.4 mb/d, respectively. In both years, gasoil/diesel, motor gasoline and LPG are expected to drive demand growth in the region. Transport fuels' growth remains strong, supported by the region's ongoing economic strength, lower international products' prices and persistent governmental subsidies schemes, most notably in India and Indonesia. Moves in **Thailand** to phase out 91 RON gasoline by 1 October have been confirmed, despite concerns that such a move would mean that nearly 1.1 million vehicles would be running on sub-optimum fuel. The temporary closure of two Formosa Petrochemical cracking units in **Taiwan** disrupted naphtha demand in June/July, although full consumption should resume once again later in July.





Latin American demand has been revised down by 40 kb/d in 2011 and by 70 kb/d in 2012, following historical data revisions for **Venezuela**. Total product demand in 2012 is seen growing by 2.4%, or 160 kb/d, to 6.7 mb/d, led by jet/kerosene, residual fuel and motor gasoline and by 2.1%, or 140 kb/d, to 6.9 mb/d in 2013 driven by LPG, jet/kerosene and gasoil/diesel. **Brazil** accounts for almost 40% of Latin American demand growth in 2012 and 2013, especially in gasoil/diesel and jet/kerosene, on the back of vehicle sales and air travel. **Argentina** is also experiencing a slowdown of vehicle sales, after record highs in 2011, on the back of its economic deceleration. Stronger demand for LPG and residual fuel oil would not be a complete surprise as Argentina struggles to secure LNG imports for power plants and industry.

Latin America: Demand by Product

(thousand barrels per day)

	Demand			Annual Chg (kb/d)		Annual Chg (%)	
	2011	2012	2013	2012	2013	2012	2013
LPG & Ethane	664	673	697	9	24	1.4	3.6
Naphtha	194	194	194	0	0	0.1	0.1
Motor Gasoline	1,636	1,690	1,726	54	36	3.3	2.1
Jet Fuel & Kerosene	290	303	311	13	9	4.3	2.9
Gas/Diesel Oil	2,128	2,180	2,238	53	57	2.5	2.6
Residual Fuel Oil	837	869	884	32	14	3.9	1.6
Other Products	836	835	834	-2	0	-0.2	-0.1
Total Products	**6,585**	**6,744**	**6,884**	**159**	**140**	**2.4**	**2.1**

Excludes Chile

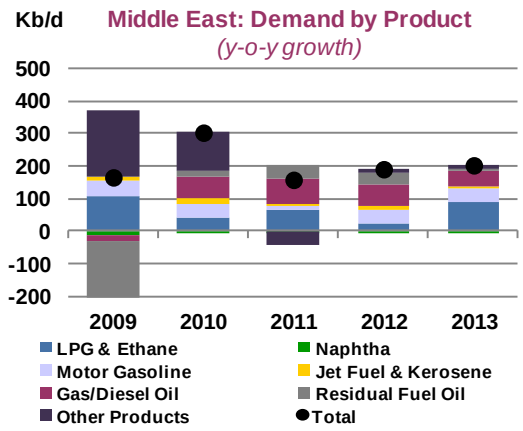
Middle Eastern demand is expected to grow by 2.4% in 2012, or 190 kb/d, to 8.1 mb/d, with gasoil/diesel, motor gasoline and residual oil providing particularly strong gains. Oil product demand is seen growing by a further 2.5% in 2013, or 200 kb/d, to 8.3 mb/d, driven higher by LPG, gasoil/diesel and motor gasoline. **Saudi Arabia** accounts for almost 60% of demand growth in 2013 as the Kingdom continues to heavily subsidise transport fuels and provide cheap petrochemical feedstock. Direct crude oil burn during 3Q12 is expected to reach 770 kb/d on top of 310 kb/d of residual fuel oil demand, amid the seasonal peak in electricity demand for summer cooling. **Iran**, on the other hand, is seen contracting as slightly higher transport fuel prices dent demand and economic activity slows on account of the oil embargo and economic sanctions. Iranian demand is expected to contract by 4.1% in 2012, to 2.0 mb/d, and by a further 4.0% in 2013; any changes in the embargo/sanctions structure impacting on demand. **UAE** and **Qatar** are expected to accelerate petrochemical demand for light distillates in 2013, as expansions in ethane cracker capacity boost operations with access to cheap feedstock.

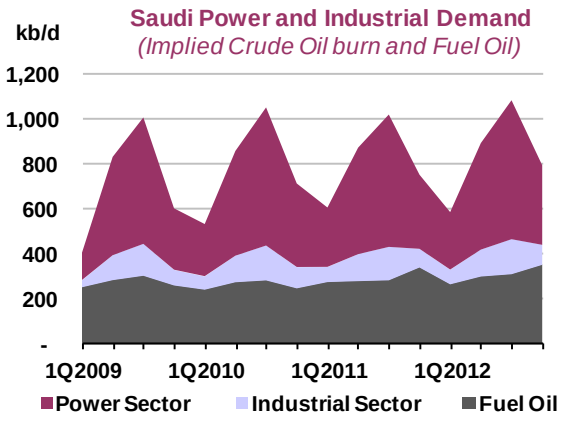
Middle East: Demand by Product

(thousand barrels per day)

	Demand			Annual Chg (kb/d)		Annual Chg (%)	
	2011	2012	2013	2012	2013	2012	2013
LPG & Ethane	1,223	1,248	1,337	25	90	2.0	7.2
Naphtha	132	132	132	0	0	-0.3	0.0
Motor Gasoline	1,397	1,437	1,477	40	40	2.8	2.8
Jet Fuel & Kerosene	463	473	478	10	5	2.2	1.0
Gas/Diesel Oil	2,117	2,188	2,235	70	48	3.3	2.2
Residual Fuel Oil	1,497	1,529	1,535	32	6	2.2	0.4
Other Products	1,047	1,062	1,077	15	15	1.4	1.4
Total Products	**7,877**	**8,069**	**8,272**	**191**	**203**	**2.4**	**2.5**

Includes Israel





FSU demand has been trimmed in 2011 and 2012, following revisions to **Ukraine** and **Kazakhstan**. Total product demand in 2012 is now expected to grow by 3.5% or 160 kb/d to 4.7 mb/d led by 'other' products, transport fuels and LPG. Total product growth of 2.4% is forecast for 2013, reaching 4.8 mb/d, with big gains in 'other' products, LPG and gasoil/diesel. **Russia** accounts for more than 85% of demand growth, especially in 'other' products and gasoil/diesel. Industrial oil demand in this region will remain susceptible to any sharper-than-expected European economic slow-down.

FSU: Demand by Product

(thousand barrels per day)

	Demand			Annual Chg (kb/d)		Annual Chg (%)	
	2011	**2012**	**2013**	**2012**	**2013**	**2012**	**2013**
LPG & Ethane	461	478	498	16	20	3.6	4.1
Naphtha	306	288	272	-18	-17	-5.9	-5.7
Motor Gasoline	1,155	1,192	1,216	37	24	3.2	2.0
Jet Fuel & Kerosene	325	330	336	5	6	1.7	1.7
Gas/Diesel Oil	1,062	1,091	1,123	29	31	2.8	2.9
Residual Fuel Oil	457	459	469	1	10	0.3	2.1
Other Products	782	870	909	88	39	11.3	4.5
Total Products	**4,548**	**4,709**	**4,821**	**160**	**112**	**3.5**	**2.4**

Includes Estonia

SUPPLY

Summary

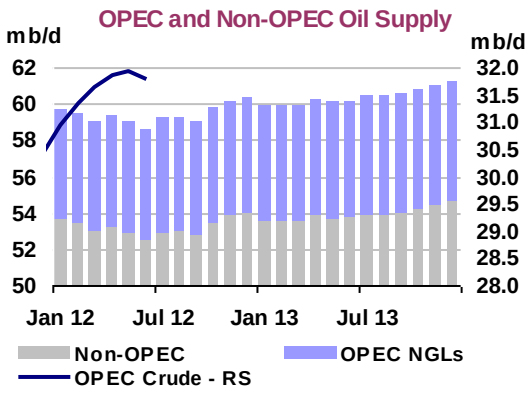
- **Global oil supply fell by 0.5 mb/d month on month (m-o-m) to 90.4 mb/d in June, with non-OPEC liquids production accounting for 75% of the decline.** Compared to a year ago, global oil production stood 2.0 mb/d higher, all of which stemmed from increasing output of OPEC crude and NGLs.

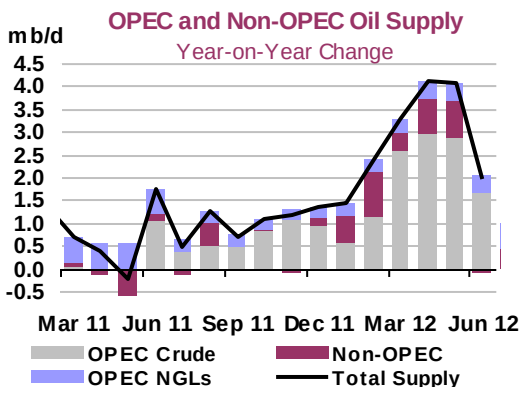
- **OPEC crude oil supplies fell by 0.1 mb/d in June to 31.8 mb/d.** Angola and Iran posted the largest declines and offset near-record production of 10.15 mb/d from Saudi Arabia. Preliminary estimates for imports of Iranian oil are stand at 1.9 mb/d for June, around 0.5 mb/d below 4Q11 levels.

- **OPEC crude capacity growth is expected to slow to 245 kb/d in 2013**, after robust expansion of 750 kb/d in 2012 derived from recovering Libyan capacity. Iraq, UAE, and Angola drive next year's growth, offsetting an assumed depletion of Iran's productive capacity if sanctions remain in force. OPEC NGLs average 6.5 mb/d next year, after growth of 0.4 mb/d in 2012 and 0.3 mb/d in 2013.

- **Non-OPEC supply fell by 0.4 mb/d in June from the prior month and by 0.1 mb/d compared to June 2011.** Labour strikes, as well as Tropical Storm Debby and planned Gulf of Mexico maintenance, reduced non-OPEC supplies. Coupled with a reduced 2012 processing gains estimate, non-OPEC supplies are now forecast to grow by 0.4 mb/d in 2012, or 0.2 mb/d lower than last month's assessment.

- **Growth should accelerate to 0.7 mb/d in 2013, to average 53.9 mb/d**, largely from Canadian oil sands, US light tight oil, and Brazil's Campos and Santos basins.



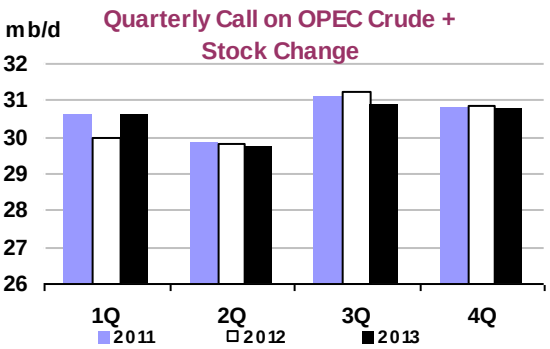


All world oil supply figures for June discussed in this report are IEA estimates. Estimates for OPEC countries, some US states, and Russia are supported by preliminary June supply data. The non-OPEC and OPEC supply overviews this month focuses on the roll out of our forecast to 2013, with discussion of key developments in production.

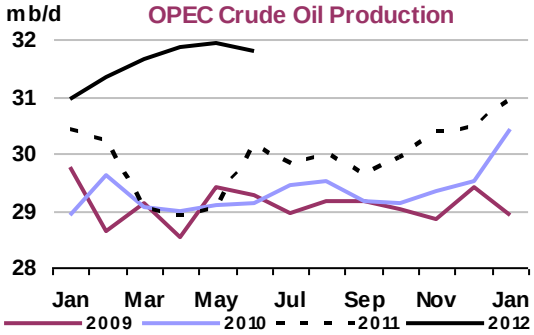
Note: Random events present downside risk to the non-OPEC production forecast contained in this report. These events can include accidents, unplanned or unannounced maintenance, technical problems, labour strikes, political unrest, guerrilla activity, wars and weather-related supply losses. Specific allowance has been made in the forecast for scheduled maintenance in all regions and for typical seasonal supply outages (including hurricane-related stoppages) in North America. In addition, from July 2007, a nationally allocated (but not field-specific) reliability adjustment has also been applied for the non-OPEC forecast to reflect a historical tendency for unexpected events to reduce actual supply compared with the initial forecast. After heavy outages seen in 2011 and 2012, this adjustment now totals –500 kb/d for non-OPEC as a whole, with most downward adjustments focused in the OECD.

OPEC Crude Oil Supply

After an eight-month ramp-up in output, OPEC crude oil supply eased in June, off by 140 kb/d to 31.77 mb/d. Angola and Iran posted the largest declines, offsetting near-record production from Saudi Arabia. Nonetheless, relatively higher output from some OPEC members continues to provide a cushion against reduced supplies from Iran in the wake of international sanctions. For reference, Saudi Arabia last produced at the 10 mb/d-plus level more than three decades ago in order to help compensate for sharply lower Iranian output after the revolution.



Entire series based on OPEC Composition as of January 2009 onwards (including Angola & Ecuador & excluding Indonesia)



Entire series based on OPEC Composition as of January 2009 onwards (including Angola & Ecuador & excluding Indonesia)

As expected, OPEC ministers agreed to maintain the collective production target of 30 mb/d at their 14 June meeting. The wording of the official communiqué suggested a compromise was reached among the various members, and rather than announcing a simple rollover, said "countries should *adhere* to the production ceiling of 30 mb/d." In reality, production has been running 1.6-2.0 mb/d above the target in recent months.

OPEC Crude Production

(million barrels per day)

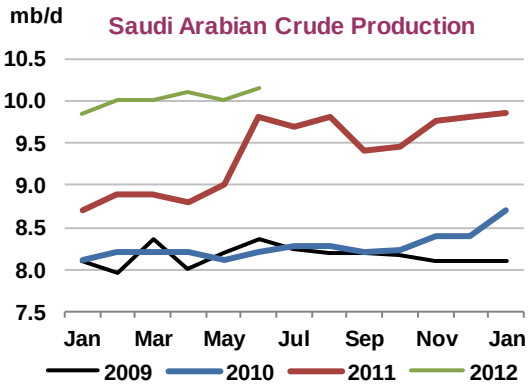
	Apr 2012 Supply	May 2012 Supply	Jun 2012 Supply	Sustainable Production Capacity[1]	Spare Capacity vs June 2012 Supply	3Q12 Average Sustainable Production Capacity
Algeria	1.14	1.18	1.16	1.18	0.02	1.18
Angola	1.77	1.80	1.65	1.85	0.20	1.90
Ecuador	0.48	0.48	0.48	0.52	0.04	0.54
Iran	3.30	3.30	3.20	3.40	0.20	3.20
Kuwait[2]	2.74	2.74	2.76	2.89	0.13	2.89
Libya	1.40	1.42	1.41	1.45	0.04	1.51
Nigeria[3]	2.15	2.16	2.16	2.55	0.39	2.59
Qatar	0.75	0.75	0.73	0.75	0.02	0.79
Saudi Arabia[2]	10.10	10.00	10.15	11.88	1.73	11.88
UAE	2.64	2.65	2.66	2.79	0.13	2.79
Venezuela[4]	2.49	2.49	2.51	2.60	0.09	2.58
OPEC-11	**28.96**	**28.97**	**28.87**	**31.85**	**2.98**	**31.83**
Iraq	2.92	2.94	2.91	3.06	0.15	3.28
Total OPEC	**31.87**	**31.91**	**31.77**	**34.90**	**3.13**	**35.11**
(excluding Iraq, Nigeria, Libya and Iran)					*2.35)*	

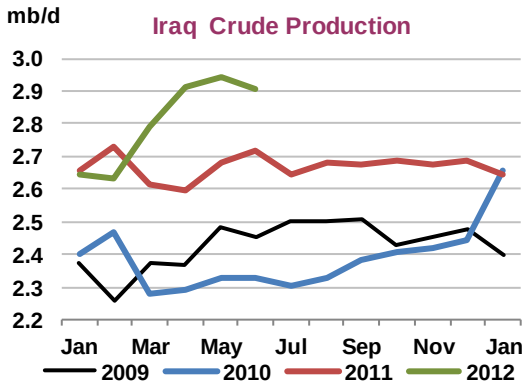
1 Capacity levels can be reached within 30 days and sustained for 90 days.
2 Includes half of Neutral Zone production.
3 Nigeria's current capacity estimate excludes some 200 kb/d of shut-in capacity.
4 Includes upgraded Orinoco extra-heavy oil assumed at 405 kb/d in June.

Most observers expect the producer group to keep output at recent higher levels for now. Calls for an emergency meeting by some price hawks such as Iran and Venezuela have been paid little heed by OPEC's other members, especially as Brent prices have rebounded to around the $100/bbl mark. The 'call on OPEC crude and stock change' for 3Q12 is raised by 0.3 mb/d, to 31.2 mb/d, due to continued non-OPEC supply outages. As a result, the call for the second half of 2012 is expected to increase by around 1.1 mb/d from 1H12, to an average 31 mb/d. The average 2012 call has been raised by 0.2 mb/d to 30.5 mb/d, with next year's call expected to average a similar level.

OPEC's effective spare capacity in June was 2.35 mb/d, down from 2.38 mb/d in May. OPEC's sustainable capacity is expected to average 35.4 mb/d by 4Q12, an increase of 550 kb/d from current levels. Looking out through 2013, production capacity rises by 245 kb/d year-on-year, with increases from Iraq, UAE, Libya and Angola only partially offset by sharply lower Iranian capacity (*See 'OPEC Crude Production Capacity On Course to Rise in 2013'*).

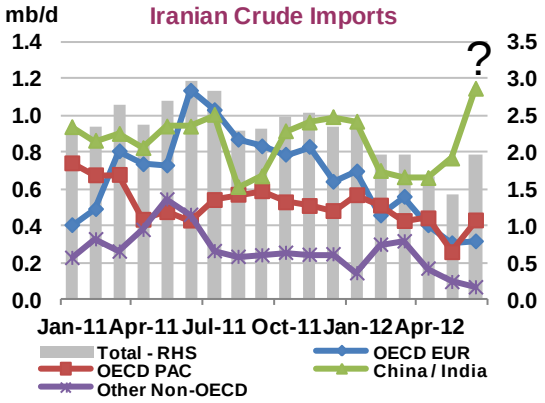
Saudi Arabia ramped up production by 150 kb/d to 10.15 mb/d in June, with the higher volumes likely earmarked for domestic use at power and desalination plants for the peak summer demand period. However, tanker data suggest output may have eased again in July on reduced demand from Saudi Aramco's US Gulf Coast joint venture Motiva refinery following the unexpected shut down of the new 325 kb/d crude unit. It is still unclear when the idled refinery will be brought back online. Saudi Arabia has increased exports to the US sharply this year to meet new demand from Motiva. The sudden breakdown likely means Saudi Aramco either found other buyers to take the crude or it was placed in storage tanks at the refinery. In the event, exports to the US are expected to be lower in July. There were also reports in June that the Kingdom has been testing the re-opened 1.65 mb/d IPSA crude pipeline, which feeds Yanbu on the country's Red Sea coast, with a view to diversifying exports should Iranian threats to disrupt shipments transiting the Strait of Hormuz materialise.

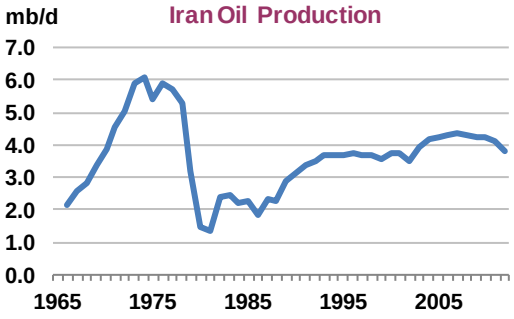




Iranian output is estimated to be flirting near 22-year lows at 3.2 mb/d for June, off 100 kb/d from May levels. Industry sources reported that volumes plunged in June, but the fall is not supported by shipping data. Tanker reports show imports rebounded sharply in June, led by China, to 1.95 mb/d compared with an estimated 1.42 mb/d in May. The higher June import data shows an eleventh-hour surge in tanker arrivals to China, up by 300 kb/d from May to 810 kb/d, with the bulk of the cargos arriving in the last 10 days of the month. Iranian trade data for June are preliminary and subject to revision once final import and custom data are available. Press reports indicate that some Iranian vessels have turned off their communication beacons, which is making it more difficult than normal for analysts to track crude shipments. Equally challenging is assessing Iranian crude held in floating storage, but latest data suggest volumes were only slightly higher at end-June, at an estimated 42 mb (*see Freight*).

While imports of Iranian oil in June remained robust, there are numerous indications volumes could fall significantly in July now that the tougher US financial sanctions on 28 June and the EU oil import ban on 1 July came into full force. That said, the US government granted China a waiver from sanctions in late June, which now brings the total to 20 countries deemed to have significantly reduced imports from Iran. Essentially, the waivers enable countries to continue importing crude from Iran at the lower levels provided payment mechanisms and shipping insurance can be obtained. So far, Japan and India have set-up sovereign insurance programmes that will allow their companies to continue buying Iranian crude. The National Iranian Tanker Company (NITC) is offering to deliver crude supplies, but agreeing on terms with buyers has proved problematic. China reportedly planned to lift 500 kb/d in July from Iran but balked at the deal when NITC set exorbitant freight rates. The payment dispute has reportedly led to a jump in the number of NITC tankers storing crude on the water in July.



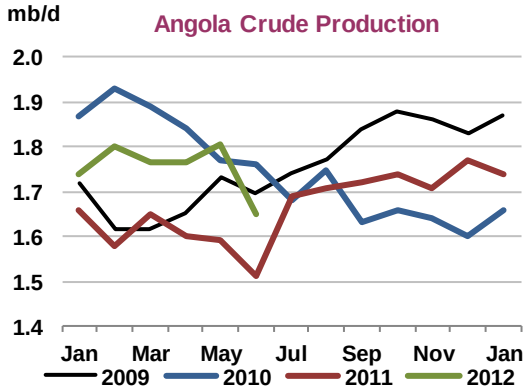


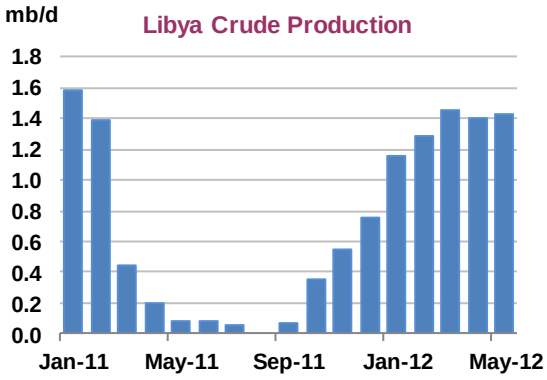
Source: 1965 – 1982,: BP Statistical Review of World Energy, 1983 onwards: IEA, 2012 refers to 1H2012 only

Iraqi supply was down 39 kb/d to 2.91 mb/d in June from a revised 2.94 mb/d for May. Crude oil exports fell just under 50 kb/d to 2.41 mb/d. Shipments from the northern Mediterranean port of Ceyhan accounted for 48 kb/d of the decline, at 318 kb/d. Exports from the Kurdish region, which normally flow into the Kirkuk stream, remain halted due to the long-running dispute over payment issues. Southern exports of Basrah crude were largely unchanged at 2.09 mb/d. Around 430 kb/d, or nearly 20% of exports, were shipped via the new SPMs off Basrah.

Kuwaiti production edged up by 20 kb/d to 2.76 mb/d while output from **UAE** posted a smaller increase of 10 kb/d to 2.66 mb/d. The UAE is readying a new export pipeline in early July, which will allow it to bypass the Strait of Hormuz. The 1.8 mb/d pipeline will enable the UAE to export 60% of its exports from the Fujairah shipping terminal. Initially, the pipeline is forecast to operate at around 1.4 mb/d, carrying oil from the onshore Habshan fields. Offshore fields could be linked in later.

Angolan production fell to the lowest level in a year due to planned and unplanned maintenance work. June output is assessed at 1.65 mb/d, off by 155 kb/d from May levels. Output from both the Girassol FPSO and the Palanca terminal were reduced due to maintenance work, while technical problems at Greater Plutonio curtailed output there. Production should partially recover in July once maintenance work is completed. ExxonMobil announced it started production from the Kizomba Satellites Phase 1 project, which involves the development of 18 wells with subsea tiebacks to existing infrastructure.

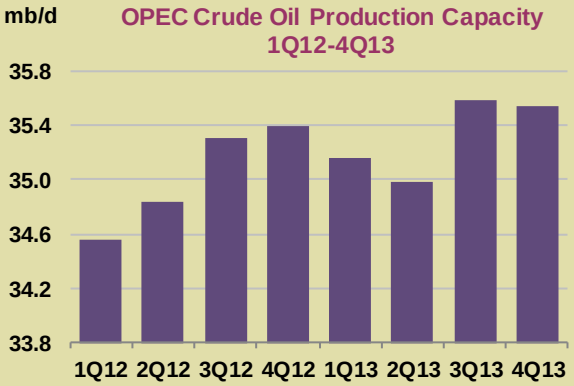




Libyan production in June was down by 10 kb/d to 1.41 mb/d, constrained due to loading delays and storage problems. Output fell further in early-July following the forced shut-in of around 300 kb/d due to protests at oil facilities ahead of the 7 July election. Protesters demanded greater autonomy for Libya's eastern region, which was long dominated from the former Ghaddafi regime in Tripoli. Oil exports from three of the country's key terminals, Es-Sider, Ras Lanuf and Brega with a combined export capacity of just under 700 kb/d were halted, but an end to protests on 8 July was accompanied by resumed operations.

OPEC Production Capacity On Course to Rise in 2013

OPEC's crude oil production capacity is expected to rise in 2013 by a net 245 kb/d, to 35.03 mb/d, with increases by Iraq, the UAE, Libya and Angola partially offset by sharply lower Iranian capacity. The 2013 increase lags more robust growth in capacity this year of around 750 kb/d, which largely reflects the recovery in Libyan output from low 2011 levels.



Growth in OPEC capacity has been revised down by a sharp 1.36 mb/d from the December 2011 report, with Iran accounting for just under 60% of the downward adjustment. Baseline revisions to Qatar and Algeria capacity levels stemming from new data accounted for a further 440 kb/d.

Indeed, amid more rigorous international sanctions enacted against **Iran** over the country's nuclear development programme this year, we assume production capacity will fall by around 570 kb/d to an average 2.67 mb/d in 2013. The outlook assumes there is no positive resolution reached in the current round of discussions and that sanctions continue through 2013. The stiffer banking regulations and shipping insurance constraints will continue to lead to reduced exports and ultimately force Iranian officials to mothball oilfields though it is impossible to predict the pace. Of OPEC's 12 members, four are expected to post significant capacity gains in 2013. Iraq, the UAE, Libya and Angola together are expected to add just under 1 mb/d net next year.

- **Iraq's** production capacity is slated to increase by 440 kb/d to an average 3.38 mb/d in 2013. Annual levels mask a significant upward trend, with capacity rising from 2.99 mb/d in 1Q12 to 3.74 mb/d by 4Q13, or an increase of almost 750 kb/d over the eight quarters.
- Expansion of capacity in the **UAE** continues apace, rising 220 kb/d to 3.04 mb/d on average in 2013.
- **Libya** posts a strong recovery over the period, rising from 1.28 mb/d in 1Q12 to 1.62 mb/d by 4Q13.
- **Angolan** capacity is set to rise by around 145 kb/d to an average 1.98 mb/d in 2013. The 150 kb/d PSVM project is the next big project scheduled to be brought online, in 3Q12.
- **Saudi Arabia** has brought forward the 900-kb/d Manifa project, with the first phase of production expected onstream in 2H13. However, over the forecast period Saudi capacity is forecast to decline by a marginal 25 kb/d, to 11.86 mb/d, but is slated to rebound as Manifa ramps up in 2014.

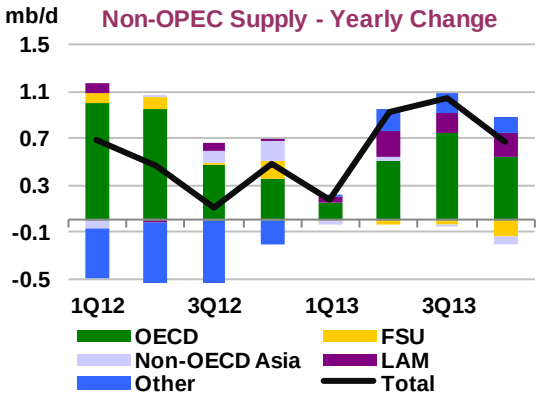
Estimated Average Sustainable Crude Oil Production Capacity 2012-2013

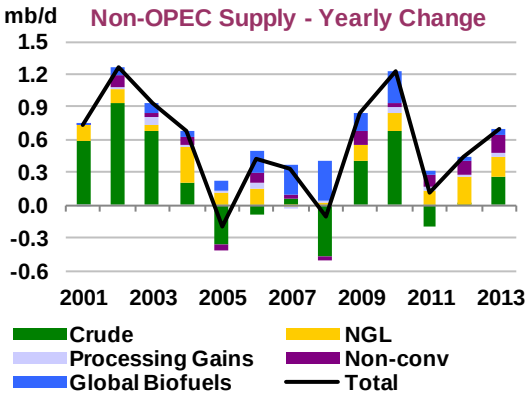
(thousand barrels per day)

	1Q12	2Q12	3Q12	4Q12	1Q13	2Q13	3Q13	4Q13	2012	2013	Δ 2012-13
Algeria	1,177	1,177	1,177	1,194	1,132	1,157	1,187	1,212	1,181	1,172	-9
Angola	1,753	1,705	1,901	1,989	1,926	1,898	2,049	2,048	1,838	1,981	143
Ecuador	517	517	536	536	519	519	537	537	526	527	2
Iran	3,370	3,350	3,200	3,050	2,900	2,700	2,600	2,500	3,242	2,674	-568
Iraq	2,992	2,995	3,284	3,294	3,618	3,618	3,695	3,740	3,142	3,668	525
Kuwait	2,836	2,836	2,836	2,836	2,805	2,805	2,805	2,805	2,836	2,805	-32
Libya	1,276	1,461	1,506	1,506	1,581	1,581	1,616	1,616	1,438	1,599	161
Nigeria	2,675	2,745	2,789	2,770	2,686	2,679	2,690	2,674	2,745	2,682	-62
Qatar	785	785	785	785	771	771	791	791	785	781	-3
Saudi Arabia	11,884	11,884	11,884	11,884	11,734	11,734	11,984	11,984	11,884	11,860	-25
UAE	2,735	2,785	2,785	2,950	3,005	3,020	3,055	3,055	2,814	3,034	219
Venezuela	2,501	2,551	2,576	2,601	2,483	2,503	2,578	2,578	2,558	2,536	-21
Total OPEC	**34,502**	**34,792**	**35,260**	**35,396**	**35,161**	**34,985**	**35,587**	**35,539**	**34,988**	**35,319**	**330**

The Non-OPEC Outlook in 2013

Non-OPEC supplies should increase by 700 kb/d in 2013 from 53.2 mb/d in 2012. Whereas growth in non-OPEC supplies in the 1990s and first half of the last decade was centred in the FSU, the majority of the growth this decade has been and will continue to be oriented towards the Americas. With quickly declining offshore Brazilian production, the major source of growth outside OPEC countries will be the US and Canada. Around 40% of non-OPEC supply growth comes from additions to crude supplies (including light tight oil), 25% comes from natural gas liquids, and 20% comes from non-conventional production like Canadian synthetic crude. Non-OPEC deepwater production, mostly centred in the Gulf of Mexico and Brazil, should grow by around 300 kb/d (20% of the total), and selected North American light tight oil plays grow by 430 kb/d. A major project list is displayed at the end of the section.





Much of the 2013 growth profile for non-OPEC supplies also depends on a resumption of flows from **Sudan/South Sudan**, **Yemen**, and **Syria**. These countries accounted for total production of around 1.0 mb/d. We assume only a slight improvement in output from these countries (mostly from Yemen, South Sudan, and Sudan), and will revise upwards if concrete information merits. Also, the potential for labour unrest in all countries during periods of high prices remains a threat to output in 2013. Finally, evidence from 2011/2012 points to ongoing problems with mature infrastructure, largely in the OECD countries. As a result, our base case assumes non-OPEC supplies are reduced by 0.5 mb/d in 2H12 and 2013 (compared with the 0.2 mb/d adjustment initially assumed for 2011-2012). The new reliability factor does not include other downward geopolitical adjustments made for South Sudan, Yemen, and Syria.

Revisions to Non-OPEC Supply Levels

Since last month, there have been three major changes to the historical and 2012 assessments for non-OPEC supply that reduce the 2012 annual growth rate by 0.2 mb/d to 0.4 mb/d in 2012. First, new annual data has been incorporated, which reduces baseline estimates for many non-OECD countries including **Vietnam**, **Uzbekistan**, and **China**. Offsetting these, new annual data suggested upwards revisions for **India**, the **Phillipines**, **Argentina**, **Egypt**, and **Gabon**. Monthly government data from **Australia** now also includes the Pyrenees and Mutineer/Exeter fields that had not been included in monthly data submissions and in publicly available data, which results in a 20 kb/d upwards revision there from early 2010. Second, global processing gains have also been reassessed in this outlook for 2008-2013 based on the IEA's downstream model. These have reduced non-OPEC liquids supply by 60 kb/d in 2011 and a substantial 130 kb/d in 2012. Finally, labour strikes in **Norway** that will impact summer supplies contribute to a reduction in 2012's output by 140 kb/d to 1.9 mb/d, around 50 kb/d worse than last month's estimate.

Non-OPEC Supply Reliability Factors
(thousand barrels/day)

Country	Reliability Factor (2013)
US (non-Gulf)	-20
US Gulf	-50
Canada	-90
Mexico	-40
Norway	-60
UK	-90
Australia	-40
China	40
Vietnam	-30
Brazil	-50
Argentina	-35
Colombia	-30
Malaysia	-5
Total Non-OPEC	**-500**

Non-OPEC Supply

(million barrels per day)

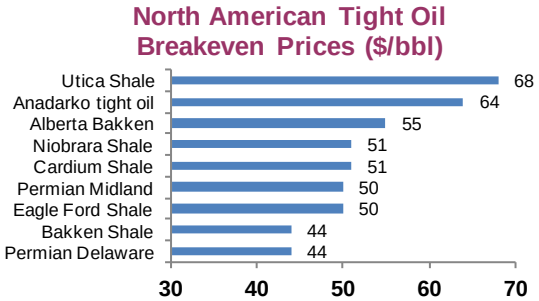
	2011	1Q12	2Q12	3Q12	4Q12	2012	1Q13	2Q13	3Q13	4Q13	2013
North America	14.5	15.5	15.4	15.4	15.8	15.5	15.9	16.0	16.1	16.6	16.2
Europe	3.8	3.8	3.5	3.1	3.5	3.5	3.5	3.4	3.2	3.3	3.3
Pacific	0.5	0.5	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Total OECD	**18.8**	**19.8**	**19.4**	**19.0**	**19.9**	**19.5**	**20.0**	**19.9**	**19.8**	**20.4**	**20.0**
Former USSR	13.6	13.7	13.7	13.5	13.7	13.7	13.7	13.6	13.5	13.6	13.6
Europe	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
China	4.1	4.2	4.1	4.2	4.2	4.2	4.2	4.2	4.2	4.3	4.2
Other Asia	3.6	3.6	3.6	3.6	3.5	3.6	3.5	3.5	3.5	3.4	3.5
Latin America	4.2	4.3	4.2	4.3	4.4	4.3	4.3	4.4	4.5	4.6	4.4
Middle East	1.6	1.4	1.4	1.5	1.5	1.4	1.4	1.5	1.5	1.5	1.5
Africa	2.6	2.4	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
Total Non-OECD	**29.9**	**29.8**	**29.4**	**29.4**	**29.7**	**29.6**	**29.7**	**29.7**	**29.6**	**29.8**	**29.7**
Processing Gains	2.1	2.1	2.1	2.2	2.1	2.1	2.2	2.2	2.2	2.2	2.2
Global Biofuels	1.9	1.6	1.9	2.3	2.0	2.0	1.7	2.0	2.3	2.1	2.0
Total Non-OPEC	**52.8**	**53.4**	**52.9**	**52.9**	**53.7**	**53.2**	**53.6**	**53.8**	**53.9**	**54.4**	**53.9**
Annual Chg (mb/d)	0.1	0.7	0.5	0.1	0.5	0.4	0.2	0.9	1.0	0.7	0.7
Changes from last OMR (mb/d)	0.0	0.0	-0.2	-0.4	-0.1	-0.2					

OECD

North America

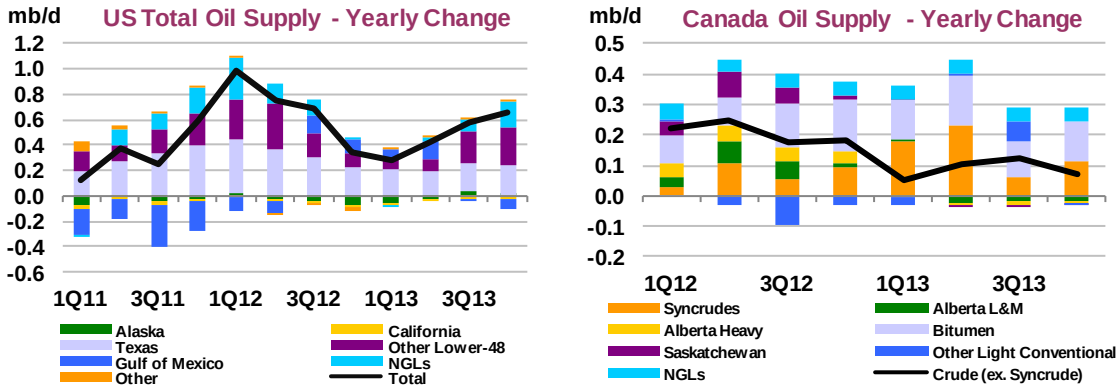
US – May preliminary, Alaska actual, other states estimated: US oil production fell in June by around 110 kb/d to 8.7 mb/d, which is nonetheless around 720 kb/d higher than year-earlier levels. Production fell in June due to pipeline maintenance in Alaska, the impacts of Tropical Storm Debby, and maintenance at other Gulf of Mexico (GOM) facilities. This was offset in part by the start of BP's Galapagos group of fields in GOM, that feed into the Na Kika complex. Tropical Storm Debby reduced GOM output by around 40 kb/d in June, and for 3Q12 we assume that such events could impact GOM production by around 90 kb/d. Light tight oil supported 2Q12 production growth in the Continental US, with North Dakota's Bakken and Eagle Ford output posting 90% annual increases from 2Q11.

US – 2013: In 2013, light tight oil (LTO) supply from selected plays should reach 1.6 mb/d, a growth of 0.4 mb/d from 2012, and leads to similar growth in total US crude and condensate output to 6.6 mb/d. Additional production volumes will be included in this supply category as we obtain well and field-level monthly data from other tight formations, especially the emerging Texas plays. Production costs vary widely across light tight oil plays, and producers that sell oil at a discount to WTI due to transportation bottlenecks may, at the margin, reduce activity. There is therefore a possibility that the Bakken's enormous growth rate in 2012 will abate somewhat in 2013 because geography and bottlenecks will crimp producer netbacks. However, Rystad Energy asset analysis shows that around 85% of the cumulative production is economic as long as realized Bakken oil prices stay above $60/bbl. The current Bakken to WTI spread is $10-20/bbl depending of the location of the sales point and means of transport. The North Dakota Bakken is expected to grow by 200 kb/d to average 560 kb/d in 2012, but should increase by around 130 kb/d in 2013. The headline story for LTO in 2013 is bound to come from Texas' Eagle Ford and from Permian basin plays like the Bone Springs, Austin Chalk, Spraberry, and Wolfcamp. These carbonate and sandstone plays, which also spread to New Mexico and to east Texas, should raise Texas' long-declining output to over 2 mb/d, a yearly average not seen since 1988.



Source: Rystad Energy. Breakeven price is the price that will give a 10% IRR for a given acreage position. Mature acreage positions with high production levels thus have a better breakeven oil price. Includes actual F&D costs (not including land costs), taxes, and royalties.

Canada: Canadian oil production is expected to breach the 4 mb/d marker in late 2012, and new in situ and mining bitumen projects are forecast to raise Canada's oil output by 280 kb/d to 4.1 mb/d in 2013. Imperial's Kearl mining and Suncor's Firebag SAGD projects are expected to be the largest contributors to output growth in 2013. CNRL's Horizon mining project did not fare well in 2012, producing an average of 80 kb/d (around 30 kb/d less than capacity), and we do not expect that 2013 will be much better due an assumption of maintenance turnarounds. Canadian LTO, centred in Alberta's Cardium and Saskatchewan and Manitoba's Bakken/Three Forks play, is also expected to post a slight annual gain to 220 kb/d in 2013. Despite high levels of drilling, we assess that producers still have a lot to learn about the reservoirs and how best to produce from them. Producers have not found the overpressuring that has been predominant in the North Dakota Bakken, which has contributed to its astronomical growth.



North Sea

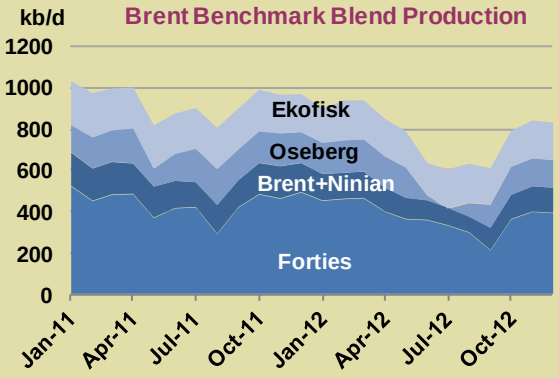
In 2011 and 2012, the North Sea suffered from a host of production setbacks. With hindsight, we now assume that these problems, which reduced Norway's and the UK's output by around 200 kb/d on average in 2011 and 2012 will persist to a degree in 2013. Consequently, we have now doubled the reliability factor for Norway and the UK to total -150 kb/d in 2013.

UK offshore crude production in April remained at the prior month's levels at around 950 kb/d, but is expected to fall by over 200 kb/d by July due to the Elgin/Franklin leak and maintenance. Nexen is planning to take out the 200-kb/d Buzzard field for maintenance at the end of the summer meaning Forties supplies alone (including the Eastern Trough) should average only 280 kb/d in 3Q12, around 25% less y-o-y and the lowest level in at least 20 years. UK offshore crude production in 2H12 should average 780 kb/d, 14% lower than 2H11. Looking back at 2011 and 2012, the Buzzard field's gas compressors kept production at reduced rates for months, a storm damaged the Gryphon field and associated infrastructure, and the Gannett field leaked. So far in 2012, the Elgin-Franklin field also sprung a leak and reduced output by 70 kb/d, and Buzzard's monthly performance remains around 30 kb/d below its design capacity. Lingering technical problems and unplanned maintenance at smaller fields contributed to unplanned maintenance levels of around 120 kb/d in 1H12, around 20 kb/d higher than the prior year. We expect the Huntington and Forties Alpha projects, as well as the return of the Elgin-Franklin and Shearwater fields, will mitigate a median decline rate of 23% elsewhere in 2013, keeping 2013's levels only 4% (30 kb/d) lower than 2012 at 840 kb/d.

In addition to the strike in **Norway** (see text box below), unplanned outages at Norway's Gullfaks, Snorre, and Ormen Lange are reducing output. Norway's Skarv field, new drilling at Ekofisk and Eldfisk, as well as Valhall and Norne should however sustain Norway's oil production at 1.8 mb/d in 2013, which is around 3% (60 kb/d) lower than 2012. An average decline rate of roughly 17% is assumed for mature fields.

In the Nick of Time: Widespread Worker Strike Averted But Supplies Still Reduced

Norway's Labour Ministry intervened at the last minute in a dispute between oil and gas industry union workers and employers. Workers had already been striking since mid-June over demands from the trade unions for an early retirement scheme from the age of 62. In addition to prevailing action affecting 200 kb/d of liquids, the Norwegian Oil Industry Association (OLF) then announced a lockout for all 6 515 workers to take effect from Monday 9 July that would have halted all production in Norway's Continental Shelf (NCS) for the first time since 1986. Such an outage would have threatened Norway's reputation as a reliable supplier of gas to Europe and oil to world markets. The Labour ministry also justified its intervention due to the economic consequences of a shutdown on Norway's economy, which accounts for 21% of GDP and almost half of Norway's exports.



The strike already shut in around 160 kb/d of crude and 40 kb/d of natural gas liquids as various union personnel were called out on strike at the Oseberg and Heidrun facilities. IEA estimates indicate the strikes likely curbed oil production by almost 150 kb/d in June and by 180 kb/d in July. Production flowing to the Oseberg Field Centre includes output from the Oseberg, Veslefrikk, Brage, Tune and Huldra fields. According to the NPD, around half of the condensate from the Troll field flows through this system and is delivered via Oseberg to the Sture terminal. The terminal, Oseberg Field Centre, and Heidrun facilities are not expected to be operating normally again until the end of this week. Loadings for July have already been deferred, and Norway's oil production is expected to fall by 410 kb/d to around 1.6 mb/d in July from May. That is the lowest level from the NCS since August of 1991, when the Sleipner platform sank and caused a seismic event registering 3.0 on the Richter scale. The reduction in Oseberg loadings at the Sture terminal will also temporarily bring BFOE production to record low levels of only 600 kb/d.

The last lockout in the offshore sector occurred in April 1986, shutting down production on the Norwegian continental shelf completely, and lasted for three weeks before the government intervened. Norway's output was also threatened last month by a Baker Hughes worker strike. The strikes affected drilling and maintenance, but not production, at twelve rigs. Government workers, including Norwegian petroleum sector boat pilots, also struck in late May and early June.

With the government in control of the negotiations, the National Wages Board will decide how much the unions will get and press reports indicate a forced arbitration will likely take place in a few weeks.

Non-OECD

Latin America

Brazil—May actual: Crude production tendered a small increase in May and remained at around 2.0 mb/d. Campos basin production fell by around 40 kb/d, and Santos basin production increased by 10 kb/d. Brazil's crude output is on track to increase by around 1% y-o-y in 1H12 to 2.1 mb/d, with growth expected to rebound to 3% in 2H12 and suggesting overall 2012 growth of 1.8% to 2.1 mb/d. Half of Brazil's production derives from six fields, : Albacora, Albacora Leste, Marlim Leste, Marlim Sul, Marlim, and Roncador which, including maintenance, have seen output decline by an average 9% in the last year, taking into account planned maintenance.

Brazil – 2013: Petrobras recently revised its production targets for 2016 to 2.5 mb/d, from an earlier 3.1 mb/d for 2015. Analysts assess that Petrobras' new CEO seems to hold a more measured and realistic view on project timelines than her predecessor, which should make the company's targets more realistic. The company acknowledged that project slippage has occurred as Asian-built rigs have been delivered late.

Yet despite an announced effort to reduce costs and get tough with suppliers, government-mandated local content restrictions will continue to challenge the company's execution strategy and its profitability. Supply gains will come from improved efficiency at existing Petrobras facilities in the Campos Basin, incremental output from the Lula field, and project additions at the Papa Terra, Parque das Baleias, and Sapinhoa fields. We expect fewer delays in the near term projects because much of the infrastructure needed this year and in 2013 is already in Brazil. Finally, the oil supply forecast for 2013 of 2.4 mb/d (a growth of 140 kb/d) assumes a late 2012 return for the 70-kb/d Chevron-operated Frade field.

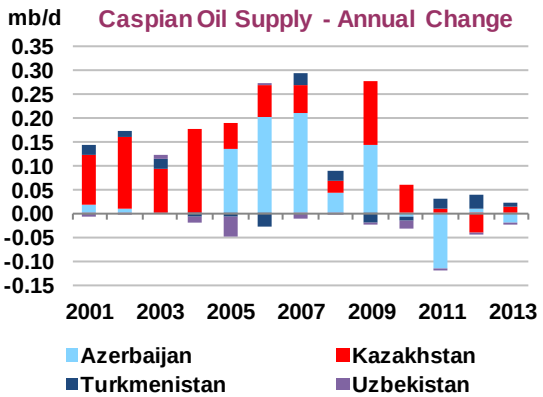
Argentina – May actual: Oil production in Argentina remained at around 680 kb/d in May, though it is expected to drop by an average of 50 kb/d in June and July. Two weeks of labour strikes at the Pan American Energy-operated Cerro Dragon field in the Chubut province shut in around 95 kb/d of crude oil.

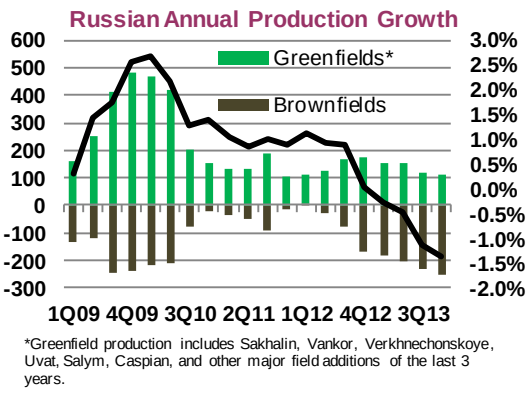
Asia

Production from non-OECD Asian countries Malaysia, Thailand, and Vietnam has surprised to the upside in the last six months. In **Malaysia**, production is expected to be around 80 kb/d higher in 2012 at 660 kb/d than assessed in December 2011. Petronas has been successful at improving its recovery rates, and the company is planning to work with IOCs including Shell and ExxonMobil on developing EOR at the Tapis, Guntong and Irong Barat fields. In 2013, the delayed startup of the Gumusut field should keep liquids production slightly above 2012's levels of 660 kb/d. Production is expected to fall by around 20 kb/d to 890 kb/d in **India** in 2013 as mature field decline is offset by the Aishwariya and Baghyam fields. **Indonesian** output declined at an annual rate of around 4% over the last decade, and despite Government forecasts to the contrary, output is expected to decline by around 7% to 870 kb/d in 2012. Overall decline in 2013 eases only slightly (-6% to average 810 kb/d) due to Chevron's Duri steamflooding. In **Vietnam,** oil production is expected to fall by around 10 kb/d to 320 kb/d, but will be supported by increasing output from existing fields. Production from a new Te Giac Trang platform began in early July and should increase production by around 10 kb/d. Also, we expect some additional crude and condensate output from the Su Tu Trang and Chim Sao fields in the second half of 2012 and in 2013.

Former Soviet Union

Russia—May actual: Crude production remained at around 10.0 mb/d in May, roughly 1% higher than May 2011. Taking a step back, Russia's liquids production grew by around 1.4% in 1H12 at around 10.7 mb/d including output growth from gas processing plants and gas condensate (which combined total 0.7 mb/d). The forecast for 1.0% growth in 2012 has remained robust over the last six months as high prices and preferential tax breaks have encouraged producers to increase recovery rates from brownfield production. New fields have also contributed around 110 kb/d of new production in 2012, largely Rosneft's Vankor field and TNK-BP's Uvat group. Notably in 1H12, Lukoil has stemmed the decline to almost 0% at its Western Siberian fields compared to an average decline of -4% for 2010 and 2011.





*Greenfield production includes Sakhalin, Vankor, Verkhnechonskoye, Uvat, Salym, Caspian, and other major field additions of the last 3 years.

Russia – 2013: We expect that producers have been able to benefit from the low hanging fruit in 2011 and 2012, but that they will be harder-pressed in 2013 to show comparable gains. The government is considering further changes to the tax regime via a profit-based rather than a revenue-based system and via additional fiscal support for low permeability and offshore oil. These new policies could dramatically affect Russia's outlook in the medium term, but they are unlikely to have a dramatic effect in 2013. Broadly speaking, producers are likely to revisit the brownfield growth profile of 2009 in 2013, lowering liquids output by around 0.4% (-50 kb/d) to 10.7 mb/d. The greenfield increments are small, and companies have not documented incremental additions to new production. Rosneft's Vankor field is expected to reach around 500 kb/d in 2013. Sakhalin Island production, as well as TNK-BP's legacy production is forecast to drop to pre-2011 levels, and in the case of Sakhalin 1, decline even further.

Azerbaijan – 2013: After peaking at 885 kb/d, the ACG fields have begun to decline, and no additional production is expected to boost Azerbaijan's oil output levels until the West Chirag field comes online in 2014. Some of the decline in 2012 has been due to maintenance, so a slight rebound is expected in 2H12, but output is still expected to fall by around 2% in 2013 to average 720 kb/d. The BP-led multi-platform project accounts for around 80% of Azerbaijan's crude output of 890 kb/d.

Kazakhstan – 2013: Despite the government and the North Caspian Operating Consortium's statements that production at the 45°API Kashagan field will begin in December 2012, observers admit that weather will likely delay the commercial start until the summer of 2013, after which the field will begin its climb to around 375 kb/d. Production from Phase 1 facilities will only reach 450 kb/d after Phase 2 development is complete. The consortium has not yet determined a mutually agreeable path forward for the second phase. Exports could flow via the CPC pipeline, the Atyrau-Samara pipeline in the Transneft system, or via Atasu-Alashankou to the east. Kazmunaigas and Shell will jointly manage production operations of all phases through the North Caspian Production Operations Company. Due to uncertainty about the initial volumes, we conservatively forecast that the field contributes only around 30 kb/d to Kazakhstan's output in 2013, and major additions would come in 2014. At the Karachaganak gas and gas condensate field the KPO consortium members reached a resolution with the government on their cost and labour dispute. The government received a 10% equity stake as of June 30, 2012, and plans to exercise greater cost control on Phase 3 development. Therefore, growth of around 30 kb/d in 2013 from Karachaganak, coupled with planned maintenance at Tengiz and steep decline rates at KMG's fields in the Mangistau region are likely to keep Kazakhstan's output at around 1.6 mb/d in 2013.

FSU net exports fell by 600 kb/d to 9.1 mb/d in May from April's lofty 9.7 mb/d, with the fall driven by a 500 kb/d contraction in crude shipments. Exports from southern outlets bore the brunt of this drop, with flows of BTC blend shipped via Ceyhan cut by 100 kb/d and combined flows from the Black Sea 300 kb/d lower than in April. An overhang of light, sweet crude in the Mediterranean contributed to this decline, with exporters reluctant to ship crude after prices for CPC and BTC blends weakened to their lowest level in nearly 18 months.

In the Baltic, the continued ramping up of Ust Luga, which shipped 375 kb/d in May (+130 kb/d m-o-m), partially offset maintenance at Primorsk (-120 kb/d) and the halting of shipments to Gdansk. Druzhba volumes have recovered to 1.15 mb/d although they remain below 4Q11-1Q12 highs. All destinations received increased flows compared to April with the exception of the Czech Republic, which reportedly received alternative seaborne supplies via the IKL pipeline. All in all, crude exports via the Transneft system stood at 4.4 mb/d, lower than April's record high, but 200 kb/d higher than a year ago largely due to the extra flexibility in the Baltic. Loading schedules for June indicate that FSU crude exports are likely to recover as supplies through the CPC and BTC pipelines rise whilst the ramp up of Ust Luga continues. Despite recent floods in Russia's southern Krasnodar region and the temporary closure of Novorossiysk, July exports from the port are expected to remain unaffected due to excess capacity.

FSU product exports amounted to 2.7 mb/d in May, 150 kb/d lower than April as buoyant domestic demand combined with a seasonal peak in refinery maintenance kept more light and middle distillates in the region. Compared to a year ago, product shipments were off 400 kb/d, largely due to last year's changes in the Russian fiscal system and refiners preferentially supplying the domestic market so as not to risk a repeat of last year's light product shortages.

FSU Net Exports of Crude & Petroleum Products

(million barrels per day)

	2010	2011	2Q2011	3Q2011	4Q2011	1Q2012	Mar 12	Apr 12	May 12	Latest month vs. Apr 12	Latest month vs. May 11
Crude											
Black Sea	2.10	1.93	1.87	1.87	1.92	1.83	1.78	2.01	1.70	-0.31	-0.11
Baltic	1.60	1.50	1.57	1.37	1.56	1.48	1.48	1.91	1.81	-0.10	0.27
Arctic/FarEast	0.74	0.67	0.69	0.65	0.65	0.62	0.61	0.61	0.62	0.01	-0.07
BTC	0.77	0.70	0.76	0.69	0.64	0.73	0.75	0.74	0.65	-0.09	-0.05
Crude Seaborne	**5.22**	**4.80**	**4.89**	**4.58**	**4.77**	**4.66**	**4.62**	**5.27**	**4.77**	**-0.49**	**0.03**
Druzhba Pipeline	1.13	1.17	1.12	1.18	1.24	1.24	1.24	1.10	1.15	0.05	0.04
Other Routes	0.42	0.53	0.54	0.54	0.50	0.51	0.54	0.49	0.48	-0.02	-0.05
Total Crude Exports	**6.76**	**6.50**	**6.55**	**6.30**	**6.51**	**6.42**	**6.40**	**6.86**	**6.40**	**-0.46**	**0.02**
Of Which: Transneft[1]	4.00	4.18	4.16	4.09	4.31	4.18	4.12	4.52	4.37	-0.15	0.20
Products											
Fuel oil[2]	1.54	1.58	1.82	1.59	1.46	1.50	1.50	1.62	1.63	0.00	-0.16
Gasoil	0.88	0.77	0.79	0.72	0.69	0.85	0.90	0.83	0.71	-0.12	-0.08
Other Products	0.43	0.43	0.53	0.36	0.33	0.42	0.38	0.43	0.40	-0.04	-0.18
Total Product	**2.85**	**2.77**	**3.14**	**2.66**	**2.49**	**2.78**	**2.79**	**2.89**	**2.74**	**-0.15**	**-0.42**
Total Exports	**9.61**	**9.27**	**9.68**	**8.96**	**9.00**	**9.19**	**9.18**	**9.75**	**9.13**	**-0.62**	**-0.39**
Imports	0.07	0.08	0.08	0.10	0.08	0.12	0.10	0.07	0.07	0.01	0.00
Net Exports	**9.54**	**9.19**	**9.60**	**8.86**	**8.92**	**9.07**	**9.08**	**9.68**	**9.06**	**-0.62**	**-0.39**

Sources: Argus Media Ltd, IEA estimates

[1]Transneft data exclude Russian CPC volumes.

[2]Includes Vacuum Gas Oil

Middle East

Crude and condensate production from **Oman** fell 10 kb/d to 900 kb/d in April, and a PDO dispute with contractors for around a week at the end of May was expected to have stunted otherwise-increasing EOR production. In 2013, Oman's production is expected to increase by around 30 kb/d on average to 940 kb/d on the assumption that PDO can successfully enhance recovery with its Harwheel EOR project. The latter project likely started in late April 2012 and will add around 40 kb/d by 2014. The project was delayed by around a year, due to the rising costs and infrastructure constraints that PDO and other Omani producers including Oxy face in bringing on tertiary recovery projects.

Despite news that the Marib pipeline in **Yemen** is expected to open again in July, we assume that output will remain threatened by Al-Qaeda and other saboteurs for the remainder of the year, reducing output by 60 kb/d from 2011 levels. The 270-mile line used to bring about 120 kb/d of oil from the Marib and Shabwa areas. We assess that some security improvements will be made, leading to a slight uptick in production of 20 kb/d to 190 kb/d in 2013.

The other major unknown for 2013 is the political fate of **Syria**. While impossible to predict the outcome, a return to pre-September 2011 production rates of 350 kb/d is deemed highly unlikely. Repeated bombings of energy infrastructure in Homs and Deir-ez-Zor, the continued economic impact of the embargo, and the fact that major companies have pulled out of the country lessen the likelihood of a quick rebound in 2013.

Non-OPEC 2013 Selected Field Additions

(thousand barrels per day)

	Project Name	Operator	Capacity Gain ('13)*	Max Capacity*	Peak Year
US - Williston Basin	Bakken - LTO	various	140	-	2017+
US - Texas	Eagle Ford - LTO	various	180	-	2017+
US	Other LTO	various	100	-	-
US – Gulf of Mexico	Galapagos	BP	40	120	2014
Canada	Christina Lake	Cenovus	10	230	2017+
Canada	Kearl-1	Imperial	50	440	2015
Canada	Firebag-4	Suncor	20	70	2014
UK	Forties Alpha	Apache	10	50	2014
UK	Huntington	E.ON	10	30	2014
Norway	Ekofisk increment	Conoco-Phillips	10	150	2013
Norway	Skarv	BP	30	80	2014
Norway	Norne	Statoil	10	90	2015
Kazakhstan	Kashagan- Phase 1	NCOC[1]	30	450	2017+
Russia	Novoportovskoye	Slavneft	20	120	2014
Russia	Srednebotubinskoye	TNK-BP	20	40	2014
Malaysia	Gumusut, Other EOR	Shell	10	120	2015+
Brazil	Roncador Module 3, P-55	Petrobras	10	320	2015
Brazil	Sapinhoa (BM-S-9)	Petrobras	50	180	2016
Brazil	Baleia Azul	Petrobras	40	140	2016
Brazil	Papa Terra, P-61 & 63	Petrobras	10	200	2015
Total			**780**		

* Capacity figures provided indicate IEA estimates for annual increment. Project sponsor estimates may differ.

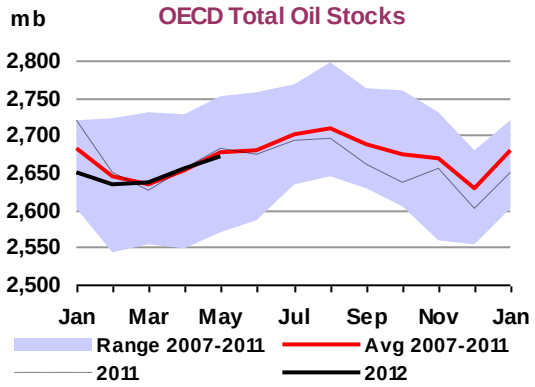
1. NCOC is a consortium of Eni, Shell, Total, ExxonMobil, KMG (all holding 16.81%), ConocoPhillips (8.4%), Inpex (7.556%).

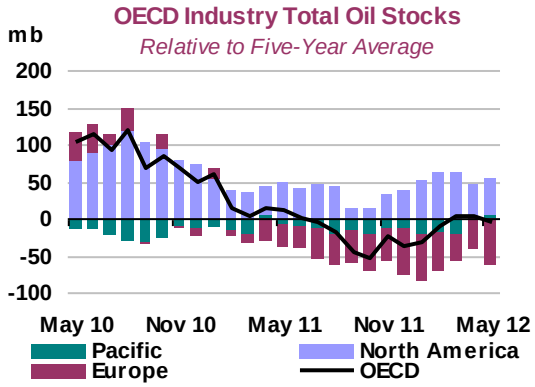
OECD STOCKS

Summary

- **OECD industry oil inventories rose by 15.4 mb in May, to 2 672 mb,** a milder increase than the five-year average of 25.1 mb. The muted OECD build suggests implied global supply overhang has been absorbed more by non-OECD markets. OECD commercial oil stocks have risen since February 2012, in line with seasonal trends. Although days of forward demand cover fell by 0.8 days to 58.9 days from April, this remained 1.4 days above the five-year average and 0.3 days higher than a year earlier.

- **Preliminary data indicate a 7.2 mb decline in June OECD industry inventories,** in contrast with a five-year average 2.3 mb build. Crude oil inventories fell by 13.0 mb as refiners ramped up crude processing. In the meantime, refined product stocks rose by 8.7 mb. 'Other products' led the increase, rising by 14.8 mb. However, middle distillate stocks fell by 10.3 mb as firm demand in Latin America and Europe persisted.





OECD Inventories at End-May and Revisions to Preliminary Data

OECD industry oil inventories rose by 15.4 mb in May, to 2 672 mb, a milder increase than the five-year average 25.1 mb. The muted OECD build suggests that implied global supply overhang has been absorbed more by non-OECD markets than OECD. OECD commercial oil stocks have now fallen below five-year average levels again in May, after spending two months in modest surplus, although overall stock levels continued the upward trend evident since February 2012. Compared with the end of 2011, OECD industry oil stocks stood 71 mb higher in May. In the meantime, in terms of forward demand cover, OECD commercial oil holdings remained 1.4 days above the five-year average, at 58.9 days. This equates to a 0.8 days decrease from the previous month and a 0.3 days rise on a year-on-year basis. Regionally, the absolute surplus of stocks versus the five-year average in North America rose slightly, while the apparent deficit in Europe widened significantly, and the Pacific shortfall narrowed substantially.

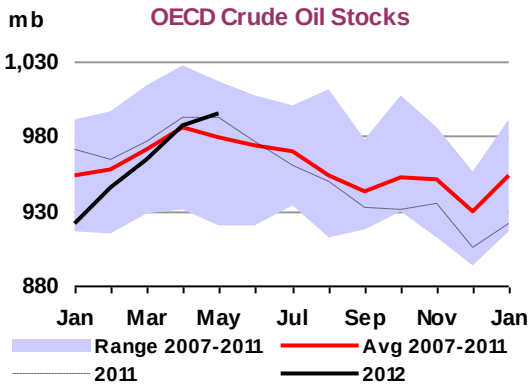
Preliminary Industry Stock Change in May 2012 and First Quarter 2012

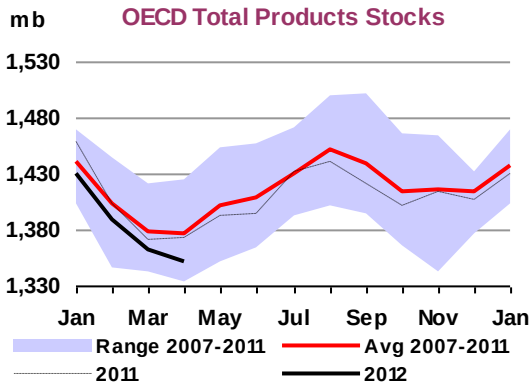
	May 2012 (preliminary) *(million barrels)*				May 2012 (preliminary) *(million barrels per day)*				First Quarter 2012 *(million barrels per day)*			
	N. Am	Europe	Pacific	Total	N. Am	Europe	Pacific	Total	N. Am	Europe	Pacific	Total
Crude Oil	**6.7**	**-6.4**	**7.6**	**8.0**	**0.21**	**-0.21**	**0.25**	**0.26**	**0.39**	**0.26**	**-0.01**	**0.64**
Gasoline	-3.5	-2.6	0.2	-6.0	-0.11	-0.08	0.01	-0.19	-0.04	-0.02	0.04	-0.02
Middle Distillates	-1.3	-7.0	3.8	-4.5	-0.04	-0.23	0.12	-0.15	-0.24	0.03	-0.07	-0.28
Residual Fuel Oil	0.3	-1.4	-0.1	-1.2	0.01	-0.05	0.00	-0.04	0.02	-0.01	0.01	0.02
Other Products	19.3	0.2	0.5	20.0	0.62	0.01	0.02	0.65	-0.04	0.00	-0.10	-0.15
Total Products	**14.7**	**-10.8**	**4.5**	**8.3**	**0.47**	**-0.35**	**0.14**	**0.27**	**-0.30**	**0.00**	**-0.13**	**-0.43**
Other Oils[1]	0.1	-1.4	0.5	-0.8	0.00	-0.05	0.02	-0.03	0.13	0.05	0.00	0.18
Total Oil	**21.4**	**-18.6**	**12.6**	**15.4**	**0.69**	**-0.60**	**0.41**	**0.50**	**0.22**	**0.31**	**-0.14**	**0.39**

1 Other oils includes NGLs, feedstocks and other hydrocarbons.

May crude stocks rose by 8.0 mb to 995 mb, in stark contrast with the five-year average month-on-month draw of 6.9 mb. Crude stocks have built since December 2011 and stand above five-year average levels for a second successive month. Just like last month, North America and Pacific crude stocks led the increase, up by 6.7 mb and 7.6 mb, respectively while European stocks declined by 6.4 mb.

Refined product inventories also rose by 8.3 mb, a lesser increase than the five-year average build of 25.0 mb, thus widening the deficit against the five-year average to 34.9 mb from 18.2 mb in April. A sharp increase in 'other products' holdings in North America led the product stock build, and were up by 19.3 mb. In contrast, all product categories in Europe barring 'other products' stocks showed declines, whereas in the Pacific only fuel oil stocks showed a slight decline.





OECD stocks were revised 12.9 mb higher for April and 10.4 mb for March, upon receipt of more complete monthly submissions from member countries. This implies a 19.8 mb build in April inventory levels, instead of preliminary estimates of a 17.3 mb increase. Upward adjustments in April were centred on European crude oil and 'other products' stocks, and North American refined product holdings. Alone among crude stocks, European levels were adjusted up by 8.1 mb, while European 'other products' stocks were revised up by 6.5 mb. All of the major North American product categories except for 'other products' showed upward revisions, with notably gasoline and middle distillate stocks amended by 3.3 mb and 4.9 mb, respectively. However, lower-than-initially-estimated crude oil holdings in North America and middle distillate stocks in Europe provided a partial offset to the generally upward revisions.

Revisions versus 13 June 2012 Oil Market Report

(million barrels)

	North America		*Europe*		*Pacific*		*OECD*	
	Mar-12	Apr-12	Mar-12	Apr-12	Mar-12	Apr-12	Mar-12	Apr-12
Crude Oil	**3.0**	**-2.5**	**-0.3**	**8.1**	**0.0**	**-1.8**	**2.7**	**3.7**
Gasoline	0.2	3.3	0.7	-2.6	0.0	1.4	0.9	2.1
Middle Distillates	-0.1	4.9	0.5	-5.8	0.0	2.4	0.4	1.5
Residual Fuel Oil	0.1	1.0	0.9	-1.5	0.0	0.2	1.0	-0.3
Other Products	0.1	-2.5	4.5	6.5	0.0	-0.7	4.7	3.4
Total Products	**0.3**	**6.8**	**6.7**	**-3.4**	**0.0**	**3.3**	**7.0**	**6.6**
Other Oils[1]	0.5	2.3	0.2	0.6	0.0	-0.3	0.7	2.6
Total Oil	**3.8**	**6.5**	**6.6**	**5.2**	**0.0**	**1.2**	**10.4**	**12.9**

1 Other oils includes NGLs, feedstocks and other hydrocarbons.

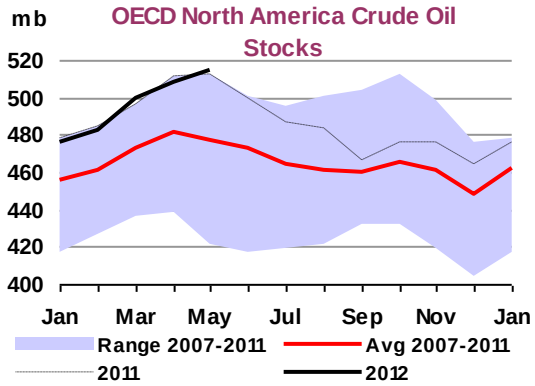
Preliminary data indicate a 7.2 mb decline in June OECD industry inventories, in contrast with a five-year average 2.3 mb build. Crude oil inventories fell by 13.0 mb as refiners ramped up crude processing. In the meantime, refined product stocks rose by 8.7 mb as every product stock category bar middle distillates increased. 'Other products' stocks continued an upward trend, rising by 14.8 mb, most of which stemmed from the US. Gasoline and fuel oil holdings also rose by 0.3 mb and 4.0 mb, respectively. However, middle distillate stocks fell by 10.3 mb on strong demand in Latin America and Europe.

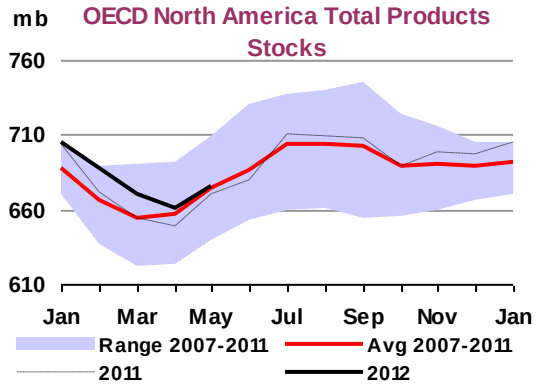
Analysis of Recent OECD Industry Stock Changes

OECD North America

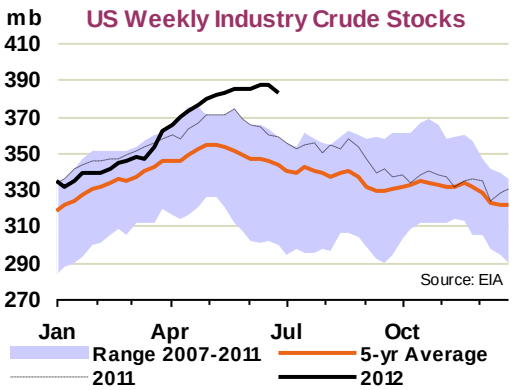
North American industry oil inventories rose by 21.4 mb to 1 353 mb in May, in line with a typical seasonal build of 18.0 mb. Crude oil holdings rose by 6.7 mb to 515 mb, a record high, most of which stemmed from the US. Despite higher refinery runs, continued strong domestic output and healthy imports boosted US crude holdings.

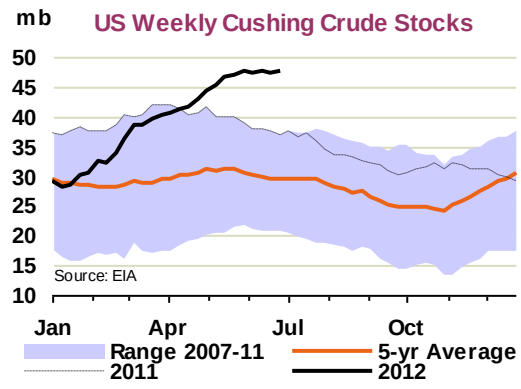
Product inventories increased by 14.7 mb as a surge in 'other products' stocks outweighed decreases in gasoline and middle distillate holdings. 'Other products' inventories rose sharply by 19.3 mb, as propane increased on refiner restocking. Gasoline inventories declined by 3.5 mb as the summer driving season in the US started at the end of May. Moreover, middle distillate inventories fell by a slight 1.3 mb, as the US continued to draw on stocks mainly to meet import demand from Latin America and Europe. Since the beginning of 2012, both absolute middle distillate stock levels and days of forward demand cover have pushed lower, reaching 17.6 mb (3.5 days) below historical norms in May.





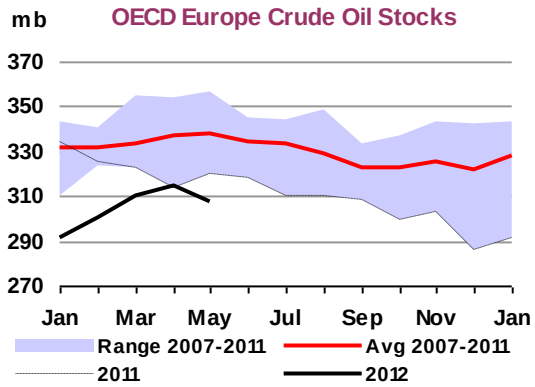
US weekly data show oil inventories rose by 10.8 mb in June, driven by another surge in 'other products' stocks, up by 12.6 mb as propane's seasonal build continued. Gasoline and fuel oil holdings also increased by 1.4 mb and 4.0 mb, respectively. Gasoline stocks edged up as US refiners ramped up their production to meet anticipated demand for the summer driving season. However, middle distillate inventories fell by 4.3 mb on continued strong exports. Overall, product inventories in the US rose by 13.8 mb. In the meantime, crude oil inventories fell by 1.7 mb, putting an end to five consecutive months of growth. Lower crude imports drove stocks down as tropical storm Debby disrupted tanker offloading operations in the region, including at the Louisiana Offshore Oil Port (LOOP). Nonetheless, crude oil stocks in the US have increased by 53.0 mb from the end of 2011 through to May, hovering significantly above the five-year range. Crude stock levels at Cushing, Oklahoma edged down by 0.1 mb, but remain just shy of recent record highs.

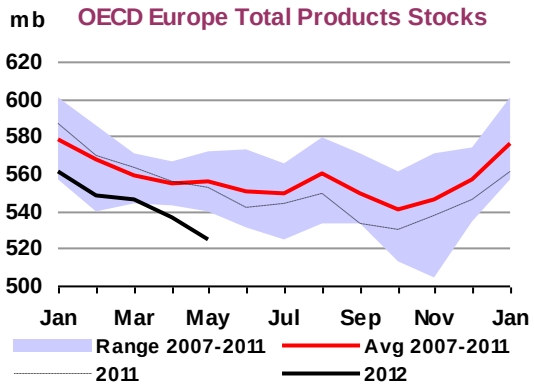




OECD Europe

Industry oil inventories in Europe fell by 18.6 mb in May to 904 mb, in contrast with a five-year average 2.6 mb build. European oil stocks have remained stubbornly below the five-year range for thirteen consecutive months. Moreover, forward demand cover in Europe has tightened after nine months at above traditional seasonal levels. Crude oil inventories fell by 6.4 mb to 308 mb, in contrast with a five-year average 0.8 mb build Meanwhile, refined product inventories declined by 10.8 mb to 525 mb, marking the lowest level since November 2007. Lower refinery runs drove down every major product stock category bar 'other products'. Gasoline holdings decreased by 2.6 mb on strong exports to the US. Middle distillate stocks fell by 7.0 mb as gasoil imports from Russia declined and amid strong demand. Fuel oil holdings declined by 1.4 mb while 'other products' stocks edged up by 0.2 mb. In the meantime, German end-user heating oil stocks rose by one percentage point to 49% fill at end-May, as cost conscious German consumers took advantage of the recent lower prices to replenish their tanks.

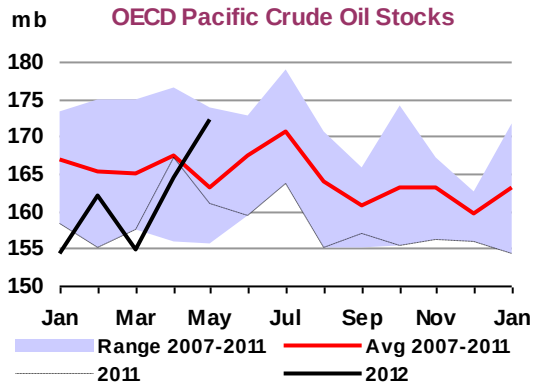


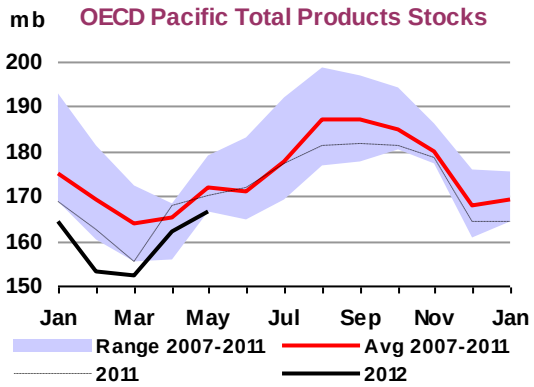


June preliminary data from Euroilstock point to a 12.5 mb stock draw, in the EU-15 and Norway. Crude oil inventories showed the largest decrease, falling by 7.1 mb. Refined product holdings also declined by 5.4 mb, driven by a sharp loss in middle distillate stocks, down by 6.0 mb. A slight drop in gasoline holdings also contributed to the overall product stocks decrease in June. In the meantime fuel oil and 'other products' stocks edged up by 0.9 mb and 0.4 mb, respectively. Refined product stocks held in independent storage in Northwest Europe also fell in June. Gasoline led the decline, as not only was there firm demand from the US but also from Mexico and West Africa.

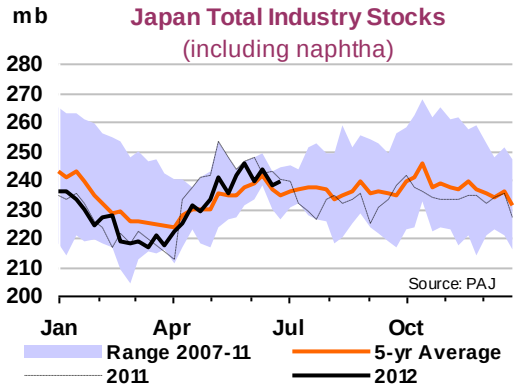
OECD Pacific

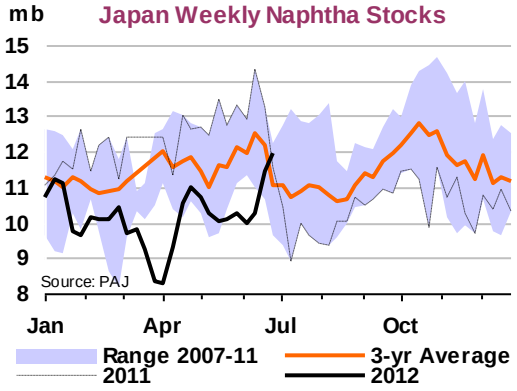
In May, OECD Pacific industry stocks built for a second consecutive month ,rising by a seasonal 12.6 mb to 415 mb. Having fallen to very low levels over 1Q12, by May inventories had rebounded to exceed the five-year average for the first time since April 2011 and now stand 37.6 mb above March's low point. The May rise was led by a 7.6 mb, counter-seasonal build in crude oil, as healthy regional imports outpaced muted refinery runs. Product stocks rose by 4.5 mb, led by a 3.8 mb build in middle distillates, with gasoline increasing by a moderate 0.16 mb. Only fuel oil inventories drew, falling by 0.1 mb.





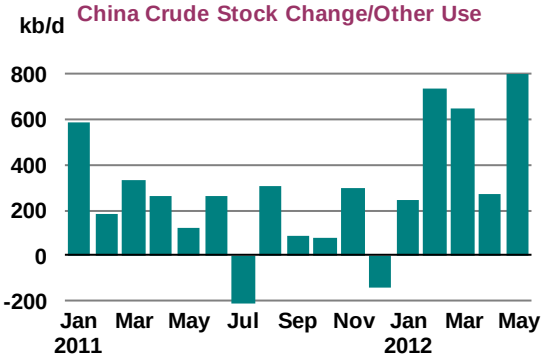
According to weekly data from the Petroleum Association of Japan (PAJ), Japanese industry inventories maintained their surplus to the five-year average in June despite a 5.5 mb draw. This was driven by a 4.2 mb decline in crude stocks while product inventories contracted by 1.3 mb due to a 1.6 mb fall in unfinished products. In contrast, finished products rose by 0.3 mb as a steady 1.7 mb build in naphtha stocks, likely resulting from longer-than-expected cracker maintenance, offset falls in fuel oil and gasoil.

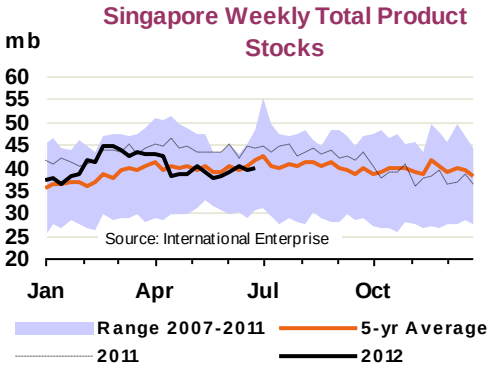




Recent Developments in Singapore and China Stocks

Data from China Oil, Gas and Petrochemicals (China OGP) indicate that Chinese commercial oil inventories fell by an equivalent 0.5 mb in May driven by a 3.0 mb draw in diesel stocks which tempered the effect of builds in gasoline (+1.1 mb) and kerosene (+1.0 mb). Crude oil stocks rose by 0.4 mb despite record crude oil imports, especially of Middle Eastern grades. This would suggest that recently-completed strategic storage capacity continues to be filled, albeit hard data on this remains elusive.



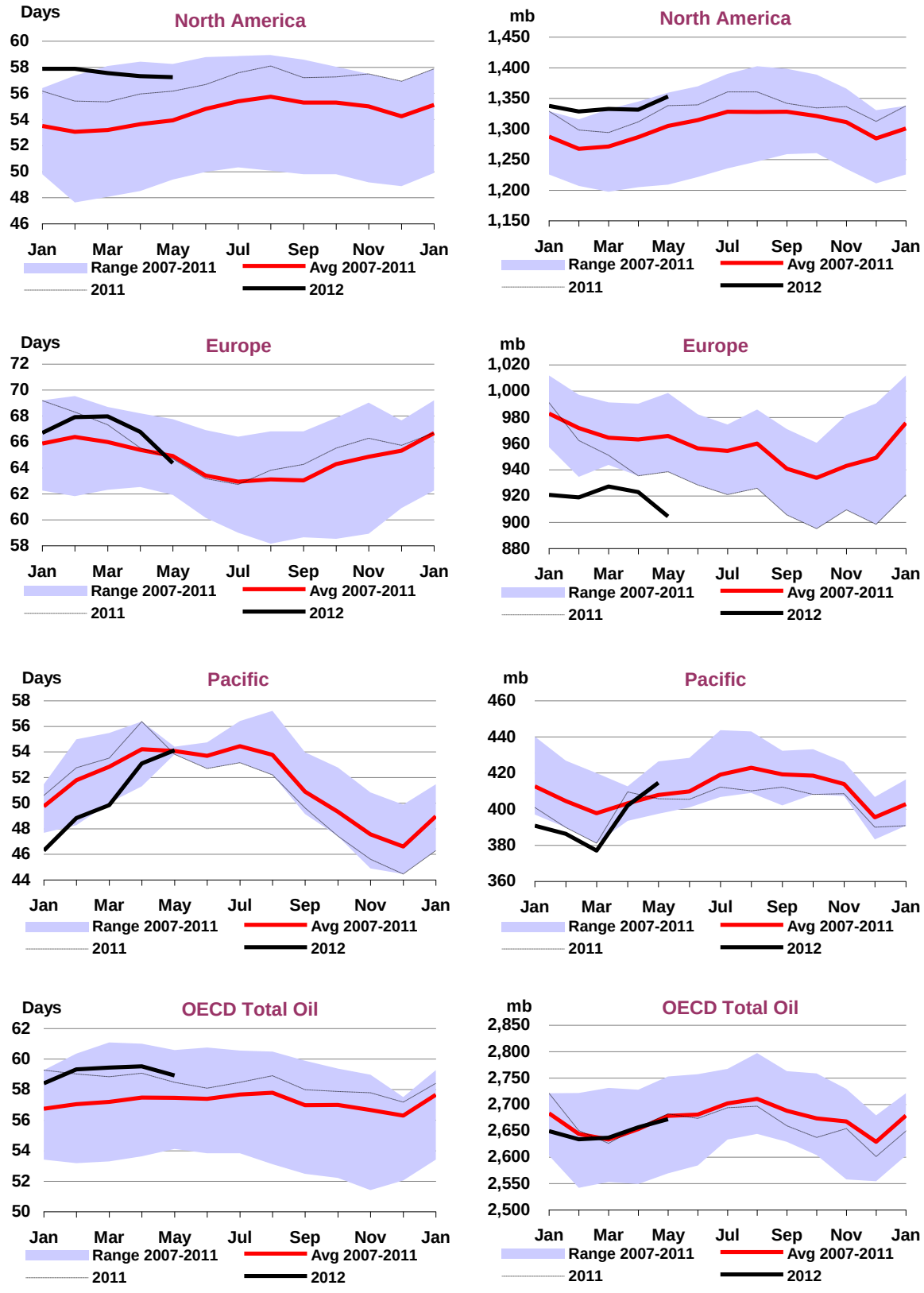


Singapore commercial product stocks continued to trend in line with the five-year average as they rose by 0.4 mb in the four weeks to 27 June to stand at 39.9 mb. Fuel oil holdings rose by 1.4 mb to offset 0.3 mb and 0.7 mb draws in light and middle distillates, respectively. Light distillates reportedly fell after imports of Indian gasoline declined amid strong local demand. Middle distillates stocks now sit towards the bottom of the five-year range after strong exports to India, Vietnam and Sri Lanka.

Regional OECD End-of-Month Industry Stocks

(in days of forward demand and millions barrels of total oil)

Days[1] **Million Barrels**



1 Days of forward demand are based on average demand over the next three months

PRICES

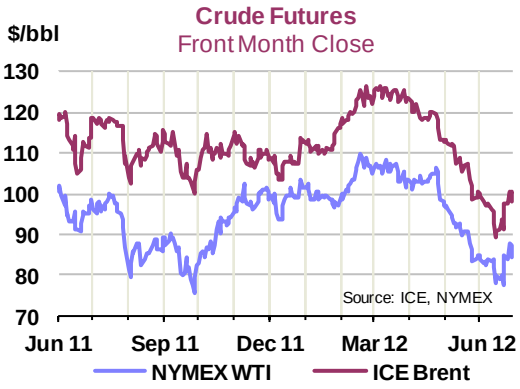
Summary

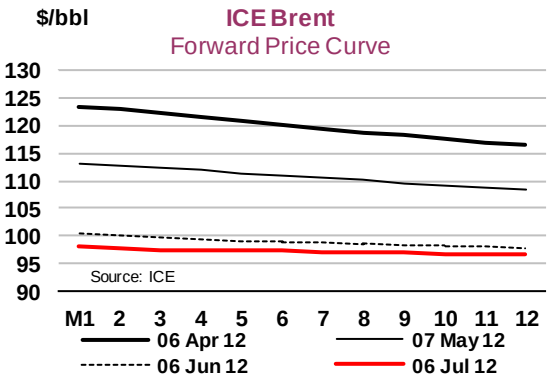
- **Oil futures markets were exceptionally volatile over June and into early July, with an array of conflicting drivers exerting pressure on prices.** Benchmark crudes plummeted during most of June before reversing course towards the end of the month and into early July. Brent crude posted the sharpest swings, but rebounded to around $100/bbl before a threatened shut-down of Norway's oil sector was averted. WTI priced within a $10/bbl range, and was last trading around $85/bbl.

- **Open interest in all major oil futures contracts declined in June, while open interest in options contracts increased.** Net long futures positions of money managers in CME WTI and ICE Brent contracts continued to fall in response to the worsening outlook for global economic activity and Europe's debt crisis.

- **Light distillate crack spreads strengthened in the Atlantic Basin (barring naphtha) due mainly to unplanned refinery outages**. In the meantime, fuel oil crack spreads in all regions improved, supported by strong power utility and bunker fuel demand. In contrast, naphtha cracks fell on weak petrochemical demand amid ample supplies from Europe, despite rebounding toward the end of June.

- **June held plenty of opportunities for charterers as crude tanker rates continued their downward spiral** as the bloated fleet continues to weigh heavily. By early-July, rates stood close to their 3Q11 lows for many benchmark rates.



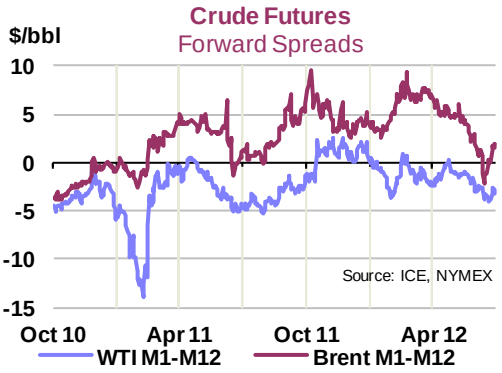


Market Overview

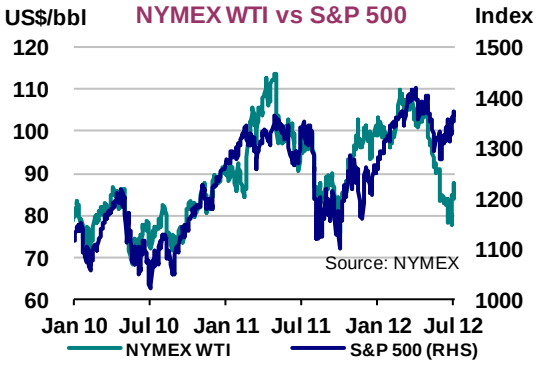
Oil futures markets were exceptionally volatile over June and into early July, with a wide array of conflicting drivers exerting pressure on prices. Benchmark crudes plummeted throughout most of June, touching 18-month lows before reversing course towards the end of the month and into early July. Brent crude posted the sharpest swings, with closing prices in a wide $11.50/bbl band before briefly rebounding to above the $100/bbl threshold. WTI traded in a narrower $10/bbl range and was last trading at the higher end of the scale near $85/bbl.

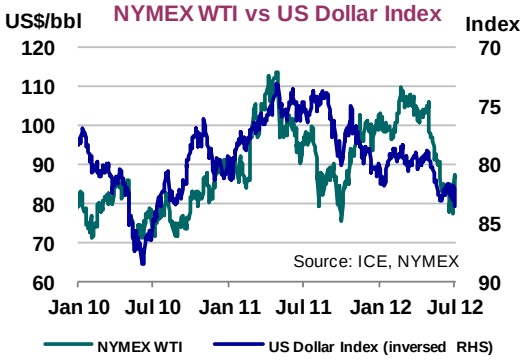
Oil markets trended lower through most of June in tandem with worsening euro zone woes and against the backdrop of rising global inventory. Swelling crude supplies in Europe propelled Brent prices to 18-month lows and triggered a brief reversal in the prevailing backwardated price structure. Brent futures contracts flipped back into contango for about 10 days in June under the weight of ample prompt supplies, after trading in backwardation for more than 15 months. Chronic unplanned outages in the

North Sea and Libya have supported prompt prices for more than a year. However, ample crude now on offer from Africa and the Middle East weighed on both European and Asian markets. Plentiful supplies from West Africa, Libya, Iraq and Saudi Arabia, continued to add pressure on the front end of the forward curve for Brent. The Brent M1-M12 backwardation narrowed to just $0.72/bbl in June compared with $4.54/bbl in May before rebounding again in the first week of July to an average $1.58/bbl.



Similarly, US futures prices fell below the $80/bbl threshold in the third week of June for the first time since October 2011 amid swelling stocks of crude. US crude inventories are at their highest level in 22 years.





The sharp downturn in oil prices over the month also saw a decoupling from key financial indicators such as the S&P 500. With rising supplies exerting exceptional downward pressure on crude futures prices, WTI and the S&P index moved in the same direction during just two of the first six months of 2012, exhibiting a much weaker degree of co-movement than evident for much of 2010 and 2011.

However, by end-June markets again focused on rising tensions between Iran and the international community, as the most severe sanctions to date were implemented. Iranian authorities renewed threats to shut the Strait of Hormuz and reports that the US military was building up its forces in the Gulf region added further fuel to the rally. Sanctions are expected to force a cutback in Iranian exports of around 1 mb/d from the summer onwards compared with 2011 levels, with the US having now exempted 20 of Iran's main customers from financial sanctions after they made significant cuts in their purchase of Iranian oil. However, immediately ahead of the 28 June US and 1 July EU deadlines, imports of Iranian crude appeared to have surged again, with tanker data suggesting China increased imports by 60% to 800 kb/d in June. A sharper downturn in Iranian sales is expected for July however.

A potential lock-out of striking Norwegian oil workers by operators threatened to shut down 2 mb/d of offshore production from 9 July, and added further upward momentum. Prices for Brent edged higher when it appeared that the Norwegian government was not going to intervene and would effectively allow the country's first closure of its oil industry in more than 25 years. However, the government finally intervened to stop the action and Norwegian supplies are expected to recover in coming weeks.

Worries over any escalation in Iranian tensions, however, are likely to persist for some time and keep something of a floor under prices. Unplanned outages in the North Sea, coupled with a potentially active Atlantic hurricane season, may also lend support. Seasonally strengthening global oil demand is also on the horizon, now expected to rise by 1.6 mb/d between 2Q12 and 3Q12, to 90.4 mb/d and by a further 500 kb/d to 90.9 mb/d in 4Q12.

Prompt Month Oil Futures Prices

(monthly and weekly averages, $/bbl)

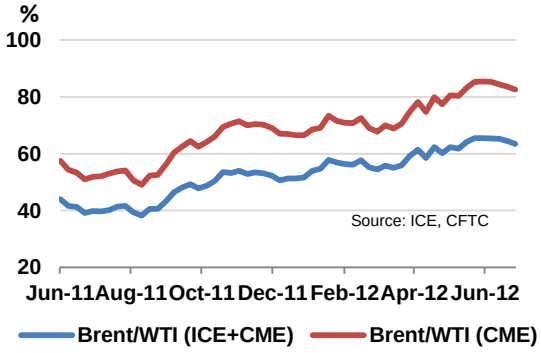
	Apr	May	Jun	Jun-May Avg Chg	% Chg	Week Commencing: 04 Jun	11 Jun	18 Jun	25 Jun	02 Jul
NYMEX										
Light Sweet Crude Oil	103.35	94.72	82.41	-12.31	-14.9	84.44	83.32	81.41	80.29	85.77
RBOB	136.65	123.90	111.36	-12.55	-11.3	112.69	112.06	109.31	111.32	113.69
No.2 Heating Oil	132.55	122.59	109.80	-12.79	-11.6	111.48	110.40	108.35	108.84	114.58
No.2 Heating Oil ($/mmbtu)	22.75	21.04	18.85	-2.20	-11.6	19.14	18.95	18.60	18.68	19.67
Henry Hub Natural Gas ($/mmbtu)	2.05	2.49	2.50	0.00	0.2	2.37	2.32	2.58	2.76	2.86
ICE										
Brent	120.49	110.29	95.93	-14.36	-15.0	99.55	97.38	92.94	93.34	99.34
Gasoil	134.94	125.21	112.59	-12.62	-11.2	114.25	113.83	111.56	110.51	116.81
Prompt Month Differentials										
NYMEX WTI - ICE Brent	-17.14	-15.57	-13.52	2.05		-15.10	-14.07	-11.53	-13.05	-13.57
NYMEX No.2 Heating Oil - WTI	29.20	27.87	27.39	-0.48		27.04	27.08	26.94	28.55	28.81
NYMEX RBOB - WTI	33.31	29.19	28.95	-0.24		28.25	28.74	27.89	31.04	27.92
NYMEX 3-2-1 Crack (RBOB)	31.94	28.75	28.43	-0.32		27.85	28.19	27.58	30.21	28.22
NYMEX No.2 - Natural Gas ($/mmbt	20.71	18.55	16.35	-2.20		16.77	16.63	16.02	15.93	16.81
ICE Gasoil - ICE Brent	14.45	14.92	16.66	1.74		14.70	16.45	18.61	17.17	17.47

Source: ICE, NYMEX

Futures Markets

Activity Levels

Percentage of Brent to WTI Open Interest

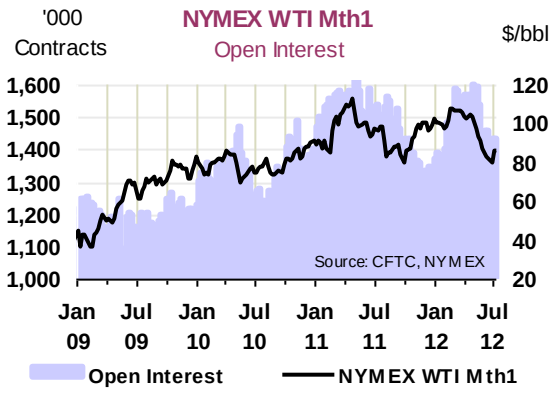


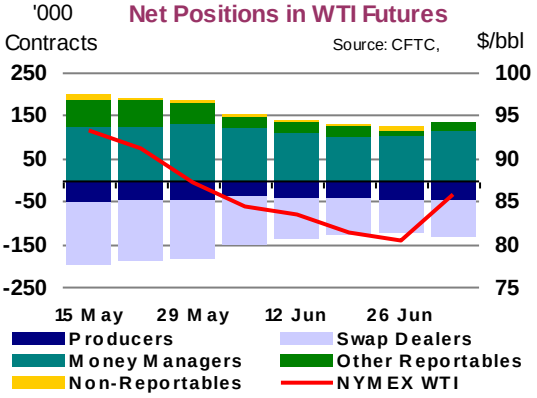
The ratio of Brent futures in London ICE to New York and London WTI oil positions declined by almost 2% to 63.5% between 29 May and 3 July 2012. The fall was triggered by a 3.6% decline in ICE Brent open interest over the same period. The decline in the ratio of Brent to WTI open interest is slightly larger when ICE WTI contracts are excluded, falling by 2.66% to 82.6%. Opposite trends are observed in volume comparison. Total volumes of trade in CME WTI contracts declined by 20.4% in June 2012 compared to June 2011 (from 15.8 million to 12.6 million contracts). Year-to-date volume also declined by 19.3% from 94.4 million to 76.2 million contracts. In comparison, Brent monthly volume increased from 13.5 million to 15.1 million contracts for June 2011 and 2012, respectively. Year-to-date volume in London ICE Brent futures contracts also increased by 16%, from 65.3 million to 75.8 million contracts, levelling with CME WTI contract.

Open interest in all major oil futures contracts declined in June while open interest in options contracts increased. Open interest in New York CME WTI futures and options contracts increased by 6.2% to 2.45 million. Meanwhile, open interest in futures-only contracts declined by 0.5% to a four-month low of 1.43 million from 1.44 million. Over the same period, open interest in London ICE WTI futures-only contracts dropped to 0.43 million while open interest in futures and options rose by 3.5% to 0.53 million contracts. On the other hand, open interest in ICE Brent futures declined by 3.6% to 1.18 million contracts, while ICE Brent futures and options increased by 0.5% to reach 1.46 million contracts from 29 May to 3 July 2012.

Money managers cut their bets on rising WTI crude oil prices for a fourth consecutive month by 26 473 contracts between 29 May and 26 June 2012. They reached the lowest level since early September 2010 at 99 765 in response to the fall in WTI prices from $90.76/bbl to $79.36/bbl. The fall in price is triggered by a worsening outlook for global economic activity, rising global inventories and Europe's debt crisis. As of 26 June, net long futures position of money managers in CME WTI contracts

was less than half the level observed at the end of February. Money managers increased their bullish bets on WTI prices in London by 1 677 to 1 275 contracts, and reduced their bets on rising Brent prices over the same period by 47% from 71 646 to 37 816 futures contracts, the lowest level since October 2011. However, money managers increased their bullish bets on rising prices in the week ending 3 July 2012 as a European Union ban on Iranian oil took effect and following cuts in policy rates by central banks in Europe and China to stimulate economic growth. As WTI prices recovered from $79.36/bbl to $87.66/bbl in the week ending 3 July, money managers increased their net long position in CME WTI contracts by 14 133 to 113 898. Similarly, money managers increased their net long position in ICE Brent contracts by 15 371 to 53 187 in the week ending 3 July 2012.





Producers, who accounted for 17.9% of the short and 14.5% of the long contracts in CME WTI futures-only contracts, increased their net futures short positions from 48 644 to 48 877 contracts between 29 May to 3 July. Swap dealers, who accounted for 30.4% and 36.4% of the open interest on the long side and short side, respectively, reduced their bets on falling prices by 36.9% to hold 85 084 net futures short positions over the same period. Producers' trading activity in the London WTI contracts followed a similar pattern as CME WTI contracts. Producers in London ICE WTI contracts reduced their net long positions from 39 541 to 4 723 contracts. Swap dealers, on the other hand, followed an opposite pattern with respect to their trading in CME WTI contracts and increased their net short positions from 38 179 to 46 809 contracts.

Positions on NYMEX Light Sweet Crude Oil (WTI) Futures Contracts

Thousand Contracts

03 July 2012	Long	Short	Net	Long/Short	Δ Net from Prev. Week		Δ Net Vs Last Month	
Producers' Positions	207.4	256.3	-48.9	*Short*	↓	-1.4	↓	-0.2
Swap Dealers' Positions	182.0	267.1	-85.1	*Short*	↓	-10.7	↑	49.7
Money Managers' Positions	182.4	68.5	113.9	*Long*	↑	14.1	↓	-12.3
Others' Positions	137.6	119.9	17.7	*Long*	↑	4.6	↓	-35.0
Non-Reportable Positions	67.5	65.2	2.4	*Long*	↓	-6.7	↓	-2.2
Open Interest			**1433.0**		↑	0.8	↓	-7.1

Source: CFTC

NYMEX RBOB futures and combined open interest declined by more than 9.4% to 253 521 and 276 409, respectively, over the same period. Open interest in NYMEX heating oil futures contracts declined by 2.6% to 315 102 contracts while open interest in natural gas futures market is down by more than 7.6% to 1.12 million contracts.

Index investors' long exposure in commodities in May 2012 declined by $38.2 billion to $269.9 billion in notional value. The notional value of long exposures in both on- and off-WTI Light Sweet Crude Oil futures contracts fell by $12.7 billion in May. The number of long futures equivalent contracts declined to the lowest level since December 2008 to 529 000, equivalent to $46.0 billion in notional value.

Market Regulation

On 10 May 2012, the CFTC issued a final order amending the effective date of the provisions in the swap regulatory regime established by the Dodd-Frank Act that would have gone into effect on 16 July 2011. The order extends the effective date for swap regulation until 31 December 2012, or until the Commission's rules and regulations go into effect, whichever is sooner. Although this is the third substantial delay amid agency struggles to keep pace with rule-making deadlines mandated by the Dodd-Frank Act, the Commission already finalised 40 rules out of the 60 required by the Act. In this sense, the Commission is in better shape than any other regulatory agency to meet the deadline despite having a limited budget. The Commission voted to finalise a swap definition rule on 10 July 2012 that closely follows what is laid out in Dodd-Frank. This would trigger the effective date for many rules two months after the final swap definition is published, including swap dealers registration, swap reporting and position limits.

On 29 June 2012, the CFTC unanimously voted to propose interpretive guidance extending the Dodd-Frank Act to cross-border derivatives activities for public comments. As noted in the June OMR, the extent to which the Dodd-Frank Act will govern cross-border activities is an important issue in light of the global nature of the swap market. The Dodd-Frank Act gives broad authority to the CFTC over the global swaps markets under Section 722. This provides that the CFTC's jurisdiction shall not apply to activities outside of the US unless they have a direct and significant connection with activities in, or effect on, the commerce of the US. The proposed interpretive guidance attempts to clarify the applicability of the new swap regulations to different categories of US and non-US entities.

On 3 July 2012, the European Council adopted the European Parliament's agreed version of the European Markets Infrastructure Regulation (EMIR). This introduces significant changes to the over-the-counter derivatives markets by establishing common rules for Central Counterparty Clearing Houses (CCPs) and trade repositories (TRs), mandating central clearing for all standardised contracts, as well as bringing reporting requirements to all derivatives contracts. Once published in the Official Journal, the rules will enter into force 20 days after the publication. The new rules will apply from the end of 2012.

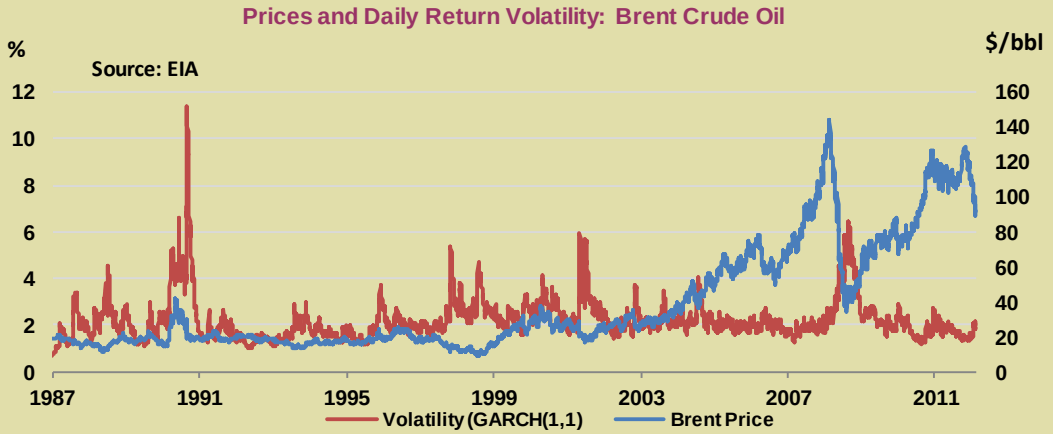
Volatility vs. Price

In recent years, the oil market has been characterised by rising, and at times, rapidly fluctuating price levels. In the last three months alone, Brent crude oil prices have fluctuated in a wide range from $125/bbl to $89/bbl. Higher volatility will certainly impact both consumers and producers. Oil exporting countries can be negatively affected by the impacts of high volatility in oil prices on fiscal revenues, investment and confidence in the economy. Higher volatility can have negative impacts on inflation and growth prospects in oil importing countries as well. As a response to observed higher prevailing volatility, for example, G20 leaders called for policy options to combat excessive price volatility in commodity markets in general, and in oil markets in particular. In order to reduce volatility in oil markets, the G20 experts group emphasised the importance of improving data transparency in both financial and physical markets as well as phasing out of inefficient fossil fuel subsidies. They also urged the use of country-specific monetary and fiscal responses to support inclusive growth in order to mitigate the impacts of excessive price volatility.

However, it is important to note that volatility itself is not the main problem. The main challenge is the elevated price levels combined with higher volatility. Oil prices, like those of many other commodities, are inherently volatile and volatility itself varies over time. Due to inelastic supply and demand curves, at least in the short run, any shock to demand and supply will lead to large changes in oil prices. For example, annualised average volatility in January 2009 peaked at 92%, followed by a rapid decline to relatively low levels. On the other hand, volatility reached its historical peak level (116% annually) in January 1991. Up until mid-March 2012, average annualised volatility in 2012 was relatively stable at around 23%. It is important to note that prices in this period increased from $110/bbl to $128/bbl. Volatility in Brent prices increased especially in June 2012, reaching more than 34% at a time when the price level declined by more than $15/bbl.

Volatility vs. Price (continued)

This pattern, volatility increasing as oil prices decline and volatility declining as oil prices increase, is consistent with the empirical evidence in the stock market. The increase in volatility when oil prices falls can be explained by the fact that falling oil prices often accompany deteriorating global activity and resulting uncertainties for global oil demand, such as the collapse in demand observed immediately after the demise of Lehman Brothers in September 2008.



Although policy makers and market participants generally point to peak oil prices in 2008, the average Brent oil price in 2008 was $96.94/bbl, only peaking at $144/bbl on 3 July 2008. Moreover, oil prices were above the $100 threshold level on only 128 days during 2008. Average Brent oil prices registered $61/bbl in post-September 2008 when the worst financial crisis since the Great Depression hit the global economy. In contrast, between mid-February 2011 and June 2012, oil prices have averaged above $100/bbl. The average Brent oil price registered $111.26/bbl and $113.17/bbl in 2011 and 2012, respectively. Given the fragile state of the global economic recovery, the impact of high oil prices on global growth, especially in oil importing countries, is potentially more severe now than in 2008. High oil prices already threaten to aggravate global economic slowdown by widening global imbalances, reducing household and business income, and boosting inflation.

This is not to say that volatility should have a second order of importance when considering market dynamics and oil prices. Prices and volatility cannot be separated from each other. However, persistently higher oil prices have been increasing the share of GDP spent on oil imports. This is especially the case in oil-importing developing countries because their economies are often more dependent on imported oil and more energy-intensive and because their energy use in a given sector is sometimes less efficient than the global average. Therefore, policies to deal with high oil prices should arguably be given priority over policies dealing with volatility. There are already many tools to combat oil price volatility, including not least at a micro level the use of commodity derivatives markets to hedge against price risk. Addressing elevated price levels may be a harder nut to crack however, unless price distortions in consumer markets on the one hand, and uncertainties in the upstream investment environment on the other are addressed, allowing markets to more readily self-adjust to international pricing signals.

Spot Crude Oil Prices

Spot crude oil markets were exceptionally volatile in June and early July, with prices for benchmark crudes plummeting by around $13-17/bbl on average in June. North Sea Dated fell by $15.45/bbl, to an average $94.80/bbl, but sharply rebounded above $100/bbl in early July on fears of a complete shutdown in the Norwegian North Sea in the wake of workers strike action.

Spot prices for WTI crude were down $12.33/bbl in June, to $82.35/bbl, pressured lower by continued high levels of crude inventories in the US, and especially the midcontinent. Stock levels at the Cushing, Oklahoma delivery point for the NYMEX contract rose by 4.5 mb to a new record high of 47.8 mb.

Spot Crude Oil Prices and Differentials

(monthly and weekly averages, $/bbl)

	Apr	May	Jun	Jun-May Avg Chg	%	Week Commencing: 04 Jun	11 Jun	18 Jun	25 Jun	02 Jul
Crudes										
North Sea Dated	119.57	110.25	94.80	-15.45	-14.0	99.59	97.00	92.56	91.28	99.12
Brent (Asia) Mth 1	120.65	110.81	95.75	-15.06	-13.6	98.57	98.21	93.67	91.57	98.81
WTI (Cushing) Mth 1	103.29	94.68	82.35	-12.33	-13.0	84.44	83.32	81.26	80.21	85.77
Urals (Mediterranean)	117.46	109.50	93.25	-16.25	-14.8	97.70	95.08	91.08	90.21	99.02
Dubai	117.28	107.32	94.33	-12.99	-12.1	96.15	96.37	92.78	91.22	96.43
Tapis (Dated)	126.53	117.07	99.83	-17.24	-14.7	103.57	101.60	97.24	96.20	102.69
Differential to North Sea Dated										
WTI (Cushing)	-16.28	-15.57	-12.45	3.12		-15.14	-13.69	-11.30	-11.07	-13.35
Urals (Mediterranean)	-2.11	-0.75	-1.55	-0.80		-1.88	-1.92	-1.48	-1.07	-0.10
Dubai	-2.29	-2.93	-0.48	2.46		-3.44	-0.64	0.22	-0.06	-2.69
Tapis (Dated)	6.96	6.82	5.03	-1.79		3.98	4.60	4.68	4.92	3.57
Prompt Month Differential										
Forward Cash Brent Mth1-Mth2	0.22	0.50	-0.03	-0.52		0.37	0.16	-0.21	-0.34	0.24
Forward WTI Cushing Mth1-Mth2	-0.48	-0.33	-0.30	0.02		-0.30	-0.30	-0.21	-0.40	-0.38
Forward Dubai Mth1-Mth2	0.42	0.42	0.95	0.53		0.85	0.97	0.88	1.12	0.41

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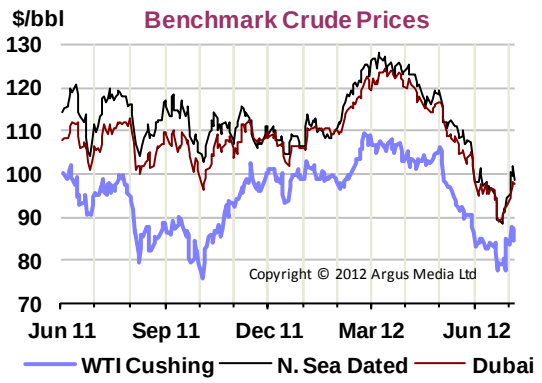
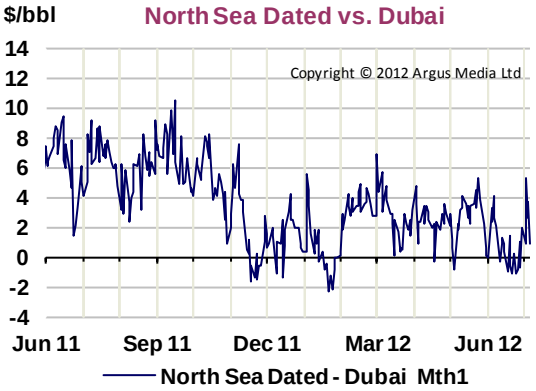
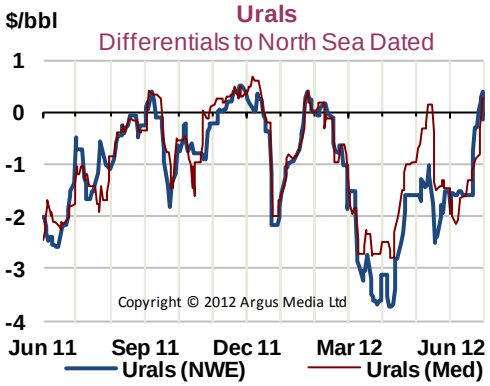
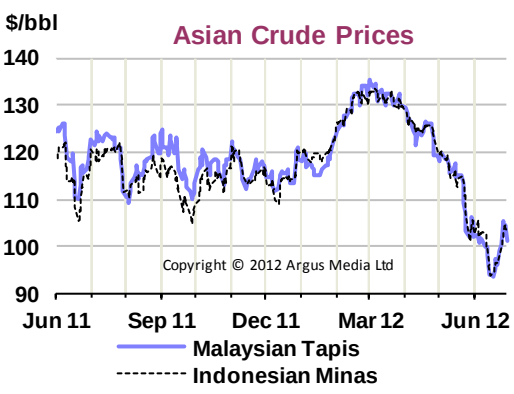
Dubai spot prices posted a month-on-month decline of just under $13/bbl, to an average $94.33/bbl. The price differential for Dubai minus North Sea Dated narrowed in June on stronger demand for sour grades, to -$0.48/bbl in June compared with -$2.93/bbl in May.





In Europe, markets were awash with crude throughout June, with plentiful supplies of African light crudes available throughout the month, including a number of Libyan cargoes on offer. However, demand for medium sour crudes remained more robust, and when new sanctions on Iran were implemented on 1 July, demand for Urals increased sharply. The discount for Urals to Brent in the Mediterranean narrowed to just -$0.10/bbl in the first week of July compared with an average -$1.55/bbl in June and -$0.75/bbl in May, and was even trading at a premium at the time of writing. .

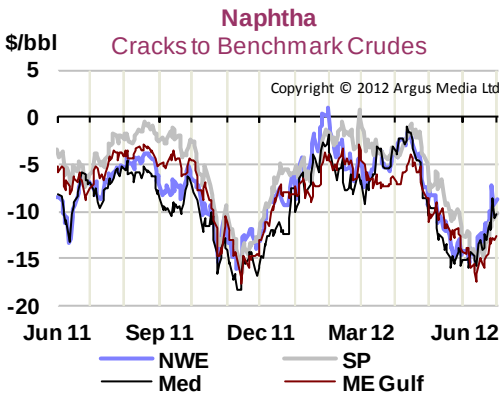


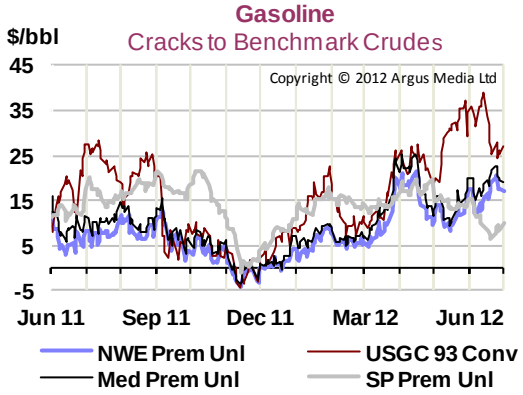


In Asia, weak naphtha demand curbed demand for light crudes while stronger fuel oil cracks propped up premiums for heavier, sour crudes. Moreover, the surplus of African crudes added further downward pressure on regional grades such as Malaysian Tapis.

Spot Product Prices

Crack spreads trended upwards for most products except naphtha in June, as the fall in product prices lagged the decline in benchmark crude prices. Light distillate crack spreads in the Atlantic basin strengthened (again except naphtha) due to unplanned refinery outages while fuel oil crack spreads in all regions improved, supported by ongoing strength in Japanese power utility demand and strong bunker fuel demand in Singapore. In contrast, naphtha margins fell on weak petrochemical demand amid ample supply from Europe, despite rebounding toward the end of June.





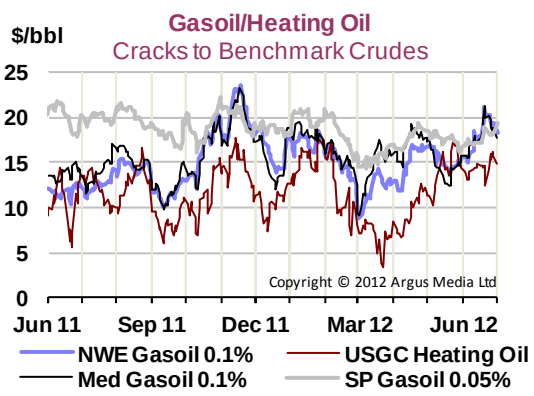
Naphtha crack spreads edged lower month-on-month in June, despite rising sharply from the middle of the month, falling by $0.29-1.06/bbl in Europe, and an even sharper $4.53/bbl in Asia. Despite the weak spot demand from petrochemical makers who have been hit hard by the intractable European debt crisis, spot naphtha feedstock supplies were ample for the early part of the month. Also recent record term premiums sought by Saudi Aramco, and a few other Middle Eastern countries, discouraged buyers, therefore resulting in some unsold volumes. In addition, Asia's top naphtha buyer Formosa Petrochemical shut its entire 2.93 million tonnes per year (tpy) cracking complex in late June due to maintenance and an unplanned outage, further weakening already lacklustre regional naphtha demand. However, in the latter part of the month, European demand for gasoline improved and this likely absorbed some surplus naphtha, boosting prices.

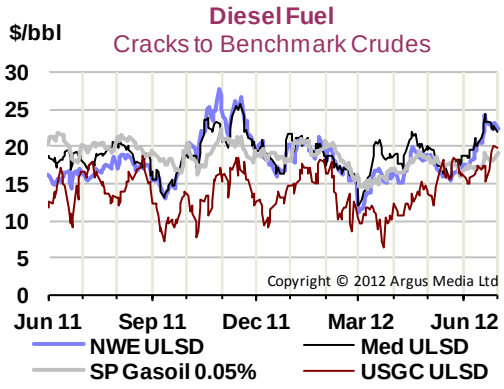
Gasoline markets in Europe and the US Gulf strengthened in June, with crack spreads widening in Northwest Europe by $4.60/bbl to Brent, and by $5.44/bbl to Urals in the Mediterranean. Super Unleaded gasoline crack spreads in the US Gulf coast rose by $3.49/bbl to LLS in June. By contrast, in Singapore, crack spread differentials fell by $4.12/bbl versus Dubai.

Prices in the US Gulf surged on the outage of a new crude distillation unit for unplanned repairs at Motiva Enterprises' 600 kb/d refinery in Port Arthur for the early part of June. However, gasoline prices then fell back again sharply as refinery runs in the region rose markedly despite the shutdown, albeit values showed a month-on-month increase. European gasoline crack spreads advanced further in June, as exports to the US and low refinery runs partly affected by the closure of Petroplus' Coryton refinery in the UK, left the spot market tightly supplied.

In Singapore, gasoline margins followed a downward spiral as demand from Asia's top two importers, Indonesia and Vietnam weakened. Indonesia has restarted its Balongan refinery that is its key gasoline-producing plant in the country, reducing gasoline imports. Meanwhile, Vietnamese demand has

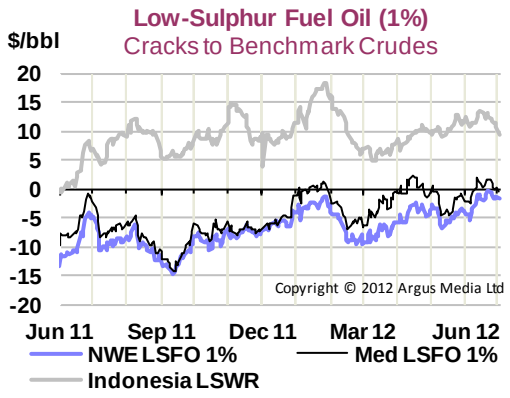
weakened seasonally with the approach of the third quarter rainy season, and as the country's only refinery was gearing up to resume operations after a near-two-month maintenance shutdown.

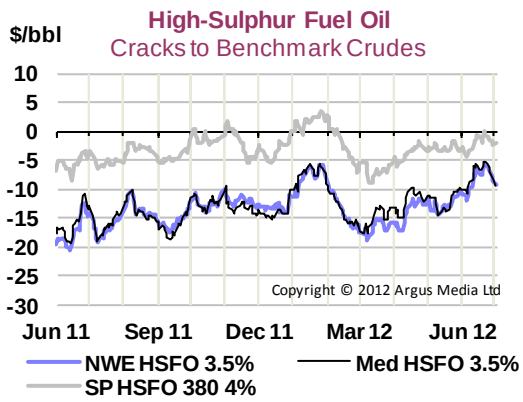




Middle distillate crack spreads strengthened in all regions in June bar Singapore. Diesel crack spreads to Brent in Northwest Europe rose by $3.87/bbl and by $3.50/bbl to Urals in the Mediterranean, and by a lesser $1.18/bbl in the US Gulf. Diesel margins widened not only due to refinery shutdowns in Europe and the US Gulf coast, but also by strong demand from West Africa. In addition, a reported buying spree by Saudi Aramco of power generation diesel fuel further supported the middle distillate market.

In the meantime, gasoil crack spreads in Singapore were virtually unchanged. Strong demand from Australia, India and Sri Lanka offset ample supplies from Northeast Asia, where refinery maintenance has just finished. A slight decline in middle distillate inventories to a six-month low in Singapore also contributed to the upward price pressure.





Fuel oil markets continued to strengthen in June, with HSFO crack spreads narrowing in Europe by $4.36-4.90/bbl and in Singapore by a lesser $0.72/bbl. Low outright prices spurred bunker fuel demand for the shipping sector in Singapore, while on-spec bunker fuel supplies were tight in the Mediterranean. Fuel oil stocks in the ARA region declined in June toward the five-year average.

LSWR cracked fuel price differentials in Singapore increased by $1.35/bbl, while LSFO discounts to Brent widened by $2.65, and by $2.70/bbl to Urals in the Mediterranean. Rising seasonal power demand for the summer provided general support for the LSFO market. Prices were supported by incremental utility demand from Japan, South Korea and Saudi Arabia.

Spot Product Prices

(monthly and weekly averages, $/bbl)

	Apr	May	Jun	Jun-May		Week Commencing:					Apr	May	Jun	Chg
				Chg	%	04 Jun	11 Jun	18 Jun	25 Jun	02 Jul				
Rotterdam, Barges FOB											**Differential to North Sea Dated**			
Premium Unl 10 ppn	136.35	121.81	110.96	-10.85	-8.9	112.25	111.10	110.00	110.04	116.32	16.78	11.56	16.16	4.60
Naphtha	115.69	98.61	82.10	-16.51	-16.7	84.98	82.43	80.09	81.67	90.02	-3.88	-11.64	-12.70	-1.06
Jet/Kerosene	135.31	126.61	112.62	-13.99	-11.0	115.13	113.74	111.52	110.63	116.72	15.74	16.36	17.82	1.46
ULSD 10ppm	137.36	127.17	115.59	-11.58	-9.1	117.22	116.73	114.81	114.19	121.45	17.79	16.92	20.79	3.87
Gasoil 0.1%	134.62	125.51	112.94	-12.58	-10.0	114.99	114.52	112.09	110.76	116.90	15.05	15.26	18.14	2.87
LSFO 1%	115.62	105.68	92.89	-12.80	-12.1	95.35	95.38	91.56	90.07	96.50	-3.95	-4.57	-1.91	2.65
HSFO 3.5%	106.00	97.89	86.80	-11.09	-11.3	88.67	89.34	85.85	83.98	88.69	-13.57	-12.36	-8.00	4.36
Mediterranean, FOB Cargoes											**Differential to Urals**			
Premium Unl 10 ppn	137.55	123.00	112.20	-10.81	-8.8	113.40	112.34	111.26	111.31	117.63	20.10	13.50	18.94	5.44
Naphtha	113.37	96.29	79.75	-16.54	-17.2	82.62	80.07	77.75	79.34	87.80	-4.09	-13.21	-13.50	-0.29
Jet Aviation fuel	134.22	125.48	111.36	-14.12	-11.3	113.92	112.45	110.23	109.36	115.52	16.76	15.98	18.11	2.13
ULSD 10ppm	137.25	127.34	114.59	-12.75	-10.0	116.55	115.45	113.91	113.07	119.61	19.80	17.84	21.34	3.50
Gasoil 0.1%	134.74	124.11	111.39	-12.72	-10.2	113.73	112.50	110.58	109.44	115.68	17.28	14.61	18.14	3.53
LSFO 1%	117.94	107.25	93.70	-13.55	-12.6	96.28	96.20	92.30	90.86	97.38	0.48	-2.25	0.45	2.70
HSFO 3.5%	105.73	97.43	86.08	-11.35	-11.6	87.97	88.65	85.13	83.21	87.90	-11.72	-12.07	-7.17	4.90
US Gulf, FOB Pipeline											**Differential to LLS**			
Super Unleaded	146.25	136.38	126.72	-9.66	-7.1	131.34	132.87	123.28	118.82	128.60	23.85	28.31	31.79	3.49
Unleaded	134.43	120.41	109.88	-10.53	-8.7	113.63	112.89	107.62	104.81	113.16	12.02	12.34	14.96	2.62
Jet/Kerosene	135.25	124.91	112.35	-12.56	-10.1	113.33	112.73	111.32	112.09	117.77	12.84	16.84	17.43	0.58
ULSD 10ppm	135.02	123.87	111.91	-11.97	-9.7	112.82	112.18	110.92	111.78	118.28	12.62	15.80	16.98	1.18
No. 6 3%*	108.55	98.56	86.97	-11.59	-11.8	88.51	88.68	85.67	84.79	88.39	-13.85	-9.51	-7.95	1.55
Singapore, FOB Cargoes											**Differential to Dubai**			
Premium Unleaded	135.06	121.61	104.50	-17.12	-14.1	109.70	106.31	100.24	99.88	107.11	17.78	14.29	10.17	-4.12
Naphtha	114.54	98.56	81.04	-17.53	-17.8	83.38	81.38	78.82	79.66	87.28	-2.74	-8.76	-13.29	-4.53
Jet/Kerosene	133.29	123.44	110.33	-13.12	-10.6	111.60	112.00	109.27	107.80	114.21	16.02	16.12	16.00	-0.12
Gasoil 0.05%	135.04	124.95	111.95	-12.99	-10.4	113.38	113.51	110.89	109.41	115.78	17.76	17.63	17.63	0.00
LSWR Cracked	126.52	118.03	106.38	-11.64	-9.9	107.15	109.26	105.58	102.70	105.74	9.24	10.71	12.06	1.35
HSFO 180 CST	115.05	106.16	94.02	-12.14	-11.4	94.33	96.48	93.27	91.20	95.94	-2.23	-1.16	-0.31	0.85
HSFO 380 CST 4%	113.53	104.45	92.18	-12.27	-11.8	92.19	94.63	91.68	89.55	94.23	-3.75	-2.87	-2.15	0.72

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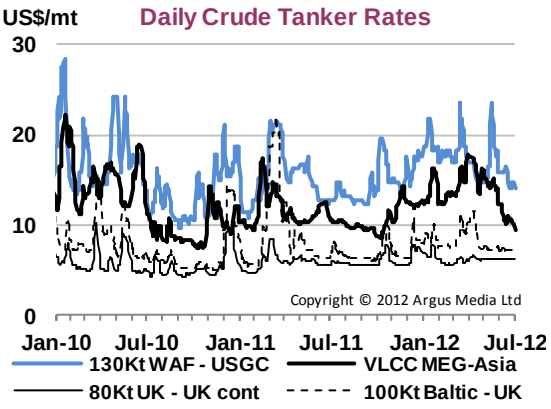
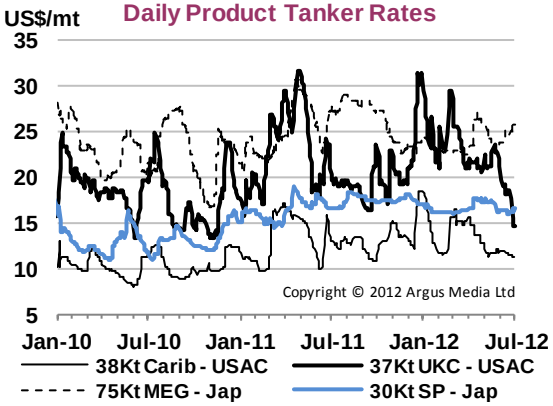
Freight

June held plenty of opportunities for charterers as crude tanker rates continued their downward spiral as the bloated fleet continues to weigh heavily. By early-July, rates stood close to their 3Q11 lows on many benchmark rates. The only bright spark in the market being that bunker costs have decreased by approximately 15% since end-1Q12, thus supporting time charter equivalent (TCE) earnings above break-even levels.

The benchmark VLCC Middle East Gulf – Asia route softened steadily over the month to stand below $10/mt by early-July, a fall of $2.50/mt compared to a month earlier. In the Atlantic Basin, rates fared little better. Although rates on the benchmark Suezmax West Africa – US Gulf Coast trade arrested their end-May collapse, they weakened by over $1.50/mt during June to stand close to $14/mt by early-July. Northwest European Aframax markets retained some strength despite recent Norwegian production shut-ins, remaining static from June. However, with North Sea supply forecast to fall over the next few months, the demand for tankers in the North Sea is likely to fall, a development likely to depress rates.

A geographical split was once again evident in product tanker markets with Asian markets out-performing those in the Atlantic Basin. In the East, the Middle East – Japan trade outperformed other routes, gaining $2/mt during the month while the Singapore – Japan rate remained close to month-earlier levels despite a mid-month blip. Meanwhile, in the Atlantic Basin anaemic demand from the US for European gasoline in the run up to the US driving season continues to severely dent the UK – US Atlantic Coast trade, as rates collapsed to an unseasonably-weak $15/mt, their lowest levels in nearly two years.





Recent crude floating storage has continued to be driven by Iranian volumes due to ongoing sales restrictions caused by US and EU sanctions. Although persistently difficult to assess as the Iranian fleet routinely deactivates their tracking beacons (see *Iranian Tankers Play Hide and Seek* in OMR dated 11 May 2012), latest estimates from shipbrokers indicate that Iran is storing approximately 42 mb on 17 VLCCs and 8 Suezmaxes. Despite Iranian tankers frequently changing name and flag, it is thought that this equates to 60% of the NITC fleet being engaged in storage duties. With EU sanctions now prohibiting vessels insured by the London based Protection and Indemnity Club (approximately 95% of global tankers) from calling at Iranian ports, and only Japanese tankers succeeding in obtaining sovereign insurance, it remains to be seen whether Iran will be able to adequately supply remaining customers using their available vessels. Despite the mid-June movement of ICE Brent into contango, information suggests that little speculative floating storage is currently taking place, with most non-Iranian ships continuing to store crude on the water for logistical reasons only.

REFINING

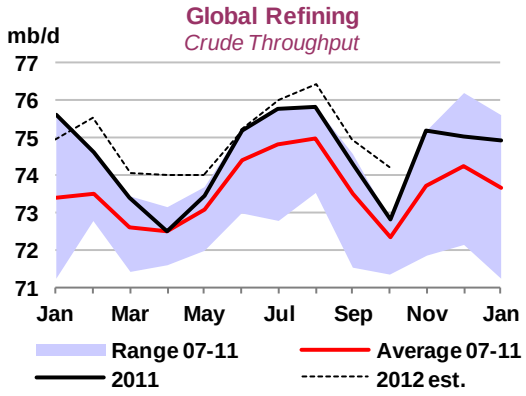
Summary

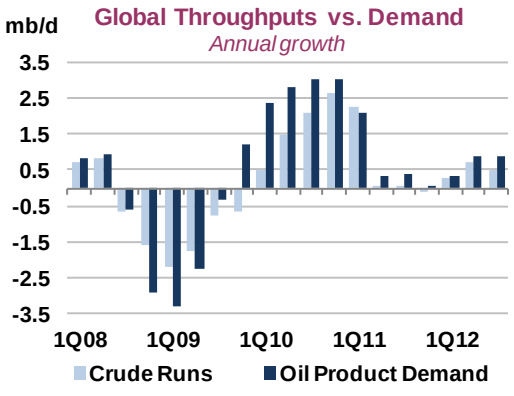
- **Global refinery crude throughput estimates for 2Q12 have been revised up by 155 kb/d since last month's report,** following higher US refinery runs for April and June, stronger-than-expected throughputs in the Middle East in April and record-high June runs in Russia. 2Q12 runs are now assessed at 74.4 mb/d, up by 0.7 mb/d annually. The incorporation of annual data for a number of non-OECD countries for 2010 has, however, lowered the 2010 and 2011 totals by 160 kb/d and 200 kb/d, respectively.

- **Refinery crude demand is expected to rise sharply in 3Q12, to 75.8mb/d. The quarterly increase of some 1.4 mb/d** from the 2Q seasonal low is in line with the recent historical trend, except for the outlier years of 2008 and 2009. Annual growth accelerates in line with an expected rebound in demand, and as product stocks in key consuming countries are replenished. Growth retains a non-OECD focus, though US refinery runs have also proven robust recently and will likely continue to do so.

- **OECD refinery crude intake rose by 260 kb/d in May to 36 mb/d, unchanged from our previous estimate.** The monthly increase stemmed entirely from North America, as US runs rose seasonally by more than 0.5 mb/d. Other increases came from Italy and South Korea, though these were offset by lower runs in other countries. Overall, OECD runs stood 260 kb/d above a year earlier, with April runs lifted 210 kb/d from last month's report after final monthly data submissions.

- **Refinery profitability generally improved in June, as plummeting crude oil prices outweighed corrections in most product markets.** A reworking of IEA refinery margin modelling will see the re-introduction of margin reporting in September, with a hiatus before then for the *July* and *August OMRs*.





Global Refinery Overview

Global refinery crude run estimates have been revised by 155 kb/d and -60 kb/d for 2Q12 and 3Q12, respectively, to 74.4 mb/d and 75.8 mb/d, following higher reported throughputs in the US, a stronger outlook for the Middle East and record-high runs in Russia in June. Providing an offset to the stronger outlook for these areas, the incorporation of annual data for a number of non-OECD countries for 2010 lowers the non-OECD baseline by 160 kb/d and 200 kb/d for 2010 and 2011, respectively, while outages in Other Asia lowers the 3Q12 estimates further.

While recent reports hint at cuts in utilisation rates in China from July, due to weak internal demand and high product inventories, we still expect annual growth to resume for Chinese throughputs, as scheduled maintenance is now mostly completed and since summer 2011 throughputs were themselves very weak. New capacity is also expected to ramp up over the remainder of the year, supporting runs, though the strength of Chinese demand and call on domestic refiners remain a key uncertainty in the outlook.

Global Refinery Crude Throughput[1]

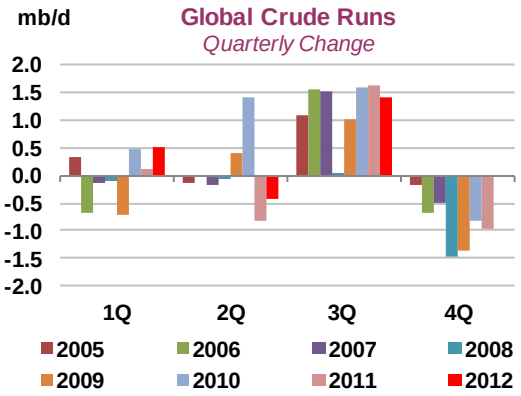
(million barrels per day)

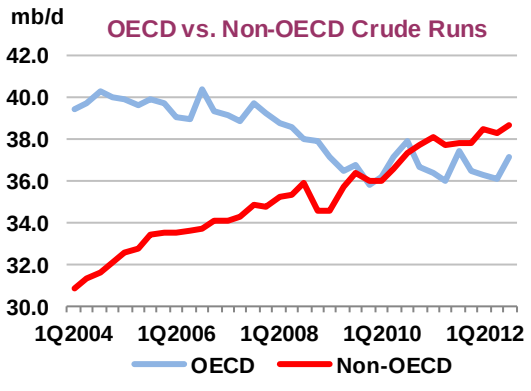
	Mar 12	1Q2012	Apr 12	May 12	Jun 12	2Q2012	Jul 12	Aug 12	Sep 12	3Q2012	Oct 12
North America	17.4	**17.6**	17.5	18.0	18.5	**18.0**	18.6	18.7	18.3	**18.5**	17.8
Europe	11.6	**12.0**	11.8	11.7	12.0	**11.8**	12.2	12.3	12.0	**12.2**	11.7
Pacific	6.6	**6.8**	6.4	6.3	6.1	**6.3**	6.3	6.6	6.2	**6.4**	6.0
Total OECD	**35.6**	**36.3**	**35.8**	**36.0**	**36.6**	**36.1**	**37.2**	**37.6**	**36.5**	**37.1**	**35.4**
FSU	6.4	**6.6**	6.3	6.1	6.8	**6.4**	6.7	6.8	6.4	**6.6**	6.4
Non-OECD Europe	0.5	**0.4**	0.5	0.5	0.4	**0.5**	0.5	0.5	0.5	**0.5**	0.5
China	9.1	**9.2**	9.0	9.1	9.1	**9.1**	9.3	9.2	9.2	**9.2**	9.4
Other Asia	9.5	**9.3**	9.4	9.3	9.1	**9.3**	9.2	9.3	9.3	**9.3**	9.3
Latin America	5.1	**5.0**	4.9	4.8	4.7	**4.8**	4.9	4.8	4.8	**4.8**	4.8
Middle East	5.8	**5.8**	5.9	6.2	6.2	**6.1**	6.1	6.2	6.1	**6.1**	6.2
Africa	2.1	**2.1**	2.2	2.1	2.2	**2.2**	2.1	2.1	2.1	**2.1**	2.3
Total Non-OECD	**38.5**	**38.5**	**38.3**	**38.0**	**38.6**	**38.3**	**38.8**	**38.9**	**38.4**	**38.7**	**38.8**
Total	**74.1**	**74.8**	**74.0**	**74.0**	**75.2**	**74.4**	**76.0**	**76.5**	**75.0**	**75.8**	**74.2**

1 Preliminary and estimated runs based on capacity, known outages, economic run cuts and global demand forecast

Note: US Virgin Islands included in North America and not Latin America as previously

Over June, refinery profitability improved for most benchmarks in key refining hubs, as the slide in international crude oil prices largely outstripped any declines in product prices. The recent rebound in crude prices could yet again cut into downstream profitability; however, as product price increases again lagged those of crude. That said, US runs have been particularly strong in recent months, rising by 0.5 mb/d in both May and June, despite the shutdown of Motiva's new 325 kb/d crude unit at Port Arthur. Preliminary data also show that Russian crude throughputs rose by more than 0.5 mb/d to a new record high in June, of 5.6 mb/d. In contrast, structural decline continues to plague the European refining sector, with further closures announced, though April and May data did not prove as weak as earlier indications had suggested. We continue to expect a very sharp increase in 3Q12 crude demand, of 1.4 mb/d from the 2Q low-point, largely in line with recent historical trends (except for 2008 and 2009, which were outliers due to the recession). Annual growth, at 0.7 mb/d in 2Q12 and 0.5 mb/d in 3Q12, compared to only 70 kb/d over the previous four quarters, stems almost entirely from the non-OECD.





IEA Refining Margin Calculations

Due to the change in price data provider earlier this year, the IEA has also decided to rework its refinery margin calculations. Revamped models will see the re-introduction of margin reporting in September, with a hiatus before then for the *July* and *August OMRs*. We apologise for any inconvenience this may cause.

OECD Refinery Throughput

OECD refinery crude throughputs rose by 260 kb/d in May, to 36 mb/d. The increase stemmed almost entirely from higher US refinery runs, which surged more than 0.5 mb/d, though Italian and South Korean rates were also higher month-on-month. Reduced rates in most other European countries, and seasonally falling Japanese runs, limited the upward trend. While May throughputs were in line with estimates in last month's report given offsets in Europe and the Pacific, April data were revised 210 kb/d higher on the receipt of final monthly submissions. European and North American runs were lifted, by 140 kb/d and 110 kb/d, respectively, while Pacific runs were slightly lower. In all, May OECD throughputs were 260 kb/d above a year earlier, with higher North American and Pacific runs offset by structurally lower European utilisation.

Preliminary weekly data for the US for June showed surprising strength in Gulf Coast utilisation rates, despite the shutdown of Motiva's new 325 kb/d crude unit early in the month. US runs rose by another 0.5 mb/d on average to 15.6 mb/d, 140 kb/d more than expected. Weekly data for Japan, on the other hand, were in line with expectations, down a further 160 kb/d from May, to what may prove the seasonal low-point in regional throughputs. In all, OECD runs are assessed averaging 36.1 mb/d in 2Q12, 180 kb/d less than in 1Q12, but 110 kb/d above the same period a year earlier.

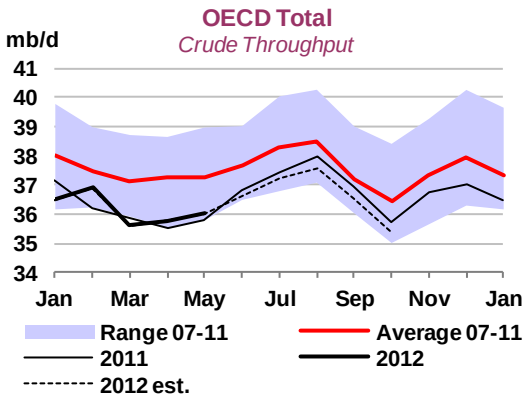
Refinery Crude Throughput and Utilisation in OECD Countries
(million barrels per day)

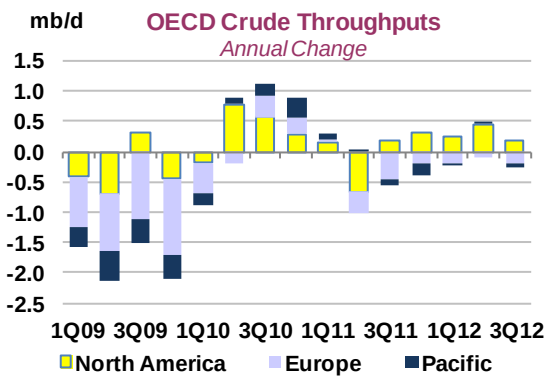
							Change from		Utilisation rate[1]	
	Dec 11	Jan 12	Feb 12	Mar 12	Apr 12	May 12	*Apr 12*	*May 11*	May 12	May 11
US[2]	14.84	14.42	14.66	14.55	14.61	15.13	0.51	0.35	87.0%	84.4%
US Virgin Islands	0.27	0.27	0.19	0.00	0.00	0.00	0.00	-0.30	0.0%	86.6%
Canada	1.68	1.60	1.75	1.62	1.67	1.64	-0.03	0.10	89.4%	83.8%
Mexico	1.16	1.21	1.25	1.18	1.22	1.21	-0.01	0.06	73.4%	74.6%
OECD North America	**17.95**	**17.49**	**17.85**	**17.35**	**17.51**	**17.98**	**0.47**	**0.21**	**86.1%**	**85.0%**
France	1.41	1.17	1.09	1.04	1.04	1.03	-0.01	-0.30	66.0%	79.6%
Germany	1.95	1.93	1.91	1.80	1.91	1.87	-0.04	0.03	87.9%	86.3%
Italy	1.55	1.57	1.50	1.39	1.33	1.49	0.16	-0.07	68.3%	71.3%
Netherlands	1.03	1.06	1.10	1.02	1.07	1.03	-0.03	0.03	80.1%	77.8%
Spain	1.09	1.09	1.15	1.08	1.05	1.01	-0.04	0.00	66.6%	71.8%
United Kingdom	1.46	1.48	1.50	1.48	1.52	1.44	-0.08	-0.05	77.0%	79.9%
Other OECD Europe	3.83	3.85	3.92	3.79	3.89	3.84	-0.05	0.12	77.6%	75.4%
OECD Europe	**12.29**	**12.14**	**12.16**	**11.61**	**11.80**	**11.72**	**-0.08**	**-0.23**	**75.6%**	**77.2%**
Japan	3.37	3.45	3.49	3.47	3.31	3.03	-0.29	0.25	65.9%	59.0%
South Korea	2.62	2.65	2.64	2.46	2.48	2.63	0.16	0.12	96.3%	91.8%
Other OECD Pacific	0.77	0.76	0.74	0.70	0.66	0.66	0.00	-0.09	70.3%	80.1%
OECD Pacific	**6.76**	**6.85**	**6.87**	**6.63**	**6.45**	**6.32**	**-0.13**	**0.28**	**76.5%**	**72.0%**
OECD Total	**37.00**	**36.49**	**36.88**	**35.59**	**35.76**	**36.01**	**0.26**	**0.26**	**80.7%**	**79.3%**

1 Expressed as a percentage, based on crude throughput and current operable refining capacity

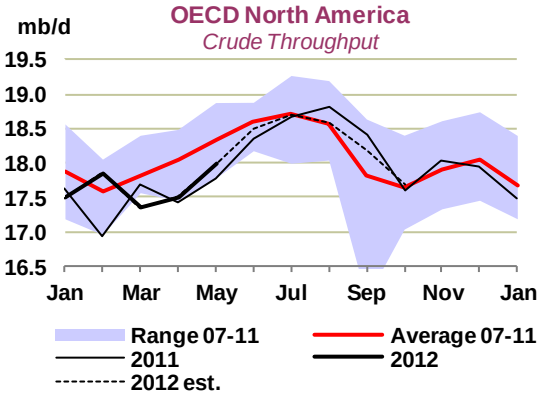
2 US50

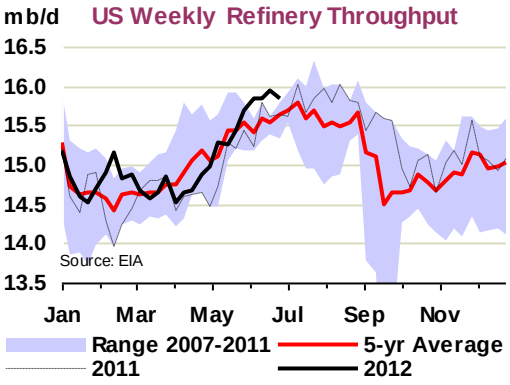
Looking ahead, OECD runs are set to rise sharply in 3Q12, increasing by 1 mb/d from the maintenance-reduced 2Q12 shoulder season. Throughputs are expected to rise most sharply in the US, but European runs could also see significant gains as refiners ramp up runs to meet stronger summer demand and refill depleted product inventories. While Pacific refinery crude runs are expected to recover from the seasonal low-point in June of 6.1 mb/d to 6.6 mb/d in August, the overall quarterly change is rather small as runs fall again in September with another spate of turnarounds. In all, 3Q12 OECD runs are seen at 37.1 mb/d, 350 kb/d less than the same period a year earlier.





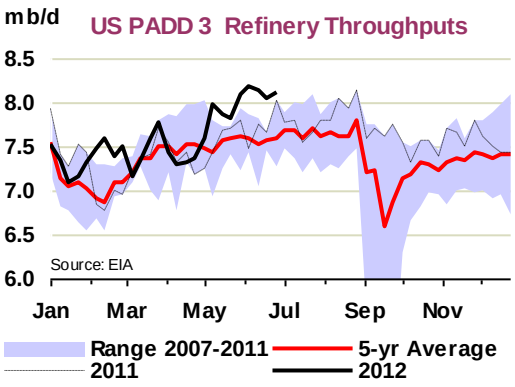
North American crude runs rose seasonally in May, up by 470 kb/d, to just shy of 18.0 mb/d. The rise was entirely accounted for by the US, while Mexican and Canadian crude runs were largely unchanged month-on-month. Within the US, the increase came from refineries on both the Gulf and West Coasts. US Gulf Coast runs surged 0.4 mb/d m-o-m according to weekly data, with the ramping up of Motiva's new 325 kb/d crude unit at Port Arthur contributing. A sharp drop off in maintenance work from April also helped push rates higher. On the West Coast, throughputs rose more than 200 kb/d from April's low, with the resumption of operations at BP's Ferndale refinery in Washington State and Alon's California refineries, including the Bakersfield, Paramount and Long Beach sites, which had been halted since last December because of poor economics.

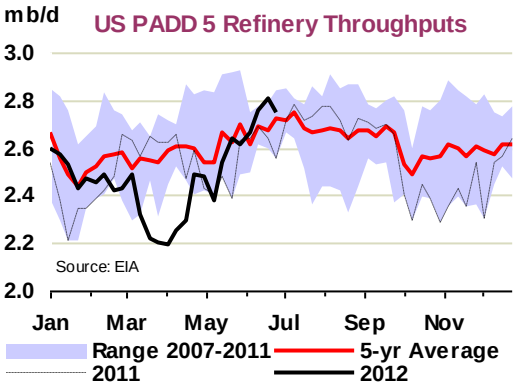




US West Coast runs continued to surge in June, with the return to full operations of BP's 220 kb/d Cherry Point refinery in Washington at the end of May. The plant had been shut by a fire in mid-February. US Gulf Coast runs also maintained their upward momentum, despite the shutdown of Motiva's new Port Arthur crude unit. The unit, which started processing crude in April and was only officially commissioned at a 31 May ceremony, was damaged and shut in early June. While Motiva has not announced a new restart date yet, industry sources say the damage to the unit, apparently due to corrosion caused by a caustic chemical leak, is so severe that it could take up to a year to repair.

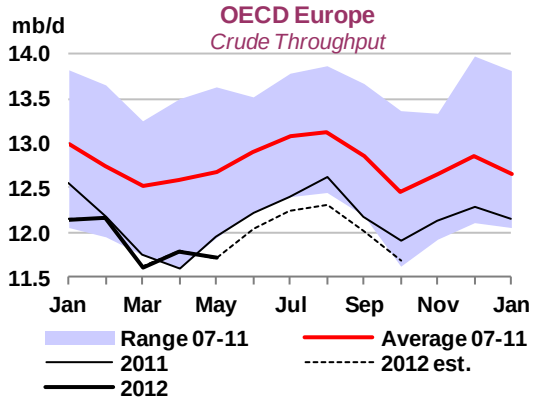
According to the most recent US crude import data, June imports from Saudi Arabia averaged 1.4 mb/d, largely on par with levels in the first four months of 2012, but more than 0.5 mb/d higher than the same period a year earlier, as shipments were scheduled ahead of the shutdown of the new unit. Arrivals of Saudi Arabian crude oil to the US Gulf Coast will likely fall back in coming weeks if the refinery outage indeed proves to be as long-lived as expected by some market observers.

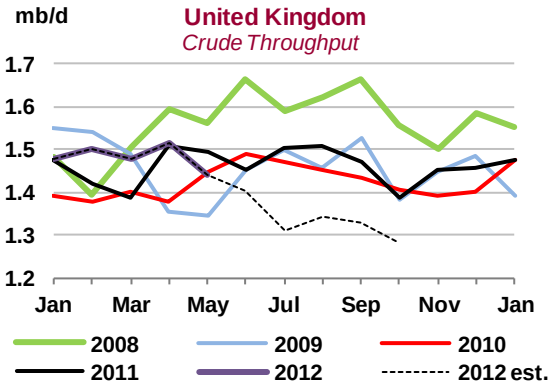




Delta Airlines has reportedly closed the deal to buy ConocoPhillips' Trainer refinery in late June, becoming the first airline to own a refinery. The new owner started maintenance work at the 185 kb/d plant in early July, and plans to restart fuel production after the summer. The refinery has been shut since September 2011. Further relief to the US East Coast downstream industry came from a last minute deal announced on 2 July, with private equity firm the Carlyle Group agreeing to buy Sunoco's 330 kb/d Philadelphia refinery. The plant was scheduled to close by the end of July if no buyer had been found. Carlyle plans to improve the plant's economics by building rail infrastructure to source cheaper domestically produced crudes. The new rail facilities will allow the plant to replace 144 kb/d of more expensive imported crudes, mostly from West Africa, with cheaper Bakken Shale crude within six months of taking over the plant. The company also plans to upgrade the plant, adding a mild hydrocracker and a hydrogen facility as well as upgrading the catalytic cracker. Access to natural gas from the Marcellus shale, 100 miles away, will reduce the plant's energy cost, allowing it to compete with US Gulf Coast refiners already benefiting from cheap feedstocks and refinery fuel.

European refinery runs were slightly lower in May, down 80 kb/d, but from an upwardly revised April, and averaging 11.7 mb/d. Preliminary data from Euroilstock, by contrast, had suggested regional runs falling almost 0.4 mb/d in May. As we had not fully incorporated this preliminary data, due to recent discrepancies with official data, May revisions were limited to -90 kb/d. Revisions to April data stemmed mostly from the UK (+70 kb/d), Germany(+50 kb/d) and Belgium (+30 kb/d), for a total of 140 kb/d.

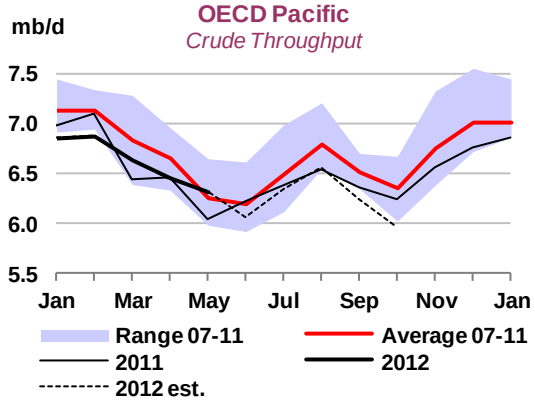


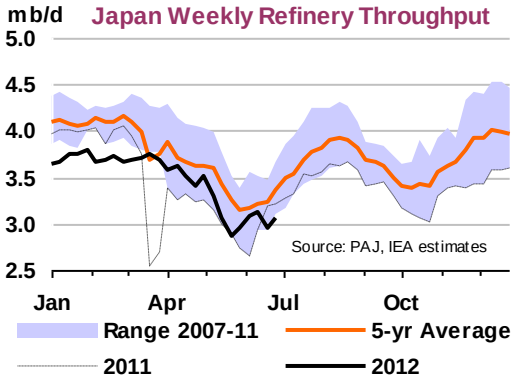


In May**, Italian** crude runs recovered, rising 160 kb/d from April's low. Eni restarted its 80 kb/d Venice refinery on 2 May, after a six-month shutdown due to poor margins. Eni's Italian refinery throughputs were 14.9% lower in 1Q12 compared to the same period in 2011, due also to unplanned outages and planned idling at the Sannazzaro and Taranto plants. In April, however, the company shut part of its Gela refinery on Sicily, also due to poor margins and regional oversupply of refined products. Also in Italy, API announced it will shut the 80 kb/d Falconara refinery for 2013 due to an overhaul of a power plant and poor economics.

In the **UK**, the 220 kb/d Coryton refinery, which shut in early June, will be permanently closed and converted to an oil import terminal following the sale to a JV including Shell, Dutch storage firm Vopak and UK fuel supplier Greenergy. UK distillation capacity will be further reduced in September this year, as Exxon Mobil decommissions a crude unit at its 330 kb/d Fawley refinery. The unit to be shut is believed to have a capacity of around 80 kb/d. In **France**, the 162 kb/d Petit Couronne plant resumed crude processing on 14 June. Idled in January following the bankruptcy of Petroplus, Petit Couronne will receive 100 kb/d of crude for up to six months through a tolling agreement with Shell, agreed by the previous French government.

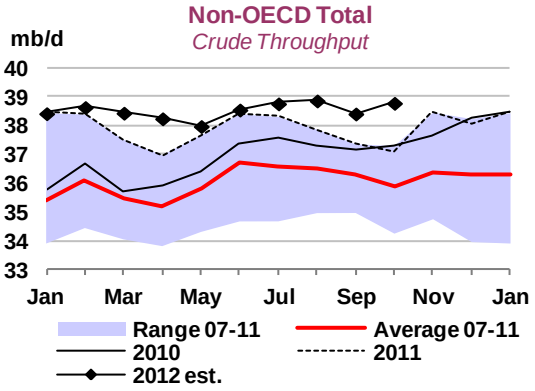
OECD Pacific throughputs declined 130 kb/d in May, to 6.3 mb/d. A 290 kb/d seasonal decline in Japan was partly offset by higher South Korean operations, while Australian refinery runs remained weak due to continued outages. Both Japanese and South Korean runs stood higher than a year earlier. While Japan's runs are on a rebound after last year's shutdowns, South Korean runs continued to be supported by robust product exports. So far this year, total South Korean product exports have averaged 1.1 mb/d, 3.4% higher than a year earlier. In June, South Korea's third largest refiner, S-Oil, reported it had cut operating rates in June due to weaker margins. The company, which operates the 670 kb/d Onsan refinery, said it had been running the plant at full capacity in May.

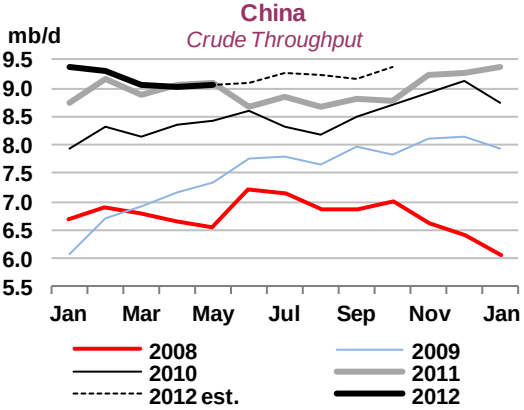




Non-OECD Refinery Throughput

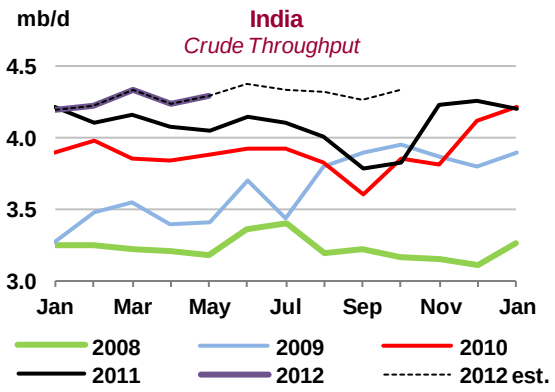
Non-OECD crude throughputs estimates for 2Q12 are largely unchanged since last month's report, as higher Middle Eastern runs for April were mostly offset by lower estimates for Asia in the same quarter and a downward adjustment to baseline data. Annual data for a number of non-OECD countries for 2010, to be released in the upcoming *Energy Statistics of non-OECD Countries*, have been incorporated since last month's report. 2010 estimates were lowered by 160 kb/d in total, mainly on weaker-than-expected Malaysian runs, but also smaller downward adjustments for countries including Yemen, Cuba, and the Ivory Coast, for which no reliable monthly data is available. Non-OECD 2011 estimates were revised 200 kb/d lower following the lower baseline. In all, non-OECD throughputs are assessed at 38.3 mb/d in 2Q12, rising to 38.7 mb/d in 3Q12, up 0.6 mb/d and 0.9 mb/d year-on-year, respectively.

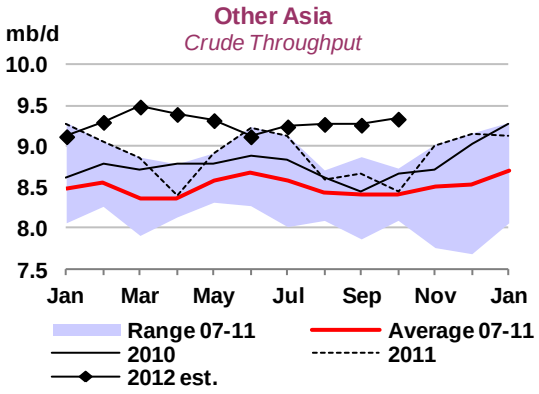




While no new official data on **China's** refinery operations have been released since last month's report, anecdotal evidence points to a slowdown in runs compared to previously expected levels. News reports and company statements cite weak internal demand and high product inventories leading to run cuts at the country's key refining companies in July. Sinopec's trading arm, Unipec, even exported gasoil for the first time in more than a year in June. Data released by China's National Development and Reform Commission (NDRC) on 29 June showed gasoil inventories held by the country's two top refiners totalling 2.32 million mt, 14.7% above a year earlier. Nevertheless, runs are still assessed higher in June than in May, as some refinery maintenance was completed and as new capacity ramps up runs. Despite the downward adjustment to our Chinese forecast for June through September, by about 100 kb/d, runs are still expected to see further increases as announced maintenance winds down from relatively high levels seen in the April to June period.

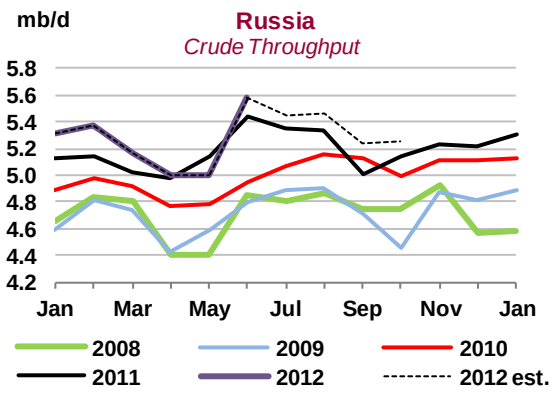
Within the **'Other Asia'** category, **Indian** refinery runs in May surpassed both planned and year-earlier levels, at an estimated 4.3 mb/d. Government data included for the first time oil processed at BPCL's Bina refinery, though we had already adjusted for these missing volumes since the plant started trial runs last summer. According to the official data, the plant processed 100 kb/d in May and 114 kb/d in April, compared with a nameplate capacity of 120 kb/d. India's annual increase of some 240 kb/d came not only from the Bina plant, but also from HPCL's Bathinda refinery, which commenced crude runs in February, and expanded capacity at Essar's Vadinar plant. Further increases are expected in India over coming months, as new capacity is fully utilised and the fire-hit Numaligarh refinery resumes operations.

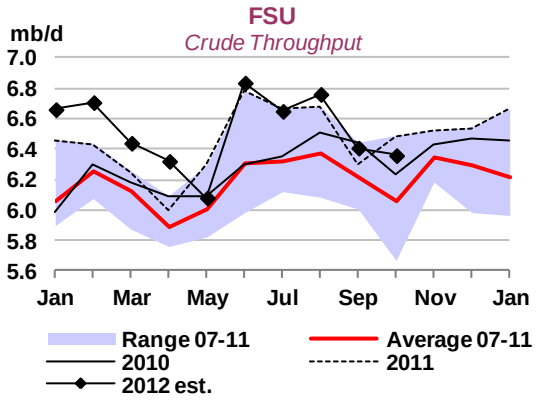




Elsewhere in the region, a fire at **Thailand's** 120 kb/d Bangchak refinery in early July damaged an 80 kb/d crude unit. The entire refinery was expected to be shut for a week, with the damaged unit offline for at least 30 days. **Vietnam's** sole refinery, the 130 kb/d Dung Quat refinery, shut since 16 May for a scheduled turnaround, reportedly reached full capacity again on 9 July, two weeks behind the original restart date. On 20 June a power outage forced Formosa to shut two crude units at its Mailiao refinery in **Taiwan**. The plant, which has three CDUs with a combined capacity of 540 kb/d, had already shut one crude unit for maintenance when the power problem occurred.

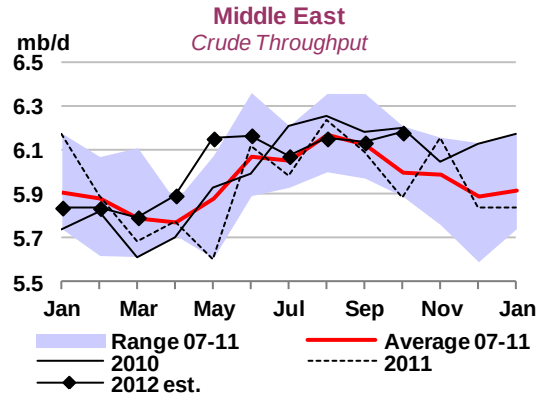
In the **FSU**, refinery crude intake surged in June, with the return of **Russian** refineries from extensive maintenance over the two previous months. Preliminary data show Russian crude runs rising almost 0.6 mb/d to 5.6 mb/d in June, an all-time high. While the increase is in line with known shutdown information, it was higher than expected and led to an upward revision in our FSU estimates for June of 125 kb/d. The increase likely came as TNK-BP's Ryazan plant, Lukoil's Nizhny Novgorod refinery and Rosneft's Achinsk and Samara refineries returned from maintenance and may have been further supported by the launch of a new crude unit at Rosneft's Tuapse refinery. The latter was expected to increase capacity by 150 kb/d to 240 kb/d with the launch of the new unit in 2Q12.

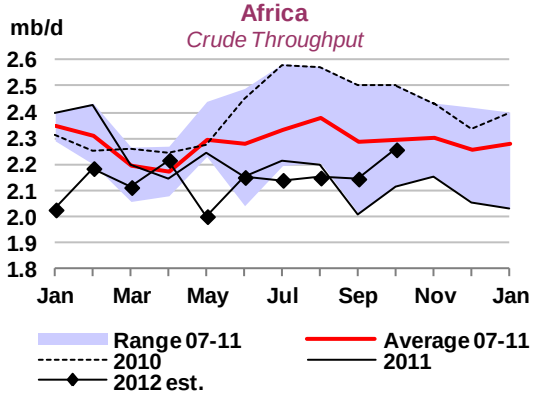




June FSU runs were also expected to have received a boost from the return to operations of Lithuania's 190 kb/d Mazeikiu refinery which was shut in May. A fire at **Kazakhstan's** Atyrau refinery at the end of June, however, cut rates there, although the extent of the damage is not known. The country's Pavlodar refinery was also to shut for maintenance at the end of June, further reducing product supplies. Russian crude exports to the **Ukraine** remained at zero in June, after TNK-BP halted operations at its Lisichansk refinery in March due to poor economics. The country's only operating refinery, the Kremenchung refinery, is assumed to be running at reduced rates and on domestic crude.

Middle Eastern crude runs have been revised higher following stronger-than-expected operations for **Saudi Arabia** and **Kuwait** in April. The announced maintenance at the Ras Tanura refinery, which restarted units in early May, seems to have had a smaller impact on overall runs than expected. According to JODI data, Saudi runs rose to 1.7 mb/d in April, from 1.6 mb/d a month earlier. Runs are expected to rise further over summer months in line with seasonal trends. Also reported monthly Kuwaiti throughputs exceeded expectations in April, by 70 kb/d, further lifting the regional total. In all, 2Q12 Middle Eastern runs are now assessed 200 kb/d higher, at 6.1 mb/d.



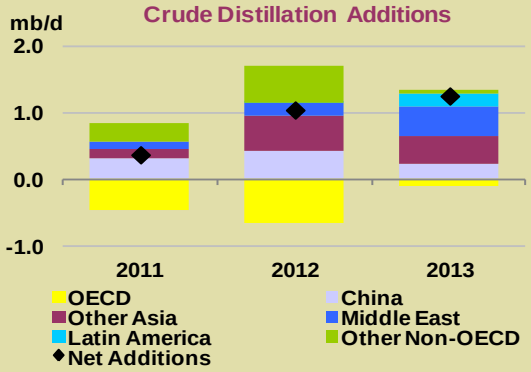


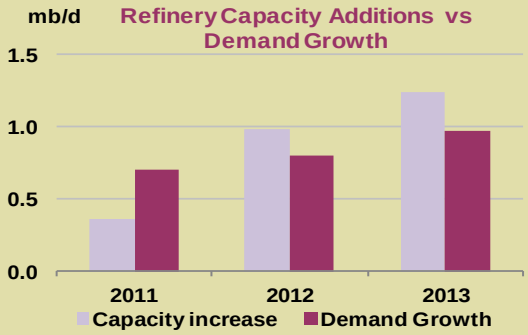
In **Africa, Libya's** Ras Lanuf refinery remains shut, despite earlier announcements of a planned July start-up. With the recent protest and blockades of the Ras Lanuf port, we await more positive news before including the 220 kb/d plant in our estimates. **Algeria's** largest refinery, the 300 kb/d Skikda plant, was reported to have completely halted operations in early July for 15 days, followed by partial shutdowns that could be lasting for up to six months to carry out improvement work. Sonatrach is expected to increase capacity at the plant by 40 kb/d, as well as adding a catalytic reformer and hydrotreating capacity by the end of this year. In **Latin America**, a technical outage at **Venezuela's** largest refinery, the Amuay plant in late June is expected to reduce runs there and lies behind the slightly lower forecast for the region.

2012-2013 Refinery Capacity Overhang Suggests Bleak Margin Outlook for Some

After a year of relatively weak refinery addition growth in 2011, this year and next are expected to see significant additions to global crude distillation capacity. While net additions in 2011 came to less than 400 kb/d, just over 1 mb/d of new crude distillation capacity is expected to be added in 2012 followed by a further 1.3 mb/d in 2013. Upgrading and desulphurisation additions are even more extensive in the two-year period, adding a combined 2.6 mb/d and 2.8 mb/d, respectively, as refiners strive to meet increasingly higher fuel quality standards.

2012 additions are entirely accounted for by the non-OECD, which adds 1.7 mb/d of new capacity in total, offset by contracting OECD capacity. The declining OECD total, however, masks the 325 kb/d expansion of Motiva's Port Arthur, TX, refinery. The actual ramp-up of this new unit will, as discussed elsewhere, now be delayed to later in the year, or possibly even next year, following corrosion damage. The expansion, probably the most important in the OECD in the last decade, is offset by further refinery closures in the US and elsewhere in the OECD. Notably, Hovensa converted its 350 kb/d St Croix refinery to a terminal earlier this year, and Sunoco shut its Marcus Hook plant on the East Coast.





Outside of the US, restructuring of the refining industry also gained pace, particularly in Europe. After shutting 530 kb/d of distillation capacity in 2011, another 495 kb/d has closed or is scheduled to close in Europe this year. Total completed or committed European capacity rationalisation now amounts to almost 1.6 mb/d since the start of the economic downturn in 2008. Key shutdowns in Europe include Petroplus' Coryton refinery in the UK, a reduction to installed capacity at Exxon Mobil's Fawley refinery also in the UK, and the shutdown of France's Berre l'Etang and Italy's Rome plants. Unless a buyer comes forward in coming weeks, Petroplus' French Petit Couronne refinery will likely close in 2013 alongside Shell's Harburg plant in Germany. Shell will also close its Clyde refinery in Australia this year.

Of the 1.7 mb/d of capacity added in the non-OECD in 2012, the largest share continues to derive from Asia. Other Asia, led by India, adds more than 0.5 mb/d, while China adds some 0.4 mb/d. India's capacity was already boosted by the commissioning of the 180 kb/d Bathinda plant and the expansion of Essar's Vadinar refinery earlier this year. Further additions are expected as Pakistan completes its 130 kb/d Karachi expansion later this year. Key projects in China include Sinopec's 200 kb/d Maoming expansion, the 100 kb/d addition to Huhhot Petrochemical and a 90 kb/d expansion of Sinopec's Jinling plant. Russian capacity could be expanded by 260 kb/d in 2012, in large part due to Rosneft's 140 kb/d Tuapse expansion.

In 2013, expected net crude distillation capacity additions amount to 1.3 mb/d globally. As in 2012, the majority of new plants or expansions are centred in non-OECD Asia, which accounts for just about half of additions. China, however, only sees 200 kb/d added in the year, with CNPC's 200 kb/d Pengzhou and 100 kb/d Renqui expansions partly offset by expected shutdown of smaller independent plants. In 'Other Asia,' India alone is expected to add 400 kb/d of distillation capacity next year, as the 300 kb/d Paradip and 120 kb/d Cuddalore plants start up. Also significant, the start up of the Saudi Aramco/Total 400 kb/d Jubail refinery is now expected at the end of 2013, as is the first phase of the 230 kb/d Abreu e Lima refinery in Brazil. The second 115 kb/d unit there will likely be commissioned in 2014.

With total oil product demand growth, including biofuels and products sources outside refineries, averaging only 0.8 mb/d in 2012 and 1 mb/d in 2013, well below new capacity additions, renewed margin weakness is expected unless more project delays or refinery shutdowns are forthcoming or demand surprises to the upside in 2013.

Table 1
WORLD OIL SUPPLY AND DEMAND

(million barrels per day)

	2009	2010	1Q11	2Q11	3Q11	4Q11	2011	1Q12	2Q12	3Q12	4Q12	2012	1Q13	2Q13	3Q13	4Q13	2013
OECD DEMAND																	
North America	23.3	23.8	23.9	23.4	23.6	23.5	23.6	23.1	23.2	23.6	23.5	23.3	23.1	23.2	23.6	23.6	23.4
Europe	14.7	14.6	14.2	14.1	14.7	14.1	14.3	13.7	13.6	14.3	14.0	13.9	13.6	13.6	14.2	13.9	13.8
Pacific	7.7	7.8	8.3	7.1	7.7	8.3	7.9	8.8	7.6	7.8	8.2	8.1	8.7	7.5	7.6	8.0	7.9
Total OECD	45.7	46.3	46.4	44.6	46.0	45.9	45.7	45.5	44.4	45.6	45.7	45.3	45.5	44.3	45.4	45.5	45.1
NON-OECD DEMAND																	
FSU	4.1	4.3	4.3	4.5	4.7	4.7	4.5	4.6	4.7	4.8	4.8	4.7	4.7	4.8	4.9	4.9	4.8
Europe	0.7	0.7	0.7	0.7	0.8	0.8	0.7	0.7	0.7	0.8	0.8	0.8	0.7	0.7	0.8	0.8	0.8
China	7.9	9.0	9.4	9.4	9.2	9.6	9.4	9.7	9.6	9.6	10.1	9.8	10.1	10.0	10.0	10.4	10.1
Other Asia	10.3	10.6	10.9	10.9	10.6	11.1	10.9	11.1	11.2	10.8	11.3	11.1	11.4	11.4	11.0	11.6	11.4
Latin America	6.0	6.4	6.4	6.6	6.8	6.7	6.6	6.6	6.7	6.9	6.8	6.7	6.7	6.8	7.1	7.0	6.9
Middle East	7.4	7.7	7.5	7.9	8.3	7.8	7.9	7.7	8.1	8.5	8.0	8.1	7.9	8.3	8.7	8.2	8.3
Africa	3.4	3.4	3.4	3.4	3.2	3.4	3.3	3.5	3.5	3.4	3.5	3.4	3.5	3.5	3.5	3.5	3.5
Total Non-OECD	39.9	42.1	42.6	43.3	43.5	44.0	43.4	43.9	44.4	44.8	45.2	44.6	45.0	45.6	45.9	46.3	45.7
Total Demand[1]	85.5	88.4	89.0	87.9	89.6	89.9	89.1	89.4	88.8	90.4	90.9	89.9	90.5	89.9	91.3	91.8	90.9
OECD SUPPLY																	
North America[4]	13.6	14.1	14.3	14.2	14.5	15.2	14.5	15.5	15.4	15.4	15.8	15.5	15.9	16.0	16.1	16.6	16.2
Europe	4.5	4.1	4.0	3.7	3.5	3.7	3.8	3.8	3.5	3.1	3.5	3.5	3.5	3.4	3.1	3.3	3.3
Pacific	0.6	0.6	0.5	0.5	0.6	0.6	0.5	0.5	0.5	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Total OECD	18.8	18.8	18.8	18.5	18.6	19.5	18.8	19.8	19.4	19.0	19.9	19.5	20.0	19.9	19.8	20.4	20.0
NON-OECD SUPPLY																	
FSU	13.3	13.5	13.6	13.6	13.5	13.6	13.6	13.7	13.7	13.5	13.7	13.7	13.7	13.6	13.5	13.6	13.6
Europe	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
China	3.8	4.1	4.2	4.2	4.0	4.0	4.1	4.2	4.1	4.2	4.2	4.2	4.2	4.2	4.2	4.3	4.2
Other Asia[2]	3.6	3.7	3.7	3.5	3.6	3.6	3.6	3.6	3.6	3.6	3.5	3.6	3.5	3.5	3.5	3.4	3.5
Latin America[2,4]	3.9	4.1	4.2	4.2	4.2	4.3	4.2	4.3	4.2	4.3	4.4	4.3	4.3	4.4	4.4	4.5	4.4
Middle East	1.7	1.7	1.8	1.7	1.7	1.5	1.6	1.4	1.4	1.5	1.5	1.4	1.4	1.5	1.5	1.5	1.5
Africa[2]	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.4	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
Total Non-OECD	29.0	29.8	30.2	29.8	29.8	29.7	29.9	29.8	29.4	29.4	29.7	29.6	29.7	29.6	29.6	29.8	29.7
Processing Gains[3]	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.2	2.2	2.2	2.2	2.2
Global Biofuels[4]	1.6	1.9	1.6	2.0	2.2	1.9	1.9	1.6	1.9	2.3	2.0	2.0	1.7	2.0	2.3	2.1	2.0
Total Non-OPEC[2]	51.4	52.6	52.7	52.4	52.7	53.2	52.8	53.4	52.9	52.9	53.7	53.2	53.5	53.8	53.9	54.4	53.9
OPEC																	
Crude[5]	29.1	29.2	29.9	29.4	29.8	30.3	29.8	31.3	31.9								
NGLs	4.9	5.4	5.8	5.7	5.8	5.9	5.8	6.0	6.1	6.3	6.4	6.2	6.4	6.4	6.6	6.6	6.5
Total OPEC[2]	34.0	34.6	35.7	35.1	35.6	36.1	35.6	37.4	38.0								
Total Supply[6]	85.4	87.3	88.3	87.4	88.3	89.3	88.4	90.7	90.8								
STOCK CHANGES AND MISCELLANEOUS																	
Reported OECD																	
Industry	-0.1	0.1	-0.5	0.5	-0.1	-0.6	-0.2	0.4									
Government	0.1	0.0	0.0	0.0	-0.4	0.1	-0.1	0.0									
Total	0.0	0.1	-0.5	0.6	-0.5	-0.6	-0.3	0.4									
Floating Storage/Oil in Transit	0.3	-0.2	0.2	-0.2	-0.2	0.0	-0.1	-0.4									
Miscellaneous to balance[7]	-0.4	-1.0	-0.4	-0.8	-0.5	0.1	-0.4	1.3									
Total Stock Ch. & Misc	-0.1	-1.1	-0.7	-0.5	-1.2	-0.5	-0.7	1.3	2.1								
Memo items:																	
Call on OPEC crude + Stock ch.[8]	29.2	30.4	30.6	29.8	31.1	30.8	30.6	30.0	29.8	31.2	30.8	30.5	30.6	29.7	30.9	30.7	30.5
Adjusted Call on OPEC + Stock ch.[9]	28.8	29.3	30.2	29.0	30.6	30.8	30.2	31.3	29.3	30.8	30.4	30.4	30.1	29.2	30.4	30.3	30.0

1 Measured as deliveries from refineries and primary stocks, comprises inland deliveries, international marine bunkers, refinery fuel, crude for direct burning, oil from non-conventional sources and other sources of supply.
2 Other Asia includes Indonesia throughout. Latin America excludes Ecuador throughout. Africa excludes Angola throughout.
Total Non-OPEC excludes all countries that were members of OPEC at 1 January 2009.
Total OPEC comprises all countries which were OPEC members at 1 January 2009.
3 Net volumetric gains and losses in the refining process and marine transportation losses.
4 As of the July 2010 OMR, Global Biofuels comprise all world biofuel production including fuel ethanol from the US and Brazil.
5 As of the March 2006 OMR, Venezuelan Orinoco heavy crude production is included within Venezuelan crude estimates. Orimulsion fuel remains within the OPEC NGL and non-conventional category, but Orimulsion production reportedly ceased from January 2007.
6 Comprises crude oil, condensates, NGLs, oil from non-conventional sources and other sources of supply.
7 Includes changes in non-reported stocks in OECD and non-OECD areas.
8 Equals the arithmetic difference between total demand minus total non-OPEC supply minus OPEC NGLs.
9 Equals the "Call on OPEC + Stock Ch." with "Miscellaneous to balance" added for historical periods and with an average of "Miscellaneous to balance" for the most recent 8 quarters added for forecast periods.

Table 1A
WORLD OIL SUPPLY AND DEMAND: CHANGES FROM LAST MONTH'S TABLE 1

(million barrels per day)

	2009	2010	1Q11	2Q11	3Q11	4Q11	2011	1Q12	2Q12	3Q12	4Q12	2012	1Q13	2Q13	3Q13	4Q13	2013
OECD DEMAND																	
North America	-	-	0.1	0.1	0.1	0.1	0.1	-	-	-	-	-					
Europe	-	-	-	-	-	-	-	-	-	-0.1	-	-					
Pacific	-	-	-	-	-	-	-	-	0.2	-	0.1	0.1					
Total OECD	-	-	0.1	0.1	0.1	0.1	0.1	-	0.2	-	-	0.1					
NON-OECD DEMAND																	
FSU	-	-	-	-	-	-	-	-	-	-	-	-					
Europe	-	-	-	-	-	-	-	-	-	-	-	-					
China	-	-	-	-	-	-	-	-	-	-	-	-					
Other Asia	-	-	-	-	-	-	-	-	0.1	-	-	-					
Latin America	-	-	-	-	-	-	-	-0.1	-0.1	-0.1	-0.1	-0.1					
Middle East	-	-	-0.1	-	-	-	-	-	-	-	-	-					
Africa	-	-	-	-	-	-	-	-	-	-	-	-					
Total Non-OECD	-	-	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-	-	-0.1	-0.1					
Total Demand	-	-	-	-	-	-	-	-0.1	0.2	-0.1	-0.1	-					
OECD SUPPLY																	
North America	-	-	-	-	-	-	-	-	-	-	0.1	0.1					
Europe	-	-	-	-	-	-	-	-	-	-0.2	-	-0.1					
Pacific	-	-	-	-	-	-	-	-	-	-	-	-					
Total OECD	-	-	-	-	0.1	0.1	-	0.1	0.1	-0.2	0.1	-					
NON-OECD SUPPLY																	
FSU	-	-	-	-	-	-	-	-	-0.1	-0.1	-	-0.1					
Europe	-	-	-	-	-	-	-	-	-	-	-	-					
China	-0.1	-	-	-	-	-	-	-	-	-0.1	-	-					
Other Asia	-	-	-	-	-	-	-	-	-	-	-	-					
Latin America	-	-	-	-	-	-	-	-	-0.1	-0.1	-0.1	-					
Middle East	-	-	-	-	-	-	-	-	-	-	-	-					
Africa	-	-	0.1	0.1	-	-	0.1	-	-	-	-	-					
Total Non-OECD	-0.1	-	0.1	0.1	0.1	0.1	0.1	0.1	-0.1	-0.1	-	-0.1					
Processing Gains	-	-	-0.1	-0.1	-	-0.1	-0.1	-0.1	-0.1	-0.1	-0.2	-0.1					
Global Biofuels	-	-	-	-	-	-	-	-	0.1	-	-	-					
Total Non-OPEC	-0.1	-	-	-	0.1	-	-	-	-0.1	-0.4	-0.1	-0.2					
OPEC																	
Crude	-	-	-	-	-	-	-	-									
NGLs	-	-	-	-	-	-	-	-	-	-	-	-					
Total OPEC	-	-	-	-	-	-	-	-									
Total Supply	-0.1	-	-	-	0.1	-	-	-									
STOCK CHANGES AND MISCELLANEOUS REPORTED OECD																	
Industry	-	-	-	-	-	-	-	0.1									
Government	-	-	-	-	-	-	-	-									
Total	-	-	-	-	-	-	-	0.1									
Floating Storage/Oil in Transit	-	-	-	-	-	-	-	-									
Miscellaneous to balance	-0.1	-	0.1	-	0.1	-	-	-									
Total Stock Ch. & Misc	-0.1	-	0.1	-	0.1	-	-	0.1									
Memo items:																	
Call on OPEC crude + Stock ch.	0.1	-	-0.1	-	-0.1	0.1	-	-0.1	0.4	0.3	-	0.2					
Adjusted Call on OPEC + Stock ch.	-	-	-	-	-	-	-	-0.1	0.4	0.3	0.1	0.2					

When submitting their monthly oil statistics, OECD Member countries periodically update data for prior periods. Similar updates to non-OECD data can occur.

Table 2

SUMMARY OF GLOBAL OIL DEMAND

	2010	1Q11	2Q11	3Q11	4Q11	2011	1Q12	2Q12	3Q12	4Q12	2012	1Q13	2Q13	3Q13	4Q13	2013
Demand (mb/d)																
North America	23.79	23.86	23.39	23.63	23.46	23.59	23.06	23.15	23.55	23.51	23.32	23.12	23.20	23.58	23.56	23.37
Europe	14.62	14.22	14.12	14.70	14.09	14.28	13.67	13.64	14.28	13.98	13.89	13.60	13.56	14.23	13.94	13.83
Pacific	7.85	8.35	7.12	7.69	8.31	7.87	8.77	7.56	7.76	8.24	8.08	8.74	7.49	7.58	7.99	7.95
Total OECD	46.26	46.43	44.63	46.03	45.86	45.74	45.50	44.36	45.60	45.73	45.30	45.46	44.26	45.38	45.49	45.15
Asia	19.57	20.34	20.29	19.76	20.66	20.26	20.84	20.76	20.46	21.41	20.87	21.48	21.41	21.04	21.96	21.47
Middle East	7.72	7.46	7.88	8.32	7.84	7.88	7.68	8.09	8.52	7.99	8.07	7.90	8.30	8.72	8.16	8.27
Latin America	6.38	6.36	6.55	6.76	6.67	6.59	6.56	6.70	6.90	6.81	6.74	6.69	6.83	7.06	6.95	6.88
FSU	4.32	4.33	4.48	4.69	4.69	4.55	4.59	4.66	4.80	4.78	4.71	4.72	4.79	4.88	4.90	4.82
Africa	3.40	3.38	3.35	3.23	3.37	3.33	3.46	3.47	3.41	3.46	3.45	3.51	3.54	3.49	3.52	3.51
Europe	0.73	0.72	0.74	0.76	0.77	0.75	0.74	0.75	0.76	0.77	0.75	0.73	0.75	0.77	0.77	0.75
Total Non-OECD	42.12	42.60	43.28	43.52	44.00	43.35	43.87	44.42	44.85	45.21	44.59	45.03	45.62	45.95	46.26	45.72
World	88.38	89.02	87.91	89.55	89.86	89.09	89.37	88.78	90.44	90.94	89.89	90.49	89.88	91.33	91.75	90.87
of which: US50	19.18	19.17	18.82	18.89	18.71	18.90	18.41	18.58	18.93	18.86	18.70	18.48	18.63	18.96	18.91	18.75
Europe 5*	8.92	8.68	8.52	8.85	8.50	8.64	8.26	8.16	8.54	8.39	8.34	8.20	8.09	8.48	8.36	8.28
China	8.95	9.42	9.41	9.18	9.57	9.40	9.75	9.59	9.63	10.07	9.76	10.08	9.99	10.00	10.41	10.12
Japan	4.44	4.83	3.91	4.31	4.81	4.46	5.28	4.24	4.35	4.71	4.64	5.25	4.17	4.16	4.46	4.50
India	3.34	3.51	3.58	3.26	3.57	3.48	3.64	3.69	3.38	3.67	3.60	3.76	3.83	3.52	3.83	3.73
Russia	3.13	3.08	3.28	3.50	3.47	3.33	3.31	3.45	3.59	3.55	3.47	3.45	3.55	3.67	3.62	3.57
Brazil	2.71	2.67	2.75	2.87	2.85	2.79	2.78	2.81	2.91	2.89	2.85	2.83	2.86	2.97	2.95	2.90
Saudi Arabia	2.66	2.47	2.84	3.09	2.72	2.78	2.56	2.98	3.25	2.86	2.91	2.70	3.09	3.35	2.97	3.03
Canada	2.24	2.28	2.17	2.31	2.28	2.26	2.21	2.18	2.26	2.24	2.23	2.20	2.17	2.25	2.23	2.22
Korea	2.27	2.36	2.05	2.21	2.30	2.23	2.31	2.15	2.24	2.33	2.26	2.30	2.15	2.23	2.32	2.25
Mexico	2.08	2.11	2.12	2.14	2.16	2.13	2.11	2.10	2.07	2.09	2.09	2.12	2.11	2.08	2.10	2.10
Iran	2.06	2.06	2.01	2.00	2.00	2.02	2.05	1.99	1.92	1.93	1.97	2.05	1.98	1.92	1.93	1.97
Total	61.97	62.63	61.45	62.61	62.95	62.41	62.68	61.92	63.06	63.60	62.82	63.43	62.62	63.58	64.09	63.43
% of World	70.1%	70.4%	69.9%	69.9%	70.1%	70.1%	70.1%	69.7%	69.7%	69.9%	69.9%	70.1%	69.7%	69.6%	69.9%	69.8%
Annual Change (% per annum)																
North America	2.2	1.8	-1.4	-2.1	-1.7	-0.9	-3.4	-1.0	-0.4	0.2	-1.1	0.3	0.2	0.1	0.2	0.2
Europe	-0.3	-1.0	-1.2	-1.7	-5.1	-2.3	-3.9	-3.4	-2.8	-0.8	-2.7	-0.5	-0.6	-0.4	-0.3	-0.4
Pacific	1.6	0.7	-3.4	0.6	2.7	0.2	5.1	6.2	0.9	-0.8	2.8	-0.4	-0.9	-2.3	-3.0	-1.7
Total OECD	1.3	0.7	-1.7	-1.5	-2.0	-1.1	-2.0	-0.6	-0.9	-0.3	-1.0	-0.1	-0.2	-0.5	-0.5	-0.3
Asia	7.2	6.8	3.0	3.0	1.6	3.6	2.5	2.3	3.5	3.6	3.0	3.0	3.1	2.8	2.6	2.9
Middle East	4.1	1.9	1.9	1.6	2.8	2.1	2.9	2.6	2.4	1.9	2.4	2.9	2.6	2.3	2.2	2.5
Latin America	5.7	3.3	2.5	3.7	3.0	3.1	3.2	2.3	2.1	2.1	2.4	2.0	1.9	2.3	2.0	2.1
FSU	6.7	2.1	6.9	6.0	5.8	5.2	6.0	4.2	2.3	1.9	3.5	2.8	2.7	1.7	2.4	2.4
Africa	0.9	0.4	-3.6	-4.0	-0.2	-1.9	2.2	3.5	5.5	2.5	3.4	1.6	2.2	2.2	1.7	1.9
Europe	-2.8	-0.2	1.7	4.9	2.7	2.3	3.2	1.5	0.1	0.1	1.2	-2.0	0.2	1.3	0.4	0.0
Total Non-OECD	5.6	4.3	2.5	2.6	2.3	2.9	3.0	2.6	3.0	2.8	2.9	2.6	2.7	2.5	2.3	2.5
World	3.3	2.4	0.4	0.5	0.1	0.8	0.4	1.0	1.0	1.2	0.9	1.2	1.2	1.0	0.9	1.1
Annual Change (mb/d)																
North America	0.50	0.43	-0.34	-0.50	-0.41	-0.21	-0.81	-0.23	-0.08	0.05	-0.27	0.06	0.05	0.03	0.05	0.05
Europe	-0.04	-0.15	-0.18	-0.25	-0.77	-0.34	-0.55	-0.48	-0.41	-0.11	-0.39	-0.07	-0.08	-0.06	-0.04	-0.06
Pacific	0.13	0.06	-0.25	0.05	0.22	0.02	0.43	0.44	0.07	-0.07	0.22	-0.03	-0.07	-0.18	-0.25	-0.13
Total OECD	0.59	0.34	-0.76	-0.70	-0.96	-0.52	-0.93	-0.27	-0.43	-0.13	-0.44	-0.04	-0.10	-0.21	-0.24	-0.15
Asia	1.31	1.30	0.58	0.58	0.33	0.69	0.50	0.47	0.70	0.75	0.61	0.63	0.65	0.58	0.55	0.60
Middle East	0.30	0.14	0.15	0.13	0.22	0.16	0.21	0.21	0.20	0.15	0.19	0.22	0.21	0.20	0.18	0.20
Latin America	0.35	0.21	0.16	0.24	0.19	0.20	0.20	0.15	0.14	0.14	0.16	0.13	0.13	0.16	0.14	0.14
FSU	0.27	0.09	0.29	0.27	0.26	0.23	0.26	0.19	0.11	0.09	0.16	0.13	0.12	0.08	0.12	0.11
Africa	0.03	0.01	-0.13	-0.14	-0.01	-0.06	0.08	0.12	0.18	0.09	0.11	0.05	0.08	0.07	0.06	0.07
Europe	-0.02	0.00	0.01	0.04	0.02	0.02	0.02	0.01	0.00	0.00	0.01	-0.01	0.00	0.01	0.00	0.00
Total Non-OECD	2.25	1.75	1.07	1.12	1.01	1.23	1.28	1.15	1.32	1.22	1.24	1.15	1.19	1.10	1.05	1.13
World	2.84	2.08	0.31	0.41	0.05	0.71	0.35	0.87	0.89	1.08	0.80	1.11	1.09	0.89	0.81	0.98
Revisions to Oil Demand from Last Month's Report (mb/d)																
North America	0.03	0.08	0.07	0.07	0.07	0.07	0.02	0.02	-0.01	-0.02	0.00	23.12	23.20	23.58	23.56	23.37
Europe	-0.05	0.00	0.01	0.01	0.01	0.01	-0.01	-0.03	-0.07	-0.05	-0.04	13.60	13.56	14.23	13.94	13.83
Pacific	0.03	0.01	0.02	0.02	0.02	0.01	0.02	0.24	0.03	0.07	0.09	8.74	7.49	7.58	7.99	7.95
Total OECD	0.02	0.08	0.10	0.10	0.10	0.09	0.02	0.23	-0.04	0.00	0.05	45.46	44.26	45.38	45.49	45.15
Asia	0.00	0.00	0.01	0.00	0.00	0.00	0.02	0.09	0.04	0.04	0.05	21.48	21.41	21.04	21.96	21.47
Middle East	0.00	-0.06	0.00	0.00	0.00	-0.02	0.00	0.01	0.00	-0.04	-0.01	7.90	8.30	8.72	8.16	8.27
Latin America	0.00	-0.04	-0.04	-0.04	-0.04	-0.04	-0.08	-0.07	-0.06	-0.06	-0.07	6.69	6.83	7.06	6.95	6.88
FSU	0.00	0.00	-0.01	-0.01	-0.01	-0.01	-0.04	0.01	0.00	0.00	-0.01	4.72	4.79	4.88	4.90	4.82
Africa	0.00	-0.02	-0.02	-0.02	-0.02	-0.02	-0.05	-0.04	-0.03	-0.04	-0.04	3.51	3.54	3.49	3.52	3.51
Europe	0.00	-0.01	-0.01	0.00	-0.01	-0.01	-0.01	0.00	0.00	0.00	0.00	0.73	0.75	0.77	0.77	0.75
Total Non-OECD	0.00	-0.13	-0.08	-0.08	-0.08	-0.09	-0.14	0.01	-0.05	-0.10	-0.07	45.03	45.62	45.95	46.26	45.72
World	0.02	-0.05	0.02	0.02	0.02	0.00	-0.12	0.24	-0.09	-0.10	-0.02	90.49	89.88	91.33	91.75	90.87
Revisions to Oil Demand Growth from Last Month's Report (mb/d)																
World	-0.01	-0.09	0.01	0.01	0.01	-0.01	-0.07	0.22	-0.11	-0.12	-0.02	90.60	89.63	91.42	91.85	90.88

* France, Germany, Italy, Spain and UK

Table 2a

OECD REGIONAL OIL DEMAND[1]

(million barrels per day)

	2010	2011	2Q11	3Q11	4Q11	1Q12	Feb 12	Mar 12	Apr 12 [2]	Latest month vs. Mar 12	Latest month vs. Apr 11
North America											
LPG&Ethane	2.94	2.97	2.70	2.75	3.13	3.17	3.20	3.09	2.85	-0.24	0.16
Naphtha	0.35	0.36	0.37	0.34	0.35	0.35	0.34	0.35	0.33	-0.02	-0.02
Motor Gasoline	10.57	10.33	10.45	10.49	10.22	10.08	10.19	10.31	10.47	0.17	0.13
Jet/Kerosene	1.65	1.65	1.68	1.71	1.60	1.59	1.60	1.63	1.57	-0.07	-0.09
Gasoil/Diesel Oil	4.83	4.92	4.77	4.86	5.03	4.83	5.00	4.64	4.68	0.04	0.01
Residual Fuel Oil	0.93	0.88	0.89	0.78	0.83	0.78	0.71	0.84	0.78	-0.06	-0.17
Other Products	2.51	2.48	2.51	2.69	2.30	2.26	2.28	2.19	2.28	0.09	-0.20
Total	23.79	23.59	23.39	23.63	23.46	23.06	23.32	23.05	22.97	-0.08	-0.19
Europe											
LPG&Ethane	0.96	0.96	0.94	0.93	0.95	1.00	1.07	0.95	0.94	-0.01	-0.03
Naphtha	1.27	1.17	1.19	1.13	1.08	1.27	1.31	1.27	1.22	-0.04	-0.03
Motor Gasoline	2.19	2.10	2.16	2.18	2.03	1.89	1.88	1.97	1.99	0.01	-0.18
Jet/Kerosene	1.23	1.24	1.25	1.34	1.18	1.08	1.11	1.11	1.17	0.06	-0.02
Gasoil/Diesel Oil	6.16	6.09	5.79	6.23	6.24	5.92	6.39	5.80	5.70	-0.09	-0.01
Residual Fuel Oil	1.31	1.25	1.23	1.27	1.21	1.20	1.30	1.15	1.10	-0.05	-0.13
Other Products	1.51	1.49	1.56	1.63	1.40	1.30	1.30	1.36	1.35	-0.01	-0.08
Total	14.62	14.28	14.12	14.70	14.09	13.67	14.36	13.60	13.47	-0.13	-0.47
Pacific											
LPG&Ethane	0.84	0.82	0.79	0.78	0.85	0.96	0.95	0.94	0.78	-0.15	-0.09
Naphtha	1.70	1.70	1.55	1.74	1.72	1.76	1.81	1.65	1.55	-0.10	0.09
Motor Gasoline	1.57	1.55	1.47	1.62	1.58	1.53	1.58	1.55	1.49	-0.07	0.06
Jet/Kerosene	0.88	0.85	0.64	0.64	0.96	1.17	1.28	1.01	0.70	-0.31	-0.07
Gasoil/Diesel Oil	1.63	1.64	1.54	1.60	1.72	1.71	1.83	1.72	1.56	-0.16	0.02
Residual Fuel Oil	0.75	0.75	0.64	0.75	0.81	0.94	0.98	0.91	0.86	-0.05	0.22
Other Products	0.49	0.56	0.48	0.57	0.67	0.71	0.76	0.72	0.71	-0.01	0.28
Total	7.85	7.87	7.12	7.69	8.31	8.77	9.19	8.51	7.65	-0.85	0.50
OECD											
LPG&Ethane	4.74	4.75	4.43	4.45	4.93	5.13	5.22	4.97	4.58	-0.40	0.04
Naphtha	3.31	3.23	3.11	3.21	3.15	3.39	3.47	3.26	3.11	-0.16	0.04
Motor Gasoline	14.33	13.97	14.08	14.30	13.83	13.50	13.66	13.84	13.95	0.11	0.00
Jet/Kerosene	3.76	3.74	3.57	3.69	3.74	3.84	3.99	3.75	3.44	-0.31	-0.18
Gasoil/Diesel Oil	12.62	12.64	12.10	12.69	12.99	12.46	13.22	12.16	11.94	-0.22	0.02
Residual Fuel Oil	2.98	2.87	2.77	2.80	2.85	2.91	2.99	2.90	2.74	-0.16	-0.08
Other Products	4.51	4.53	4.56	4.89	4.36	4.27	4.33	4.27	4.34	0.07	0.00
Total	46.26	45.74	44.63	46.03	45.86	45.50	46.88	45.16	44.09	-1.06	-0.17

1 Demand, measured as deliveries from refineries and primary stocks, comprises inland deliveries, international bunkers and refinery fuel. It includes crude for direct burning, oil from non-conventional sources and other sources of supply. Jet/kerosene comprises jet kerosene and non-aviation kerosene. Gasoil comprises diesel, light heating oil and other gasoils. North America comprises US 50 states, US territories, Mexico and Canada.
2 Latest official OECD submissions (MOS).

Table 2b

OIL DEMAND IN SELECTED OECD COUNTRIES[1]

(million barrels per day)

	2010	2011	2Q11	3Q11	4Q11	1Q12	Feb 12	Mar 12	Apr 12 [2]	Latest month vs. Mar 12	Latest month vs. Apr 11
United States[3]											
LPG	2.17	2.18	1.96	1.99	2.31	2.38	2.44	2.24	2.07	-0.16	0.15
Naphtha	0.26	0.26	0.27	0.25	0.26	0.26	0.24	0.25	0.24	0.00	-0.01
Motor Gasoline	8.99	8.74	8.87	8.89	8.61	8.49	8.64	8.64	8.84	0.19	0.06
Jet/Kerosene	1.45	1.44	1.49	1.50	1.39	1.36	1.38	1.39	1.37	-0.02	-0.10
Gasoil	3.80	3.85	3.75	3.78	3.92	3.76	3.95	3.52	3.66	0.15	-0.03
Residual Fuel Oil	0.54	0.48	0.51	0.36	0.43	0.42	0.40	0.42	0.40	-0.01	-0.19
Other Products	1.97	1.93	1.97	2.12	1.77	1.75	1.78	1.64	1.77	0.13	-0.21
Total	19.18	18.90	18.82	18.89	18.71	18.41	18.82	18.08	18.36	0.27	-0.33
Japan											
LPG	0.48	0.50	0.50	0.45	0.52	0.63	0.62	0.62	0.50	-0.12	-0.08
Naphtha	0.78	0.73	0.67	0.75	0.72	0.73	0.73	0.70	0.64	-0.06	-0.01
Motor Gasoline	1.00	0.98	0.92	1.04	1.00	0.96	0.98	0.99	0.94	-0.05	0.06
Jet/Kerosene	0.55	0.53	0.36	0.34	0.62	0.83	0.93	0.71	0.42	-0.29	-0.04
Diesel	0.44	0.44	0.42	0.44	0.47	0.45	0.48	0.48	0.42	-0.06	0.00
Other Gasoil	0.40	0.37	0.33	0.33	0.39	0.45	0.49	0.43	0.33	-0.10	-0.04
Residual Fuel Oil	0.39	0.44	0.36	0.47	0.52	0.60	0.64	0.59	0.56	-0.03	0.22
Other Products	0.39	0.47	0.36	0.49	0.58	0.64	0.68	0.64	0.58	-0.06	0.28
Total	4.44	4.46	3.91	4.31	4.81	5.28	5.55	5.16	4.39	-0.77	0.40
Germany											
LPG	0.11	0.10	0.10	0.11	0.09	0.10	0.12	0.11	0.11	0.00	0.00
Naphtha	0.39	0.37	0.38	0.36	0.33	0.39	0.44	0.36	0.37	0.01	-0.02
Motor Gasoline	0.45	0.45	0.47	0.46	0.45	0.42	0.42	0.44	0.44	0.00	-0.02
Jet/Kerosene	0.18	0.18	0.19	0.19	0.17	0.16	0.15	0.17	0.17	0.00	-0.02
Diesel	0.64	0.67	0.67	0.71	0.68	0.64	0.62	0.68	0.66	-0.02	0.00
Other Gasoil	0.45	0.38	0.25	0.44	0.43	0.36	0.52	0.25	0.28	0.04	0.08
Residual Fuel Oil	0.15	0.14	0.14	0.14	0.14	0.14	0.16	0.14	0.13	-0.01	-0.02
Other Products	0.09	0.10	0.11	0.12	0.11	0.06	0.05	0.08	0.07	-0.01	-0.04
Total	2.47	2.40	2.31	2.53	2.41	2.27	2.48	2.22	2.23	0.01	-0.03
Italy											
LPG	0.11	0.10	0.08	0.08	0.11	0.12	0.14	0.09	0.09	0.00	0.00
Naphtha	0.10	0.08	0.09	0.07	0.07	0.07	0.06	0.09	0.08	-0.02	-0.03
Motor Gasoline	0.24	0.23	0.23	0.23	0.22	0.18	0.16	0.20	0.19	-0.01	-0.05
Jet/Kerosene	0.09	0.09	0.09	0.11	0.08	0.07	0.06	0.07	0.08	0.01	-0.01
Diesel	0.49	0.50	0.52	0.51	0.50	0.43	0.42	0.47	0.44	-0.02	-0.07
Other Gasoil	0.12	0.11	0.09	0.10	0.13	0.11	0.13	0.10	0.08	-0.02	0.00
Residual Fuel Oil	0.14	0.13	0.13	0.15	0.12	0.13	0.15	0.12	0.12	0.00	0.00
Other Products	0.24	0.22	0.23	0.21	0.20	0.18	0.18	0.18	0.21	0.03	-0.01
Total	1.54	1.45	1.46	1.47	1.43	1.30	1.31	1.32	1.29	-0.02	-0.17
France											
LPG	0.12	0.10	0.09	0.08	0.11	0.13	0.15	0.12	0.09	-0.02	0.00
Naphtha	0.14	0.14	0.15	0.14	0.13	0.15	0.15	0.15	0.15	0.00	0.00
Motor Gasoline	0.18	0.18	0.20	0.19	0.17	0.15	0.15	0.16	0.17	0.01	-0.03
Jet/Kerosene	0.15	0.15	0.15	0.16	0.15	0.14	0.14	0.14	0.14	0.01	-0.01
Diesel	0.68	0.69	0.71	0.70	0.69	0.67	0.68	0.69	0.70	0.00	-0.01
Other Gasoil	0.30	0.27	0.19	0.28	0.27	0.33	0.43	0.26	0.23	-0.02	0.04
Residual Fuel Oil	0.09	0.08	0.08	0.08	0.09	0.09	0.11	0.08	0.08	-0.01	-0.01
Other Products	0.17	0.17	0.19	0.20	0.16	0.14	0.14	0.13	0.13	0.00	-0.04
Total	1.83	1.79	1.76	1.84	1.75	1.80	1.95	1.72	1.69	-0.04	-0.06
United Kingdom											
LPG	0.14	0.13	0.15	0.13	0.12	0.13	0.11	0.13	0.12	-0.01	-0.04
Naphtha	0.03	0.03	0.03	0.02	0.02	0.03	0.03	0.03	0.02	0.00	-0.01
Motor Gasoline	0.36	0.34	0.35	0.33	0.33	0.33	0.34	0.36	0.35	-0.01	0.00
Jet/Kerosene	0.33	0.32	0.31	0.33	0.32	0.30	0.32	0.31	0.32	0.01	0.02
Diesel	0.45	0.45	0.45	0.45	0.47	0.45	0.46	0.47	0.49	0.02	0.06
Other Gasoil	0.12	0.12	0.11	0.13	0.11	0.11	0.11	0.12	0.11	-0.01	0.00
Residual Fuel Oil	0.07	0.06	0.06	0.06	0.06	0.05	0.05	0.05	0.05	0.00	-0.02
Other Products	0.15	0.15	0.16	0.16	0.14	0.15	0.15	0.15	0.14	-0.01	-0.03
Total	1.63	1.61	1.62	1.62	1.57	1.54	1.57	1.61	1.60	-0.01	-0.02
Canada											
LPG	0.34	0.37	0.34	0.35	0.38	0.35	0.32	0.42	0.37	-0.05	0.00
Naphtha	0.08	0.08	0.08	0.08	0.07	0.09	0.09	0.10	0.09	-0.01	0.00
Motor Gasoline	0.74	0.74	0.74	0.78	0.75	0.75	0.72	0.79	0.83	0.04	0.10
Jet/Kerosene	0.11	0.11	0.11	0.13	0.11	0.13	0.12	0.14	0.11	-0.03	0.01
Diesel	0.23	0.24	0.22	0.23	0.25	0.23	0.22	0.26	0.27	0.01	0.06
Other Gasoil	0.31	0.31	0.28	0.32	0.32	0.31	0.30	0.30	0.23	-0.07	-0.04
Residual Fuel Oil	0.10	0.09	0.08	0.08	0.09	0.09	0.07	0.11	0.08	-0.03	0.00
Other Products	0.32	0.32	0.32	0.35	0.30	0.27	0.27	0.30	0.29	-0.01	-0.01
Total	2.24	2.26	2.17	2.31	2.28	2.21	2.12	2.40	2.26	-0.14	0.12

1 Demand, measured as deliveries from refineries and primary stocks, comprises inland deliveries, international bunkers and refinery fuel. It includes crude for direct burning, oil from non-conventional sources and other sources of supply. Jet/kerosene comprises jet kerosene and non-aviation kerosene. Gasoil comprises diesel, light heating oil and other gasoils.
2 Latest official OECD submissions (MOS).
3 US figures exclude US territories.

Table 3
WORLD OIL PRODUCTION
(million barrels per day)

	2011	2012	2013	1Q12	2Q12	3Q12	4Q12	1Q13	Apr 12	May 12	Jun 12
OPEC											
Crude Oil											
Saudi Arabia	9.04			9.65	9.78				9.80	9.70	9.85
Iran	3.58			3.32	3.27				3.30	3.30	3.20
Iraq	2.67			2.69	2.92				2.92	2.94	2.91
UAE	2.50			2.61	2.65				2.64	2.65	2.66
Kuwait	2.24			2.42	2.45				2.44	2.44	2.46
Neutral Zone	0.59			0.60	0.60				0.60	0.60	0.60
Qatar	0.74			0.75	0.74				0.75	0.75	0.73
Angola	1.66			1.77	1.74				1.77	1.80	1.65
Nigeria	2.18			2.06	2.16				2.15	2.16	2.16
Libya	0.46			1.30	1.41				1.40	1.42	1.41
Algeria	1.18			1.16	1.16				1.14	1.18	1.16
Ecuador	0.50			0.48	0.48				0.48	0.48	0.48
Venezuela	2.50			2.51	2.50				2.49	2.49	2.51
Total Crude Oil[6]	29.83			31.31	31.85				31.87	31.91	31.77
Total NGLs[1,6]	5.78	6.22	6.50	6.05	6.13	6.33	6.35	6.38	6.13	6.13	6.13
Total OPEC[6]	35.61			37.36	37.98				38.00	38.04	37.90
OPEC: Historical Composition[6]	35.61			37.36	37.98				38.00	38.04	37.90
NON-OPEC[2]											
OECD											
North America	14.54	15.51	16.15	15.49	15.36	15.40	15.78	15.94	15.51	15.33	15.25
United States[5]	8.09	8.78	9.26	8.78	8.76	8.69	8.90	9.05	8.74	8.83	8.72
Mexico	2.94	2.90	2.78	2.92	2.94	2.88	2.84	2.82	2.94	2.95	2.94
Canada	3.51	3.83	4.11	3.80	3.66	3.83	4.04	4.07	3.83	3.56	3.59
Europe	3.76	3.48	3.34	3.78	3.50	3.07	3.55	3.51	3.73	3.59	3.18
UK	1.11	0.96	0.91	1.10	0.96	0.79	0.98	1.00	1.05	0.94	0.88
Norway	2.04	1.90	1.84	2.09	1.91	1.67	1.95	1.90	2.06	2.01	1.67
Others	0.60	0.62	0.59	0.60	0.63	0.62	0.62	0.61	0.62	0.65	0.63
Pacific	0.54	0.55	0.52	0.54	0.55	0.56	0.54	0.52	0.56	0.53	0.56
Australia	0.45	0.47	0.45	0.45	0.47	0.48	0.47	0.44	0.48	0.45	0.48
Others	0.09	0.08	0.07	0.09	0.08	0.08	0.08	0.08	0.08	0.08	0.08
Total OECD	18.84	19.53	20.02	19.82	19.41	19.03	19.87	19.96	19.80	19.45	18.99
NON-OECD											
Former USSR	13.58	13.67	13.62	13.73	13.68	13.54	13.74	13.72	13.67	13.65	13.73
Russia	10.60	10.70	10.66	10.71	10.68	10.70	10.71	10.72	10.68	10.69	10.66
Others	2.98	2.97	2.96	3.01	3.00	2.83	3.02	3.01	2.99	2.96	3.06
Asia	7.69	7.73	7.71	7.79	7.69	7.71	7.75	7.75	7.65	7.75	7.68
China	4.10	4.17	4.24	4.18	4.13	4.15	4.22	4.22	4.08	4.19	4.12
Malaysia	0.66	0.67	0.66	0.70	0.67	0.66	0.65	0.67	0.67	0.67	0.66
India	0.91	0.91	0.89	0.90	0.91	0.93	0.92	0.91	0.91	0.90	0.92
Indonesia	0.93	0.87	0.81	0.90	0.88	0.85	0.84	0.84	0.89	0.88	0.86
Others	1.08	1.11	1.11	1.12	1.11	1.11	1.11	1.11	1.11	1.11	1.11
Europe	0.14	0.14	0.13	0.14	0.14	0.14	0.13	0.13	0.14	0.14	0.14
Latin America	4.24	4.28	4.42	4.29	4.17	4.29	4.35	4.32	4.17	4.18	4.15
Brazil[5]	2.19	2.23	2.39	2.26	2.13	2.24	2.30	2.30	2.11	2.14	2.14
Argentina	0.69	0.66	0.63	0.68	0.66	0.66	0.66	0.63	0.68	0.68	0.62
Colombia	0.92	0.97	1.01	0.93	0.95	0.98	0.99	0.99	0.96	0.94	0.96
Others	0.44	0.41	0.40	0.42	0.42	0.41	0.40	0.40	0.42	0.42	0.42
Middle East[3]	1.65	1.43	1.47	1.40	1.42	1.46	1.45	1.44	1.45	1.39	1.41
Oman	0.89	0.91	0.94	0.89	0.90	0.92	0.92	0.91	0.90	0.88	0.91
Syria	0.33	0.16	0.15	0.17	0.16	0.16	0.16	0.16	0.17	0.16	0.16
Yemen	0.23	0.17	0.19	0.14	0.16	0.18	0.18	0.18	0.19	0.16	0.15
Others	0.20	0.19	0.19	0.20	0.20	0.19	0.19	0.19	0.20	0.20	0.20
Africa	2.60	2.32	2.32	2.45	2.28	2.28	2.29	2.32	2.30	2.26	2.28
Egypt	0.74	0.73	0.72	0.74	0.74	0.73	0.73	0.73	0.74	0.74	0.74
Gabon	0.25	0.26	0.26	0.26	0.25	0.26	0.26	0.26	0.26	0.25	0.26
Others	1.61	1.33	1.34	1.45	1.29	1.29	1.30	1.34	1.30	1.28	1.29
Total Non-OECD	29.89	29.58	29.67	29.80	29.38	29.41	29.71	29.69	29.37	29.38	29.39
Processing Gains[4]	2.11	2.14	2.18	2.14	2.11	2.16	2.13	2.18	2.08	2.10	2.16
Global Biofuels[5]	1.91	1.96	2.03	1.61	1.94	2.26	2.03	1.70	1.94	1.94	1.94
TOTAL NON-OPEC[6]	52.75	53.20	53.90	53.36	52.85	52.86	53.74	53.54	53.19	52.88	52.48
Non-OPEC: Historical Composition[6]	52.75	53.20	53.90	53.36	52.85	52.86	53.74	53.54	53.19	52.88	52.48
TOTAL SUPPLY	88.36			90.71	90.83				91.19	90.92	90.39

1 Includes condensates reported by OPEC countries, oil from non-conventional sources, e.g. Venezuelan Orimulsion (but not Orinoco extra-heavy oil), and non-oil inputs to Saudi Arabian MTBE. Orimulsion production reportedly ceased from January 2007.
2 Comprises crude oil, condensates, NGLs and oil from non-conventional sources
3 Includes small amounts of production from Israel, Jordan and Bahrain.
4 Net volumetric gains and losses in refining and marine transportation losses.
5 As of the July 2010 OMR, Global Biofuels comprise all world biofuel production including fuel ethanol from the US and Brazil.
6 Total OPEC comprises all countries which were OPEC members at 1 January 2009. OPEC Historical Composition comprises countries which were OPEC members at that point in time. Total Non-OPEC excludes all countries that were OPEC members at 1 January 2009. Non-OPEC Historical Composition excludes countries that were OPEC members at that point in time.

Table 4

OECD INDUSTRY STOCKS[1] AND QUARTERLY STOCK CHANGES

	RECENT MONTHLY STOCKS[2] in Million Barrels					PRIOR YEARS' STOCKS[2] in Million Barrels			STOCK CHANGES in mb/d			
	Jan2012	Feb2012	Mar2012	Apr2012	May2012*	May2009	May2010	May2011	2Q2011	3Q2011	4Q2011	1Q2012
North America												
Crude	476.1	482.7	499.6	508.0	514.7	488.6	493.0	512.0	0.04	-0.36	-0.03	0.39
Motor Gasoline	271.4	266.6	255.1	244.6	241.1	234.5	249.3	247.5	-0.01	0.02	0.09	-0.04
Middle Distillate	225.7	213.7	203.4	195.3	194.0	232.2	221.8	214.0	-0.04	0.16	-0.03	-0.24
Residual Fuel Oil	41.1	43.3	43.0	41.4	41.7	46.5	53.5	44.5	-0.01	-0.02	-0.02	0.02
Total Products[3]	704.5	687.4	670.5	660.5	675.2	709.0	700.6	670.7	0.29	0.30	-0.10	-0.30
Total[4]	1337.5	1328.3	1332.4	1331.4	1352.8	1359.1	1350.2	1337.8	0.50	0.03	-0.32	0.22
Europe												
Crude	291.2	300.5	309.8	314.3	307.9	331.9	356.8	319.6	-0.05	-0.11	-0.24	0.26
Motor Gasoline	97.4	96.5	93.6	93.6	91.0	93.6	94.7	92.1	-0.09	-0.03	0.07	-0.02
Middle Distillate	286.6	272.9	273.7	267.2	260.1	293.2	288.3	279.0	-0.14	-0.12	0.13	0.03
Residual Fuel Oil	59.9	60.0	59.9	55.0	53.6	76.9	74.7	68.1	-0.03	0.00	-0.04	-0.01
Total Products[3]	561.2	548.0	545.6	535.9	525.1	572.2	570.7	552.1	-0.23	-0.10	0.14	0.00
Total[4]	920.9	919.0	927.2	923.1	904.5	975.9	998.5	938.4	-0.25	-0.25	-0.08	0.31
Pacific												
Crude	154.3	162.0	154.7	164.6	172.2	155.7	166.5	160.9	0.02	-0.03	-0.01	-0.01
Motor Gasoline	25.2	23.9	25.4	26.1	26.2	27.0	27.4	25.0	0.01	0.00	-0.03	0.04
Middle Distillate	63.3	54.7	54.6	59.5	63.3	65.2	60.1	64.1	0.14	0.01	-0.08	-0.07
Residual Fuel Oil	19.7	20.1	19.6	20.2	20.1	20.6	21.2	21.3	0.01	-0.01	-0.01	0.01
Total Products[3]	164.3	153.1	152.2	161.8	166.3	171.1	166.6	170.0	0.18	0.11	-0.19	-0.13
Total[4]	390.8	386.4	377.0	401.9	414.5	397.4	403.8	405.7	0.27	0.07	-0.24	-0.14
Total OECD												
Crude	921.5	945.2	964.2	986.8	994.8	976.1	1016.2	992.5	0.01	-0.49	-0.29	0.64
Motor Gasoline	394.0	387.0	374.1	364.3	358.3	355.1	371.4	364.7	-0.09	-0.02	0.13	-0.02
Middle Distillate	575.5	541.4	531.8	522.0	517.4	590.6	570.1	557.0	-0.04	0.05	0.03	-0.28
Residual Fuel Oil	120.8	123.4	122.4	116.6	115.5	143.9	149.4	133.9	-0.04	-0.03	-0.07	0.02
Total Products[3]	1430.1	1388.5	1368.3	1358.3	1366.6	1452.4	1437.9	1392.8	0.24	0.31	-0.16	-0.43
Total[4]	2649.1	2633.6	2636.6	2656.4	2671.8	2732.4	2752.5	2681.9	0.52	-0.15	-0.64	0.39

OECD GOVERNMENT-CONTROLLED STOCKS[5] AND QUARTERLY STOCK CHANGES

	RECENT MONTHLY STOCKS[2] in Million Barrels					PRIOR YEARS' STOCKS[2] in Million Barrels			STOCK CHANGES in mb/d			
	Jan2012	Feb2012	Mar2012	Apr2012	May2012*	May2009	May2010	May2011	2Q2011	3Q2011	4Q2011	1Q2012
North America												
Crude	696.0	696.0	696.0	696.0	696.0	721.7	726.6	726.5	0.00	-0.33	0.00	0.00
Products	0.7	1.0	1.0	1.0	1.0	2.0	2.0	0.0	0.00	0.00	0.01	0.00
Europe												
Crude	187.9	188.2	189.1	189.7	189.7	186.6	185.2	185.6	-0.01	-0.02	0.04	0.03
Products	231.2	231.0	230.6	230.1	230.2	238.7	237.1	234.7	0.05	-0.01	-0.02	-0.04
Pacific												
Crude	393.6	393.6	393.6	393.5	393.5	388.8	390.2	391.1	0.00	0.00	0.03	0.00
Products	20.0	19.7	20.0	20.0	20.0	19.2	20.0	20.0	0.00	-0.01	0.01	0.00
Total OECD												
Crude	1277.4	1277.7	1278.6	1279.1	1279.1	1297.1	1302.0	1303.3	-0.01	-0.36	0.07	0.03
Products	251.9	251.8	251.6	251.1	251.2	259.9	259.1	254.7	0.05	-0.03	0.00	-0.03
Total[4]	1530.7	1530.9	1531.6	1531.5	1531.6	1558.5	1562.5	1559.4	0.04	-0.38	0.07	-0.01

* estimated

1 Stocks are primary national territory stocks on land (excluding utility stocks and including pipeline and entrepot stocks where known) and include stocks held by industry to meet IEA, EU and national emergency reserve commitments and are subject to government control in emergencies.

2 Closing stock levels.

3 Total products includes gasoline, middle distillates, fuel oil and other products.

4 Total includes NGLs, refinery feedstocks, additives/oxygenates and other hydrocarbons.

5 Includes government-owned stocks and stock holding organisation stocks held for emergency purposes.

Table 5

TOTAL STOCKS ON LAND IN OECD COUNTRIES[1]

('millions of barrels' and 'days')

	End March 2011		End June 2011		End September 2011		End December 2011		End March 2012 [3]	
	Stock Level	Days Fwd[2] Demand	Stock Level	Days Fwd Demand	Stock Level	Days Fwd Demand	Stock Level	Days Fwd Demand	Stock Level	Days Fwd Demand
North America										
Canada	184.1	83	189.7	80	188.6	83	190.4	85	184.4	-
Mexico	45.0	21	46.5	22	46.1	21	44.4	21	44.8	-
United States[4]	1769.5	94	1807.6	96	1780.9	95	1752.1	96	1778.0	-
Total[4]	2020.7	86	2065.9	87	2037.7	87	2009.0	87	2029.4	88
Pacific										
Australia	39.1	38	39.5	38	38.2	37	40.0	39	38.0	-
Japan	575.4	147	593.2	138	601.1	125	588.5	111	579.5	-
Korea	170.2	83	175.2	79	173.6	75	166.8	72	164.0	-
New Zealand	7.6	53	8.7	61	8.7	56	8.3	52	9.0	-
Total	792.3	111	816.5	106	821.6	99	803.6	92	790.5	105
Europe[5]										
Austria	19.4	78	19.6	71	18.0	69	19.4	79	19.0	-
Belgium	37.0	59	38.1	58	36.7	58	36.4	56	34.8	-
Czech Republic	21.5	102	21.7	105	20.1	105	20.7	114	20.2	-
Denmark	21.4	132	21.5	134	22.4	138	22.4	142	21.4	-
Finland	26.7	135	27.2	134	26.4	130	29.2	149	29.9	-
France	167.4	95	166.7	91	160.0	92	165.0	92	164.7	-
Germany	285.8	124	286.3	113	276.9	115	278.6	123	281.2	-
Greece	33.9	104	32.6	97	30.9	93	27.9	79	29.1	-
Hungary	17.4	124	17.3	118	16.2	112	15.4	125	17.2	-
Ireland	10.8	80	10.2	74	11.3	77	10.7	84	11.7	-
Italy	131.8	90	130.0	88	130.1	91	128.3	99	130.5	-
Luxembourg	0.5	9	0.6	10	0.7	11	0.6	10	0.5	-
Netherlands	125.7	124	117.8	113	114.3	114	101.4	102	119.5	-
Norway	21.1	88	23.5	91	24.5	92	25.9	106	29.1	-
Poland	62.8	110	64.6	105	65.2	110	64.5	124	64.5	-
Portugal	23.5	87	23.3	86	21.9	90	21.9	90	20.9	-
Slovak Republic	9.0	105	8.9	100	8.3	99	8.5	110	9.0	-
Spain	132.9	97	130.1	94	131.2	97	132.8	99	134.3	-
Sweden	33.7	105	32.5	105	32.6	108	31.5	109	29.6	-
Switzerland	36.6	153	37.2	138	37.0	140	35.7	138	35.3	-
Turkey	58.3	82	56.6	71	56.4	80	55.8	80	57.4	-
United Kingdom	93.5	58	85.4	53	84.7	54	87.8	57	88.4	-
Total	1371.0	97	1351.8	92	1325.9	94	1320.5	96	1348.3	99
Total OECD	4183.9	94	4234.2	92	4185.2	91	4133.1	91	4168.2	94
DAYS OF IEA Net Imports[6]	-	143	-	147	-	144	-	143	-	144

1 Total Stocks are industry and government-controlled stocks (see breakdown in table below). Stocks are primary national territory stocks on land (excluding utility stocks and including pipeline and entrepot stocks where known) they include stocks held by industry to meet IEA, EU and national emergency reserves commitments and are subject to government control in emergencies.
2 Note that days of forward demand represent the stock level divided by the forward quarter average daily demand and is very different from the days of net imports used for the calculation of IEA Emergency Reserves.
3 End March 2012 forward demand figures are IEA Secretariat forecasts.
4 US figures exclude US territories. Total includes US territories.
5 Data not available for Iceland.
6 Reflects stock levels and prior calendar year's net imports adjusted according to IEA emergency reserve definitions (see www.iea.org/netimports.asp). Net exporting IEA countries are excluded.

TOTAL OECD STOCKS

CLOSING STOCKS	Total	Government[1] controlled	Industry	Total	Government[1] controlled	Industry
	Millions of Barrels			*Days of Fwd. Demand[2]*		
1Q2009	4278	1547	2731	96	35	61
2Q2009	4306	1561	2745	95	35	61
3Q2009	4327	1564	2763	94	34	60
4Q2009	4205	1564	2641	91	34	57
1Q2010	4241	1567	2675	93	34	59
2Q2010	4319	1562	2757	92	33	59
3Q2010	4296	1549	2747	92	33	59
4Q2010	4230	1561	2670	91	34	58
1Q2011	4184	1558	2626	94	35	59
2Q2011	4234	1561	2673	92	34	58
3Q2011	4185	1526	2660	91	33	58
4Q2011	4133	1532	2601	91	34	57
1Q2012	4168	1532	2637	94	35	59

1 Includes government-owned stocks and stock holding organisation stocks held for emergency purposes.
2 Days of forward demand calculated using actual demand except in 1Q2012 (when latest forecasts are used).

Table 6

IEA MEMBER COUNTRY DESTINATIONS OF SELECTED CRUDE STREAMS[1]

(million barrels per day)

	2009	2010	2011	2Q11	3Q11	4Q11	1Q12	Feb 12	Mar 12	Apr 12	Year Earlier Apr 11	Year Earlier change
Saudi Light & Extra Light												
North America	0.52	0.69	0.69	0.72	0.47	0.85	0.84	0.76	0.84	0.83	0.63	0.20
Europe	0.59	0.66	0.83	0.79	0.93	0.88	0.76	0.70	0.71	0.84	0.79	0.05
Pacific	1.28	1.21	1.24	1.14	1.21	1.27	1.37	1.27	1.48	1.26	1.25	0.01
Saudi Medium												
North America	0.40	0.36	0.37	0.36	0.40	0.40	0.47	0.56	0.42	0.49	0.32	0.16
Europe	0.02	0.00	0.02	0.02	0.05	0.01	0.05	0.03	0.09	0.08	-	-
Pacific	0.34	0.34	0.40	0.38	0.43	0.40	0.46	0.46	0.52	0.47	0.33	0.14
Saudi Heavy												
North America	0.03	0.02	0.02	0.03	0.03	0.01	-	-	-	0.24	0.02	0.21
Europe	0.02	0.00	0.01	0.00	0.03	0.03	0.04	0.04	0.07	0.12	-	-
Pacific	0.15	0.22	0.20	0.21	0.23	0.18	0.21	0.19	0.23	0.16	0.22	-0.06
Iraqi Basrah Light[2]												
North America	0.40	0.36	0.29	0.41	0.31	0.21	0.39	0.22	0.40	0.33	0.46	-0.13
Europe	0.12	0.09	0.11	0.10	0.19	0.11	0.14	0.15	0.10	0.06	0.01	0.05
Pacific	0.24	0.29	0.34	0.26	0.38	0.32	0.26	0.29	0.27	0.28	0.42	-0.14
Iraqi Kirkuk												
North America	0.06	0.03	0.07	0.07	0.05	0.06	0.06	0.10	0.04	0.07	0.05	0.01
Europe	0.31	0.27	0.27	0.31	0.32	0.26	0.20	0.20	0.18	0.29	0.29	0.00
Pacific	-	-	-	-	-	-	-	-	-	-	-	-
Iranian Light												
North America	-	-	-	-	-	-	-	-	-	-	-	-
Europe	0.15	0.24	0.23	0.28	0.20	0.21	0.25	0.21	0.27	0.19	0.36	-0.18
Pacific	0.07	0.04	0.04	0.03	0.04	0.03	0.03	0.05	0.02	0.04	0.02	0.01
Iranian Heavy[3]												
North America	-	-	-	-	-	-	-	-	-	-	-	-
Europe	0.40	0.49	0.55	0.59	0.73	0.54	0.33	0.24	0.29	0.22	0.36	-0.14
Pacific	0.57	0.52	0.51	0.41	0.51	0.49	0.48	0.54	0.38	0.40	0.42	-0.01
Venezuelan Light & Medium												
North America	0.39	0.14	0.18	0.30	0.24	0.13	0.07	0.06	0.16	0.19	0.12	0.06
Europe	0.07	0.02	0.02	0.01	0.02	0.02	0.01	-	-	-	0.02	-
Pacific	-	-	-	-	-	-	0.01	-	-	-	-	-
Venezuelan 22 API and heavier												
North America	0.75	0.86	0.76	0.77	0.70	0.69	0.68	0.68	0.75	0.68	0.83	-0.15
Europe	0.07	0.06	0.05	0.05	0.06	0.05	0.08	0.05	0.11	0.08	0.04	0.05
Pacific	-	-	-	-	-	-	-	-	-	-	-	-
Mexican Maya												
North America	0.93	0.91	0.82	0.80	0.84	0.84	0.72	0.83	0.69	0.68	0.71	-0.03
Europe	0.10	0.11	0.12	0.12	0.12	0.12	0.12	0.17	0.10	0.15	0.14	0.01
Pacific	-	-	-	-	-	-	-	-	-	-	-	-
Mexican Isthmus												
North America	0.01	0.04	0.07	0.08	0.06	0.07	0.04	-	0.05	0.07	0.09	-0.02
Europe	0.01	0.02	0.01	0.02	0.00	0.01	0.02	0.03	0.03	0.05	-	-
Pacific	-	-	-	-	-	-	-	-	-	-	-	-
Russian Urals												
North America	0.15	0.08	0.01	-	-	0.02	-	-	-	-	-	-
Europe	1.72	1.80	1.69	1.86	1.51	1.61	1.75	1.73	1.63	1.66	2.05	-0.39
Pacific	-	-	-	-	-	-	-	-	-	-	-	-
Nigerian Light[4]												
North America	0.54	0.60	0.53	0.60	0.43	0.46	0.25	0.19	0.32	0.31	0.57	-0.26
Europe	0.32	0.34	0.45	0.40	0.54	0.48	0.51	0.52	0.32	0.56	0.27	0.29
Pacific	0.00	-	0.05	0.04	0.06	0.05	0.03	0.01	0.03	0.06	0.03	0.03
Nigerian Medium												
North America	0.21	0.25	0.18	0.18	0.18	0.14	0.04	-	0.11	0.07	0.24	-0.17
Europe	0.13	0.09	0.14	0.17	0.11	0.13	0.26	0.29	0.26	0.26	0.14	0.12
Pacific	-	-	-	-	-	-	-	-	-	-	-	-

1 Data based on monthly submissions from IEA countries to the crude oil import register (in '000 bbl), subject to availability. May differ from Table 8 of the Report.
IEA North America includes United States and Canada.
IEA Europe includes all countries in OECD Europe except Hungary. The Slovak Republic and Poland is excluded through December 2007 but included thereafter.
IEA Pacific data includes Australia, New Zealand, Korea and Japan.

2 Iraqi Total minus Kirkuk.

3 Iranian Total minus Iranian Light.

4 33° API and lighter (e.g., Bonny Light, Escravos, Qua Iboe and Oso Condensate).

Table 7
REGIONAL OECD IMPORTS[1,2]
(thousand barrels per day)

	2009	2010	2011	2Q11	3Q11	4Q11	1Q12	Feb-12	Mar-12	Apr-12	Year Earlier Apr-11	Year Earlier % change
Crude Oil												
North America	7353	7343	6703	6928	6793	6519	5999	5927	6122	5983	6482	-8%
Europe	8893	9072	8986	8846	9331	8905	9122	9081	8882	8875	8383	6%
Pacific	6082	6249	6370	6084	6260	6492	6753	7145	6422	6782	6514	4%
Total OECD	22329	22663	22058	21859	22384	21917	21874	22153	21426	21641	21619	0%
LPG												
North America	13	8	8	4	4	3	2	2	3	3	6	-47%
Europe	260	284	307	284	304	327	298	294	277	225	298	-25%
Pacific	529	558	561	547	580	546	651	661	717	654	651	0%
Total OECD	802	850	876	836	888	877	951	958	996	882	955	-8%
Naphtha												
North America	22	36	42	51	43	38	15	9	9	28	22	28%
Europe	352	416	291	336	285	253	425	495	345	446	346	29%
Pacific	841	900	876	830	906	853	832	934	721	831	757	10%
Total OECD	1215	1352	1209	1217	1234	1144	1272	1438	1075	1305	1124	16%
Gasoline[3]												
North America	878	789	753	981	703	654	674	606	692	757	883	-14%
Europe	193	174	217	221	216	208	268	273	273	280	161	74%
Pacific	96	64	74	61	71	92	74	63	100	108	76	41%
Total OECD	1167	1027	1044	1262	990	954	1016	942	1065	1145	1121	2%
Jet & Kerosene												
North America	62	76	74	86	81	63	42	69	36	56	95	-42%
Europe	452	419	398	367	451	450	291	283	270	387	412	-6%
Pacific	53	40	50	43	45	55	71	85	80	21	48	-57%
Total OECD	567	534	523	497	578	568	403	437	385	463	554	-16%
Gasoil/Diesel												
North America	55	49	34	30	32	29	31	24	33	8	40	-80%
Europe	1035	1049	1014	942	947	1075	1028	937	1127	884	1106	-20%
Pacific	87	97	128	153	123	139	138	96	179	138	201	-32%
Total OECD	1177	1194	1177	1125	1102	1243	1196	1058	1339	1029	1347	-24%
Heavy Fuel Oil												
North America	270	277	266	304	193	222	213	158	239	180	430	-58%
Europe	534	529	583	581	651	595	647	592	568	592	537	10%
Pacific	113	117	146	111	156	169	208	223	176	157	130	21%
Total OECD	917	923	995	996	1000	986	1068	973	983	930	1097	-15%
Other Products												
North America	870	805	874	896	903	837	753	688	677	742	957	-22%
Europe	770	705	708	782	730	629	609	652	692	636	820	-22%
Pacific	325	335	326	251	343	328	341	299	360	335	300	12%
Total OECD	1964	1845	1908	1930	1976	1794	1703	1639	1728	1713	2077	-18%
Total Products												
North America	2171	2040	2051	2355	1960	1845	1729	1556	1687	1774	2432	-27%
Europe	3595	3575	3518	3513	3584	3538	3566	3527	3551	3450	3680	-6%
Pacific	2045	2110	2162	1995	2225	2184	2316	2362	2334	2243	2163	4%
Total OECD	7810	7725	7731	7862	7769	7566	7611	7445	7572	7468	8275	-10%
Total Oil												
North America	9524	9382	8754	9283	8753	8364	7728	7484	7809	7757	9154	-15%
Europe	12488	12646	12504	12359	12915	12443	12689	12608	12433	12326	12063	2%
Pacific	8127	8360	8531	8079	8485	8676	9069	9506	8756	9026	8677	4%
Total OECD	30139	30388	29789	29721	30153	29483	29485	29598	28999	29109	29894	-3%

1 Based on Monthly Oil Questionnaire data submitted by OECD countries in tonnes and converted to barrels.
2 Excludes intra-regional trade.
3 Includes additives.

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User's Guide and Glossary to the IEA *Oil Market Report*

For information on the data sources, definitions, technical terms and general approach used in preparing the *Oil Market Report (OMR)*, *Medium-Term Oil and Gas Markets (MTOGM)* and *Annual Statistical Supplement* (current issue of the Statistical Supplement dated 10 August 2011), readers are referred to the *Users' Guide* at www.oilmarketreport.org/glossary.asp. It should be noted that the spot crude and product price assessments are based on daily Argus prices, converted when appropriate to US$ per barrel according to the Argus specification of products (Copyright © 2012 Argus Media Limited - all rights reserved).

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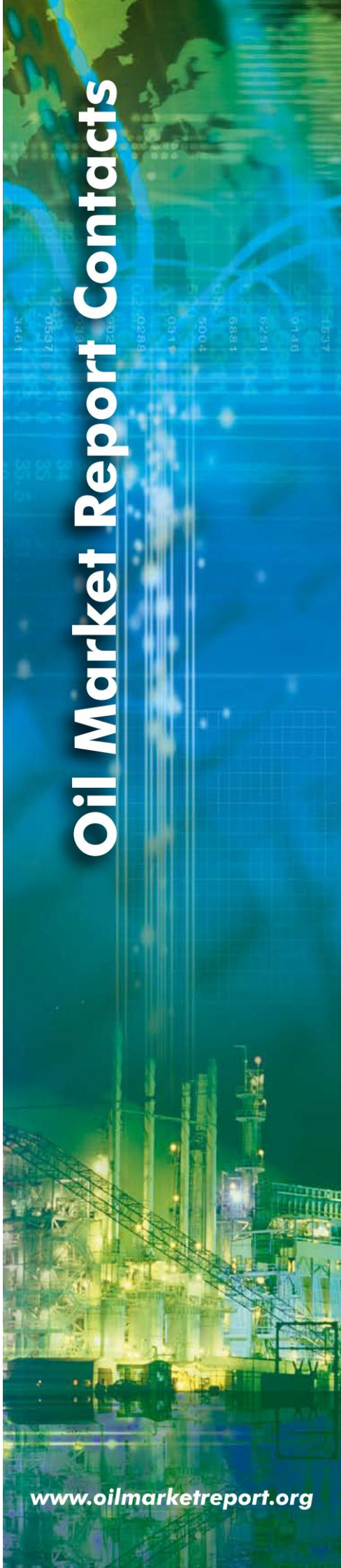
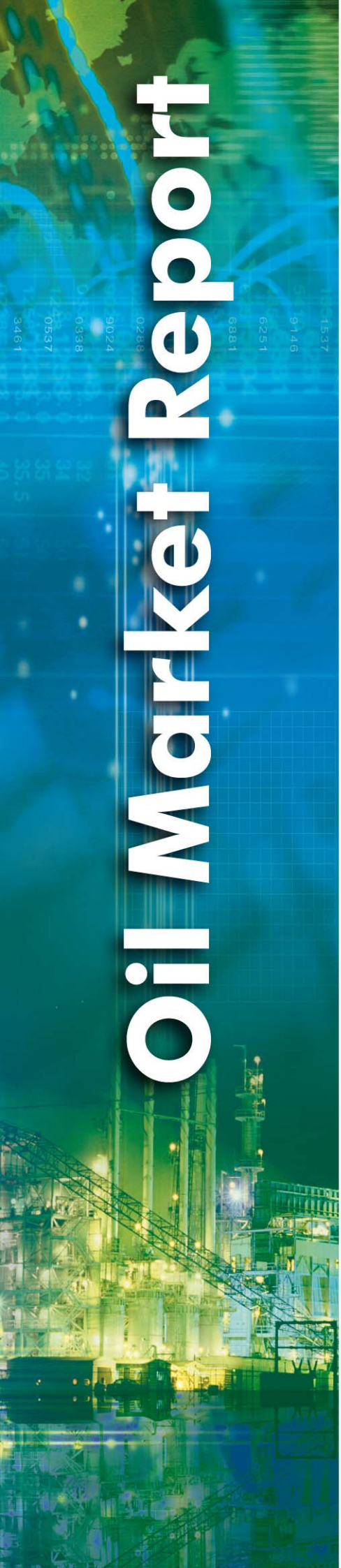
Next Issue: 10 August 2012





International Energy Agency

10 August 2012

HIGHLIGHTS

- **Sluggish economic growth could restrict annual oil demand growth to 0.9 mb/d in 2012 and 0.8 mb/d in 2013**, with demand averaging 89.6 mb/d and 90.5 mb/d respectively. Baseline revisions for the FSU, China and Middle East lower absolute demand by 0.3 mb/d for 2011/2012 and, combined with weaker economic growth assumptions, trim the 2013 demand total by 0.4 mb/d.

- **Global oil supply grew by 0.3 mb/d m-o-m to 90.7 mb/d in July,** with non-OPEC generating 60% of the increase. Global oil output stood 2.6 mb/d above year-ago, with 80% of the increase from OPEC crude and NGLs. Summer maintenance reduced 2Q12 non-OPEC growth to 0.5 mb/d, but output should grow by 0.7 mb/d in 2013.

- **OPEC crude supply fell 70 kb/d to 31.39 mb/d in July versus June**, on declines from Iran, Angola and Libya. Effective spare capacity is assessed at 2.57 mb/d, and July crude imports from Iran fell to 1.0 mb/d. The 'call on OPEC crude and stock change' is now 31 mb/d for 3Q12 and averages 30.1 mb/d for 4Q12-4Q13.

- **Oil prices advanced in July and early August, extending earlier gains.** Urals, a substitute for Iranian crude in Europe, led the rally in spot markets as the EU embargo on Iranian oil took effect. Brent and WTI futures surged past $112/bbl and $93/bbl, respectively, in early August, from $89.61/bbl and $78.10/bbl in late June.

- **June OECD industry oil stocks fell counter-seasonally by 5.5 mb to 2683 mb, or 57.8 days of forward cover.** A crude stock build failed to offset a draw in products. The deficit to the five-year average stock level widened to 19.2 mb. July preliminary data suggest a 10.0 mb build in OECD stocks.

- **Global refinery crude run estimates for 3Q12 have been lowered by 0.3 mb/d** since last month, following a slowdown in apparent Chinese oil demand and refinery operations, and outages in the US and Japan. 3Q12 global throughputs now total 75.5 mb/d, 0.2 mb/d above a year earlier and 1.1 mb/d above the 2Q12 seasonal low.

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DATA RESET

Baseline data changes are an occupational hazard for analysts, and frequently incur the wrath of a readership then forced to reset their working models. The *OMR* this month carries more than its fair share of data adjustments, most notably affecting oil demand estimates. Inconvenient though such adjustments may be, they are an inevitable result of our goal of incorporating the latest, most accurate information and, over time, to reflect the evolving membership of institutions like the OECD or OPEC. The August release of the *OMR's* companion *Annual Statistical Supplement* also allows such adjustments to be placed in historical context.

Baseline demand estimates now fully incorporate 2010 data for non-OECD countries (taken from 'Energy Statistics of Non-OECD Countries (2012 Edition)'). This results in a net downward adjustment to the 2010/2011 baseline of around 0.3 mb/d for the non-OECD total, concentrated in China (-0.2 mb/d), the Middle East (-0.2 mb/d) and FSU (-0.1 mb/d). Data for non-OECD 'other Asia' provide a partial offset, revised up by 0.2 mb/d. Generally, adjustments for China and the Middle East are carried through the demand outlook to 2013, although further weakening is incorporated for China, based on a lower economic growth assumption for 2012/2013. Meanwhile, the downward adjustment for the Middle East tapers off to -0.1 mb/d, amid assumed persistently high crude prices, and heavily subsidised domestic oil products prices, which together boost demand slightly compared to the weaker baseline.

Making sense of this month's market balance is further complicated by the *OMR's* reclassification of Chile, Estonia, Israel and Slovenia into the OECD category, and corresponding (but not identical) downward adjustments to supply, demand, stocks and refining data for the non-OECD grouping. All four countries joined the OECD during the course of 2010, but only now have comparatively regular, complete and consistent monthly and annual oil data become available. Table 1A on page 52, which every month makes a comparison between oil supply, demand and inventory estimates from the current and prior reports, has been re-worked to show a consistent comparison between data for the OECD and non-OECD groupings as they stand now. Notwithstanding the benefits of such a like-for-like comparison, the regional reclassification on its own effectively adds 0.7 mb/d (1.5%) to OECD total oil demand for 2010/2011, 13 mb (0.5%) to May OECD industry oil stocks and around 0.4 mb/d (1%) to OECD refinery crude runs based on January-June 2012 data.

Taken together with the removal of some increasingly tenuous adjustments previously applied for the *OMR* to OECD countries' submitted inventory data, and a modest downward adjustment to 2Q12 OPEC supply estimates, we arrive at a slightly different looking Table 1 compared to last month's version. All told, global oil demand for 2012 is 0.3 mb/d lower than in the July *OMR* and 2013 demand is 0.4 mb/d lower. Implied global stock build in 1H12 now looks to have averaged 1.85 mb/d, rather than the 1.7 mb/d estimated last month. And the 'call on OPEC crude and stock change' now dips to 31 mb/d for 3Q12 and an average of 30.1 mb/d during 4Q12-4Q13, markedly lower than we carried last month.

From a consuming country standpoint, this apparent easing in expected market fundamentals through 2013 might initially seem reassuring, particularly if it leads to some further relief from, by historical standards, very high crude prices. That of course overlooks the fact that a weaker demand outlook is partly the result of a worrying slow-down in global economic activity. And while the outlook for oil supplies is both relatively unchanged from last month, and indicative of sustained growth potential, there are worrying signs here too. In particular, the geopolitical dimension is likely to continue to provide something of a floor for prices. The issue of Iran will likely continue to weigh heavy on the market through 2H12. Moreover, there is a risk that recent progress in restoring output from Libya, Iraq and Nigeria could be jeopardised if recent political and civil tensions worsen. So as the incumbent *OMR* Editor bows out, there remains plenty of food for thought for his successor.

DEMAND

Summary

- **A relatively subdued global oil demand forecast persists for both 2012 and 2013, resulting from the weak economic backdrop.** Sub-one mb/d demand growth is envisaged in both years – to 89.6 mb/d in 2012 and 90.5 mb/d in 2013. The associated macroeconomic framework assumes global growth of 3.3% in 2012, and 3.6% in 2013 (the key change from last month being the 0.2 percentage point reduction for 2013).

- **Despite 2Q12 baseline demand data marginally exceeding last month's estimate, the key Chinese and US figures for June were revised down.** The total 2Q12 global demand estimate is 0.03 mb/d higher than assumed in early-July, but recent (i.e. June) estimates of demand from the world's two dominant consumers – China (-570 kb/d) and the US (-105 kb/d) – have been curtailed. On average therefore, forecast 4Q12-4Q13 demand averages around 415 kb/d lower than last month on a like-for-like basis.

- **Definitional changes have seen the movement of Chile, Israel, Slovenia and Estonia into the OECD category, from the non-OECD. Together, these countries account for around 0.7 mb/d of oil demand.** Accordingly this has altered the OECD regional groupings: *North America* with the addition of Chile is now classified as *Americas;* and the *OECD Pacific*, plus Israel, is now listed as *Asia & Oceania.* Large non-OECD baseline revisions have also removed around 0.3 mb/d from the historical series.

Global Oil Demand (2011-2013)

(million barrels per day)

	1Q11	2Q11	3Q11	4Q11	2011	1Q12	2Q12	3Q12	4Q12	2012	1Q13	2Q13	3Q13	4Q13	2013
Africa	3.4	3.4	3.2	3.4	3.3	3.5	3.4	3.4	3.4	3.4	3.5	3.5	3.5	3.5	3.5
Americas	30.2	29.9	30.4	30.1	30.1	29.6	30.0	30.5	30.2	30.1	29.7	30.0	30.6	30.5	30.2
Asia/Pacific	29.0	27.7	27.8	29.3	28.4	30.0	28.6	28.4	29.7	29.2	30.3	29.1	28.6	29.9	29.5
Europe	15.0	14.9	15.5	14.9	15.1	14.5	14.5	15.1	14.7	14.7	14.3	14.3	15.0	14.7	14.5
FSU	4.2	4.4	4.6	4.6	4.4	4.5	4.6	4.8	4.8	4.6	4.7	4.8	4.9	5.0	4.8
Middle East	7.0	7.4	7.8	7.3	7.4	7.2	7.7	8.1	7.6	7.6	7.5	7.9	8.3	7.8	7.9
World	**88.7**	**87.6**	**89.3**	**89.6**	**88.8**	**89.1**	**88.8**	**90.2**	**90.5**	**89.6**	**89.9**	**89.6**	**91.0**	**91.4**	**90.5**
Annual Chg (%)	2.3	0.3	0.4	0.0	0.7	0.5	1.4	1.0	1.0	1.0	0.9	0.8	0.9	1.0	0.9
Annual Chg (mb/d)	2.0	0.2	0.3	0.0	0.6	0.4	1.2	0.9	0.9	0.9	0.8	0.7	0.8	0.9	0.8
Changes from last OMR (mb/d)	-0.34	-0.34	-0.30	-0.31	-0.32	-0.27	0.03	-0.29	-0.48	-0.25	-0.55	-0.32	-0.36	-0.37	-0.40

Global Overview

Oil consumption is forecast to post sub-1 mb/d gains in both 2012 and 2013, due to a combination of persistently high prices and a weak economic backdrop. Global oil demand growth of around 0.9 mb/d (1.0%) is assumed for 2012, averaging 89.6 mb/d, the growth forecast roughly on a par with those carried in the *OMR* all year. Demand growth will likely fall in 2013, to 0.8 mb/d (averaging 90.5 mb/d), as the stronger macroeconomic outlook is offset by, among other reasons, the resumption of nuclear capacity in Japan reducing prospective oil needs from the power sector.

Large non-OECD baseline revisions (see *Non-OECD Baseline Data Revisions*) reduce the aggregate global oil demand outlook for 2012, by 0.25 mb/d, coinciding as they do with net-negative revisions to new OECD nations (see *New OECD Regions, Countries and Oil Demand Data: Changes in Demand*). Surprisingly strong 2Q12 OECD demand (+0.2 mb/d y-o-y) bucks the overall downside trend, with a modest 0.03 mb/d global baseline addition now made. The US led the 2Q12 change, with 130 kb/d more oil demand than assumed in the *OMR* dated 12 July. Significant revisions were also seen for Japan (+65 kb/d), Germany (+45 kb/d) and South Korea (+40 kb/d), as consumers there took advantage of June's dip in prices to potentially replenish stocks.

Marginally weaker economic drivers leave the 2013 demand growth outlook 0.15 mb/d lower than previously assumed. Global economic growth of around 3.3% is anticipated in 2012, rising to 3.6% in 2013 – down marginally from last month's report (3.8%) as the economic backdrop has worsened. China endures the majority of the reduction, with GDP growth of 8.0% now assumed for 2012 (previously 8.2%), rising to 8.1% in 2013 (8.5% before). The economic outlook for the US has also been curbed for 2013, with growth of 2.0% now assumed (2.3% last month), as conditions in the US have deteriorated. The IEA is carrying marginally lower global GDP projections than seen in IMF's July *World Economic Outlook Update* – 3.3% for 2012 (3.5% IMF) and 3.6% in 2013 (3.9% IMF). The key difference in 2012 being the IMF's more positive outlook for Japan (2.4% versus 2.0% for the IEA). Given the power constraints currently facing Japan, we have assumed slightly weaker growth. In 2013 the discrepancies with the IMF centre on the US (2.3% IMF versus 2.0%) and China (8.5% IMF versus 8.1%), as recent weakness in both economies in our view reduce the potential for strong recovery as soon as 2013.

Real GDP Growth
OMR dated 10 Aug 2012

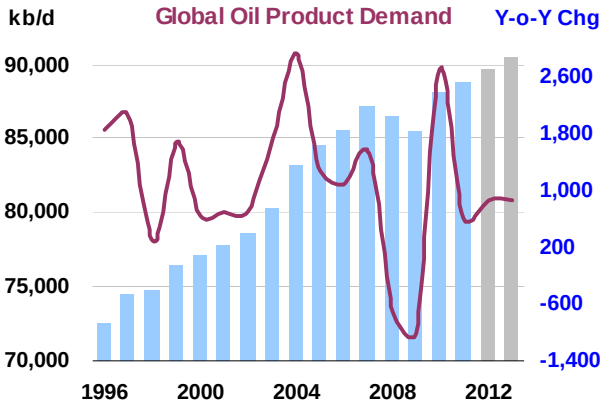
% change	2012	2013
WORLD	**3.3**	**3.6**
OECD	**1.3**	**1.7**
OECD, Americas	2.3	2.2
OECD, Europe	(0.1)	0.8
OECD, Asia & Oceania	2.5	2.4
Non-OECD	**5.5**	**5.7**
Africa	4.9	4.7
Latin America	3.8	4.1
China (excl. Hong Kong)	8.0	8.1
Other Asia	5.5	6.0
Non-OECD Europe	1.4	2.2
FSU	3.1	3.1
Middle East	3.2	3.0

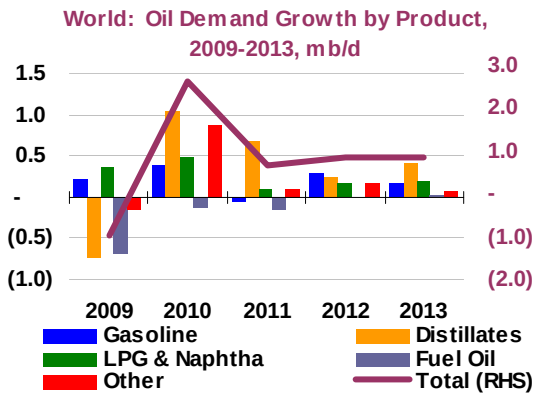
Sources: IEA; IMF

Current vs. Previous
OMR dated 12 July 2012

	2012	2013
WORLD	**-**	**(0.2)**
OECD	**-**	**(0.2)**
OECD, North America	0.2	(0.3)
OECD, Europe	(0.2)	(0.3)
OECD, Pacific	-	-
Non-OECD	**-**	**(0.1)**
Africa	-	-
Latin America	-	-
China (excl. Hong Kong)	(0.2)	(0.4)
Other Asia	-	-
Non-OECD Europe	-	-
FSU	-	-
Middle East	-	-

Lower June demand data for the US (105 kb/d less than assumed last month, despite the 2Q12 upward revision) and China (-570 kb/d), which jointly account for nearly one-third of total global demand, further suppress the demand forecast. Gas/diesel oil demand revisions leading the June adjustment, with Chinese June apparent demand 360 kb/d below its month earlier reading and the US 105 kb/d lower, as industrial activity slowed.



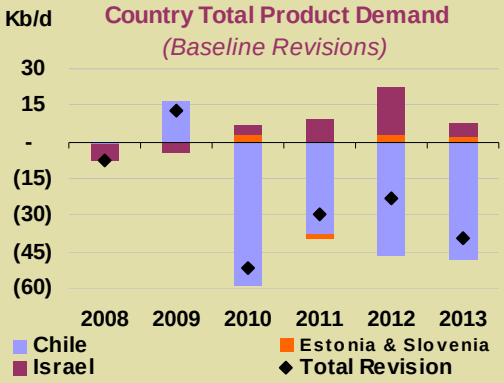


Strong distillate demand remains a feature of the outlook through 2013, despite recent weakness, as the construction and manufacturing sectors gradually become more robust. Global gas/diesel oil demand is set to rise by 260 kb/d in 2012, to 26.3 mb/d, and by 345 kb/d in 2013 to 26.6 mb/d. Having fallen by 25 kb/d amid weak economic growth in 2012, jet/kerosene demand is forecast to rise by 60 kb/d in 2013,

to 6.5 mb/d. A still-strong petrochemical industry, largely an emerging market phenomenon, but also a North American one, is likely to support LPG (up 165 kb/d in 2012 and 185 kb/d 2013).

New OECD Regions, Countries and Oil Demand Data: Changes in Demand

Demand data for Chile, Estonia, Israel and Slovenia are incorporated within the new OECD regional classifications this month – Americas, Europe and Asia & Oceania. These countries now submit data to the IEA via monthly and annual oil questionnaires. Moreover, differences between the predominantly JODI-derived data series for these countries previously included in non-OECD totals, and the new monthly/annual data now included within the OECD, result in a net change for global oil demand due to these classification changes of around -50 kb/d for 2010 and -30 kb/d for 2011.



The new OECD Americas region is the amalgamation of the old North America and Chile. The effect on OECD demand of including new oil demand data for Chile is an average addition of 290 kb/d of oil products for 2000-2010 and an average of 330 kb/d added to 2012 and 2013. The OECD Europe region now includes Estonia and Slovenia, which previously were included in FSU and other non-OECD Europe, respectively. The impact for the period 2000-2013 is an average addition of 80 kb/d to OECD demand. OECD Asia & Oceania is essentially the OECD Pacific countries plus Israel. The average historical (2000-2010) impact of adding Israel is almost 250 kb/d, while for 2012 and 2013 the average effect is 270 kb/d.

The new data result in a marginal upward revision to Estonia, Israel and Slovenia oil demand between 2010 and 2013. On the other hand, Chile suffered a more significant downward revision to total oil products, from 2010, backed predominantly by downward revisions to 'other' products demand.

Total Product Demand by Country (Kb/d)
*(Changes from JODI to MOS-IEA database)**

	2008	2009	2010	2011	2012	2013
Additions to OECD						
Chile	370	368	322	333	332	331
Estonia & Slovenia	91	80	80	81	84	83
Israel	246	233	250	263	277	263
Substractions to non-OECD						
Chile	371	350	381	371	379	379
Estonia & Slovenia	91	80	77	83	82	81
Israel	252	237	246	253	257	257
Total Baseline Revisions	**(7)**	**12**	**(52)**	**(29)**	**(24)**	**(40)**

**(Changes from JODI to MOS-IEA database period Jan-2000 to June-2012)*

OECD

Aggregate OECD demand in June was largely flat y-o-y, although this masks disparate regional trends. Strong growth in Asia & Oceania, caused by post-tsunami additions to Japan and the robust expansion that continues to be seen in Korea, balance-out modest declines elsewhere. Gas/diesel oil proved to be the strongest product, as a result of strong industrial demand in many nations, notably Korea, Australia and Germany.

OECD Demand based on Adjusted Preliminary Submissions - June 2012

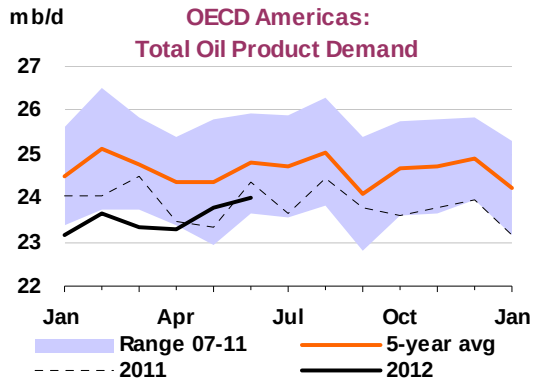
(million barrels per day)

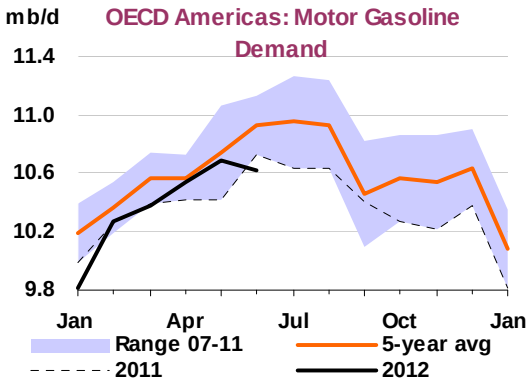
	Gasoline		Jet/Kerosene		Diesel		Other Gasoil		RFO		Other		Total Products	
	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa
OECD Americas*	**10.63**	**-0.9**	**1.79**	**0.1**	**4.38**	**-0.1**	**0.60**	**-16.2**	**0.78**	**-12.3**	**5.83**	**-0.31**	**24.01**	**-1.4**
US50	8.92	-1.4	1.56	0.3	3.59	-1.5	0.14	-45.2	0.39	-18.1	4.40	0.8	19.01	-1.8
Canada	0.77	1.7	0.11	-6.8	0.24	5.7	0.28	-2.3	0.09	10.6	0.72	-4.1	2.21	-0.5
Mexico	0.81	1.3	0.06	7.8	0.35	4.8	0.15	4.8	0.20	-13.2	0.59	-2.1	2.15	-0.3
OECD Europe	**2.13**	**-3.3**	**1.29**	**-2.3**	**4.51**	**-0.8**	**1.54**	**13.9**	**1.21**	**-4.2**	**3.58**	**-5.8**	**14.27**	**-1.6**
Germany	0.44	-2.5	0.18	-4.3	0.70	8.1	0.41	53.8	0.19	49.4	0.52	-11.2	2.44	7.7
United Kingdom	0.33	-4.7	0.35	1.1	0.45	-2.6	0.12	-3.9	0.05	-12.4	0.32	-9.5	1.62	-4.1
France	0.19	-3.2	0.15	4.7	0.73	2.5	0.25	23.3	0.07	-19.7	0.44	-0.2	1.83	2.7
Italy	0.22	-6.9	0.10	-8.2	0.50	-7.1	0.09	9.3	0.12	-22.5	0.35	-10.7	1.38	-8.7
Spain	0.12	-2.8	0.12	-7.3	0.46	-5.8	0.14	-6.0	0.19	-0.3	0.30	-5.5	1.32	-4.9
OECD Asia & Oceania	**1.56**	**0.2**	**0.59**	**-2.6**	**1.26**	**8.9**	**0.44**	**-9.5**	**0.87**	**18.5**	**3.19**	**8.6**	**7.91**	**5.8**
Japan	0.92	-2.7	0.29	-7.3	0.45	-0.9	0.32	2.3	0.54	37.4	1.65	7.7	4.16	5.5
Korea	0.19	8.2	0.13	1.1	0.29	5.5	0.11	2.7	0.27	-1.1	1.31	14.0	2.30	9.1
Australia	0.32	2.2	0.13	1.7	0.41	4.9	0.00	0.0	0.02	-18.4	0.17	-4.8	1.05	1.4
OECD Total	**14.31**	**-1.2**	**3.67**	**-1.2**	**10.15**	**0.6**	**2.58**	**1.1**	**2.87**	**-0.9**	**12.60**	**0.1**	**46.20**	**-0.3**

* Including US territories

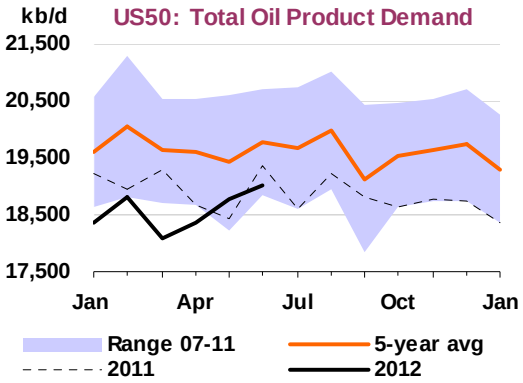
Americas

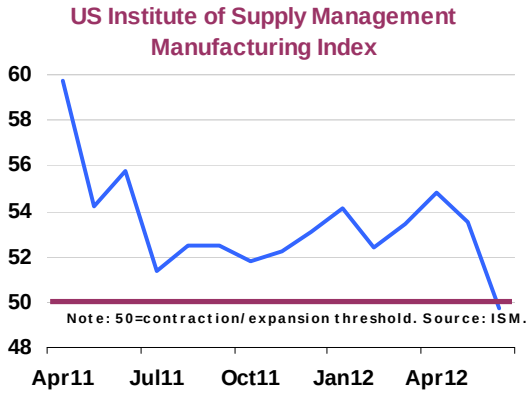
Subdued demand conditions persist for the newly created OECD Americas – US, Canada, Mexico and Chile – suppressed by a combination of stuttering economic growth, relatively high oil prices and continued efficiency gains. US demand, for example, showed signs of recuperating in May – with a year-on-year (y-o-y) gain of 345 kb/d (or 1.9%) to 18.8 mb/d posted – before gains were reversed again in June, demand being down 345 kb/d y-o-y (1.8%) to 19.0 mb/d.





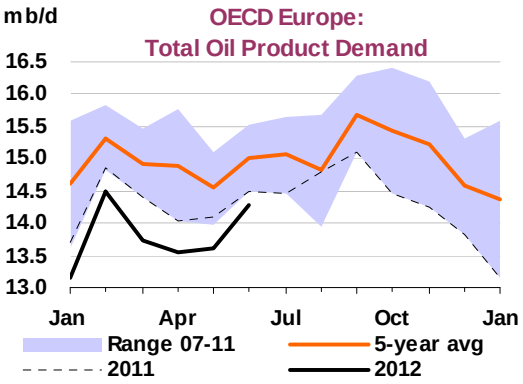
US oil consumption averaged 18.7 mb/d in 2Q12, down by a very modest 0.6% y-o-y, after confirmed reports of a 3.9% decline in 1Q12. Absolute demand growth should return in the second half of 2012 (+0.5% y-o-y), as macroeconomic activity is thought likely to consolidate whilst prices remain below their earlier peaks. Rising second half demand should support an annual average decline rate of 0.9% in 2012, taking total US oil product demand down to an average of 18.7 mb/d. Potential support for gasoline could arise if, as many are speculating, the recent drought-related spike in US crop prices causes a waiver of Renewable Fuels Standard (RFS) commitments. Under such a scenario – not our prevailing base case – less ethanol would be required in the gasoline blend, in turn requiring more refinery-sourced gasoline. All other things equal however, US demand should remain relatively flat in 2013 at 18.7 mb/d, as the entrenched long-term structural decline cancels out any support provided by lower oil prices and continued 2.0% economic growth.

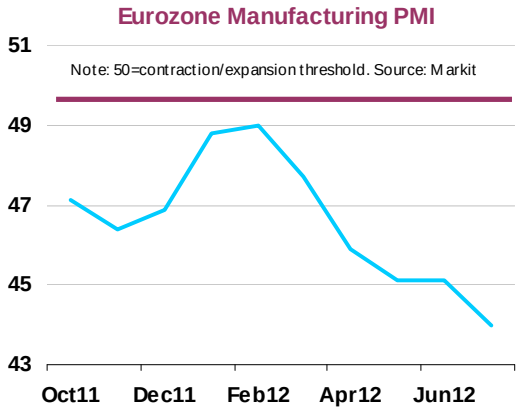




Europe

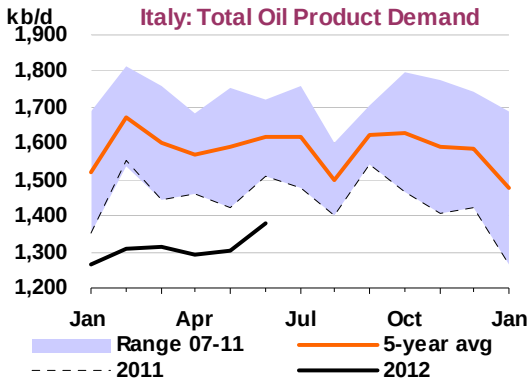
The oil demand outlook remains relatively bleak in Europe, reflecting the ailing state of the economic backdrop there. Gasoline remains one of the worst performing product categories, down 3.3% in June to 2.1 mb/d, as consumer sentiment has eroded, a consequence of record unemployment rates. The sharp deterioration in manufacturing-sector confidence post-February (see *Eurozone Manufacturing PMI* chart), has also led to falls in industrially important diesel (-0.8% to 4.5 mb/d) and fuel oil (-4.2% to 1.2 mb/d). Total European oil demand fell by 1.6% in June, to 14.3 mb/d, with Italy (-8.7% to 1.4 mb/d), Poland (-6.4% to 0.5 mb/d) and Spain (-4.9% to 1.3 mb/d) posting particularly low metrics. Demand in Germany (+7.7% to 2.4 mb/d) and France (+2.7% to 1.8 mb/d) remained more robust.

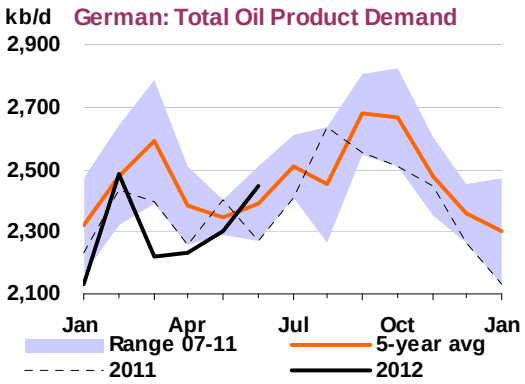




Starting with the greatest decline, **Italian** demand continues to fall heavily as the dire state of the economy undermines consumption of oil products, with no product except heating oil going unscathed. Fuel oil (-22.5%) led overall June demand south, as the previous year's need to replace lost Libyan natural gas waned, similarly suppressing 'other' products (-11.3%). Having fallen by 8.4% in May and 8.7% in June, total Italian oil product demand should contract by 8.5% for 2012 as a whole, to 1.3 mb/d. The assumed decline rate is then forecast to ease somewhat in 2013, to -2.9%, as the predicted economic decline also eases.

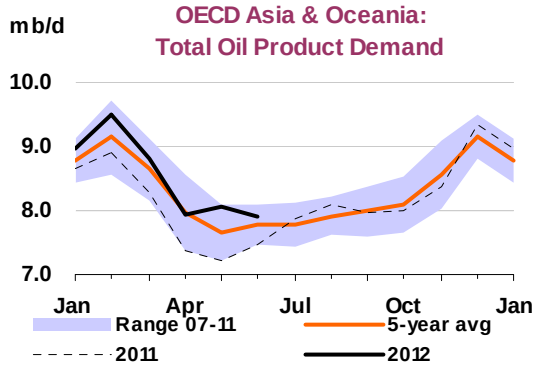
In June, according to preliminary data, oil product deliveries in **Germany** increased by 7.7% y-o-y, after declining 4.1% in May. Fuel oil rose by a sharp 50% and gasoil/diesel by almost 22%, while naphtha demand collapsed by 21% and jet/kerosene dropped by 4.3%. The sharp rise in heavy oils contrast with the deterioration of the economy, signalled by a three-year-low manufacturing PMI reading (July dropped to 43). The export sector, the traditional source of growth, may fail to boost German demand, as appetite for its exports languished in the 2Q12 due to anaemic demand in the EU, China and the US. Our 2012 and 2013 forecast for total oil product demand remain at 2011's 2.4 mb/d level.

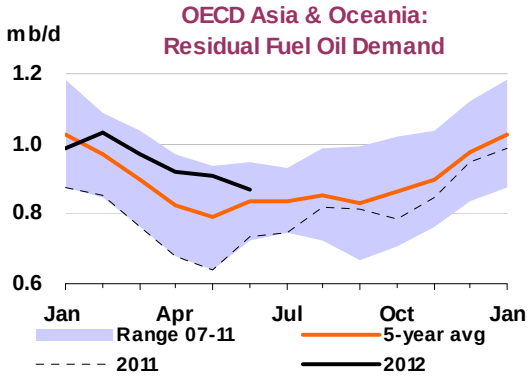




Asia & Oceania

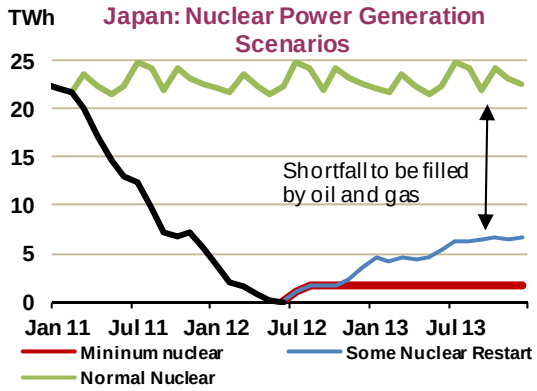
The extended Asia & Oceania region –the previous OECD Pacific region plus Israel – saw a robust 5.8% y-o-y growth rate for demand in June, to 7.9 mb/d. Post-tsunami Japan continues to provide a large amount of the upside momentum, with fuel oil and 'other' products rising particularly sharply stimulated as replacement fuels in a power sector shorn of nuclear capacity. Large gains were also seen in the, for now, more resilient South Korean (+9.1% to 2.3 mb/d) and Australian (+1.4% to 1.1 mb/d) economies.

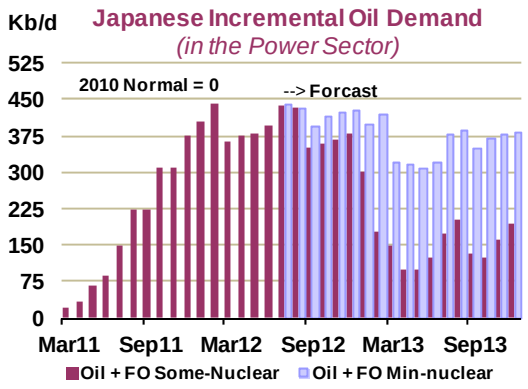




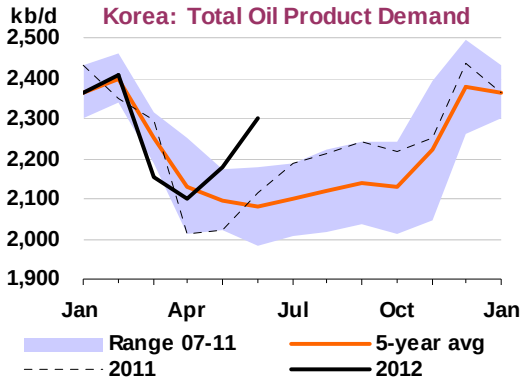
In **Japan**, oil demand rose by 5.5% or 220 kb/d y-o-y in June, after rising by an average of 10.7% in the previous five months. May oil demand was revised upwards by 145 kb/d on the back of stronger residual fuel oil (75 kb/d higher than reported in the July *OMR*) and 'other' product demand (+55 kb/d). In June, residual fuel oil (up 37.4%), 'other' products (up 24%) which includes direct crude burning, and LPG (8.3%) led the monthly growth. Jet/kerosene (-7.3%), naphtha (-3.1%) and motor gasoline (-2.7%) all posted sizeable declines, reflecting the still-ailing state of consumer confidence.

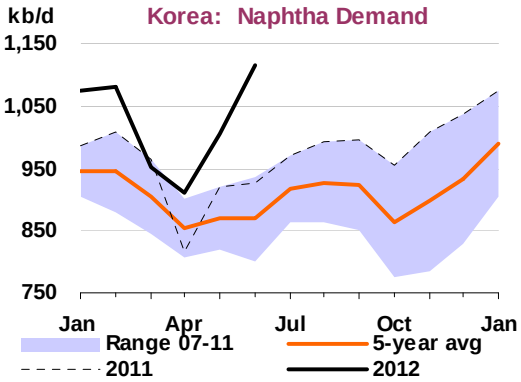
The Japanese power sector continues to confront significant summer power generation constraints. Currently, only two nuclear reactors in Ohi are operating, adding 1 TWh in July and 1.75 TWh of capacity in August. Reactivation of further idle capacity depends on a new nuclear watchdog being appointed in September, responsible for authorizing nuclear plant start-ups. Our scenarios for incremental oil demand for 2012 were revised upward by 10 kb/d, taking the 'some nuclear' case to 360 kb/d and 'minimum nuclear' to 390 kb/d. Incremental oil demand in 2013, from 2010 'normal' levels, are expected at 160 kb/d for 'some nuclear' and 340 kb/d for 'minimum nuclear'. As such, the IEA has revised up Japanese total oil demand by an average of 20 kb/d for 2012 and 2013. Demand in 2012 is expected to grow by 200 kb/d (+4.5%) to 4.7 mb/d, while 2013 demand should decrease 140 kb/d (-3%) to average near 4.5 mb/d.





Korean demand data posted a surprisingly robust 9.1% y-o-y growth trend in June, a gain of roughly 190 kb/d to 2.3 mb/d. This strong demand growth has resulted in government efforts to curtail consumption (see *13 June 2012 OMR*), as most of Korea's oil needs to be imported. With demand curbs adopted, Korean demand will likely flatten in 2013, falling by 0.2% to 2.3 mb/d, after an envisaged 2.3% gain in 2012. Relatively strong naphtha consumption, up 7.5%, is projected to lead the 2012 momentum, following June's 19.7% gain, as robust industrial output in Korea (+0.7% in June) continues to support the Korean petrochemical sector.





Non-OECD

June was a mixed month for the non-OECD, with strong gains in total oil consumption still seen in many nations but clear signs of economically induced weakness emerging elsewhere. Industrially important gas/diesel oil demand eased, rising by a relatively muted 1.4% in June to 13.5 mb/d, a growth rate exceeded by every other major non-OECD product category. A surprising drop in dominant non-OECD consumer, China (down 2.3% to 3.1 mb/d), led the way, with reports of lower trucking usage in June. The non-OECD transportation fuel market in general, however, remains relatively robust, supporting gasoline demand growth of 5.8% (to 8.9 mb/d). High volatility appeared in jet/kerosene demand, down 3.1% in May but up 3.5% in June, albeit air-traffic numbers show signs of weakness.

After a couple of tough months at mid-2012, more robust demand growth is assumed to emerge towards the end of the year and into 2013. The base case scenario holds that the exceptionally trying macroeconomic backdrop of mid-year improves in the latter stages of 2012 and into 2013. Furthermore, using the futures strip as the basis for our pricing assumption, real oil prices would fall in 2013, with Brent down around 7% according to the prevailing futures strip, providing some support for demand. Total non-OECD demand growth of around 2.7% is foreseen for 2013, averaging 44.7 mb/d, on a par with the predicted increase for 2012.

Non-OECD: Demand by Product
(thousand barrels per day)

	Demand			Annual Chg (kb/d)		Annual Chg (%)	
	Apr-12	May-12	Jun-12	May-12	Jun-12	May-12	Jun-12
LPG & Ethane	4,582	4,652	4,763	120	137	2.6	3.0
Naphtha	2,209	2,225	2,153	62	57	2.9	2.7
Motor Gasoline	8,670	8,599	8,894	218	490	2.6	5.8
Jet Fuel & Kerosene	2,615	2,534	2,704	-82	91	-3.1	3.5
Gas/Diesel Oil	13,349	13,555	13,518	439	192	3.3	1.4
Residual Fuel Oil	5,396	5,324	5,334	121	143	2.3	2.8
Other Products	6,275	6,383	6,439	-41	142	-0.6	2.3
Total Products	**43,097**	**43,273**	**43,806**	**837**	**1,252**	**2.0**	**2.9**

Non-OECD Baseline Data Revisions

Significant historical data revisions accrue to the non-OECD demand estimates this month, reflecting the complete annual data series that have now been compiled by the IEA's Energy Data Centre. Whereas previously post-2009 non-OECD figures were based upon a combination of national source statistics, JODI data and econometric modelling, the revisions that have been included this month reflect the official annual statistics for 2010, plus revisions to prior years. The changes amount to a lower global demand estimate of roughly 0.1 mb/d for 2009 and 0.3 mb/d for 2010, with the lower baseline numbers accordingly filtering through to the demand projections. Although changes were seen across several regions, the largest adjustments are applied to Iraq, Iran and China. The Iraqi series for 2008, for example, is roughly 150 kb/d lower than previously reported (with demand now listed at 0.5 mb/d in 2008), with almost all of the revisions seen in gas/diesel oil and heavy fuel oil. Both road and industrial usage of diesel in Iraq are now thought to have fallen by 2.3% in 2008, markedly weaker than the previously assumed gains. Official statistics for Iran cut around 65 kb/d off the annual 2009 demand estimate, to 2.01 mb/d, and reduced the 2010 estimate by 220 kb/d, to 1.84 mb/d, with LPG underpinning the change. The Iranian LPG demand number is revised down in 2010 on account of large reported contractions in road (-72%), residential (-10.9%) and industrial (-11.9%) use. Finally, China has seen 155 kb/d removed from its 2010 demand estimate, to 8.8 mb/d, based on reductions to gas/diesel oil. The adjustments are distributed across different sectors, specifically private power producers (-25.0%), oil and gas extraction (-19.3%), iron and steel (-11.4%), non-metallic manufacturing (e.g. cement, -8.5%), rail (-5.1%) and non-ferrous metals (-1.2%).

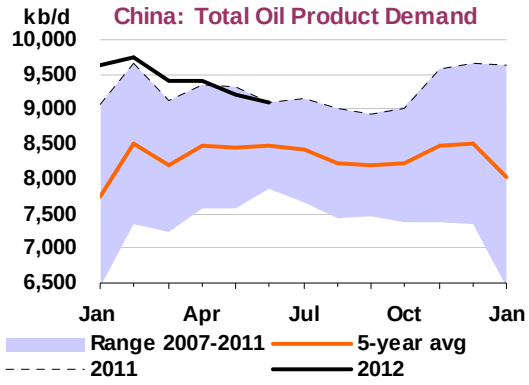
Non-OECD: Demand by Product
(thousand barrels per day)

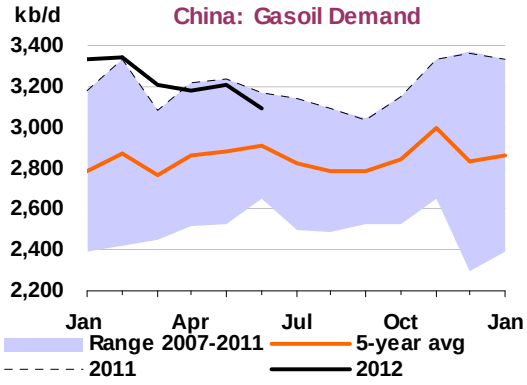
	Demand			Annual Chg (kb/d)		Annual Chg (%)	
	2011	2012	2013	2012	2013	2012	2013
LPG & Ethane	4,598	4,704	4,867	107	163	2.3	3.5
Naphtha	2,161	2,184	2,202	23	18	1.1	0.8
Motor Gasoline	8,383	8,776	9,030	393	254	4.7	2.9
Jet Fuel & Kerosene	2,695	2,737	2,797	42	60	1.6	2.2
Gas/Diesel Oil	13,047	13,345	13,694	298	349	2.3	2.6
Residual Fuel Oil	5,319	5,422	5,554	102	132	1.9	2.4
Other Products	6,150	6,345	6,541	195	196	3.2	3.1
Total Products	**42,353**	**43,513**	**44,685**	**1,159**	**1,172**	**2.7**	**2.7**

China

Weaker economic projections, plus lower base data, combine to suppress forecasts of **Chinese** oil demand. Not only has an average of 450 kb/d been removed from the latest May/June consumption estimates, but the underlying economic backdrop has now also weakened: growth of 8.0% in 2012 (previously 8.2%) and 8.1% in 2013 (8.5%). China is expected to consume roughly 9.5 mb/d of oil products in 2012, up 2.6% (or 240 kb/d) on the previous year. The Chinese growth estimate then modestly accelerates to 2.8% in 2013 (or 265 kb/d), taking average annual demand up to 9.7 mb/d.

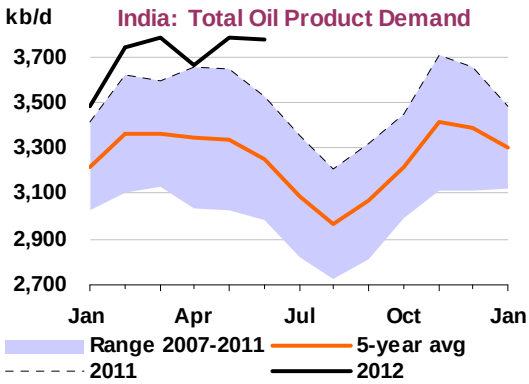
The latest data reveals a sharp deceleration in momentum compared to the double-digit expansions seen at the beginning of 2011. Preliminary estimates of apparent demand – i.e. refinery output plus net product imports – for June, depict y-o-y growth close to zero, with total demand averaging 9.1 mb/d. The near disappearance of Chinese growth continues the trend that took hold towards the end of 2011, with the average expansion rate of the previous ten months through June now just 1.1%. Reports of heavy rain likely boosted hydro production, quelling the need for coal to be moved by trucks, while stagnating electricity output in general has been taken as a pointer of the recent economic slow-down. Stronger industrial output towards the latter part of 2012 should support a re-acceleration in demand, with growth of 2.9% assumed for 3Q12 and 4.1% for 4Q12. Gasoline looks set to continue to underpin the Chinese upside, with respective gains of 8.3% and 6.9% assumed as robust car sales (+9% in June, to 1.58 million) continue.

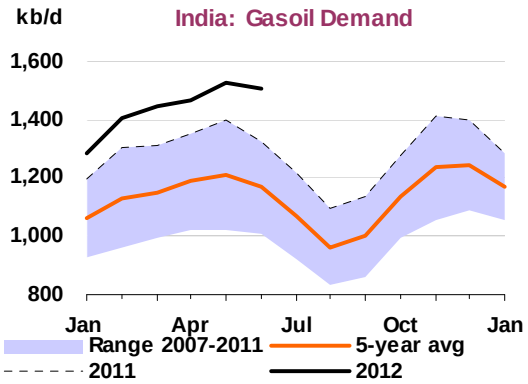




Other Non-OECD

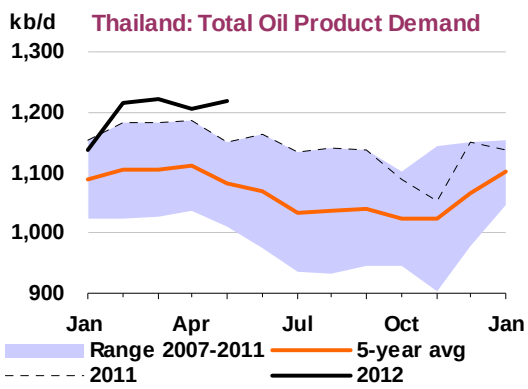
Indian demand rebounded strongly in June, up 7.2% y-o-y to 3.8 mb/d, a sharp acceleration from the relatively lacklustre trend seen in the previous six months (when growth averaged just below 3%). The additional consumption is largely diesel, up 13.9% in June to 1.5 mb/d, as both the power and agricultural sectors ramped up their requirements. Below par monsoon rains (22% below their seasonal norm in the week ending July 20th), resulted in an increased usage of diesel-fired generators to irrigate crops. Late-July's electricity blackouts are likely to provide further short-term support for diesel demand, as a major stop-gap power source in emergency generation. The updated June estimate is effectively 145 kb/d up on the prediction made a month earlier. Growth will likely slow in the second half of 2012, reflecting the increased global economic malaise, before rebounding in 2013 as underlying conditions look set to improve (with GDP growth of around 7% foreseen in 2013).

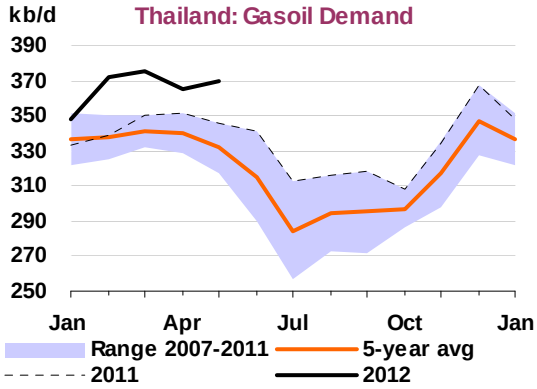




The **Thai** demand forecast has also been revised higher, with growth of 2.7% now envisaged for 2012 (previously assumed to be 2.0%), on the realisation the post-flood rebound will be larger than previously

assumed. Additional consumption following May's 75 kb/d revision, 35 kb/d attributable to fuel oil, leaving a total y-o-y gain in May of 6.1% to 1.2 mb/d. Economic growth of around 5% underpins the relatively robust Thai oil demand forecast.





The compilation of coherent **Iranian** data has proved particularly difficult this month, as official JODI data alluded to strong y-o-y gains of 6.0% in April and 7.9% in May, exceeding IEA estimates. Particularly large increases for gasoline, with respective jumps of 10.8% and 16.8% reported, and gas/diesel oil, up 7.6% and 6.4%. Additional IEA analysis implies lower, but still positive, y-o-y gains for total Iranian oil product demand, of 2.0% in April and 2.7% in May, with transportation fuels taking the brunt of the correction. Despite such adjustments, the April/May statistics still show an upward growth adjustment from last month's predictions of y-o-y declines, supporting a diminished annual decline rate of 1.6% in 2012, whereas previously -2.3% was assumed. Furthering the complexities the baseline series has been significantly reduced (see *Non-OECD Baseline Data Revisions*), down 220 kb/d in 2010. Total Iranian consumption of 1.8 mb/d is envisaged for 2012, a level that is expected to be maintained in 2013.

SUPPLY

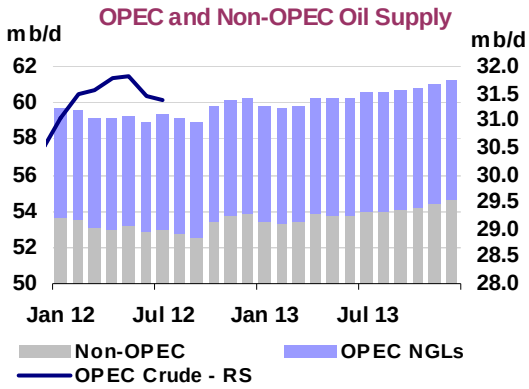
Summary

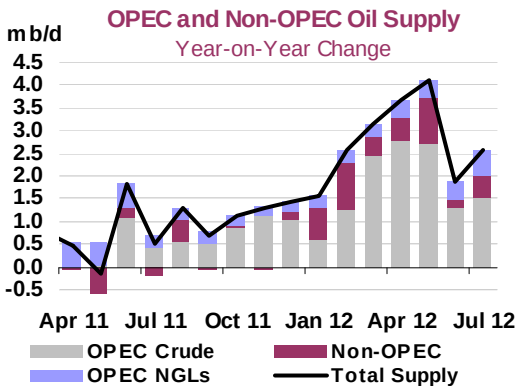
- **Global oil supply grew by 0.3 mb/d month-on-month (m-o-m) to 90.7 mb/d in July, with non-OPEC liquids production accounting for 60% of the increase.** Compared to a year ago, global oil production stood 2.6 mb/d higher, with 80% of the increase deriving from OPEC crude and NGLs.

- **OPEC crude supply for July is estimated at 31.39 mb/d, a drop of 70 kb/d from a downward-revised June total**. Lower output from Iran, Angola and Libya counteracted increases from Iraq, UAE and Qatar. OPEC output now stands just above the underlying 'call on OPEC crude and stock change' for 3Q12. The call recedes to 30.4 mb/d for 4Q12 and to 30.1 mb/d in 2013. OPEC effective spare capacity nudged higher to 2.57 mb/d, but remains slim relative to current supply-side risks permeating the market.

- **Imports of Iranian oil by major consumers registered a sharp drop in July, to 1.00 mb/d from 1.74 mb/d in June.** However, July data are preliminary, and there is scope for imports from Iran to recover modestly from September onwards, albeit we retain our existing assumption that around 1 mb/d of Iranian oil may struggle to find buyers in 2H12.

- **Non-OPEC supply grew by 0.2 mb/d in July from the prior month and by 0.5 mb/d compared to July 2011.** Planned summer maintenance curbed growth of non-OPEC supplies in 2Q12 to 0.5 mb/d in contrast to 0.7 mb/d in the first quarter. Non-OPEC supplies are expected to grow by 0.4 mb/d in 2012 and 0.7 mb/d in 2013, unchanged from last month's assessment.



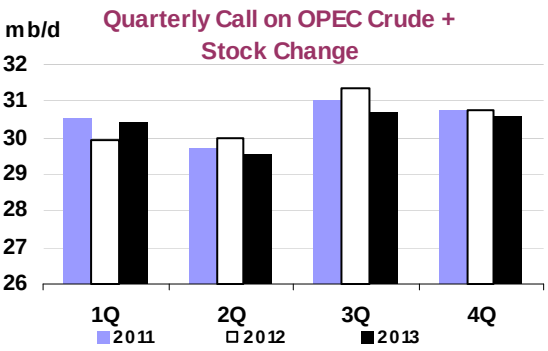


All world oil supply figures for July discussed in this report are IEA estimates. Estimates for OPEC countries, some US states, and Russia are supported by preliminary July supply data.

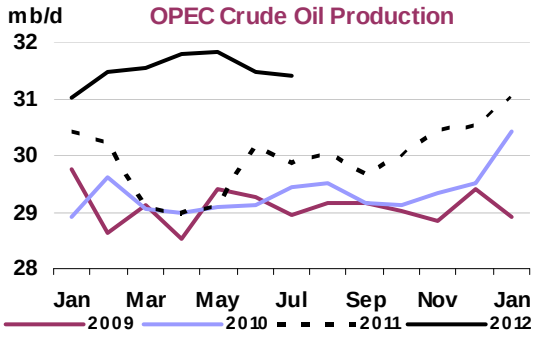
Note: Random events present downside risk to the non-OPEC production forecast contained in this report. These events can include accidents, unplanned or unannounced maintenance, technical problems, labour strikes, political unrest, guerrilla activity, wars and weather-related supply losses. Specific allowance has been made in the forecast for scheduled maintenance in all regions and for typical seasonal supply outages (including hurricane-related stoppages) in North America. In addition, from July 2007, a nationally allocated (but not field-specific) reliability adjustment has also been applied for the non-OPEC forecast to reflect a historical tendency for unexpected events to reduce actual supply compared with the initial forecast. After heavy outages seen in 2011 and 2012, this adjustment now totals –500 kb/d for non-OPEC as a whole, with most downward adjustments focused in the OECD.

OPEC Crude Oil Supply

OPEC crude supply for July is estimated at 31.39 mb/d, around 70 kb/d lower than a downward-revised June total of 31.46 mb/d. Last month saw lower supplies from Iran, Angola and Libya, which countered increases from Iraq, UAE and Qatar. Output has therefore ebbed from an April/May highpoint of near 31.8 mb/d, and now stands just above this report's assessment of the underlying 'call on OPEC crude and stock change' for 3Q12 of 31.0 mb/d. Thereafter, the 'call' is seen receding to 30.4 mb/d in 4Q12, before averaging 30.1 mb/d during 2013, slightly lower than envisaged in last month's report. After accounting for OECD definitional changes introduced this month, the marginally weaker 'call' derives from what is now a more conservative oil demand outlook for the OECD and China.



Entire series based on OPEC Composition as of January 2009 onwards (including Angola & Ecuador & excluding Indonesia)



Entire series based on OPEC Composition as of January 2009 onwards (including Angola & Ecuador & excluding Indonesia)

Effective spare capacity held by OPEC producers is assessed at 2.57 mb/d, slightly higher than the June level of 2.35 mb/d, on account of a higher average 3Q12 installed capacity level, which now forms the basis for comparison with the most recent month's output. Angola, Libya, Nigeria, Iraq, Qatar and Ecuador are all seen adding modestly to installed capacity during this quarter, thus boosting very slightly the level of implied spare output capacity within the global oil market. That said, and amid ongoing geopolitical issues affecting supply from a number of major producers, current spare capacity can hardly be considered excessive. Civil and social unrest affecting supply from Nigeria, Iraq and Libya in recent weeks, plus the ongoing slide in output from Iran, are outweighing the market impact of moves by Gulf producers to by-pass the Straits of Hormuz, weakening demand growth and higher levels of consumer inventory.

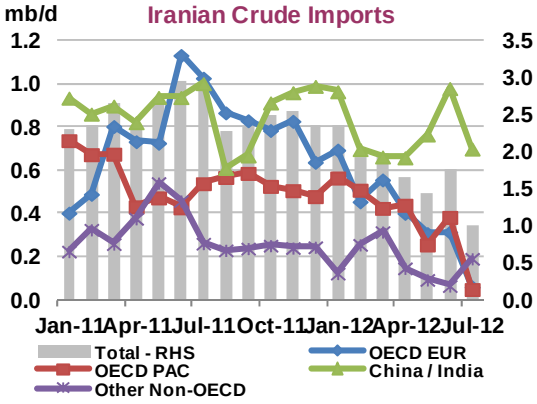
OPEC Crude Production

(million barrels per day)

	May 2012 Supply	Jun 2012 Supply	Jul 2012 Supply	Sustainable Production Capacity[1]	Spare Capacity vs July 2012 Supply
Algeria	1.18	1.16	1.16	1.18	0.02
Angola	1.80	1.71	1.62	1.90	0.28
Ecuador	0.48	0.48	0.48	0.54	0.06
Iran	3.20	3.00	2.90	3.20	0.30
Kuwait[2]	2.74	2.76	2.76	2.89	0.13
Libya	1.42	1.38	1.35	1.51	0.16
Nigeria[3]	2.16	2.16	2.16	2.59	0.43
Qatar	0.75	0.73	0.75	0.79	0.04
Saudi Arabia[2]	10.00	10.00	10.00	11.88	1.88
UAE	2.65	2.66	2.68	2.79	0.11
Venezuela[4]	2.49	2.51	2.51	2.58	0.07
OPEC-11	**28.87**	**28.55**	**28.37**	**31.83**	**3.45**
Iraq	2.94	2.91	3.02	3.28	0.27
Total OPEC	**31.81**	**31.46**	**31.39**	**35.11**	**3.72**
(excluding Iraq, Nigeria, Libya and Iran)					*2.57)*

1 Capacity levels can be reached within 30 days and sustained for 90 days.
2 Includes half of Neutral Zone production.
3 Nigeria's current capacity estimate excludes some 200 kb/d of shut-in capacity.
4 Includes upgraded Orinoco extra-heavy oil assumed at 405 kb/d in July.

Iranian crude supply in July fell to 2.9 mb/d from a downward-revised 3.0 mb/d in June. Supply has steadily drifted lower, from 3.6 mb/d in 4Q11 to 3.4 mb/d in 1Q12 and 3.1 mb/d in 2Q12. We have also made a reassessment of both the crude export and domestic crude refinery throughput data that comprise Iranian supply estimates for 2011/2012. On average, 2011 monthly crude supply for Iran has been revised up by nearly 45 kb/d (averaging 3.62 mb/d), while those for January to June 2012 have been revised down by 40 kb/d on average (and come in close to 3.25 mb/d for the six month period). Symbolically, Iranian crude output fell below that of regional rival Iraq in July for the first time since the late 1980s.



July also saw the first full month of the combined US sanctions and EU embargo affecting Iranian oil sales. Preliminary data for key consuming countries suggest July imports of Iranian oil near 1.00 mb/d, compared with 1.74 mb/d in June. It is worth noting however, that July data are highly provisional, and subject to revision as fuller customs and shipping data become available. That said, the EU countries and South Korea are believed not to have taken any Iranian oil in July. However, if June potentially represented a pre-embargo surge in imports, July and August may similarly understate the trend level of Iranian imports for the months to come. Japan, South Korea, Turkey and India will all likely see some hiatus in liftings in July and August due to a lack of insurance cover for vessels carrying Iranian crude. That said, Japan and India have now introduced state-backed insurance schemes for cargoes of Iranian oil, while Iran itself announced that it will provide insurance cover for vessels trading into China, South Korea or indeed for any vessel entering its waters.

Imports may languish well below 1.5 mb/d in July and August, but they could theoretically pick up again from September if importers are satisfied that government-backed or Iranian insurance is adequate. An observed decline of 14 mb in Iranian floating storage in July also suggests that some extra oil is en route to customers for August/September delivery. However, with persistent doubts over the validity of Iranian-backed insurance, and an ongoing review by US authorities of the exemptions to sanctions, could also keep overall imports around 1 mb/d below 2011 levels. Moreover, with US financial authorities in late-July/early-August identifying Chinese, Iraqi and UK banks allegedly in breach of sanctions, and the US congress agreeing a bill that further tightens measures against Iran, the country will likely continue to face major difficulties in placing its exports.

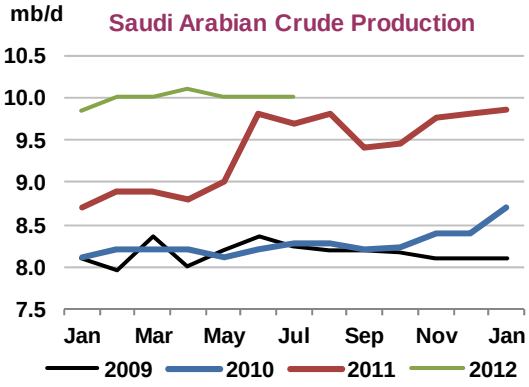
Libya saw output slip to 1.35 mb/d in July, from 1.38 mb/d in June and 1.42 mb/d in May. Market reports suggest that uncompetitive pricing terms impeded sales in June and July, with suggestions that this temporarily led NOC to shut-in 300 kb/d during June as storage filled up. Civil unrest in the Kufra region and power supply problems have also impeded supply in recent weeks. Some rebound in supply is possible for August however, after official selling prices were adjusted to be more competitive with comparable light-sweet grades. The restart of the Ras Lanuf refinery was again postponed from 15 July until at least early-September, with disrupted crude supplies from Agoco fields cited as one reason. Meanwhile, a new pipeline is to be built by early-2013, linking the eastern Nafoora field to the Amal field, allowing onward flows to the Ras Lunuf export terminal.

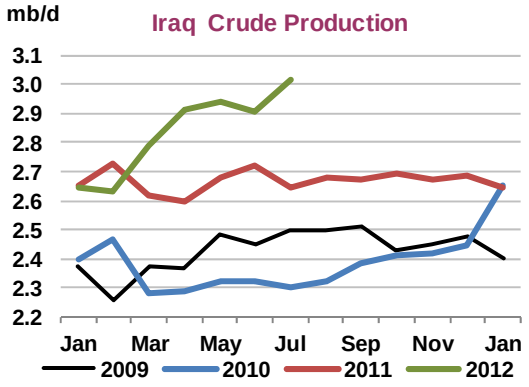
Output remained constrained from OPEC's two west African producers in July. **Angola** experienced a second successive month of output decline, averaging 1.62 mb/d in July from 1.71 mb/d in June. Scheduled maintenance at the Girassol FPSO and downtime at the Palanca export terminal affected output in the first half of July. However, supplies are expected to rebound in August, and export schedules in excess of 1.8 mb/d, if realised, would amount to a 30-month high. **Nigerian** crude

production is assessed stable at 2.16 mb/d in July, around 150 kb/d lower than levels seen in summer 2011. Shell in early-August lifted the force majeure on Bonny Light crude exports in force since May, after completing lengthy pipeline repairs, while Total announced that it planned to add 350 kb/d of new oil output capacity in the next three years at the deepwater Akpo and Usan fields. However, less promisingly, late-July and early-August saw renewed pirate attacks on vessels carrying oil workers in the Niger Delta region.

The estimate for June crude supply from **Saudi Arabia** has been revised down to 10.0 mb/d from a prior level of 10.15 mb/d. Data on export shipments and indications for refinery throughputs and direct crude burn in the power sector together suggest June output remaining close to May levels. July output too has been held flat at 10 mb/d. Price formulas also suggest the Kingdom may not have been looking to place more oil with customers in August, although some extra sales into Asia are possible for September, based on cheaper regional price differentials.

The approach of the 1 July embargo on Iranian imports saw a spate of reports on alternative oil transit routes in the event of any blockage of the straits of Hormuz. In addition to the start-up of Abu Dhabi's 1.5 mb/d line (see below), there were also suggestions that Saudi Arabia is preparing to switch up to 2 mb/d of east-west pipeline capacity, currently given over to natural gas shipments, to once again carry crude. Separate reports noted Iraqi requests to be allowed to use the 1.65 mb/d Iraq Pipeline in Saudi Arabia (IPSA) to reduce its reliance on the Straits. However, press reports suggest that Saudi Arabia plans to continue using that pipeline for natural gas shipments to Yanbu, as has been the case since 2001.





Crude supply from the **UAE** in July was up by an estimated 20 kb/d to 2.68 mb/d. Abu Dhabi began commissioning the 1.5 mb/d Habshan to Fujairah pipeline in early-July, a project designed to ship onshore Murban crude 370 km to the northeast, by-passing the straits of Hormuz. Around 8 mb of new crude storage has been built at Fujairah in conjunction with the pipeline, and the line is expected to be operating close to capacity levels by end-2012.

Iraqi crude production in July reached 3.02 mb/d, with a rise in crude exports from Basrah contributing all of the 0.1 mb/d m-o-m increment in supply. Southern exports of 2.22 mb/d were the highest since before the allied invasion in 2003, as a single point mooring (SPM) terminal which had closed for maintenance in June, re-entered service. However, northern shipments via Ceyhan in Turkey fell by 40 kb/d to 0.28 mb/d. The pipeline from Kirkuk to Ceyhan was attacked twice, both times within the Turkish border, first on 20 July and then again on 5 August.

Amid a worsening political situation in Syria and heightened activity by PKK insurgents in border areas, the Turkish army has stepped up its presence along the Iraqi border. Meanwhile, the Kurdistan Regional Government (KRG) in Iraq has reportedly started cross-border shipments of around four trucks of condensate per day into Turkey. Strained relations between the KRG and Baghdad have seen the former

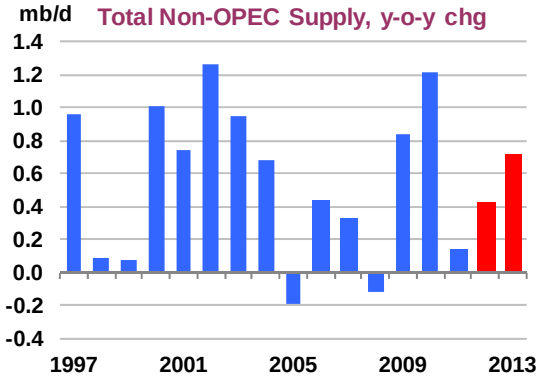
cut off 175 kb/d of export shipments via the Kirkuk-Ceyhan pipeline since April, claiming that Baghdad has failed to make payment for the crude. The KRG said it would resume exports via the pipeline in August at levels of 100 kb/d, but that these could again cease by end-month if Baghdad fails to recommence payments.

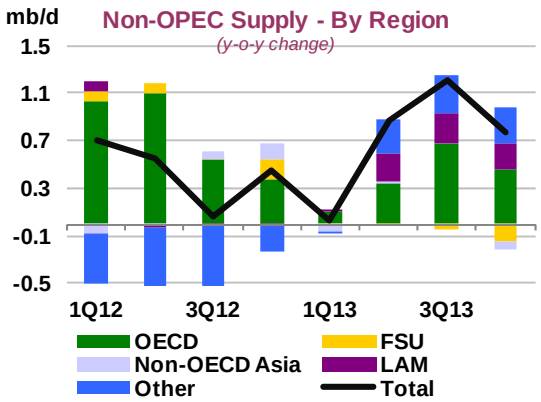
A 'tug-of-war' is also underway between Erbil and Baghdad as regards foreign upstream participation. July saw Total and Gazprom, following earlier forays by Exxon Mobil and Chevron, buying stakes in acreage in northern Iraq. Production sharing contracts offered by the KRG are seen by foreign operators as more attractive than the limited, 20-year service contracts offered by Baghdad. Having prohibited Chevron and Exxon from bidding for any further work at southern fields as punishment for signing deals with the KRG, Baghdad now says it may also cancel Total's share of the recently-started Halfaya field.

Non-OPEC Overview

Non-OPEC production grew by 0.6 mb/d in the first half of 2012, although crude output accounted for only around 20% of the growth, with the rest coming from natural gas plant liquids and gas condensates. Unplanned outages at China's Peng Lai field, Total's Elgin/Franklin complex, and geopolitical disruptions in the Middle East and Africa, among others, have reduced non-OPEC output by around 1 million b/d. Nexen will perform maintenance at the 200-kb/d Buzzard field in September, which will lower production from the Brent benchmark blend. On the plus side, a restart of exports from the 120-kb/d Marib pipeline in Yemen, and a tentative agreement on pipeline transit between Sudan and South Sudan, could herald an easing in the level of non-OPEC outages.

Yet, in non-OPEC countries downside risks remain. Sabotage could return to Yemen, and a comprehensive agreement between Sudan and South Sudan could yet prove elusive. In Latin America, Brazilian production is underperforming and Colombia's Cano Limón pipeline was bombed last month. More certainty regarding North Sea loading schedules supports prior and current forecasts that production in the North Sea, and notably at fields that feed into the Brent-Forties-Oseberg-Ekofisk marker, will drop to record lows. US maintenance is also at its peak now, with Alaskan pipeline maintenance and Gulf of Mexico turnarounds keeping 3Q12 crude output at 6.2 mb/d. This is 60 kb/d less than 2Q12 but still a significant 600 kb/d higher than 3Q11. Maintenance will reduce 3Q12 annual growth in non-OPEC supply to only 60 kb/d, but growth rates of around 400 kb/d should return in the fourth quarter.



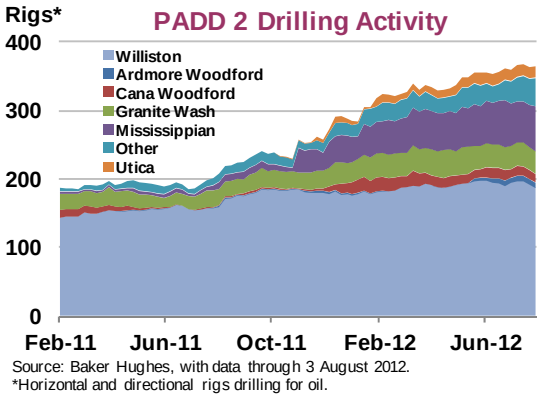


On balance, revisions made over the last month have cancelled each other out, with an uptick to Middle East and African production offset by lower Latin American and global biofuels output in 2012. The inclusion of Estonia and Chile in the OECD category increases 2012 OECD production by around 30 kb/d. First half upward revisions to non-OPEC supplies offset downward revisions in the second half. Non-OPEC supplies should grow by 430 kb/d in 2012 and by 720 kb/d in 2013, leaving 2013 supplies at around 53.9 mb/d.

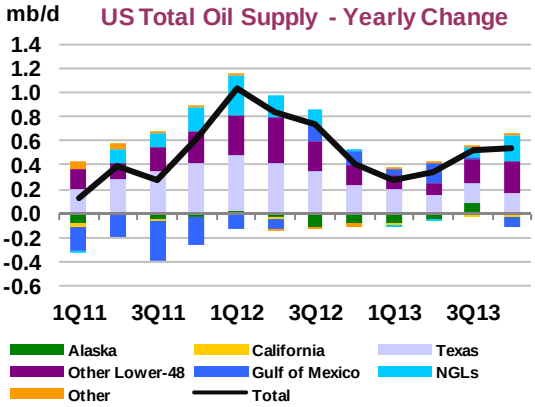
OECD

North America

US – July preliminary, Alaska actual, other states estimated: US oil production likely remained at around 8.9 mb/d in July, with maintenance in Alaska and the Gulf of Mexico and lower ethanol output offsetting rising onshore production at light tight oil deposits. In Alaska, summer maintenance at the Trans-Alaska oil pipeline (TAPS) reduced output in July and August. Operators such as BP and Conoco Philips have therefore reduced output at their fields lowering Alaskan output to 430 kb/d in July, or 150 kb/d lower than 1H12 production.



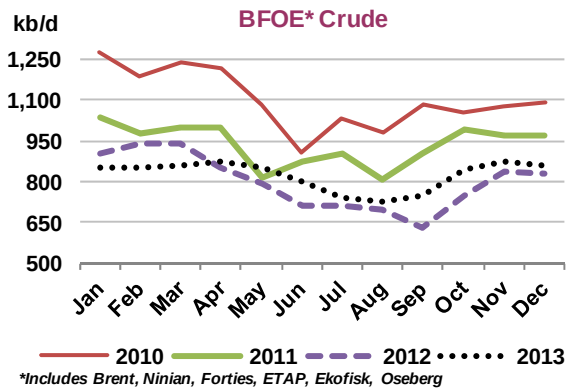
Source: Baker Hughes, with data through 3 August 2012.
*Horizontal and directional rigs drilling for oil.



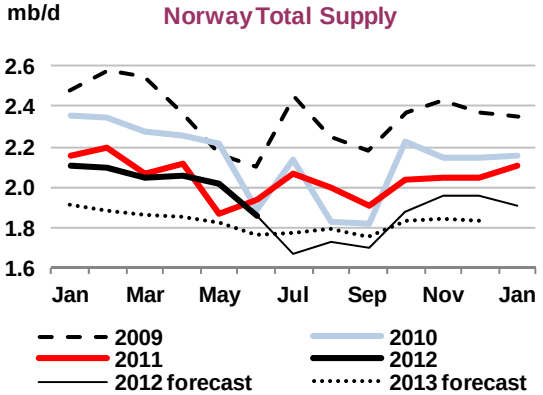
Remarkably, in the chart above drilling activity in PADD 2 has not slowed due to the recent fall in prices. The Gulf of Mexico, which is already prone to hurricane-related outages during 3Q, will see output further reduced from maintenance occurring at BP's Atlantis field. The BP-operated Mad Dog field is also undergoing maintenance, but company reports indicate the field has been offline since last year. Offsetting these declines are increases in production from the Eagle Ford shale, with operators reporting they plan to drill in closer intervals. Operators are also now able to take advantage of Enterprise Products Partners' new 24-inch crude oil pipeline linking the area with extensive Houston area refining markets. The pipeline has a design capacity of 350 kb/d, but will initially carry around 250 kb/d.

North Sea

North Sea production fell to around 2.4 mb/d in July based on preliminary data, or 260 kb/d below the prior month, with 3Q12 production also 8% lower than in 2011. The impact of the oil workers' strike in Norway was expected to cut around 110 kb/d of production in June and 120 kb/d in July. Maintenance in 2Q12, strong field performance, and the effects of the strike were less severe than expected resulting in an upwards revision. The BP-operated Valhall field also doubled its production in May from April to over 30 kb/d. A new platform is expected during the next couple of months, which should raise production further.



*Includes Brent, Ninian, Forties, ETAP, Ekofisk, Oseberg



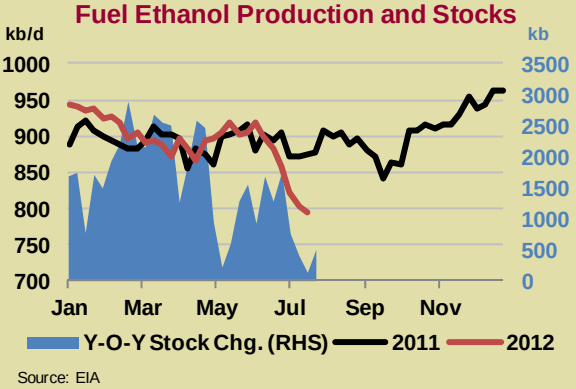
Forties production is expected to fall from around 370 kb/d in August to around 200 kb/d in September due to the onset of planned maintenance at Nexen's Buzzard field. The field also suffered some technical issues in July, which caused deferred loadings. The maintenance in September could increase price uncertainty and volatility with the benchmark BFOE crude because of the disproportional influence that Buzzard's sulphur content has on the Forties blend. Oseberg production likely fell below 100 kb/d in July due to the impact of the strikes earlier in the month. All told, BFOE production is expected to touch a record low of around 630 kb/d in September (not including Troll). On average, the third quarter BFOE level is 17% lower year-on-year (y-o-y).

Severe Drought Clouds US Ethanol Outlook

The worst drought in 55 years is severely affecting the US' key corn growing regions. In its 10 July update, the US Department of Agriculture lowered average yield expectations for corn by 12% compared to its June forecast (from 166 bushels/acre to 146 bushels/acre, *i.e.* 9.2 tons/hectare), and the total projected corn harvest has been revised down to 316 million tons. While this still represents the third largest harvest on record, the continued absence of rain in combination with very low US corn stocks have driven up corn prices to record highs during the last weeks (around $8/bushel, *or* $315/ton).

Reduced Profit Margins Lead to Plant Shut-ins. High corn prices in combination with falling ethanol prices have led to negative crushing margins that caused a number of ethanol plants to reduce production or idle temporarily until after the US corn harvest. Ethanol output has thus plunged to around 800 kb/d, the lowest level in two years. Given the current situation, US ethanol production is expected to average around 850 kb/d in 2012, 60 kb/d lower than in 2011, and expect 1H13 production lower than in our previous forecast.

The RFS Waiver Drumbeat Gets Louder. The drought has also raised fodder prices, putting increasing economic pressure on meat and poultry producers. Since around 40% of the US corn harvest is processed in ethanol distilleries (note that one third of this is returned to the fodder market as high protein feed in the form of dried distillers grains), meat and poultry organisations have recently called on the Environmental Protection Agency (EPA) to waive the Renewable Fuels Standard (RFS) as they see ethanol demand induced by the RFS creating the type of economic harm required to justify a waiver.



Source: EIA

Although more than 150 members of Congress are supporting the call according to news reports, there is currently no indication from EPA that it will waive the RFS mandate. US ethanol stocks are fairly high at 800 million gallons, providing the possibility to satisfy at least part of the 13.2 billion gallons of ethanol mandated under the RFS this year. In addition, according to the Renewable Fuels Association, around 2.5 billion ethanol credits, so-called Renewable Identification Numbers (RINs), have been banked in recent years as refiners blended more ethanol than required by the RFS. These RINs provide some flexibility for blenders to meet the 2012 RFS requirements despite the projected lower ethanol output, and could help reduce some of the pressure on corn prices.

Non-OECD

Latin America

Brazil – June actual: Crude output in Brazil fell by 20 kb/d to 2.0 mb/d in June (80 kb/d less than in June 2011) on continued maintenance at fields in the Campos Basin. The Marlim Leste and Barracuda fields saw production reduced by around 40 kb/d in total. It is worth noting, however, that in the Santos basin the Lula field reached a record level of 100 kb/d in June, 30 kb/d higher than the rates of the prior six months. In 2Q12 on average, Brazilian crude production fell by 50 kb/d from the prior year, although an uptick in growth is expected during 2H12.

Output remains shut in at the 70-kb/d Chevron-operated Frade field. Although Brazil's regulator the ANP noted it had no objections to the firm restarting production, a federal court is requiring Chevron and Transocean to stop all transport and production operations in Brazil. Chevron plans to appeal against the ruling and says that it is still planning for a production restart. Despite these intentions, we have delayed full resumption of production from 4Q12 to 1Q13 on the assumption that the Court's ruling will undermine a timely restart.

Colombia – May actual: The Revolutionary Armed Forces of Colombia, known as the FARC, bombed the 220 kb/d Cano Limon pipeline on 22 July. The pipeline traditionally carries about a third of its design capacity, mostly from Ecopetrol. The company noted in an earnings release that they would be reducing their output forecast due to the unavailability of transport systems affecting the Cano Limon fields and the fields in the Putumayo basin. Production from the Cano Limon field alone totals around 40 kb/d. Despite the sabotage of the field, pipelines are usually repaired quickly. Similar events occurred in September and December 2011 and the field's output was cut in half. Based on company-level data for 2Q12 we have slightly reduced production expectations, by 20 kb/d in 2012 and maintain that production is now unlikely to exceed 1.0 mb/d until the second half of 2013.

Africa

Sudan and South Sudan Agree on Transit Fees But Challenges Remain

Sudan and South Sudan reached a tentative agreement on oil processing and pipeline transit on 3 August, one day after the expiry of a UN resolution that would have imposed economic sanctions on both states had they not found a solution. The news of the deal does not, however, dramatically change our view on production prospects for 2013.

A new deal? Southern oil is expected to be exported via the north through the pipelines from Petrodar's Block 3/7 and from GNPOC's Block 1,2, and 4 fields, at $9.10/bbl and $11/bbl, respectively. Including a $3.028 billion transfer to the north, to be paid out over 3.5 years, the deal averages an effective pipeline tariff of $24/bbl. Sudan had previously asked for $36/bbl. The deal stipulates that new rates can be renegotiated after three and a half years, but may not be raised before then.

Contentious issues remain. Sudan stresses that the implementation of the transit agreement will not go into effect until the sides agree on border security and the status of the Abyei area. Talks have broken down several times in the past over the location of a demilitarised zone, which would represent the first step to ending hostilities. The sides are unlikely to continue the requisite negotiations on border security until after Ramadan, at the end of August. According to the African Union Peace and Security Council (AUPSC), the parties have until 22 September to resolve the remaining issues.

Restarting crude production will not be easy. Industry sources have been quoted as saying that restarting oil production could take six months or even longer, since the lines have been filled with water and because some wells were not closed properly. South Sudan was producing around 300 kb/d in January 2012 before the shut-in began, with around 250 kb/d of production from Blocks 3 and 7. We expect a trickle of oil from these blocks could make its way out before the end of 2012, yet we do not expect to see production exceed 150 kb/d from these assets in 2013. The potential for pipeline sabotage remains, and there is a high probability of mechanical issues associated with restarting production. The extent of damage at Blocks 1, 2, and 4 in GNPOC's operating area in Sudan and South Sudan is also unclear, but it is likely that the damage could have reduced the capacity of the Central Processing Facility. Therefore, when this particular production does restart, it is unlikely to return quickly to pre-conflict volumes of around 130 kb/d (in Sudan and South Sudan).

Looking forward, the sustainability of any deal will depend on managing conflict on both sides, yet both sides are compelled to agree in the near future as fiscal pressures mount. The base case assumption is that output from Sudan and South Sudan averages 130 kb/d in 2013, and 60 kb/d in 4Q12, compared with around 450 kb/d in 4Q11.

Former Soviet Union

FSU net exports fell by a further 220 kb/d to 8.9 mb/d in June, with 60 kb/d and 110 kb/d contractions in crude and products, respectively. Year-on-year, net exports remain 470 kb/d lower, driven by a 440 kb/d fall in products, with crude shipments remaining relatively stable (-20 kb/d y-o-y). Exports of crude amounted to 6.34 mb/d after a 260 kb/d contraction in shipments from Baltic ports offset a 220 kb/d hike in shipments from the Black Sea. In the Baltic, Primorsk and Ust Luga volumes decreased by 130 kb/d in total. Exports from the former were curbed by maintenance, while anecdotal reports suggest that Ust Luga did not export its scheduled 320 kb/d after northern markets were awash with Urals, as evidenced by the collapse of the premium of Urals NWE to Urals Med throughout June. As a consequence, 140 kb/d more Urals was shipped via Novorossiysk. This underlines the rising flexibility in the Transneft network, which permits Russian producers to ship oil via the most profitable routes.

Despite the surprise fall in Ust Luga loadings, Druzhba pipeline volumes remain depressed, at 1.1 mb/d (-80 kb/d m-o-m) with deliveries to all destinations lower than in May, notably with Poland receiving 60 kb/d less. Tanker data suggest that from July onwards to compensate for lower Druzhba deliveries, Poland are importing more seaborne Urals, despite the extra cost vis a vis pipeline deliveries. The FSU exported 2.63 mb/d of products in June, after shipments of fuel oil, 'other products' and gasoil fell by 60 kb/d, 30 kb/d and 20 kb/d, respectively. Healthy Russian internal demand and an expected fall in July export duties which prompted exporters to hold back shipments, resulted in lower exports, despite an increase in refinery throughput after recent maintenance.

FSU Net Exports of Crude & Petroleum Products

(million barrels per day)

	2010	2011	3Q2011	4Q2011	1Q2012	2Q2012	Apr 12	May 12	Jun 12	Latest month vs. May 12	Latest month vs. Jun 11
Crude											
Black Sea	2.10	1.93	1.87	1.92	1.83	1.88	2.01	1.70	1.92	0.22	0.10
Baltic	1.60	1.50	1.37	1.56	1.48	1.75	1.91	1.81	1.54	-0.26	0.12
Arctic/FarEast	0.74	0.67	0.65	0.65	0.62	0.62	0.61	0.62	0.64	0.02	-0.03
BTC	0.77	0.70	0.69	0.64	0.73	0.68	0.74	0.65	0.66	0.02	-0.13
Crude Seaborne	**5.22**	**4.80**	**4.58**	**4.77**	**4.66**	**4.93**	**5.27**	**4.77**	**4.76**	**-0.01**	**0.06**
Druzhba Pipeline	1.13	1.17	1.18	1.24	1.24	1.11	1.10	1.15	1.07	-0.08	-0.03
Other Routes	0.42	0.53	0.54	0.50	0.51	0.49	0.49	0.48	0.50	0.02	-0.05
Total Crude Exports	**6.76**	**6.50**	**6.30**	**6.51**	**6.42**	**6.53**	**6.86**	**6.40**	**6.34**	**-0.06**	**-0.02**
Of Which: Transneft[1]	4.00	4.18	4.09	4.31	4.18	4.35	4.52	4.37	4.17	-0.21	0.23
Products											
Fuel oil[2]	1.54	1.58	1.59	1.46	1.50	1.61	1.62	1.63	1.57	-0.06	-0.32
Gasoil	0.88	0.77	0.72	0.69	0.85	0.74	0.83	0.71	0.69	-0.02	-0.05
Other Products	0.43	0.43	0.36	0.33	0.42	0.40	0.43	0.40	0.37	-0.03	-0.08
Total Product	**2.85**	**2.77**	**2.66**	**2.49**	**2.78**	**2.75**	**2.89**	**2.74**	**2.63**	**-0.11**	**-0.44**
Total Exports	**9.61**	**9.27**	**8.96**	**9.00**	**9.19**	**9.28**	**9.75**	**9.13**	**8.96**	**-0.17**	**-0.47**
Imports	0.07	0.08	0.10	0.08	0.12	0.07	0.06	0.05	0.10	0.05	0.00
Net Exports	**9.54**	**9.19**	**8.86**	**8.92**	**9.07**	**9.21**	**9.69**	**9.09**	**8.86**	**-0.22**	**-0.47**

Sources: Argus Media Ltd, IEA estimates

[1]Transneft data exclude Russian CPC volumes.

[2]Includes Vacuum Gas Oil

Middle East

Crude and condensate production from **Oman** increased by around 40 kb/d in May to 940 kb/d despite a dispute with contractors for around a week. The Harwheel miscible gas and other EOR projects are increasing production in the country. In **Yemen,** producers shipped their first batch of crude oil to the Aden refinery at a rate of around 30 kb/d, the first shipment via the Marib pipeline since late last year. Output may be slow to recover and could remain subject to sabotage for the remainder of the year. Either way, the resumption of exports is a positive sign, and we have raised production estimates for 2H12 by around 30 kb/d to near 200 kb/d, on par with last year's levels during the same period but around 50 kb/d less than the first half of this year.

OECD STOCKS

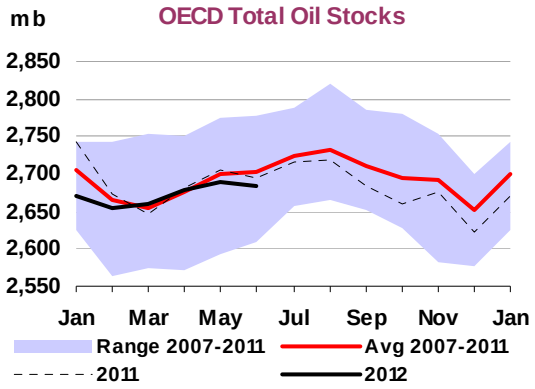
Summary

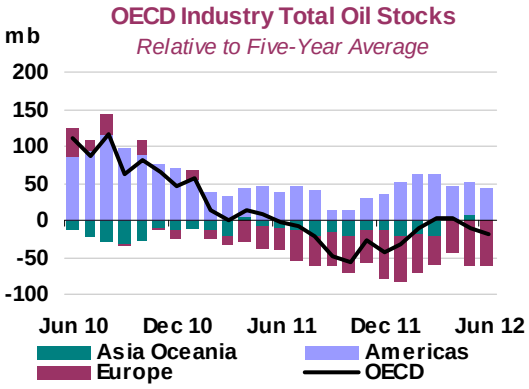
- **OECD industry stocks fell counter-seasonally by 5.5 mb to 2 683 mb** in June, representing a deficit of 19.2 mb to the five-year average. A build in product stocks, notably of 'other products', failed to offset a draw in crude oil stocks.

- **OECD forward demand cover fell by 0.2 days to stand at 57.8 days**, 0.2 days below May's downwardly revised level. However, cover now exceeds year-ago levels (+0.1 days) for the first time since January 2011.

- **July preliminary data indicate a 10.0 mb OECD stock build**, more muted than the 21.7 mb five-year average build. A sharp 13.9 mb decline in crude, as refinery throughput increased, outweighed a significant 28.6 mb build in products, concentrated in OECD Americas.

- **Chinese strategic stock building continues apace** as the gap between reported refinery throughput and net imports and production data averaged 600 kb/d over 1H12 suggesting a combination of strategic petroleum reserve filling, and unreported crude use in either the refining or power generation sectors.





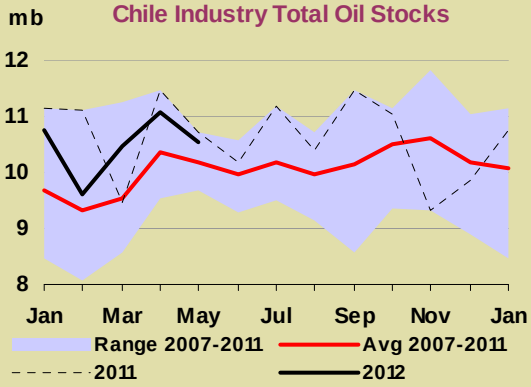
OECD Inventory Position at End-June and Revisions to Preliminary Data

OECD commercial oil inventories slipped further below the five-year average in June, drawing by 5.5 mb in contrast to the five-year average build of 1.7 mb. End-June total oil inventories stood at 2 683 mb, a deficit of 19.2 mb to the five-year average. However, despite this, OECD total commercial oil inventories posted a second consecutive quarterly stock build, increasing by 0.3 mb/d in the second quarter, only slightly lower than the 0.4 mb/d reported for the first quarter. When translated into days of forward demand, levels have also come down compared to previous months, and cover now stands at 57.8 days, 0.2 days below May's downwardly revised level. However, compared to year-ago levels, cover now stands 0.1 days higher, the first time year-ago levels have been exceeded since January 2011.

June's draw was driven by crude inventories, which declined by a seasonal 6.6 mb after a build in the OECD Americas (+8.8 mb) failed to offset decreases in Asia Oceania (-4.8 mb) and Europe (-9.6 mb). In contrast, products holdings rose by 2.5 mb, although this masked a significant decline in middle distillate stocks which plummeted by 14.0 mb, notably in OECD Europe where prolonged weak refinery runs following rationalisation is continuing to weigh heavily on stocks. Motor gasoline also fell by 2.7 mb, with a build in the Americas partially offsetting declines elsewhere. These falls were more-than-offset by a 14.23 mb surge in 'other products' stocks principally located in OECD Americas.

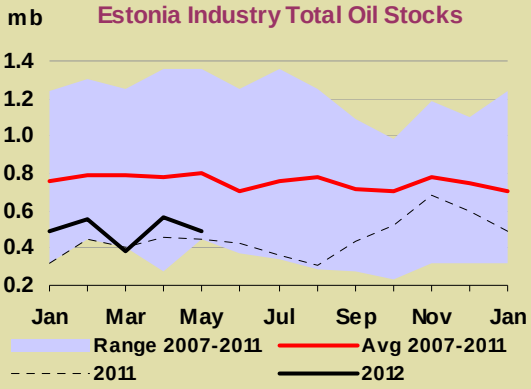
New OECD Countries Incorporated

As elsewhere in this report, data for new OECD member countries Chile, Estonia and Slovenia has been incorporated. Unlike the OECD supply and demand analysis, however, Israel is currently not included in the time series since stock levels are not reported by their administration. The effect of the re-classification of these countries into the OECD makes for net additions in May 2012 of 17.7 mb and 13.4 mb to OECD total and industry oil stock holdings, respectively. As with supply and demand data, the historical OECD stocks series has been revised to include Chile from January 1984 onwards and Estonia and Slovenia from January 1990 onwards.

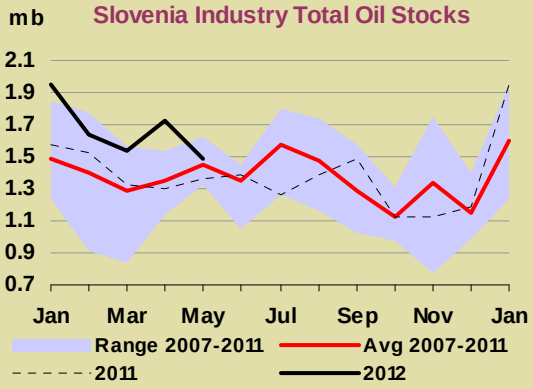


All of Chile's 10.5 mb total oil inventories are held by industry, equating to 31.2 days of forward demand. Indeed, the government places an obligation on all producers and importers of liquid fuels to hold stocks equivalent to 25 days of average sales for the previous six months. Crude stocks account for 2.7 mb while total products account for 7.7 mb, of which middle distillates, gasoline, residual fuel oil and 'other products' account for 2.7 mb, 1.6 mb, 1.0 mb and 2.4 mb, respectively.

Unlike Chile, Estonia does not place a minimum stockholding obligation on industry. Instead, Estonia has a specialized stockholding agency, OSPA, which is responsible for fully meeting Estonia's emergency stockholding requirements as a member of the EU. In May, out of a total 1.3 mb of stocks, industry held 0.5 mb and the government 0.8 mb. Total oil stocks are sufficient to cover 43.1 days of forward demand. Given that Estonia does not have a refinery, only products are stored on national territory. Middle distillates account for 0.6 mb while residual fuel oil and motor gasoline account for 0.3 mb and 0.4 mb, respectively. It is also noteworthy that Estonia's stockpiling agency stores over 1 mb of emergency oil stocks overseas under bilateral agreements with Sweden, Finland, Denmark and Latvia.



Slovenia has a similar stock holding regime to that of Estonia. There is no minimum stockholding requirement on industry, and the country's stockholding agency, ZRSBR, is fully responsible for covering Slovenia's EU stockholding requirement. Currently, out of 4.9 mb (92.6 days of forward demand) of total oil stocks in the country, industry holds nearly 1.5 mb while approximately 3.4 mb is held by the agency for emergency purposes. Since Slovenia does not have a refinery, it holds only products stocks with middle distillates accounting for the lion's share with 3.4 mb, of which the government holds 2.6 mb. Motor gasoline holdings amount to 1.1 mb, of which industry hold the majority (0.8 mb). Very little residual fuel oil is stored with the remaining 0.4 mb held as 'other products'. Slovenia's stockholding agency also holds approximately 1 mb of emergency oil stocks abroad in Germany, Hungary and Italy.



Preliminary Industry Stock Change in June 2012 and Second Quarter 2012

	June 2012 (preliminary) (million barrels)				June 2012 (preliminary) (million barrels per day)				Second Quarter 2012 (million barrels per day)			
	Am	Europe	As. Ocean	Total	Am	Europe	As. Ocean	Total	Am	Europe	As. Ocean	Total
Crude Oil	**-2.2**	**-1.2**	**-3.3**	**-6.6**	**-0.07**	**-0.04**	**-0.11**	**-0.22**	**0.11**	**0.00**	**0.15**	**0.26**
Gasoline	0.5	-2.3	-0.8	-2.7	0.02	-0.08	-0.03	-0.09	-0.15	-0.06	0.00	-0.21
Middle Distillates	-3.7	-8.9	-1.4	-14.0	-0.12	-0.30	-0.05	-0.47	-0.19	-0.29	0.08	-0.40
Residual Fuel Oil	3.5	1.9	-0.5	5.0	0.12	0.06	-0.02	0.17	0.03	-0.01	0.00	0.02
Other Products	12.6	0.0	1.7	14.2	0.42	0.00	0.06	0.47	0.39	0.01	0.07	0.46
Total Products	**12.9**	**-9.4**	**-1.0**	**2.5**	**0.43**	**-0.31**	**-0.03**	**0.08**	**0.07**	**-0.35**	**0.15**	**-0.13**
Other Oils[1]	-2.0	1.0	-0.5	-1.4	-0.07	0.03	-0.02	-0.05	0.07	-0.01	0.07	0.13
Total Oil	**8.8**	**-9.6**	**-4.8**	**-5.5**	**0.29**	**-0.32**	**-0.16**	**-0.18**	**0.25**	**-0.36**	**0.37**	**0.26**

1 Other oils includes NGLs, feedstocks and other hydrocarbons.

Recent Changes to Industry Stocks' Methodology

Beginning with this issue, and aside from regional category changes, a number of other adjustments have been made to the methodology used to compile the OECD industry stocks data. Long-standing downward adjustments applied in order to net out volumes of residual fuel oil held by major consumers, such as power producers, in Austria, Italy and the Netherlands have been removed from the entire data series. Since these stocks were stored at specific sites such as power stations and were largely unavailable to the general market , they were traditionally excluded from OMR industry stocks. However, data for major consumer stocks that could be individually identified for these countries has been unavailable in recent years, requiring the IEA to make adjustments based on historical average levels. Given the generally declining share of fuel oil in the fuel mix, these adjustments had become prone to error in the absence of concrete data, and so are now excluded from the entire series. Given that these stocks were previously 'removed' from reported industry levels, this change in methodology has the net effect of increasing industry stocks by a combined 22 mb in May 2012. Industry stocks in Austria, Italy and the Netherlands have therefore been revised upwards by 3.0 mb, 17.4 mb and 1.6 mb, respectively.

Coincidentally, in this issue a 12 mb downward adjustment has also been incorporated for Canadian 'other products' inventories for the period January 2007 to April 2012. This follows submissions by Canada for recent months which depict fundamentally lower 'other products' stock levels, and the adjustment represents an attempt to avoid a break in series during the 2007-2012 period.

Due to the above changes, the overall net change to current OECD inventory levels is +11.5 mb for May 2012.

This month's revisions to April and May preliminary estimates have been made on a 'like for like' basis and therefore do not reflect the one-off impact this month resulting from the addition of the new OECD members to their respective regions. In short, stock data for the new members have been added in to both last month's preliminary estimates and to this month's revised estimates. However, data revisions for April and May do reflect changes ensuing from baseline adjustments (see *Recent Changes to Industry Stocks' Methodology*) which 'added' 22 mb to OECD Europe fuel oil stocks. On this basis, more complete data for OECD countries indicate that May inventories were 17.2 mb higher at 2 672 mb when compared to the data presented in last month's report but nonetheless May's level still lagged the five-year average by 11.9 mb.

Revisions versus 12 July 2012 Oil Market Report

(million barrels)

	Americas		*Europe*		*Asia Oceania*		*OECD*	
	Apr-12	May-12	Apr-12	May-12	Apr-12	May-12	Apr-12	May-12
Crude Oil	**3.5**	**0.4**	**-1.8**	**2.9**	**0.6**	**-0.2**	**2.2**	**3.1**
Gasoline	1.7	0.4	0.6	-0.4	0.0	0.4	2.3	0.4
Middle Distillates	2.8	-1.0	1.0	-2.8	0.0	-0.4	3.8	-4.2
Residual Fuel Oil	0.9	1.2	22.4	26.0	0.0	0.1	23.3	27.3
Other Products	-10.3	-16.1	0.4	-1.0	0.0	0.6	-9.9	-16.5
Total Products	**-4.9**	**-15.5**	**24.4**	**21.8**	**0.0**	**0.7**	**19.5**	**7.0**
Other Oils[1]	0.6	7.7	-1.3	-1.2	0.0	0.5	-0.7	7.1
Total Oil	**-0.9**	**-7.4**	**21.3**	**23.6**	**0.6**	**1.1**	**21.0**	**17.2**

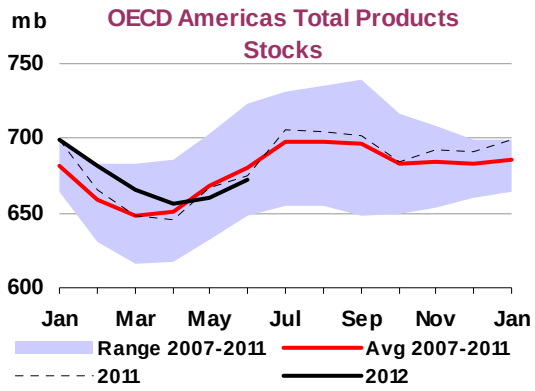
1 Other oils includes NGLs, feedstocks and other hydrocarbons.

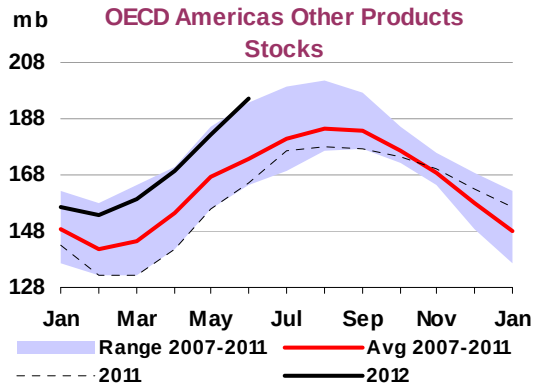
Preliminary data for July indicate an OECD stock build of 10.0 mb, more muted than the five-year average 21.7 mb stock build. The increase in refinery throughputs after seasonal turnarounds which outpaced rising crude supplies led to a 13.9 mb drop in crude inventories, with draws of -9.3 mb, -2.4 mb and -2.2 mb reported in the Americas, Europe and Asia Oceania, respectively. These were outweighed by a 28.6 mb build in products, concentrated in OECD Americas (+21.9 mb) after a refinery output rose.

Analysis of Recent OECD Industry Stock Changes

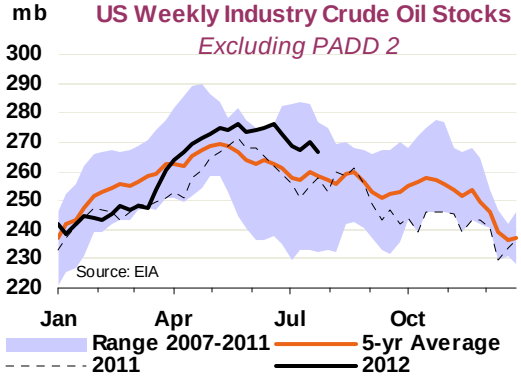
OECD Americas

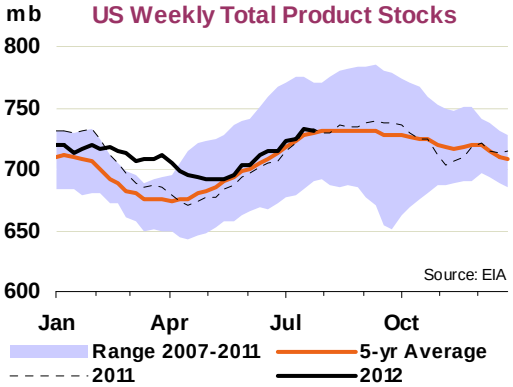
OECD Americas industry inventories (now including Chile) built by a seasonal 8.8 mb in June after a 12.9 mb build in products offset a seasonal 2.2 mb contraction in crude. 'Other products' stocks drove the build as they increased by 12.6 mb, nearly double the five-year average 6.5 mb build. On an absolute basis 'other products' stocks now stand at 194.8 mb, 21.6 mb above five-year average levels. Although this remains a seasonal phenomenon, stocks now sit above the five-year range having risen by 30 mb over the past year. This trend results from increasing domestic natural gas and light tight oil production which has increased propane supply and caused a significant stock build compared to a year ago. High stocks have thus led to a 40% fall in Propane prices compared to a year ago. Despite this rise, total OECD Americas products still lag the five-year average by 8.2 mb, in contrast to crude which remains 37.3 mb in surplus. Middle distillates are driving this deficit to the five-year average, declining by a further 3.7 mb in June to 27.3 mb below the seasonal benchmark.





Preliminary weekly data from the US Energy Information Administration through 27 July indicate that US industry total oil stocks fell by 7.3 mb over the month to stand at 1 105 mb. Crude inventories dropped by 9.3 mb after imports retreated to their lowest level in over six months. Crude stocks at Cushing drew by 2.5 mb from record June levels, with inventories there now standing at 45.1 mb. In contrast to the fall in crude, total products built by 16.6 mb driven by a 6.3 mb increase in diesel stocks and a 5.4 mb rise in the 'other oils' category, while gasoline grew by 2.9 mb.

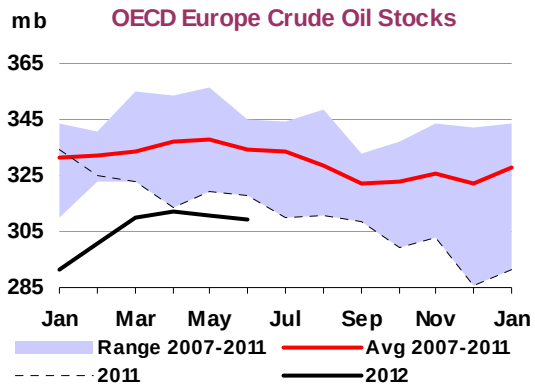


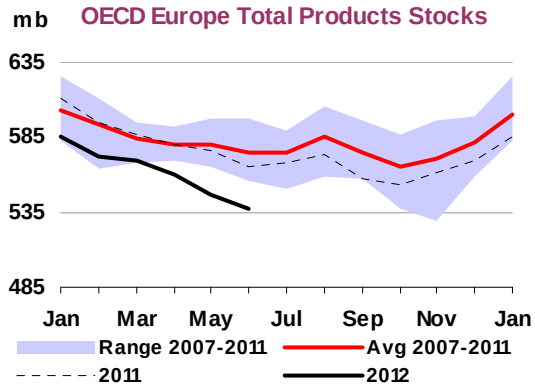


After much focus on the crude stock overhang at Cushing, Oklahoma, it is now apparent that crude stocks in PADD 3 (the US Gulf Coast) have also increased significantly, due to the reversal of the Seaway pipeline and in the run up to the start-up of the Motiva refinery at Port Arthur and an increase in Saudi Arabian imports. Although this refinery was recently forced to shut down and is expected to remain closed until 2013, the crude intended for the refinery remains in storage in the region, pushing non-PADD 2 stocks also above the five year average.

OECD Europe

Commercial inventories in OECD Europe (now including Estonia and Slovenia) continue to lag the five-year average on an absolute basis. They declined by a seasonal 9.6 mb to stand at 919 mb in June, amid continuing weak refinery throughputs which necessitated products destocking to meet demand. Despite sluggish overall demand levels, industry stock cover now stands at a comfortable 63.8 days, a fall of 4.1 days compared to the turn of the year. Germany led the destocking, reporting a sharp draw of 5.1 mb in total oil, as refinery runs remained depressed. Additionally, significant draws were also reported in Italian (-1.9 mb) and Dutch (-2.2 mb) inventories. Regional crude oil stocks remained relatively stable, declining by a slight 1.2 mb.



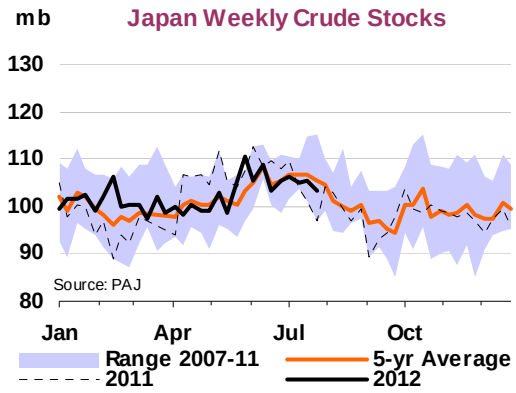


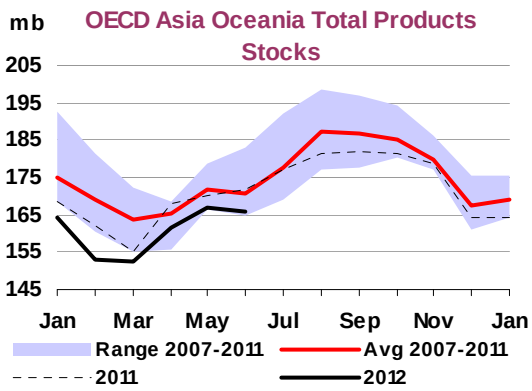
Total products drew by a significant 9.4 mb, steeper than the five-year average decline of 5.6 mb. Middle distillate holdings plummeted by 8.9 mb, with a third of the fall reported in Germany, which posted a 3.0 mb draw. Due to low German refinery runs, all products except fuel oil posted falls, although the decrease in middle distillates was exacerbated as German households took advantage of lower gasoil prices to fill up their heating oil tanks. Recent data suggest that consumer tank fill reached 53% of capacity, 4% higher than May. Motor gasoline was the only other product category to report a large draw in Europe, falling by 2.4 mb, led by falls in Germany (-1.7 mb) and France (-1.5 mb).

Preliminary data released by Euroilstock signal a 3.0 mb stock build in EU-15 and Norway. Crude fell by 2.4 mb after European refinery intake rose by a reported 170 kb/d. However, this was offset by a 5.4 mb rise is products led by middle distillates (+4.1 mb) and motor gasoline (+2.1 mb) as refinery output rose. Additionally, data indicate that refined products held in independent storage in Northwest Europe built in July with all products except gasoil rising.

OECD Asia Oceania

Industry inventories in OECD Asia Oceania (data for now still excludes Israel) fell by 4.8 mb in June, driven by a counter-seasonal 3.3 mb draw in crude oil stocks spread across the whole region. Total products stocks continue to lag the five-year average, declining by a seasonal 1.0 mb, with minor falls reported across all products except for 'other products'. Notably, middle distillates declined by 1.4 mb, driven by a sharp 1.47 mb drop in Korean inventories after refinery throughputs remained constrained, offsetting an uptick in imports.

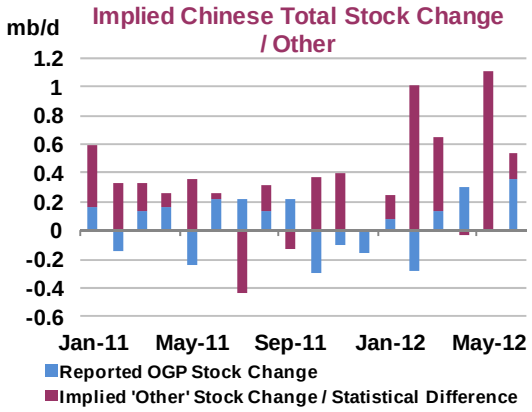


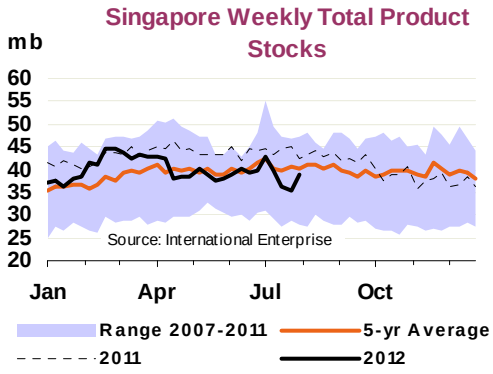


Preliminary weekly data from the Petroleum Association of Japan (PAJ) indicate that despite a 0.3 mb fall, total industry stocks remained 1.6 mb above the five-year average. Crude stocks fell by 2.2 mb/d, despite a steep rise in imports, likely resulting from of post-maintenance refinery throughput gains coupled with robust crude direct burn for power generation. In contrast, total products rose by 1.4 mb, after kerosene inventories built by 2.0 mb, offsetting a 1.3 mb fall in naphtha.

Recent Developments in Singapore and China Stocks

According to weekly data from International Enterprise, Singapore onshore inventories fell below the five-year average, as they decreased by 3.9 mb to stand at 39.0 mb at end-July. During early and mid-month light distillates and residual fuel oil fell sharply amid high demand from Australia and Vietnam. However, end-July was characterised by stock builds across all product categories, notably fuel oil, after demand elsewhere in Asia waned while imports rose.





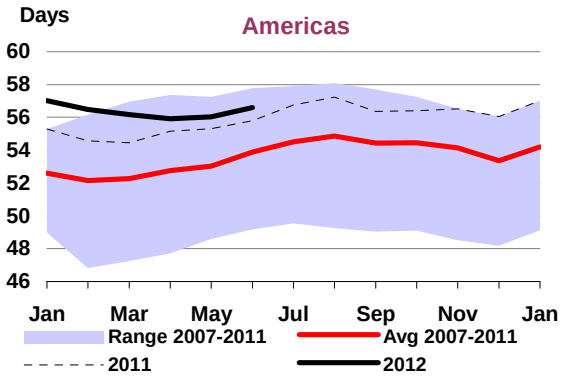
Chinese crude oil inventories rose by an equivalent 10.5 mb in June, according to percentage stock change data from *China Oil, Gas and Petrochemicals* (China OGP). Crude built despite a sharp 700 kb/d fall in crude imports, to their lowest levels since end-2011 as refineries sharply curbed runs. Product inventories drew by a combined 11.7 mb led by gasoil, which fell by 7.3 mb, while gasoline and kerosene fell by 4.2 mb and 0.2 mb, respectively. This destocking resulted from low refinery output lagging demand.

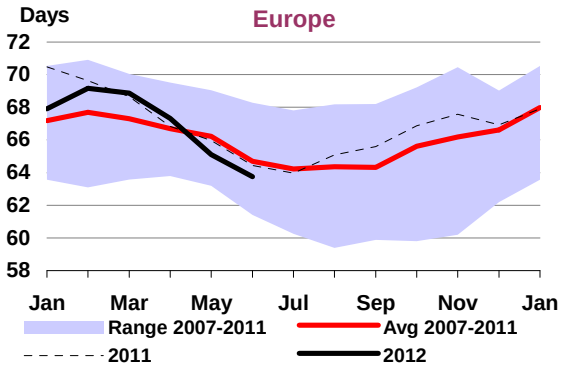
The gap between reported refinery throughput and net imports and production data implies an average 600 kb/d build in overall Chinese crude stocks over 1H12. This is significantly larger than the reported OGP figure of 100 kb/d, and suggests a combination of strategic petroleum reserve filling, and unreported crude use in either the refining or power generation sectors.

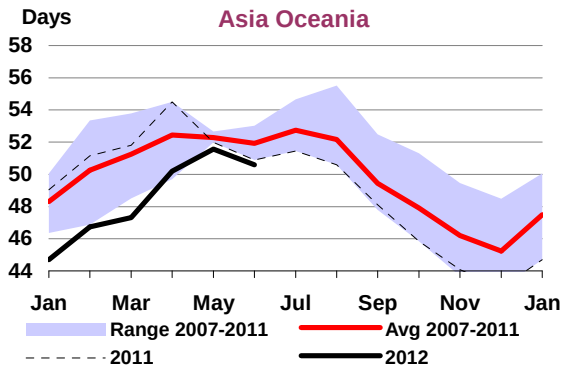
Regional OECD End-of-Month Industry Stocks

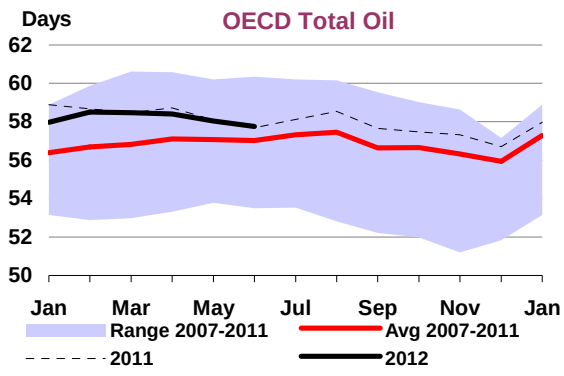
(in days of forward demand and millions barrels of total oil)

Days[1]

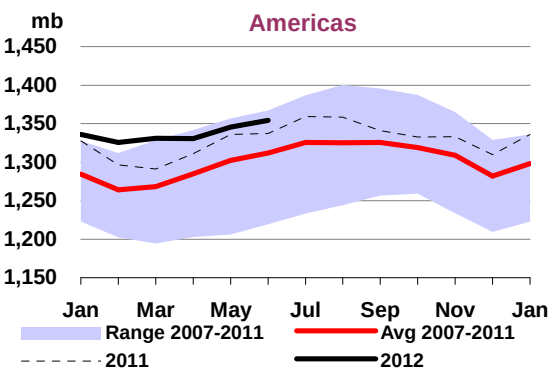


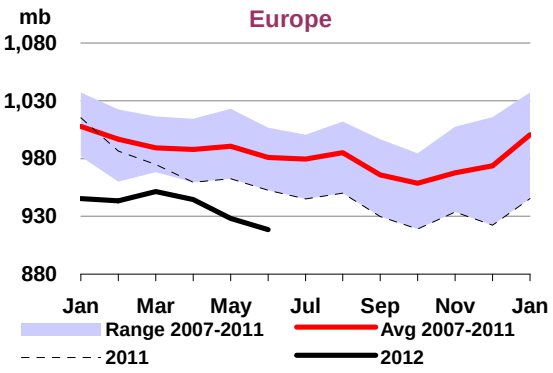


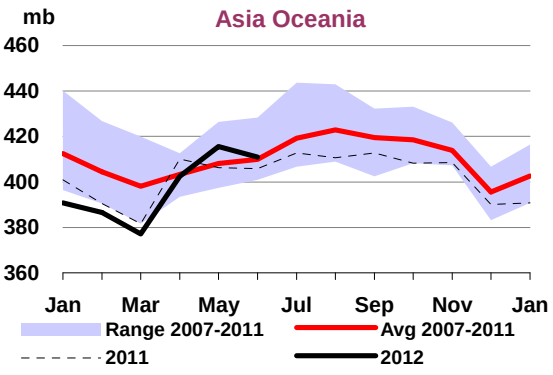


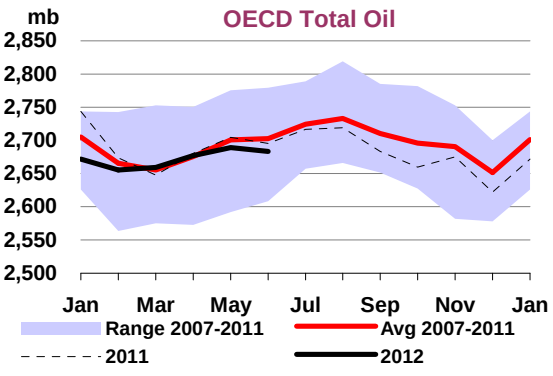


Million Barrels









1 Days of forward demand are based on average demand over the next three months

PRICES

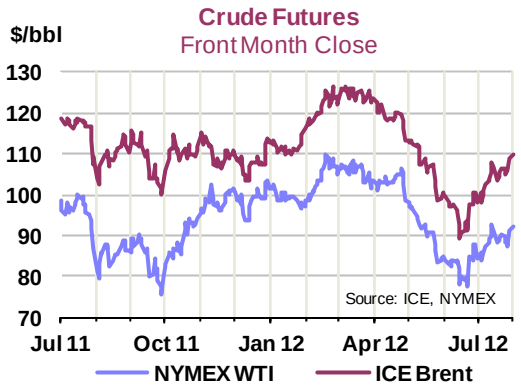
Summary

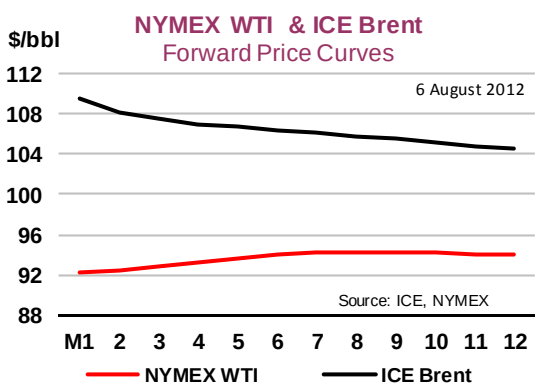
- **Crude oil prices in July extended the price gains begun towards the end of June, thereby retracing part of their steep 2Q12 declines.** Russian Urals in the Mediterranean, a common substitute for Iranian barrels, saw prices rise by nearly $10/bbl on the month, to $106/bbl. The rally continued in early August, with prices passing the $110/bbl mark. Crude markets in the Middle East and the Asia Pacific region were more subdued, thanks in part to heavier-than-expected exports of Iraqi Basrah Light, which reached their highest level since the 2003 conflict. Prices for Middle East sour benchmark Dubai in Singapore gained less than $5/bbl on the month. In futures markets, front-month CME WTI gained $5.53 on the month, averaging $87.93/bbl, while ICE Brent advanced by $6.80, to $102.72/bbl.

- **Activity in futures markets continues to ebb away from the CME WTI contract**. The ratio of open interest in Brent futures on the London ICE to New York and London WTI oil positions gained nearly half a percentage point in July, to almost 64%, driven by a 2.6% decline in CME WTI open interest. Stripping out ICE WTI contracts, the ratio of Brent to WTI open interest rose even faster, by nearly 1.5 percentage points, to 84%. Trade volumes followed a similar path, with year-to-date volume in the ICE Brent market now exceeding that in the CME WTI contracts.

- **Product prices and crack spreads were a mixed bag in July.** Naphtha prices rallied across the board on firming petrochemical margins, while fuel oil prices weakened on soft demand. Lacklustre US gasoline demand undermined gasoline cracks in the Atlantic basin, but Singapore cracks rose on healthy Southeast Asian demand and regional refinery glitches. Firm diesel demand in Europe and Latin America, compounding the impact of refinery mishaps in Europe and Asia, supported global diesel margins.

- **July crude tanker rates sank to their lowest levels since 4Q10 on weak demand and ample supply, but product tanker markets fared better.** Crude rates on the VLCC Middle East Gulf – Japan route have fallen steadily since their April highs and now stand at $8.50/mt, down by $1/mt versus June. Suezmax rates on the West Africa – US Gulf Coast route also fell by over $1/mt in July and stood at below $13/mt by early August. Aframax rates on the Baltic – UK trade fell the most, down by as much as $1.20/mt to under $6/mt by early August. In contrast, product tanker rates on the Middle East Gulf – Japan trade surged by close to $3.50, to a high of nearly $20/mt in late July, the highest level since 4Q2008.





Market Overview

Oil markets appeared to adjust smoothly in July to tightening international sanctions on Iranian oil exports, but prices continued to trend upwards, extending gains posted towards the end of June, when markets seemed to reverse course following steep second-quarter declines. Continued high Saudi output combined with a faster-than-expected recovery in Libyan production, fast-growing Iraqi exports and lacklustre oil demand growth have helped blunt the impact of declining Iranian exports in recent months, which are estimated to have dropped by a weighty 1.8 mb/d in July compared to year-ago levels. However, on closer inspection, the supply/demand picture was more nuanced and less comfortable than it appeared at first sight. Geopolitical concerns remained at the fore, not just in Iran but also in Syria, where civil conflict intensified, Sudan and South Sudan, where actual oil pipeline movements between the two countries may prove more elusive than an agreement in principle reached in early August, and Libya, where civil unrest in the Kufra region disrupted oil production last month. Attacks on oil workers and facilities resumed in Nigeria, where pirates targeted oil workers being ferried through the Niger Delta, and Colombia, where the Cano Limon pipeline was bombed. In Libya and Iraq, production gains have come with signs of potential problems ahead. There were new supply surprises elsewhere too, including the North Sea (where maintenance-related production cuts this fall now look set to exceed earlier market expectations), Brazil, and Angola. Moreover, despite weak global economic growth, oil demand is showing pockets of renewed demand strength: global naphtha demand is on the mend, recent weekly US demand estimates are showing new signs of life, and worldwide distillate markets look tight.

The impact of Iranian sanctions also appears to play out differently depending on the regions. Perhaps not coincidentally, Urals in the Mediterranean market displayed the steepest advances in crude pricing in July. Mediterranean refiners arguably have been bearing the brunt of Iranian oil sanctions: EU imports of Iranian oil ground to a total halt after an EU embargo took effect on 1 July. There is a relatively limited choice of immediately available substitutes. Iraqi Kirkuk exports into the Mediterranean market too have been curtailed by attacks on the pipeline from Kirkuk to the Turkish port of Ceyhan. Meanwhile, Urals, the default substitute for Iranian barrels in Europe, has seen its own flows out of Black Sea ports through Turkey curtailed, with more barrels earmarked for domestic refineries and for export through the new Baltic terminal at Ust Luga.

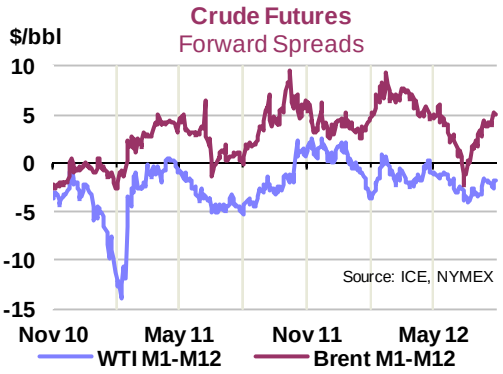
Asian refiners, which normally take in a larger share of Iranian exports than Europe, have seemingly suffered less from the erosion of Iranian barrels on the market. They have been the primary beneficiaries of incremental Saudi and Iraqi supply. The scope and duration of their cuts in Iranian imports is also unclear. Remarkably, Dubai prices in Singapore trailed the rest of the benchmark crude complex last month, with gains of less than $5/bbl. WTI prices in the US have also reacted to fast-rising output from rising light tight oil supply and weak Midwest demand for crude following a string of refinery outages.

Contrasting regional supply situations translate into diverging futures curves on the main futures markets. WTI futures at the CME remain in contango, whereas the Brent market, after briefly flipping into a shallow contango in June, when prices bottomed out, has since returned to backwardation. Given the implications of the time structure of futures markets on the roll yield of commodity indices, it may not come totally as a surprise that the ratio of open interest in oil futures has been steadily tilting towards the ICE Brent market, at the expense of CME WTI futures. While open interest in CME WTI in absolute terms still exceeds that in ICE Brent, already trade volume in the latter market exceeds that in the former.

Product markets also have firmed up, with naphtha posting particularly strong gains on the back of robust petrochemical margins. Fuel oil markets, in contrast, have weakened across the board, but low-sulphur distillate markets benefit from robust global demand and insufficient production. Distillate markets have been the main beneficiaries of insufficient or unreliable electricity generation capacity in a

broad range of developing and newly industrialised countries. Whenever power goes out, as it does routinely in many of those countries, end-users have learned to rely on back-up generators running on diesel. Such generators reportedly came in handy earlier this month in India, when a poor monsoon and insufficient investment in capacity caused the largest power outage in history.

Looking forward, a key factor in oil market direction will be Iran's own response to the tightening sanctions noose and narrowing export opportunities. The country may soon run out of storage capacity in which to stash unsold crude cargoes. This could lead it to a more accommodating foreign and nuclear policy, eventually paving the way for an easing of sanctions, or it could incentivise it to more aggressively discount barrels in Asia and elsewhere. But markets could also turn more bullish if Iran responded to export constraints with other measures, including, but not limited to, production shut-ins, with all the adverse long-term effects that this could have.



Prompt Month Oil Futures Prices

(monthly and weekly averages, $/bbl)

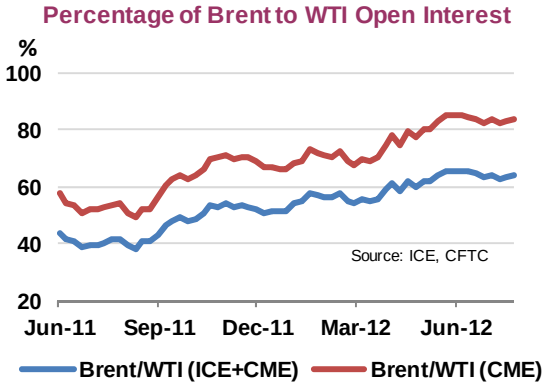
	May	Jun	Jul	Jul-Jun Avg Chg	% Chg	Week Commencing: 02 Jul	09 Jul	16 Jul	23 Jul	30 Jul
NYMEX										
Light Sweet Crude Oil	94.72	82.41	87.93	5.53	6.3	85.77	85.78	90.32	89.03	89.06
RBOB	123.90	111.36	118.49	7.13	6.0	113.69	116.74	121.51	119.30	121.68
No.2 Heating Oil	122.59	109.80	118.18	8.38	7.1	114.58	115.85	121.12	119.66	120.52
No.2 Heating Oil ($/mmbtu)	21.04	18.85	20.29	1.44	7.1	19.67	19.89	20.79	20.54	20.69
Henry Hub Natural Gas ($/mmbtu)	2.49	2.50	2.96	0.46	15.7	2.86	2.84	2.93	3.10	3.08
ICE										
Brent	110.29	95.93	102.72	6.80	6.6	99.34	100.40	105.47	104.56	106.38
Gasoil	125.21	112.59	119.55	6.97	5.8	116.81	117.26	122.07	120.88	122.87
Prompt Month Differentials										
NYMEX WTI - ICE Brent	-15.57	-13.52	-14.79	-1.27		-13.57	-14.62	-15.14	-15.53	-17.33
NYMEX No.2 Heating Oil - WTI	27.87	27.39	30.25	2.86		28.81	30.07	30.79	30.63	31.47
NYMEX RBOB - WTI	29.19	28.95	30.56	1.60		27.92	30.96	31.18	30.27	32.63
NYMEX 3-2-1 Crack (RBOB)	28.75	28.43	30.45	2.02		28.22	30.67	31.05	30.39	32.24
NYMEX No.2 - Natural Gas ($/mmbtu)	18.55	16.35	17.33	0.97		16.81	17.04	17.86	17.44	17.61
ICE Gasoil - ICE Brent	14.92	16.66	16.83	0.17		17.47	16.86	16.60	16.32	16.49

Source: ICE, NYMEX

Futures Markets

Activity Levels

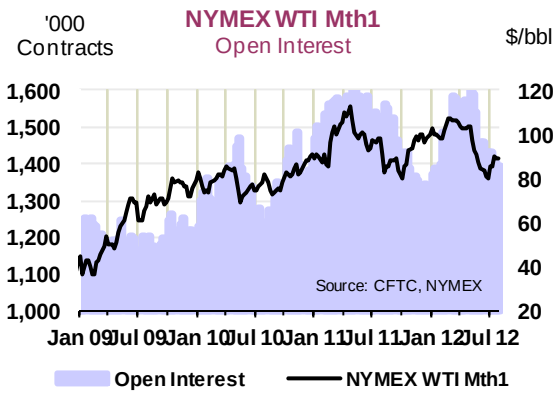
Market activity on oil futures exchanges continued to slip away from the New York CME and London ICE WTI contracts towards the ICE Brent futures contract, extending recent trends. Data on open interest show the ratio of Brent futures on the London ICE to New York and London WTI oil positions gained close to half a percentage point to 63.9% between 3 July and 31 July 2012, driven by a 2.6% decline in CME WTI open interest. Stripping out ICE WTI contracts, the ratio of Brent to WTI open interest rose even faster, by 1.44%,

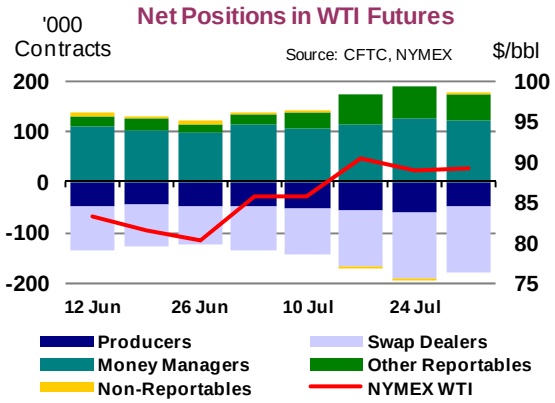


to 84%. Trade volumes followed a similar path. Although open interest in CME WTI contracts still exceeds that in ICE Brent contracts, volumes in the ICE Brent market have now overtaken those in the CME WTI market. Total trade volumes in CME WTI contracts fell by 6.1% in July 2012 y-o-y and by 17.9% for year-to-date, to 10.9 million contracts and 87 million contracts, respectively. In contrast, Brent monthly volume jumped to 13.1 million contracts last month from 8.9 million in July 2011. Year to-date Brent volume jumped by 20% to 88.9 million contracts, exceeding the volume in CME WTI contracts.

Changes in the structure of the forward curve for Brent and WTI futures may have had something to do with the shift. The Brent curve has been in steep backwardation since December 2010. A recent flip into contango proved short-lived. In contrast, the WTI curve has stayed in contango. The Brent market thus offers a more positive roll yield than WTI, and may have been providing commodity index traders with a stronger incentive to invest in Brent futures than in WTI. The high-profile failure of two Wall Street brokerages in less than a year, both of which involved the apparent disappearance of customer funds held in segregated accounts, could potentially have caused some erosion of trust in investor circles and served as a contributing factor, at the margin, to the recent trend in CME WTI futures open interest and trade volume.

Open interest declined in July in both ICE Brent and CME WTI oil contracts but increased in ICE WTI contracts. At the CME, combined open interest in WTI futures and options declined by 5.2% to 2.32 million, while open interest in futures-only contracts declined by 2.6% to 1.4 million, the lowest level since January 2012. Over the same period, open interest at the London ICE rose to 0.44 million for WTI futures-only contracts and by 1.4% in futures and options, to 0.54 million contracts. Meanwhile, open interest in ICE Brent futures contracts inched down by close to 1% to 1.17 million contracts, while ICE Brent futures and options contracts declined by 1.9% to 1.43 million contracts from 3 July to 31 July 2012.





Amid optimism among investors that the European Central Bank and Federal Reserve would announce a new set of stimulus measures to rejuvenate the economy and revive growth momentum, money managers raised their net long positions by 5.2% between 3 July and 31 July 2012 to 119 858 contracts after a four-month decline. Expectations of new stimulus measures have been on the rise ever since the ECB President Mario Draghi said on 26 July that the central bank was ready to do whatever it took to preserve the euro. Crude inventory draws in the US may have contributed to the increase in bullish bets. Yet money managers' net long positions remain at just over half (52%) their peak levels reached in the week ending 28 February 2012. Money managers in London ICE Brent contracts followed a similar pattern and boosted their bullish wagers, especially after the second week of July, reaching the highest level since 22 May 2012, at 78 672.

Positions on NYMEX Light Sweet Crude Oil (WTI) Futures Contracts

Thousand Contracts

31 July 2012	Long	Short	Net	Long/Short	Δ Net from Prev. Week	Δ Net Vs Last Month
Producers' Positions	228.6	276.7	-48.1	*Short*	↑ 11.4	↑ 0.8
Swap Dealers' Positions	164.1	294.3	-130.3	*Short*	↑ 0.1	↓ -45.2
Money Managers' Positions	185.7	65.8	119.9	*Long*	↓ -4.3	↑ 6.0
Others' Positions	142.4	87.8	54.5	*Long*	↓ -12.0	↑ 36.9
Non-Reportable Positions	66.3	62.3	4.0	*Long*	↑ 4.8	↑ 1.6
Open Interest			**1395.8**		↑ 6.7	↓ -37.2

Source: CFTC

Positions on ICE Brent Crude Oil Futures Contracts

Thousand Contracts

31 July 2012	Long	Short	Net	Long/Short	Δ Net from Prev. Week	Δ Net Vs Last Month
Producers' Positions	489.9	665.5	-175.6	*Short*	↓ -12.3	↓ -16.8
Swap Dealers' Positions	193.7	96.5	97.2	*Long*	↓ -2.5	↓ -16.4
Money Managers' Positions	123.4	44.7	78.7	*Long*	↑ 10.5	↑ 25.5
Others' Positions	23.1	29.5	-6.5	*Short*	↑ 1.7	↓ -1.4
Non-Reportable Positions	47.2	41.0	6.2	*Long*	↑ 2.6	↑ 9.1
Open Interest			1172.8		↑ 21.5	↓ -10.6

Source: ICE

Producers accounted for 19.8% of the short positions and 16.4% of the long positions in CME WTI futures-only contracts at end-July, having trimmed their net futures short positions to 48 099 contracts from 48 877 contracts at the beginning of the month. Swap dealers, who accounted for 27.7% and 37% of the open interest on the long side and short side, respectively, increased their bets on falling prices by 53.1% to 130 275 net futures short positions. Producers' and swap dealers' trading activity in the London ICE Brent contracts followed a similar pattern as CME WTI contracts. Producers in London ICE Brent contracts increased their net short positions from 158 832 to 175 610 contracts. Similarly, swap dealers reduced their net long positions from 113 627 to 97 219 contracts.

NYMEX RBOB futures and combined open interest declined by more than 3% to 245 820 and 262 401, respectively, over the same period. Open interest in NYMEX heating oil futures contracts declined by 3.8% to 303 178 contracts while open interest in natural gas futures market was up by 1% to 1.13 million contracts.

Index investors' long exposure in commodities in June 2012 increased by $14.2 billion to $284 billion, after plummeting by $38.2 billion in May. The notional value of long exposures in both on- and off-WTI Light Sweet Crude Oil futures contracts rose by $1.7 billion in June. The number of long futures equivalent contracts increased by 25 000 to 554 000, equivalent to $47.7 billion in notional value.

Market Regulation

As reported in the *July OMR*, the US CFTC approved a final rule on 10 July on the further definition and interpretation of the terms "swaps" and "security-based swaps", as well as "security-based swap agreement". The Commission announced that it was planning to publish the finalised rule in the Federal Register on 13 August 2012. It is expected to become effective 60 days later.

Importantly, the publication of the final swap definitions rule and interpretation will trigger the compliance dates for several other Commission rules, including swap dealers' (SD) and major swap

participants' (MSP) registration, SD and MSP swap data reporting and record-keeping, real time reporting of swap transaction and pricing data, internal and external business conduct standards, and position limits. Some of these rules will be effective as early as 12 October. The Commission might however delay the compliance date for some rules.

On 10 July, the US CFTC also approved the final rule on the end-user exemption from mandatory clearing. The final rule clarifies the conditions which must be met to benefit from the exemption. Under the final rule, if a swap is being used to hedge commercial risk, then non-financial entities and certain financial entities may choose whether or not to clear. Financial entities eligible for exemption include small financial institutions with $10 billion or less in assets, certain government entities such as foreign governments, foreign central banks and international financial institutions (e.g. IMF and World Bank), and affiliates of end-users. The rule also specifies reporting requirements when the exception is used. Specifically, end-users are expected to provide information on swaps subject to exception in an annual filing or on a case-by-case basis. The final rule will be effective 60 days after publication in the Federal Register but compliance is not required until the Commission make its decision on swaps required to be cleared.

On 24 July, the US CFTC finalised a rule that sets a phased schedule for compliance with the mandatory clearing requirements for swaps. According to the final rules, once the Commission decides that the swaps have to be cleared, the phased schedule compliance requires that (a) transactions between SDs, MSPs and active funds ("Category 1" entities) will become subject to mandatory clearing, starting 90 days after publication of a final clearing determination; (b) transactions between "Category 2" entities (commodity pools, private funds, and persons predominantly engaged in activities that are in the business of banking or financial activity, provided that such participants are not third-party subaccounts) and Category 1 entities or other Category 2 entities will become subject to mandatory clearing, starting 180 days after publication of a final clearing determination; and (c) all other swap transactions between Category 1 or Category 2 entities and end-users, who do not qualify for clearing exemptions, will be subject to mandatory clearing starting 270 days after publication of a final clearing determination. On the same day, the CFTC proposed the first determination for mandatory clearing by derivatives clearing organisations of six classes of credit default swaps and interest rate swaps.

While the regulators on both sides of the Atlantic are drafting new laws to regulate swaps markets, Intercontinental Exchange (ICE) announced that it plans to transition all existing over-the-counter (OTC) cleared energy swaps and option products, including crude and refined oil, natural gas, electric power, and natural gas liquids, to economically equivalent futures and option products in January 2013. ICE argued that new regulations in the US and Europe as well as Asia are likely to increase the cost and complexity for swaps market participants relative to futures market participants. ICE further argued that already tested futures market regulations give market participants more certainty in regulation than untested regulation in swaps markets.

Treatise on the Definition of Swap

Almost two years after the Dodd-Frank Act was enacted into law, on 10 July 2012 the US CFTC voted 4-1 to approve a 600-page final rule, jointly developed with the US Securities and Exchange Commission (SEC), to further define the statutory term "swap". Not only does the definition provide greater clarity on which financial products can be expected to fall within regulatory oversight, and thus become subject to reporting, clearing, capital and margin requirements, but passage of the rule also sets the compliance dates for a string of other Commission rules governing the $650 trillion over-the-counter global swaps markets. Those include rules on swap dealers (SD) and major swap participants (MSP) registration, SD and MSP swap data reporting and recordkeeping, registration of swap data depositories, large trader reporting for registered SDs and MSPs, real time reporting of swap transactions and pricing data, internal and external business conduct standards and position limits.

Treatise on the Definition of Swap (continued)

The Commission had been criticised for finalising other rules without first defining the term 'swap'. Critics argued that defining a swap should have been the first rulemaking by the regulators rather than one of the last. Others countered however that it was arbitrary deadlines imposed on the regulators by the Dodd-Frank Act that led the US CFTC to delay the product definition rule. Furthermore, the Commission, along with the SEC, might have postponed the swap definition rule to ensure that market participants were ready for the new regulatory requirements that the final rule would trigger.

What is a "Swap"?

The final rule, consistent with the Dodd-Frank Act statute, defines a broad range of derivatives as swaps: interest rate swaps, currency swaps, commodity swaps, including energy, metals, and agricultural swaps, commodity options, currency options, cross-currency swaps, forward rate agreements, options to enter into swap (swaptions) and broad-based index swaps, such as index credit default swaps. The final rule also treats foreign exchange swaps and forwards as swaps except those exempted by the Department of Treasury.

What is not a "Swap"?

The final rule clarifies that insurance products, loan participations, certain consumer and commercial transactions, such as consumer mortgage rate locks, consumer and commercial loans, and service contracts will not be considered swaps. In line with the Dodd-Frank Act, the final rule excludes non-financial forward contracts that are intended to be physically settled from the statutory swap definition. Clearly, the scope of this exclusion or exemptions will have the greatest impact on energy market participants.

Exclusions for Energy Companies

The US CFTC also issued a guidance clarifying the extent of forward contract exclusion and its relevance to the new swap definition. The Dodd-Frank Act specifically excludes "any sale of a nonfinancial commodity or security for deferred shipment or delivery, so long as the transaction is intended to be physically settled" from its statutory swap definition. If the transaction is to be physically settled, even if settled at different agreed prices, then it will not be considered a swap. Book-out transactions in nonfinancial commodities would not be considered as swap as long as the underlying contracts meet the requirement specified in the Brent interpretation, which requires that the contracts (a) create a binding obligation to make or take delivery without providing any right to offset, cancel, or settle on a payment-of-differences basis and (b) are

between market participants that regularly make or take delivery of the referenced commodity in their ordinary course of business. If the parties settle their delivery obligations through a subsequent, separately-negotiated agreement, these contracts still qualify for the forward exclusion from the swap definition.

Furthermore, the interpretation keeps forward contracts with price optionality, where parties can adjust forward contract prices during the course of the agreement, as forward rather than swap contracts. The final rule also excludes forward contracts with volumetric optionality, where parties have the option to adjust the volume specified in the underlying contract, from being classified as swaps provided that the underlying contracts satisfy the seven-part test. The CFTC has, however, requested public comment on the interpretation of forward contracts with volumetric optionality.

The final rule also excludes environmental commodities, such as carbon offset credits, emission allowance and renewable energy credits from the statutory definition of swap. The Commission guidance also excludes certain types of arrangements, such as fuel delivery agreements and physical exchange transactions, from being classified as swaps.

Spot Crude Oil Prices

Having reversed course in late June following steep second-quarter declines, crude oil prices extended their gains in July. European benchmark Urals prices, which had seen a particularly steep drop in June in the Mediterranean market, led the rebound, rising by an average $9.58/bbl, or more than 10%, to $102.83/bbl. That was more than half the decline of $16.25/bbl, or nearly 15%, seen in the previous month, and nearly twice the price increase of Middle East benchmark Dubai in July in absolute terms.

Dubai prices edged up by less than $5/bbl on the month, to slightly over $99/bbl, compared with a loss of nearly $13/bbl in June.

There were several likely factors behind the renewed comparative strength in Urals pricing, which has kept the Russian grade at a relatively unusual premium of 10-70cents/bbl to North Sea Dated in the Mediterranean market through most of the month. Demand for the grade has been on the rise. Urals has proved one of the most popular substitutes for Iranian crude in the European Union, where an embargo against Iranian crude imports became effective on 1 July. Refiners in the Mediterranean basin are by far Europe's largest users of Iranian crude; it may therefore not come as a surprise that the rebound in Urals prices was noticeably steeper there than in Northwest Europe, the region's other major refining centre and trading hub.

Spot Crude Oil Prices and Differentials

(monthly and weekly averages, $/bbl)

	May	Jun	Jul	Jul-Jun		Week Commencing:				
				Avg Chg	%	02 Jul	09 Jul	16 Jul	23 Jul	30 Jul
Crudes										
North Sea Dated	110.25	94.80	102.56	7.76	8.2	99.12	100.03	105.60	104.12	107.26
Brent (Asia) Mth 1	110.81	95.75	102.51	6.76	7.1	98.81	99.61	105.12	104.71	106.97
WTI (Cushing) Mth 1	94.68	82.35	87.90	5.55	6.7	85.77	85.78	90.32	88.90	89.06
Urals (Mediterranean)	109.50	93.25	102.83	9.58	10.3	99.02	100.45	105.90	104.44	107.76
Dubai	107.32	94.33	99.19	4.86	5.2	96.43	96.87	101.50	100.76	101.94
Tapis (Dated)	117.07	99.83	105.71	5.89	5.9	102.69	102.96	108.52	107.32	110.00
Differential to North Sea Dated										
WTI (Cushing)	-15.57	-12.45	-14.66	-2.21		-13.35	-14.25	-15.27	-15.22	-18.20
Urals (Mediterranean)	-0.75	-1.55	0.26	1.81		-0.10	0.42	0.30	0.32	0.50
Dubai	-2.93	-0.48	-3.38	-2.90		-2.69	-3.15	-4.09	-3.37	-5.31
Tapis (Dated)	6.82	5.03	3.15	-1.88		3.57	2.93	2.92	3.20	2.74
Prompt Month Differential										
Forward Cash Brent Mth1-Mth2	0.50	-0.03	0.47	0.49		0.24	0.46	0.36	0.61	1.18
Forward WTI Cushing Mth1-Mth2	-0.33	-0.30	-0.33	-0.02		-0.38	-0.39	-0.34	-0.24	-0.27
Forward Dubai Mth1-Mth2	0.42	0.95	0.38	-0.57		0.41	0.47	0.37	0.35	0.26

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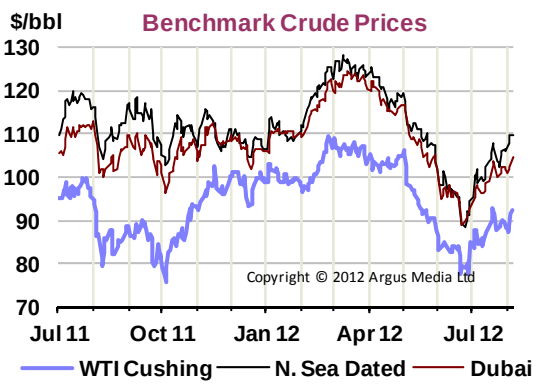
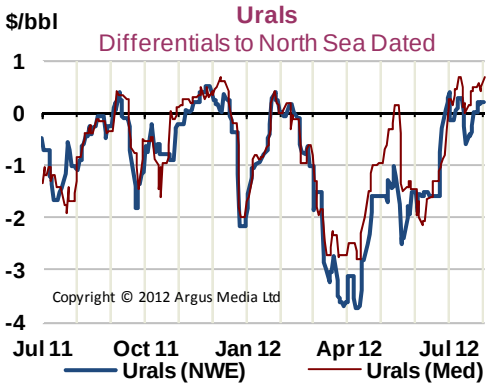
Compounding the effect of the ban on Iranian imports, Iraqi Kirkuk, another medium-sour crude and good substitute for Iranian grades, has also been in relatively short supply in Europe, as attacks on the pipeline from Kirkuk to the Turkish port of Ceyhan caused loading delays at the Ceyhan terminal.

Even as demand increased in the face of lower Iranian and Iraqi supply, supply of Urals barrels was itself relatively constrained, especially in the Mediterranean, even as a lack of Iranian and Iraqi barrels spurred extra European demand. Export tariffs of roughly $51/bbl, while down by roughly $7/bbl from June, helped keep Urals at home, supporting rising throughputs at domestic refineries. Rising exports from the recently opened Baltic terminal of Ust-Luga, which pipeline operator Transneft seeks to maximize to offset construction costs, have come at the expense of shipments from the Black Sea, the main source of Russian barrels into the Mediterranean.

Last, product markets may also have helped support Urals, thanks to the latter's relatively generous distillates yields, as reduced import availability from the United States, India and Russia itself have compounded the impact of structurally declining regional refinery runs to keep European distillate markets in short supply.

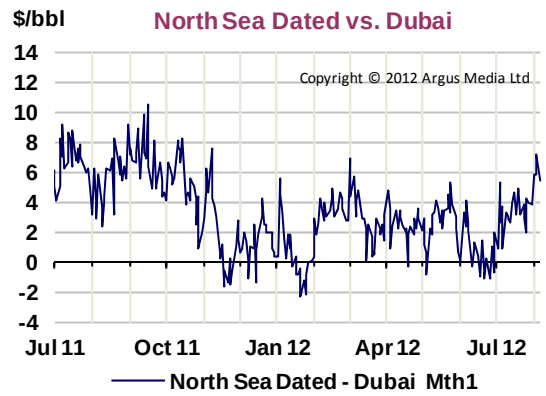


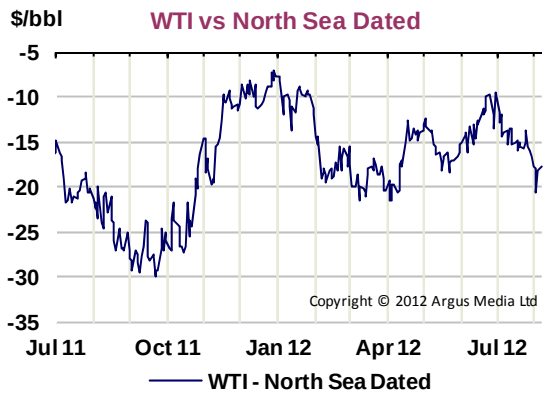


North Sea crudes have also enjoyed relatively strong support in European markets, particularly towards the end of the month. Following a wave of consolidation in European refining capacity, steep product stock draws helped spur an earlier, pre-July recovery in refining margins, causing crude demand from European refineries to rebound. Expectations of a steep seasonal decline in North Sea autumn supply due to field maintenance also helped. News in early August that North Sea maintenance would cut crude loadings even more than had been earlier anticipated hints at continued price support.

Support for US benchmark WTI was more tepid. July prices averaged just $5.55/bbl above June levels, representing less than half the decline incurred from May to June. Strong Midwest crude production growth continued to undermine the price of the landlocked grade. But unplanned refinery shutdowns in the Chicago region also helped depress demand. Having narrowed to about $10/bbl by mid-June, the WTI-North Sea Dated spread widened again in July, passing the $20/bbl mark in early August. Light, sweet crude prices on the US Gulf fared better, mirroring the rise in North Sea markets and increased Midwestern demand for products from Gulf Coast refineries. Continued, strong product import demand from Latin America also helped support Gulf Coast refining activity and demand for coastal grades with relatively rich gasoline and distillate yields. LLS's premium to WTI bottomed out at slightly above $10/bbl on 24 May, bouncing back in July to reach $19/bbl by 2 August.

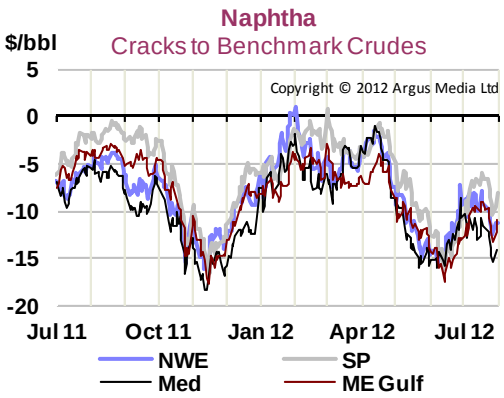
Middle Eastern grades in the Asia Pacific proved to be the market laggards, posting some of the weakest price gains among international crude benchmarks in July. Dubai prices in Singapore rose by less than $5/bbl on average month-on-month. Increased availability of Iraqi Basrah Light in the Middle East Gulf likely helped blunt upward pressures on regional crude prices. Basrah Light exports out of Iraq's southern ports rose to roughly 2.2 mb/d in July, their highest level since the 2003 conflict, after one of two single-point mooring platforms was returned to service following maintenance in June.

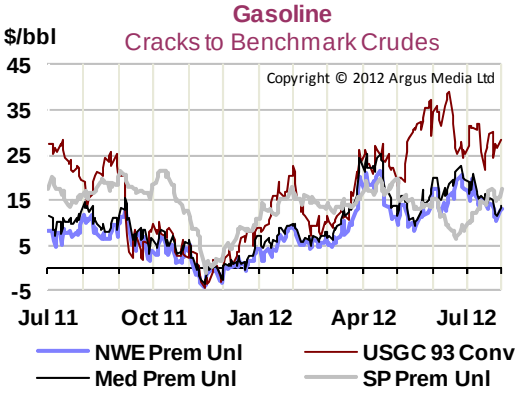




Spot Product Prices

Urals crack spreads came under pressure in July in the Mediterranean, even as Dubai cracks widened in Singapore, largely as a reflection of the contrasted price patterns observed in world crude markets. With Urals prices rising twice as fast as those of Dubai, Urals crack spreads in the Mediterranean fell for all products bar naphtha. In contrast, Singapore cracks rose across the board, except for fuel oil. Naphtha prices firmed up in all regions as petrochemical margins improved, while fuel oil prices weakened, mostly on lower-than-expected demand. Gasoline cracks were a mixed bag. Weak gasoline demand in the US restricted outlets for excess European gasoline production, undermining Atlantic Basin gasoline cracks. In Singapore, however, gasoline margins rose on healthy Southeast Asian demand and tight supplies caused by refinery glitches. Firm diesel demand in Europe and Latin America, compounding the impact of refinery glitches in Europe and Asia, supported diesel margins.





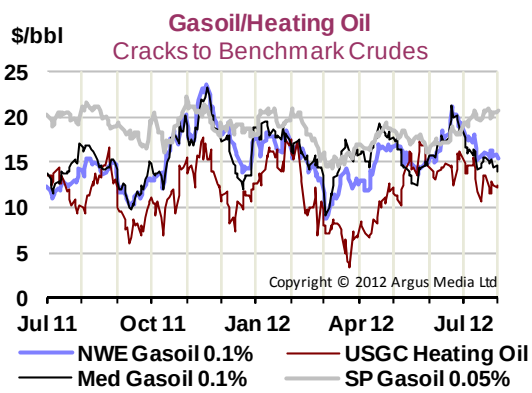
Naphtha margins rose by $1.23-2.97/bbl in Europe and by $5.43/bbl in Asia, due to brisk demand on the back of improved petrochemical margins, and tight feedstock supply due to refinery outages. Both European and Asian petrochemical manufacturers saw margins increase and boosted utilisation as a result. Notably, petrochemical producers in South Korea ran their crackers close to full capacity in July. Also firm prices in the west gave traders little incentive to ship cargoes to Asia, further supporting Asia's naphtha crack spreads. Finally, a shutdown at JX Nippon Oil & Energy Corp.'s Mizushima-B refinery, one of Japan's top naphtha suppliers, and the restart of Taiwan's CPC, a large naphtha cracker, contributed to prevailing naphtha tightness.

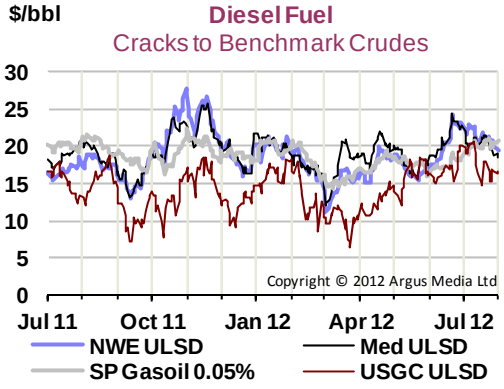
However, towards the end of July, naphtha margins lost their upward momentum, notably in Europe, as firm demand proved to be short-lived and import demand from Asia withered after Japan's Maruzen Petrochemical shut a 768,000 tonnes per year (tpy) naphtha cracker in Chiba.

Gasoline markets in Europe and the US Gulf weakened on a m-o-m basis in July, with crack spreads narrowing in Northwest Europe by $1.66/bbl to Brent, and by $3.38/bbl to Urals in the Mediterranean. Super unleaded gasoline crack spreads in the US Gulf coast also fell by $3.43/bbl to LLS in July. By contrast, in Singapore, crack spreads rose by $3.99/bbl versus Dubai. Atlantic basin weakness was driven by low demand, with US gasoline demand (four-week average, as of 3 August) down by 4.2% on a y-o-y basis, leading to an unexpected build in gasoline stocks. Moreover, weak import demand from West Africa due to the ongoing Nigerian subsidy probe weighed on gasoline prices, leaving few outlets to place excess European material.

In Singapore, gasoline margins rose on healthy Southeast Asian demand and tight supplies caused by refinery problems. Southeast Asian countries, including Indonesia, increased import volumes in preparation for Ramadan, the Muslim holy month of fasting that started at the end of July (demand for gasoline usually rises during this period as travel increases). Moreover, Taiwan Formosa's back-to-back

shutdown of its two residue fluid catalytic crackers (RFCC), along with a fire at the Bangchak Petroleum refinery in Thailand, further tightened supplies.



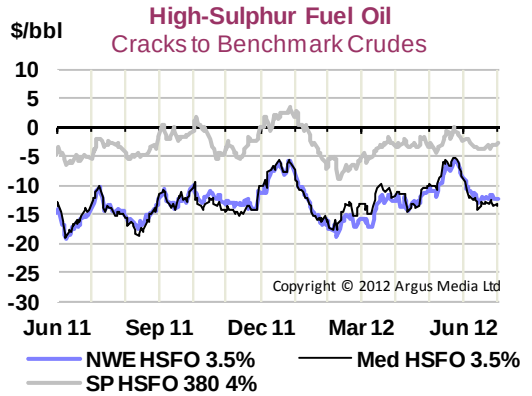


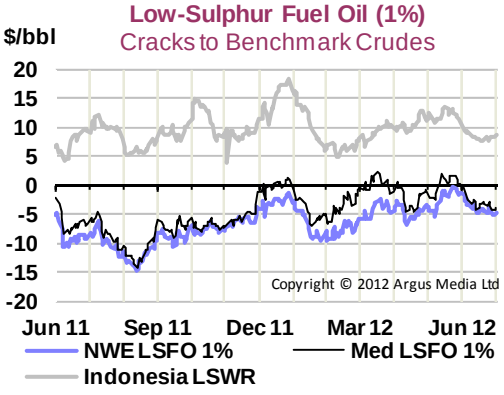
Middle distillate crack spreads strengthened in all regions in July bar the Mediterranean. Diesel crack spreads rose by $0.46/bbl to Brent in Northwest Europe, by $0.62/bbl to LLS in the US Gulf and an even stronger $2.45/bbl to Dubai in Singapore, while differentials fell by $0.98/bbl for Urals in the Mediterranean.

Firm demand in the midst of continued structural declines in refinery runs in Europe and steady exports from the US Gulf led the price increase on both sides of the Atlantic. The UK's diesel import demand was strong, affected by the closure of the Coryton refinery in June. A glitch at a unit at Shell's Pernis refinery in Rotterdam further clipped supply. US Gulf crack spreads were buoyed by ongoing diesel exports to Europe and Latin America, while a sharp increase in the Urals price brought about negative diesel margins in Mediterranean.

In the meantime, gasoil crack spreads in Singapore outperformed those in other regions amid comparatively weak Dubai prices, continued strong import demand from Australia, and Shell's closure of a 110 000 b/d crude unit at its Pulau Bukom refinery in Singapore.

Fuel oil markets weakened in July, with HSFO crack spreads widening in Europe by $3.73-5.46/bbl and a lesser $0.95/bbl in Singapore. Subdued demand for bunker fuel from ship-owners and Chinese independent refineries along with plentiful supply weighed on the fuel oil market.





LSWR cracked fuel price differentials in Singapore increased by $3.69/bbl while LSFO discounts to Brent widened by $2.03/bbl and by $3.48/bbl to Urals in the Mediterranean. Lower-than-anticipated Japanese summer power demand outweighed strong demand in Korea and the Middle East. In the meantime, the

switch of bunker-fuel sulphur content for the North American Emission Control Area to a maximum of 1%, from 1 August had little impact on crack spreads.

Spot Product Prices

(monthly and weekly averages, $/bbl)

	May	Jun	Jul	Jul-Jun Chg	Jul-Jun %	Week Commencing: 02 Jul	09 Jul	16 Jul	23 Jul	30 Jul	May	Jun	Jul
Rotterdam, Barges FOB											**Differential to North Sea D**		
Premium Unl 10 ppm	121.81	110.96	117.06	6.10	5.5	116.32	115.10	119.85	116.24	120.00	11.56	16.16	14.50
Naphtha	98.61	82.10	92.83	10.73	13.1	90.02	91.01	96.47	93.00	96.56	-11.64	-12.70	-9.74
Jet/Kerosene	126.61	112.62	120.10	7.47	6.6	116.72	117.26	122.91	122.07	124.30	16.36	17.82	17.53
ULSD 10ppm	127.17	115.59	123.81	8.22	7.1	121.45	121.56	126.81	124.74	126.23	16.92	20.79	21.25
Gasoil 0.1%	125.51	112.94	119.09	6.16	5.5	116.90	117.04	121.43	119.96	122.03	15.26	18.14	16.53
LSFO 1%	105.68	92.89	98.62	5.74	6.2	96.50	96.16	101.30	99.52	101.62	-4.57	-1.91	-3.94
HSFO 3.5%	97.89	86.80	90.83	4.03	4.6	88.69	88.05	93.31	92.09	93.79	-12.36	-8.00	-11.73
Mediterranean, FOB Cargoes											**Differential to Urals**		
Premium Unl 10 ppm	123.00	112.20	118.39	6.19	5.5	117.63	116.42	121.19	117.56	121.34	13.50	18.94	15.56
Naphtha	96.29	79.75	90.56	10.81	13.6	87.80	88.78	94.21	90.68	94.20	-13.21	-13.50	-12.27
Jet Aviation fuel	125.48	111.36	118.85	7.49	6.7	115.52	116.07	121.66	120.75	122.94	15.98	18.11	16.02
ULSD 10ppm	127.34	114.59	123.19	8.59	7.5	119.61	121.33	127.01	123.96	125.46	17.84	21.34	20.36
Gasoil 0.1%	124.11	111.39	118.31	6.92	6.2	115.68	116.11	120.96	119.46	121.09	14.61	18.14	15.48
LSFO 1%	107.25	93.70	99.80	6.10	6.5	97.38	97.33	102.58	100.81	102.91	-2.25	0.45	-3.03
HSFO 3.5%	97.43	86.08	90.20	4.11	4.8	87.90	87.49	92.76	91.43	93.13	-12.07	-7.17	-12.63
US Gulf, FOB Pipeline											**Differential to LLS**		
Super Unleaded	136.38	126.72	131.90	5.18	4.1	128.60	131.12	133.21	132.86	136.50	28.31	31.79	28.36
Unleaded	120.41	109.88	115.47	5.59	5.1	113.16	114.00	117.11	115.62	121.62	12.34	14.96	11.93
Jet/Kerosene	124.91	112.35	121.58	9.23	8.2	117.77	119.77	124.20	122.83	124.83	16.84	17.43	18.04
ULSD 10ppm	123.87	111.91	121.14	9.23	8.2	118.28	119.44	123.72	121.84	123.69	15.80	16.98	17.60
No. 6 3%*	98.56	86.97	91.58	4.61	5.3	88.39	88.83	94.06	93.34	94.11	-9.51	-7.95	-11.96
Singapore, FOB Cargoes											**Differential to Dubai**		
Premium Unleaded	121.61	104.50	113.35	8.85	8.5	107.11	110.28	116.77	116.98	120.95	14.29	10.17	14.16
Naphtha	98.56	81.04	91.33	10.29	12.7	87.28	90.02	95.00	92.24	95.14	-8.76	-13.29	-7.86
Jet/Kerosene	123.44	110.33	117.53	7.20	6.5	114.21	114.84	119.90	119.77	121.20	16.12	16.00	18.34
Gasoil 0.05%	124.95	111.95	119.27	7.31	6.5	115.78	117.14	121.60	121.13	122.72	17.63	17.63	20.08
LSWR Cracked	118.03	106.38	107.56	1.18	1.1	105.74	105.10	109.26	108.90	110.50	10.71	12.06	8.37
HSFO 180 CST	106.16	94.02	97.92	3.90	4.1	95.94	95.31	99.78	99.33	101.05	-1.16	-0.31	-1.27
HSFO 380 CST 4%	104.45	92.18	96.09	3.91	4.2	94.23	93.49	97.81	97.51	99.09	-2.87	-2.15	-3.10

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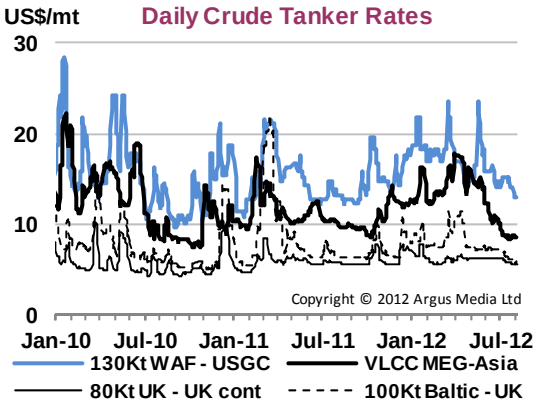
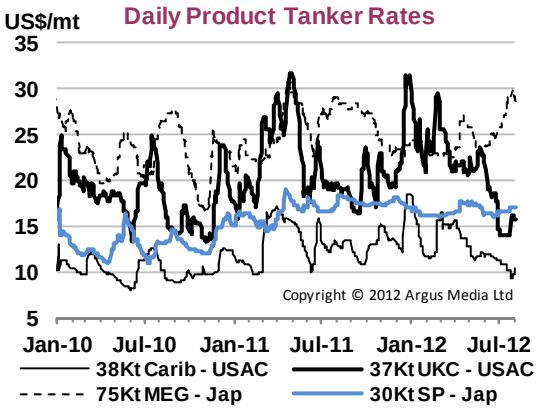
Freight





July crude tanker rates sank to their lowest levels since 4Q10 amid limited demand and stiff competition for cargoes among a bloated fleet. Rates on the benchmark VLCC Middle East Gulf – Japan route have collapsed steadily since their early-2Q12 highs and now stand at $8.50/mt, a fall of $1/mt from the

previous month. The impact of the softening has been amplified by bunker prices rising in line with international crude prices, which for some operators has once again translated into negative earnings. Not surprisingly then, there are now signs that rates may have found their floor and stabilised.

In the Suezmax market, limited US demand for light, sweet West African grades amid surging domestic light, tight oil production has limited demand for transatlantic cargoes. Although, European refiners have taken plenty of the 'backed out' barrels, this has not been enough to mop up excess tonnage and stop rates on the West Africa – US Gulf Coast route from weakening by over $1/mt over July to stand at under $13/mt by early-August. Even the normally stable Northwest European Aframax markets have weakened, as demand has remained seasonally weak. The Baltic – UK trade fared the worst, declining by $1.20/mt to under $6/mt by early August with reports indicating that supplies coming out of Primorsk and Ust Luga remained low.

In contrast, product tanker markets fared rather better. Notably, the Middle East Gulf – Japan trade surged by close to $3.50 to a high of nearly $20/mt in the last week of July as Japanese demand for carriers picked up and eventually available vessels became scarce. The last time such levels were reached was in 4Q08. In the Atlantic Basin, the transatlantic UK – US Atlantic Coast trade finally found a floor at $13.90/mt. Towards the end of the month the rate picked up as fundamentals tightened but by early-August the rate was once again on the way down after tonnage weighed heavy.

The activities of Iran's NITC fleet remain an important issue for tanker markets, with only a minority of other vessels able to call at Iranian ports or accept Iranian cargoes. Reports emerged over the past few weeks that due to insurance issues, Turkey is no longer lifting Iranian volumes shipped via Ain Sukhna and therefore will only accept crude delivered on NITC vessels. Iran has also offered to ship oil to Korea and India using its own carriers and this will therefore tighten the availability of its tonnage. Data indicate that Iran has recently offloaded 14 mb of floating storage, much of which is destined for Asia. There now remain 28 mb of Iranian crude stored on 12 VLCCs and 4 Suezmaxes. With land-based storage assumed to be brimming, it remains to be seen whether Iran is able to find outlets for its oil, either direct to customers or placing it into floating storage. It is understood that Iran has 6 VLCCs under construction in Chinese shipyards due to be delivered in 2012-13. The first vessel was due to be handed over towards the end of 1Q12, but this has not yet arrived. Nonetheless, absent further significant delays, Iran could soon have 12 mb of extra capacity to help deliver its oil.

REFINING

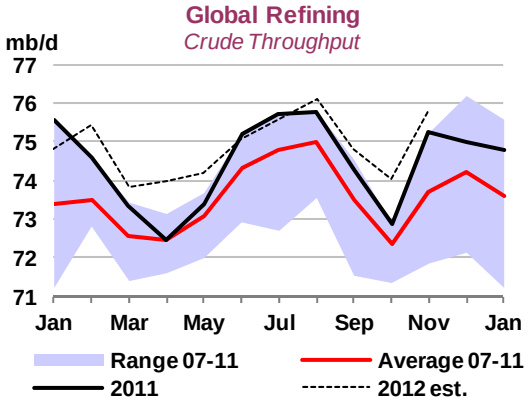
Summary

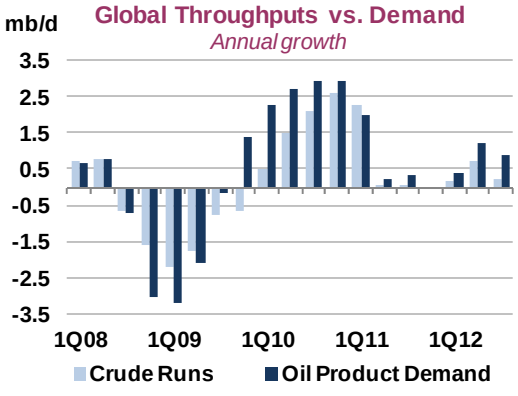
- **Global refinery crude throughput estimates for 3Q12 have been lowered by 0.3 mb/d** since last month's report, following signs of a slowdown in apparent Chinese oil product demand and refinery operations, and refinery outages in the US and Japan. Total crude runs are estimated at 75.5 mb/d for the quarter, 0.2 mb/d above a year earlier and 1.1 mb/d above the 2Q12 lull in throughputs.

- **2Q12 world crude runs are largely unchanged since last month's report, at 74.4 mb/d**, following offsetting changes to the OECD and non-OECD regions. While our OECD assessment has been lifted by 100 kb/d following upward adjustments to the Americas and Europe for May and Asia Oceania for June, lower than expected Chinese throughputs in June left global runs unchanged. 2Q12 throughputs posted annual gains of 0.7 mb/d.

- **OECD crude throughputs rose by 0.4 mb/d in June, to 37.1 mb/d, or 120 kb/d less than a year earlier**. Monthly gains were recorded in the US and to a lesser extent Europe, while Asia Oceania throughputs fell seasonally. Preliminary data indicate OECD runs continued to increase in July, despite US runs stabilising after several months of strong growth. Final May submissions came in 250 kb/d higher than preliminary data, lifting 2Q12 estimates by 100 kb/d since last month's report.

- **Refining profitability generally deteriorated in July, with the exception of Asia, as crude oil price increases largely outpaced gains in product prices.** Gasoline cracks fell in the Atlantic Basin as surplus products struggled to find markets. ULSD cracks remained firm and improved in Rotterdam and on the US Gulf Coast, while Mediterranean cracks fell back slightly. Most product cracks, except for fuel oil, improved in Singapore supported by a series of refinery outages.





Global Refinery Overview

Global refinery crude throughputs rose seasonally in June and July as refiners ramped up runs after completing maintenance and to meet peak summer transportation fuel demand. Global crude runs are forecast to rise further in August, to a seasonal peak of 76.1 mb/d, before falling back again in September with the onset of more turnarounds. The 3Q12 forecast has been lowered by 0.3 mb/d since last month's report, largely on a more pessimistic outlook for China and unscheduled refinery outages in the US and Japan, and are now seen averaging 75.5 mb/d. This is still 1.1 mb/d higher than 2Q12 global runs, estimates for which remain unchanged, at 74.4 mb/d.

2Q12 OECD runs were lifted by almost 100 kb/d, due to upward revisions for Europe and the Americas for May on receipt of official monthly data, and higher preliminary data for Asia Oceania for June. A

320 kb/d downward adjustment to Chinese crude intake in June provided an offset, however, leaving global runs unchanged.

Global Refinery Crude Throughput[1 2]

(million barrels per day)

	1Q2012	Apr 12	May 12	Jun 12	2Q2012	Jul 12	Aug 12	Sep 12	3Q2012	Oct 12	Nov 12
Americas	**17.7**	17.7	18.3	18.7	**18.2**	18.7	18.7	18.3	**18.6**	17.9	18.3
Europe	**12.0**	11.8	11.8	11.9	**11.9**	12.3	12.4	12.1	**12.2**	11.7	12.1
Asia Oceania	**7.0**	6.7	6.6	6.4	**6.6**	6.6	6.7	6.4	**6.6**	6.3	6.7
Total OECD	**36.7**	**36.1**	**36.7**	**37.1**	**36.6**	**37.6**	**37.7**	**36.9**	**37.4**	**35.9**	**37.0**
FSU	**6.6**	6.3	6.1	6.8	**6.4**	6.7	6.7	6.4	**6.6**	6.3	6.5
Non-OECD Europe	**0.4**	0.5	0.5	0.4	**0.5**	0.5	0.5	0.5	**0.5**	0.5	0.5
China	**9.2**	9.0	9.1	8.8	**9.0**	8.9	9.0	8.9	**8.9**	9.2	9.3
Other Asia	**9.3**	9.4	9.1	9.3	**9.3**	9.3	9.3	9.3	**9.3**	9.3	9.5
Latin America	**4.8**	4.8	4.7	4.6	**4.7**	4.8	4.7	4.7	**4.7**	4.7	4.7
Middle East	**5.5**	5.6	5.9	5.9	**5.8**	5.9	6.0	5.9	**5.9**	5.9	5.9
Africa	**2.1**	2.2	2.1	2.2	**2.2**	2.1	2.2	2.2	**2.2**	2.3	2.4
Total Non-OECD	**38.0**	**37.8**	**37.5**	**38.0**	**37.8**	**38.0**	**38.4**	**37.9**	**38.1**	**38.2**	**38.8**
Total	**74.7**	**74.0**	**74.2**	**75.1**	**74.4**	**75.6**	**76.1**	**74.8**	**75.5**	**74.0**	**75.8**

1 Preliminary and estimated runs based on capacity, known outages, economic run cuts and global demand forecast

2 From the report dated 10 August, 2012 OECD Americas include Chile and OECD Asia Oceania includes Israel.

Despite the recent weakness in Chinese refinery runs and the structural declines recorded in the OECD, global refinery activity has been posting relatively healthy growth so far this year. In 2Q12, annual growth averaged 740 kb/d globally, of which two-thirds came from non-OECD countries. Both India and Russia reported record high crude intake in June, driven in part by capacity expansions and refinery upgrades, supporting not only healthy domestic demand, but also allowing for high-quality fuel exports. Also US refiners have been able to maintain robust runs this year, these averaging some 0.3 mb/d more than in 1H11, and this despite refinery closures on the East Coast and lacklustre domestic demand. Product exports have been key to supporting US runs. In the January-May period of this year, US exports have surged almost 0.4 mb/d year-on-year, mostly targeting Latin America and Europe. Global growth is seen slowing to 0.2 mb/d in 3Q12, however, as structural decline is expected to resume in the OECD.

Refining profitability generally deteriorated in July, with the exception of Asia, as crude oil price increases largely outpaced gains in product prices. Gasoline cracks fell in the Atlantic Basin as surplus products struggled to find markets. ULSD cracks remained firm and improved slightly in Rotterdam and on the US Gulf Coast, while Mediterranean cracks fell back slightly. Most product cracks, except fuel oil, improved in Singapore, supported by a series of refinery outages. The OMR will resume refining margin reporting in September, after having reworked the models to incorporate new price data and updated yields.

OECD Refinery Throughput

OECD refinery throughputs for June rose almost 0.4 mb/d from a month earlier, largely in line with our previous forecast as slightly higher runs in Asia Oceania offset weaker-than-expected runs in Europe. The monthly increase stemmed almost entirely from the US, which saw crude intake 460 kb/d higher. Seasonal increases were also recorded in Europe, largely on account of higher French rates, though regional runs were 90 kb/d lower than expected, at 11.95 mb/d. Maintenance curbed Japanese utilisation rates further in June, taking regional runs to a seasonal low of 6.4 mb/d. Compared to a year earlier, only the Americas saw runs higher, despite the complete halt to refinery operations in the US Virgin Islands since last year with the closure of Hovensa's 500 kb/d St. Croix refinery over 2011 and

2012. European refinery runs stood 280 kb/d below year-earlier rates, with the closure of more than 0.8 mb/d of capacity since early 2011. OECD Asia Oceania's throughputs have largely recovered to year earlier levels, with robust South Korean throughputs supporting regional runs.

Refinery Crude Throughput and Utilisation in OECD Countries
(million barrels per day)

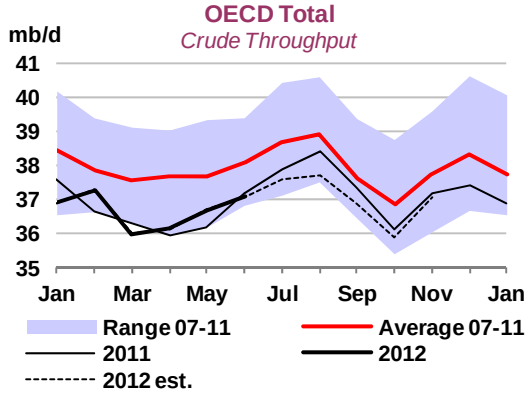
	Jan 12	Feb 12	Mar 12	Apr 12	May 12	Jun 12	Change from May 12	Change from Jun 11	Utilisation rate[1] Jun 12	Utilisation rate[1] Jun 11
US[2]	14.42	14.66	14.55	14.61	15.18	15.64	0.46	0.27	88.2%	87.7%
US Virgin Islands	0.27	0.19	0.00	0.00	0.00	0.00	0.00	-0.30	0.0%	86.6%
Canada	1.60	1.75	1.62	1.67	1.73	1.66	-0.08	0.12	90.3%	83.9%
Chile	0.16	0.15	0.16	0.15	0.17	0.17	-0.01	0.00	73.6%	74.3%
Mexico	1.21	1.25	1.18	1.22	1.21	1.25	0.04	0.11	76.0%	74.3%
OECD Americas	**17.66**	**18.01**	**17.51**	**17.66**	**18.29**	**18.71**	**0.42**	**0.19**	**87.3%**	**87.7%**
France	1.17	1.09	1.04	1.04	1.03	1.24	0.21	-0.11	79.3%	80.7%
Germany	1.93	1.91	1.80	1.91	1.88	1.80	-0.07	0.02	84.6%	83.8%
Italy	1.57	1.50	1.39	1.33	1.49	1.44	-0.05	-0.18	66.1%	74.4%
Netherlands	1.06	1.10	1.02	1.07	1.09	1.07	-0.02	0.03	83.0%	80.5%
Spain	1.09	1.15	1.08	1.05	1.01	1.10	0.09	0.04	72.8%	75.7%
United Kingdom	1.48	1.50	1.48	1.52	1.44	1.43	-0.01	-0.02	76.4%	77.7%
Other OECD Europe	3.85	3.92	3.79	3.89	3.90	3.86	-0.04	-0.06	78.0%	79.4%
OECD Europe	**12.14**	**12.16**	**11.61**	**11.80**	**11.84**	**11.95**	**0.11**	**-0.28**	**77.1%**	**79.0%**
Japan	3.45	3.49	3.47	3.31	3.00	2.90	-0.10	-0.03	63.1%	62.1%
South Korea	2.65	2.64	2.46	2.48	2.63	2.59	-0.05	0.07	94.6%	92.1%
Other Asia Oceania	0.99	1.00	0.94	0.90	0.93	0.94	0.01	-0.07	29.0%	82.4%
OECD Asia Oceania	**7.09**	**7.12**	**6.87**	**6.69**	**6.56**	**6.42**	**-0.13**	**-0.03**	**75.1%**	**74.4%**
OECD Total	**36.88**	**37.29**	**35.99**	**36.15**	**36.69**	**37.08**	**0.39**	**-0.12**	**81.5%**	**81.6%**

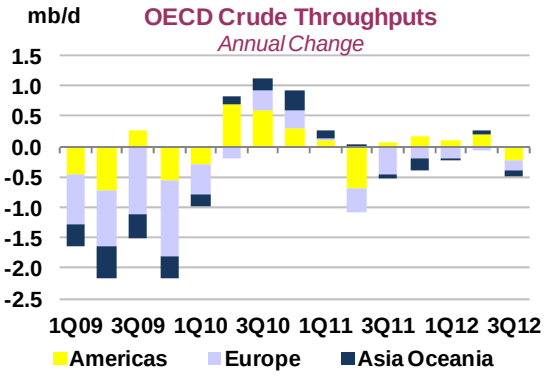
1 Expressed as a percentage, based on crude throughput and current operable refining capacity

2 US50

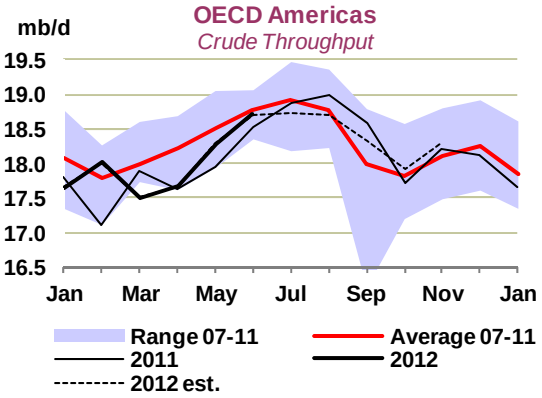
3 OECD Americas includes Chile and OECD Asia Oceania includes Israel. OECD Europe includes Slovenia and Estonia, though neither country has a refinery

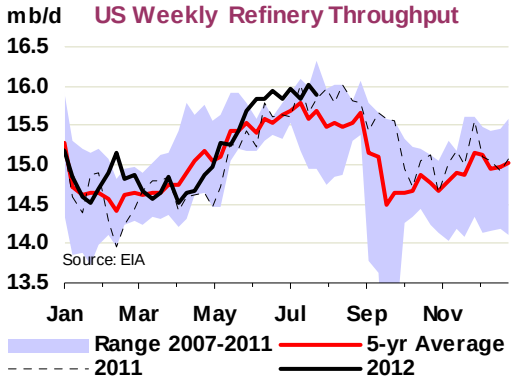
As highlighted elsewhere in this report, the OECD total now includes Chile, Israel, Estonia and Slovenia. The inclusion of Chile in the new OECD Americas aggregate adds 180 kb/d to OECD total throughputs in 2011, while the addition of Israel to the OECD Asia Oceania add another 240 kb/d. While Estonia and Slovenia have also been added to OECD Europe, neither country has any operating refineries. The inclusion of the above countries had little impact on the global throughput levels for 2011 and 2012 as the new monthly series were largely in line with our earlier assessments included in the non-OECD grouping. The 2010 total has been revised 27 kb/d lower on slightly lower Israeli throughputs. All comparisons with previous reports shown here involve the current regional compositions.





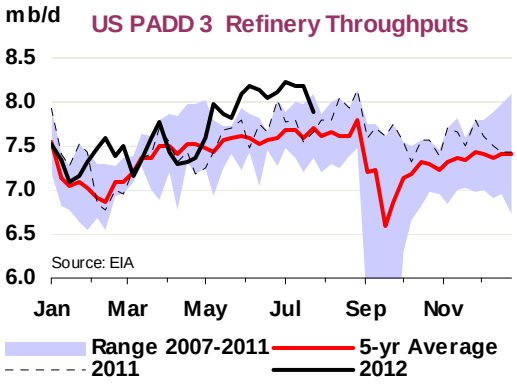
OECD Americas refinery crude intake rose 420 kb/d in June, to 18.7 mb/d, some 190 kb/d higher than a year earlier and 35 kb/d above our previous forecast. Higher US50 crude runs underpinned the increase, up another 460 kb/d, to 15.64 mb/d, and their highest since August 2007. Including other feedstocks, US refinery runs averaged 15.9 mb/d. All US regions lifted runs in June as maintenance wound down and peak summer driving demand materialised, though in absolute terms the largest rises came from the Gulf and West Coasts, which were both up 0.2 mb/d m-o-m. Preliminary data show **Canadian** runs 80 kb/d lower in June, due to maintenance at Imperial's Edmonton refinery and as a fire broke out at Co-op's 100 kb/d Regina refinery. The expansion of this latter plant by 30 kb/d is expected to be completed in 4Q12. **Mexican** and **Chilean** throughputs were largely unchanged from the previous month, though Mexican runs were 110 kb/d higher than a year earlier.

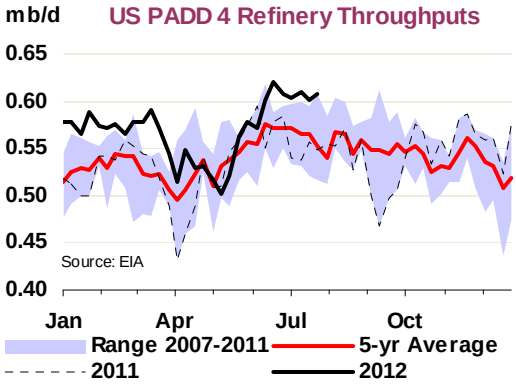




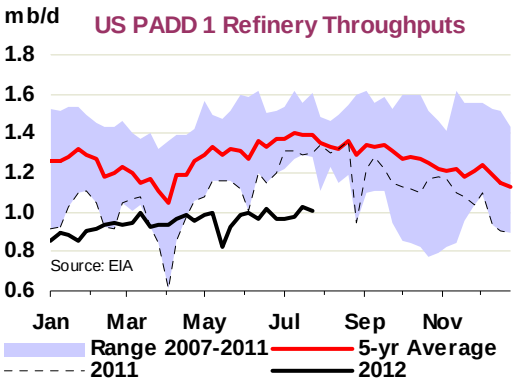
According to weekly data from the EIA, **US50** refinery crude intake was mostly unchanged in July, averaging 15.7 mb/d overall. US **Gulf Coast** throughputs initially increased further in the month, before falling back quite sharply in the week ending 27 July. In the same week, **Midwest** refinery runs surged to 3.6 mb/d, just shy of their previous record high. Throughputs in PADD4, or the **Rocky Mountain** region, were also at record highs in July, above 600 kb/d. The drop in Gulf Coast rates could be partly accounted for by the shutdown of Valero's 135 kb/d Meraux refinery after a fire on 22 July, while the company's Port Arthur refinery was also undergoing maintenance. The Meraux plant is expected to be offline until the end of August.

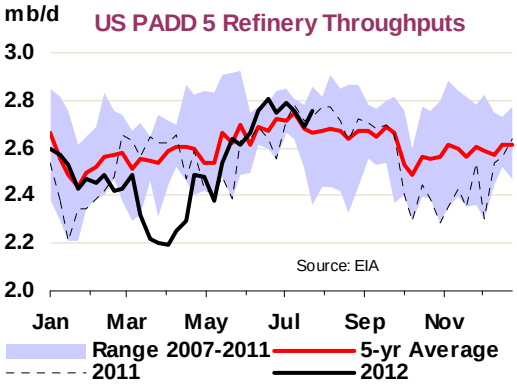
Motiva finally announced in July that the 325 kb/d expansion of its Port Arthur refinery in Texas would not come on stream until next year, following extensive corrosion damage and subsequent shutdown of the new unit in early June. Despite the delay, US Gulf Coast refinery runs have hovered well above year-earlier levels so far this summer, supported in large part by substantive product exports to Latin America and Europe. US oil product exports averaged 3.1 mb/d in the January to May period, 370 kb/d higher than a year earlier. Of this, more than 70% came from the Gulf Coast.





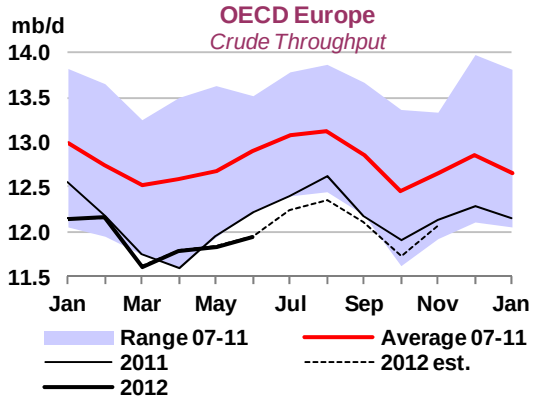
While **US East Coast** runs averaged only 1.0 mb/d in July, more than 300 kb/d less than a year earlier, refinery runs are expected to rise as ConocoPhillips' 185 kb/d Trainer refinery resumes operation in 3Q12. The plant, which shut in September 2011 due to poor margins, is currently undergoing maintenance and upgrades, after Delta Airlines finalised the deal to purchase the plant on 22 June. The EIA recently released a report updating its supply requirements for the Northeast market. The previously reported supply gap of 420 kb/d of products, which would have resulted from the shutdown of the three Philadelphia refineries, is now estimated at only 50 kb/d, as only the Marcus Hook refinery shut down while the Trainer and Philadelphia plants found buyers. Moreover, gasoline imports have also largely disappeared, with only ULSD imports required, as a result of higher demand expected due to New York state's requirement that all distillate fuel used for heating purposes should be ULSD from 1 July 2012.

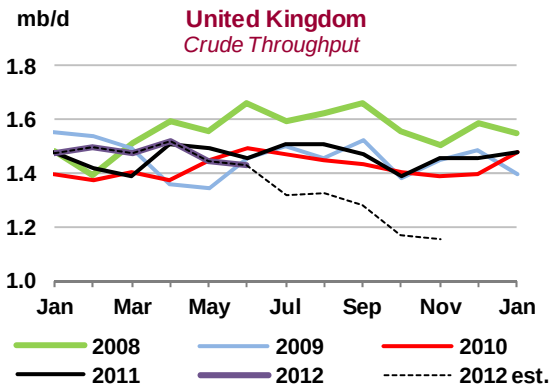




West Coast crude runs are expected to fall back from current levels in August due to a fire at Chevron's 245 kb/d Richmond refinery on 6 August. The fire, which started in the plant's only crude distillation unit, could force the plant to shut for several months. US West Coast refinery runs have just recently recovered from a prolonged outage at BP's Cherry Point refinery, also due to a fire.

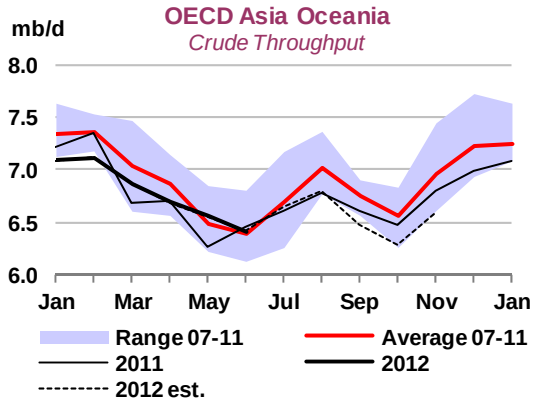
OECD European crude throughputs rose modestly in June, to 11.95 mb/d on average. A monthly increase in France of some 210 kb/d, supported by both improving margins and the return to service of Petroplus' Petit Couronne refinery mid-month, took runs to their highest level this year at 1.24 mb/d. The rise in France was partly offset by smaller declines in Greece, Germany, Italy and Poland. While regional runs are expected to rise seasonally in July and August, UK runs are forecast to drop markedly in the second half of this year. The permanent shutdown of Petroplus's 220 kb/d Coryton refinery in June will lower available capacity in coming months, as will the shutdown of one crude unit at Exxon's Fawley plant later this year. Furthermore, Valero recently announced it is planning an eight-week turnaround at its Pembroke refinery, starting in October.

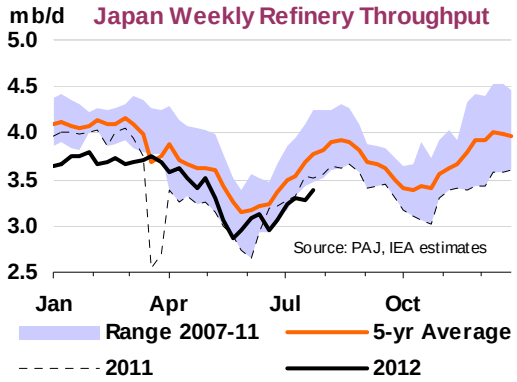




The regional total still stood some 280 kb/d below year earlier levels, due to a 0.8 mb/d reduction in refinery capacity since the beginning of 2011. This includes the latest shutdown of UK's 220 kb/d Coryton refinery in June, France's Reichstett and Berre l'Etang refinery in 2011 and early 2012, Germany's 260 kb/d Wilhelmshaven in 2011 and Tamoil's Cremona refinery in 2Q11. Capacity will be reduced further later this year, when Exxon shuts one crude unit at its Fawley refinery, and ERG closes the Rome refinery. France's Petit Couronne refinery could also close, once the tolling agreement with Shell runs out later this year, and if no buyer has been found.

Refinery throughputs in **OECD Asia Oceania** fell seasonally in June, to 6.4 mb/d, unchanged from the previous year. The 130 kb/d monthly decline, was nevertheless smaller than expected, lifting regional runs 100 kb/d from our previous report. Lower-than-normal seasonal maintenance in Japan, following the extensive shutdowns in the aftermath of the earthquake and tsunami in 2011, could be partly responsible. Robust runs in **South Korea** also contributed, the latter supported by strong internal demand. South Korea's oil demand rose 9.9% year-on-year in June according to Korea National Oil Corporation. Warmer weather underpinned oil use, while government efforts to rein in consumption have yet to take effect.

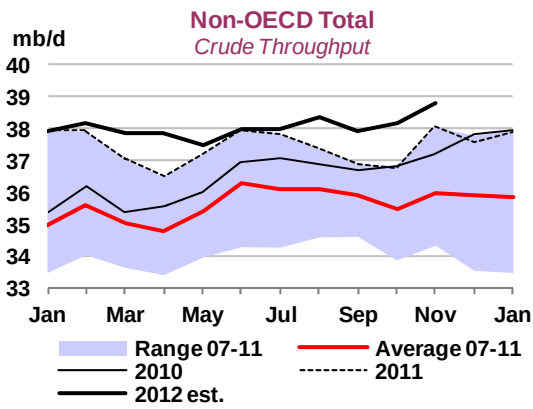


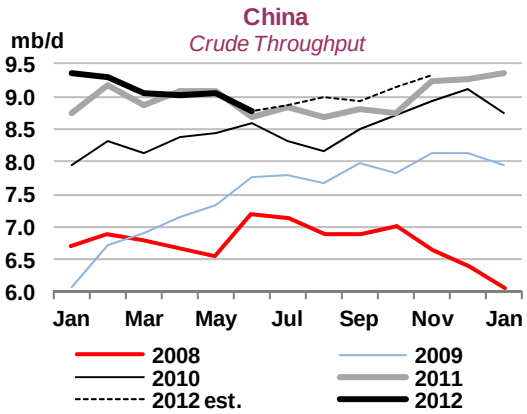


Weekly data from the Petroleum Association of Japan (PAJ) showed **Japanese** refinery runs rising in line with historical trends in July, as maintenance wound down further. By end-month, however, Japan looked set to lose 14% of its refining capacity due to unplanned shutdowns. Idemitsu Kosan shut its 220 kb/d Chiba refinery on 19 July due to a fire, but the plant restarted earlier than many had expected on 31 July. Also in July, JX Energy had to shut down its Mizushima-B plant due to the discovery of falsified maintenance records. The plant has a capacity of 205 kb/d of crude distillation as well as a 35 kb/d condensate splitter. We have excluded this capacity for the remainder of the forecast period. The shutdowns coincide with Cosmo's closure of its 220 kb/d Chiba refinery. The plant, which was already shut for maintenance over May and June, could be offline for several months after an asphalt leak into the sea was detected on 28 June. The refiner has to wait for results from investigations of the cause of the leak and approvals from local authorities before it can restart.

Non-OECD Refinery Throughput

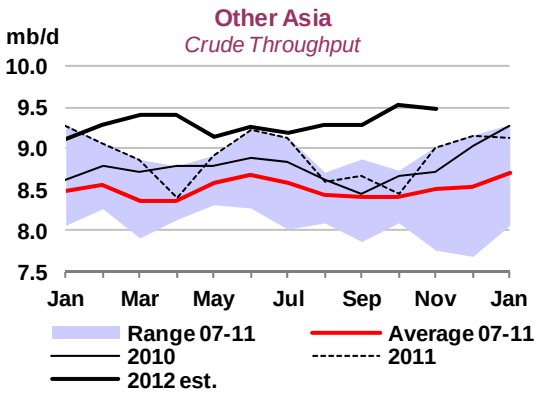
Non-OECD refinery throughput estimates have been lowered by 110 kb/d for 2Q12 and 240 kb/d for 3Q12, largely as a result of weaker than expected Chinese refinery runs in June and July and increasing evidence of a slowdown in the country's oil demand growth. We nevertheless expect Chinese crude intake to increase in coming months, though at a slower pace than previously assumed. Strong refinery runs in India and Russia in June and July, in part supported by strong export demand, still underpin growth in non-OECD refinery runs. Total non-OECD crude throughputs are seen posting annual gains of 0.5 mb/d and 0.7 mb/d in 2Q12 and 3Q12, to 37.8 mb/d and 38.1 mb/d, respectively.

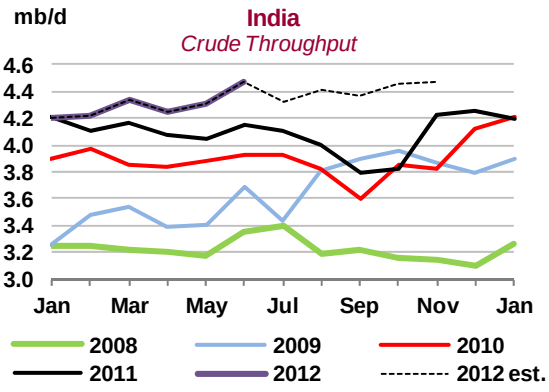




Chinese refinery intake fell unexpectedly in June, to only 8.8 mb/d, the lowest since October of last year, and 0.3 mb/d less than our previous forecast. While runs continued to be capped by maintenance shutdowns and weak margins, high inventories and faltering domestic demand further added downward pressure. In July, runs improved only marginally, to 8.9 mb/d, despite a sharp reduction in announced maintenance shutdowns. The latest decrease in retail prices on 11 June, the third so far this year, again cut into refinery profitability offsetting lower offline capacity. In the end, runs ultimately depend on domestic demand and if the demand slowdown proves more severe than forecast in this report or rebounds from current lows, Chinese crude runs are expected to follow accordingly. That said, Petrochina was expected to start the new 100 kb/d Hohot refinery in July or August, after completion in June, possibly providing some upside to current runs.

Other Asian refinery runs were revised slightly lower for May but higher for June, following the receipt of monthly data for a number of countries. May estimates were lowered 170 kb/d, mostly due to unaccounted-for maintenance in the **Philippines**. Shell's 110 kb/d Tabango refinery was assumed to be shut over April and May, but JODI data suggest the refinery was completely shut for all of May, with total runs averaging only 64 kb/d (from 194 kb/d in April). Also **Indonesian** runs were lower than expected.

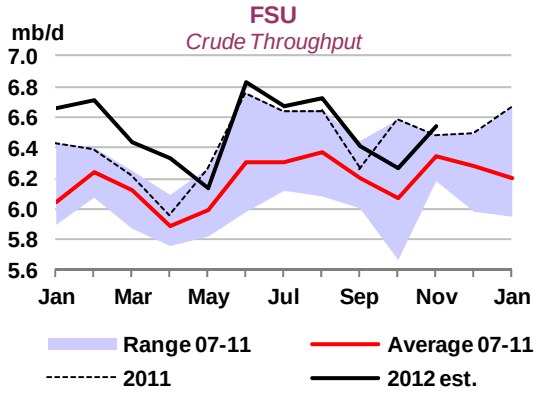


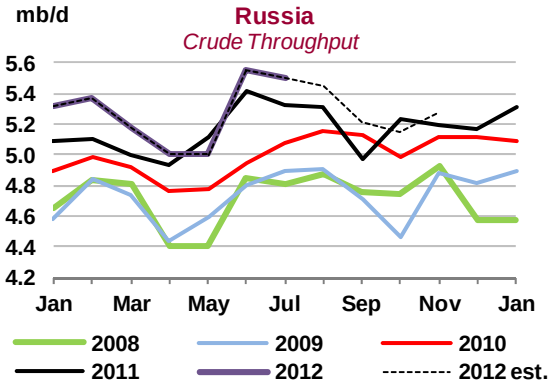


Regional throughput estimates were lifted for June as **Indian** refiners hit another record high, estimated at 4.5 mb/d. The monthly throughputs were some 7% above year-earlier levels and 85 kb/d higher than our forecast. While **Vietnam's** sole refinery resumed operations on 7 July, after a complete shutdown starting in May, the plant had to shut again unexpectedly in early August. Traders were as a result offering prompt Bach Ho crude supplies while looking to buy both gasoil and gasoline to fill the supply shortfall. Elsewhere, **Taiwan's** Mailiao refinery was reportedly reaching full capacity in mid-July after having completed safety checks on one of the plant's 180 kb/d units. In **Singapore**, Shell closed a 110 kb/d distillation unit at its Pulau Bukom refinery for 30 days from July.

In the **FSU**, official Ministry data confirmed Russia's record high throughputs of 5.6 mb/d in June, taking

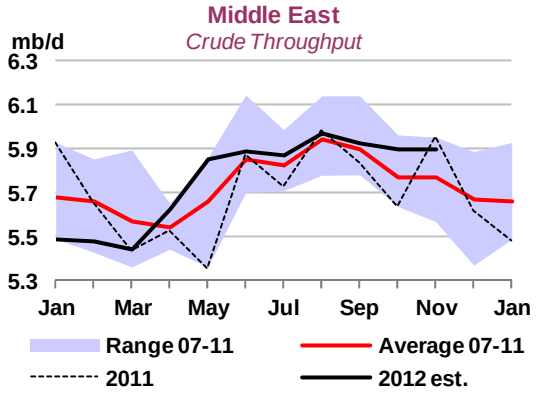
regional runs to 6.8 mb/d. **Russia**'s crude runs were up 550 kb/d from a month earlier and 140 kb/d above a year earlier. Furthermore, preliminary data for July were in line with previous estimates of 5.5 mb/d. High throughputs supported not only robust internal demand but also increasing product exports. According to Argus Media, Russia exported record volumes of EU specification diesel in July, due to lower tariffs and refinery upgrades allowing for higher low sulphur fuel production.

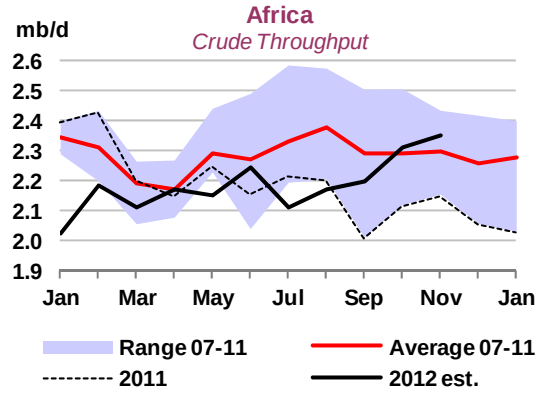




According to the Energy Ministry, companies are investing $30 billion to modernise 88 processing facilities over the 2012-2015 period. The upgrades include 40 gasoline and 30 diesel production units, as well as 18 catalytic crackers, reformers and hydrocrackers. According to the Ministry, ten new units are scheduled to start operations in 2012, with four already commissioned. These include gasoline hydrotreaters at Slavneft's Yaroslav and Gazprom Neft's Omsk plants, as well as diesel hydrotreaters at Surgutneftegas' Kirishi and Lukoil's Volgograd refineries.

Middle Eastern refinery crude run estimates are relatively unchanged for May and June, but have been lowered for the first quarter following a reassessment of **Iranian** crude runs. These are seen averaging 1.5 mb/d in the first quarter, but then rising to 1.6 mb/d in April, possibly due an 80 kb/d expansion of the Arak refinery, which we had expected in 2Q12. **Yemen's** Aden refinery reportedly resumed operations on 6 August, after a nine month closure due to lack of crude supplies. Flows through the Marib-Ras Issa pipeline had been halted since October last year, following a series of attacks. Despite nameplate capacity of 170 kb/d, the refinery is expected to process between 60 kb/d and 70 kb/d, in line with rates reached prior to the shutdown.





In **Africa**, **Libya** again delayed the restart of the 220 kb/d Ras Lanuf plant from July to August or September. We were assuming the plant to resume operation in October at the earliest and retain this forecast. Sonatrach shut **Algeria**'s largest refinery, the 335 kb/d Skikda plant, in July for a 15 day closure. The plant will be partially shut for up to six months. Meanwhile, **Morocco** reportedly commissioned a new 48 kb/d crude unit at its Mohammedia refinery in late July (in line with our capacity forecast).

Table 1
WORLD OIL SUPPLY AND DEMAND
(million barrels per day)

	2009	2010	1Q11	2Q11	3Q11	4Q11	2011	1Q12	2Q12	3Q12	4Q12	2012	1Q13	2Q13	3Q13	4Q13	2013
OECD DEMAND																	
Americas[1]	23.7	24.1	24.2	23.7	24.0	23.8	23.9	23.4	23.7	23.9	23.8	23.7	23.4	23.5	23.9	23.9	23.7
Europe[2]	14.7	14.7	14.3	14.2	14.8	14.2	14.4	13.8	13.8	14.4	14.0	14.0	13.6	13.5	14.2	13.9	13.8
Asia Oceania[3]	8.0	8.1	8.6	7.4	8.0	8.6	8.1	9.1	8.0	8.1	8.5	8.4	9.0	7.8	7.9	8.3	8.3
Total OECD	46.3	46.9	47.1	45.3	46.7	46.5	46.4	46.2	45.5	46.5	46.3	46.1	46.0	44.9	46.1	46.2	45.8
NON-OECD DEMAND																	
FSU	4.0	4.2	4.2	4.4	4.6	4.6	4.4	4.5	4.6	4.8	4.8	4.6	4.7	4.8	4.9	5.0	4.8
Europe	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
China	7.9	8.8	9.3	9.3	9.0	9.4	9.2	9.6	9.2	9.3	9.8	9.5	9.8	9.7	9.6	10.0	9.7
Other Asia	10.3	10.8	11.1	11.1	10.8	11.3	11.0	11.3	11.4	10.9	11.4	11.3	11.5	11.6	11.2	11.6	11.5
Latin America	5.7	6.0	6.0	6.2	6.4	6.3	6.2	6.2	6.3	6.5	6.4	6.4	6.3	6.5	6.7	6.6	6.5
Middle East	7.1	7.3	7.0	7.4	7.8	7.3	7.4	7.2	7.7	8.1	7.6	7.6	7.5	7.9	8.3	7.8	7.9
Africa	3.4	3.4	3.4	3.4	3.2	3.4	3.3	3.5	3.4	3.4	3.4	3.4	3.5	3.5	3.5	3.5	3.5
Total Non-OECD	39.1	41.2	41.6	42.3	42.5	43.0	42.4	42.9	43.3	43.7	44.1	43.5	43.9	44.7	44.9	45.2	44.7
Total Demand[4]	85.5	88.1	88.7	87.6	89.3	89.6	88.8	89.1	88.8	90.2	90.5	89.6	89.9	89.6	91.0	91.4	90.5
OECD SUPPLY																	
Americas[1,4]	13.6	14.1	14.3	14.3	14.5	15.3	14.6	15.6	15.6	15.5	15.9	15.7	16.0	16.1	16.1	16.6	16.2
Europe[2]	4.5	4.1	4.0	3.7	3.5	3.7	3.8	3.8	3.6	3.1	3.5	3.5	3.5	3.4	3.1	3.3	3.3
Asia Oceania[3]	0.6	0.7	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Total OECD	18.8	18.9	18.9	18.6	18.6	19.6	18.9	19.9	19.7	19.2	19.9	19.7	20.0	20.0	19.8	20.4	20.1
NON-OECD SUPPLY																	
FSU	13.3	13.5	13.6	13.6	13.5	13.6	13.6	13.7	13.7	13.5	13.7	13.7	13.7	13.6	13.5	13.6	13.6
Europe	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
China	3.8	4.1	4.2	4.2	4.0	4.0	4.1	4.2	4.1	4.1	4.2	4.2	4.2	4.2	4.2	4.2	4.2
Other Asia[5]	3.6	3.7	3.7	3.5	3.6	3.6	3.6	3.6	3.6	3.5	3.5	3.6	3.5	3.5	3.4	3.4	3.5
Latin America[5,7]	3.9	4.1	4.2	4.2	4.2	4.3	4.2	4.3	4.2	4.2	4.3	4.2	4.3	4.4	4.4	4.5	4.4
Middle East	1.7	1.7	1.8	1.7	1.7	1.5	1.6	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Africa[5]	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.4	2.3	2.3	2.3	2.3	2.3	2.3	2.4	2.4	2.3
Total Non-OECD	29.0	29.8	30.2	29.8	29.8	29.7	29.9	29.8	29.4	29.3	29.7	29.5	29.6	29.6	29.6	29.8	29.6
Processing Gains[6]	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.2	2.2	2.2	2.2	2.2
Global Biofuels[7]	1.6	1.8	1.5	1.9	2.2	1.8	1.9	1.6	1.8	2.2	1.9	1.9	1.6	2.0	2.4	2.1	2.0
Total Non-OPEC[5]	51.4	52.6	52.7	52.4	52.7	53.3	52.8	53.4	53.0	52.8	53.7	53.2	53.4	53.8	54.0	54.4	53.9
OPEC																	
Crude[8]	29.1	29.2	29.9	29.4	29.9	30.3	29.9	31.4	31.7								
NGLs	4.9	5.4	5.8	5.7	5.8	5.9	5.8	6.0	6.1	6.3	6.4	6.2	6.4	6.4	6.6	6.6	6.5
Total OPEC[5]	34.0	34.6	35.7	35.1	35.6	36.2	35.7	37.4	37.8								
Total Supply[9]	85.4	87.3	88.4	87.6	88.4	89.4	88.4	90.8	90.8								
STOCK CHANGES AND MISCELLANEOUS																	
Reported OECD																	
Industry	-0.1	0.1	-0.5	0.5	-0.1	-0.7	-0.2	0.4	0.3								
Government	0.1	0.0	0.0	0.0	-0.4	0.1	-0.1	0.0	0.0								
Total	0.0	0.1	-0.5	0.6	-0.5	-0.6	-0.3	0.4	0.3								
Floating Storage/Oil in Transit	0.3	-0.2	0.2	-0.2	-0.2	0.0	-0.1	-0.4	0.8								
Miscellaneous to balance[10]	-0.4	-0.8	0.0	-0.3	-0.1	0.5	0.0	1.7	0.9								
Total Stock Ch. & Misc	0.0	-0.9	-0.3	0.0	-0.9	-0.1	-0.3	1.7	2.0								
Memo items:																	
Call on OPEC crude + Stock ch.[11]	29.1	30.1	30.2	29.4	30.7	30.4	30.2	29.7	29.7	31.0	30.4	30.2	30.1	29.3	30.4	30.3	30.1
Adjusted Call on OPEC + Stock ch.[12]	28.8	29.3	30.2	29.1	30.6	30.9	30.2	31.3	30.6	31.2	30.6	30.9	30.3	29.5	30.6	30.5	30.2

1 As of August 2012 OMR, OECD Americas includes Chile.
2 As of August 2012 OMR, OECD Europe includes Estonia and Slovenia.
3 As of August 2012 OMR, OECD Asia Oceania includes Israel.
4 Measured as deliveries from refineries and primary stocks, comprises inland deliveries, international marine bunkers, refinery fuel, crude for direct burning, oil from non-conventional sources and other sources of supply.
5 Other Asia includes Indonesia throughout. Latin America excludes Ecuador throughout. Africa excludes Angola throughout.
Total Non-OPEC excludes all countries that were members of OPEC at 1 January 2009.
Total OPEC comprises all countries which were OPEC members at 1 January 2009.
6 Net volumetric gains and losses in the refining process and marine transportation losses.
7 As of the July 2010 OMR, Global Biofuels comprise all world biofuel production including fuel ethanol from the US and Brazil.
8 As of the March 2006 OMR, Venezuelan Orinoco heavy crude production is included within Venezuelan crude estimates. Orimulsion fuel remains within the OPEC NGL and non-conventional category, but Orimulsion production reportedly ceased from January 2007.
9 Comprises crude oil, condensates, NGLs, oil from non-conventional sources and other sources of supply.
10 Includes changes in non-reported stocks in OECD and non-OECD areas.
11 Equals the arithmetic difference between total demand minus total non-OPEC supply minus OPEC NGLs.
12 Equals the "Call on OPEC + Stock Ch." with "Miscellaneous to balance" added for historical periods and with an average of "Miscellaneous to balance" for the most recent 8 quarters added for forecast periods.

Table 1A
WORLD OIL SUPPLY AND DEMAND: CHANGES FROM LAST MONTH'S TABLE 1

(million barrels per day)

	2009	2010	1Q11	2Q11	3Q11	4Q11	2011	1Q12	2Q12	3Q12	4Q12	2012	1Q13	2Q13	3Q13	4Q13	2013
OECD DEMAND																	
Americas	-	-0.1	-	-	-	-	-	-0.1	0.2	-	-0.1	-	-0.1	-	-	-	-0.1
Europe	-	-	-	-	-	-	-	-	0.1	-	-	-	-0.1	-0.1	-0.1	-0.1	-0.1
Asia Oceania	-	-	-	-	-	-	-	0.1	0.2	0.1	-	0.1	-	0.1	0.1	0.1	0.1
Total OECD	-	-0.1	-	-0.1	-	-	-	-	0.4	0.1	-0.1	0.1	-0.2	-0.1	-	-0.1	-0.1
NON-OECD DEMAND																	
FSU	-	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-	-	-	-	-	0.1	0.1	-
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.4	-0.3	-0.3	-0.3	-0.3	-0.3	-0.4	-0.4	-0.4
Other Asia	-	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1
Latin America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Middle East	-	-0.1	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.1	-0.1	-0.1
Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Non-OECD	-0.1	-0.2	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.4	-0.4	-0.4	-0.4	-0.4	-0.2	-0.3	-0.3	-0.3
Total Demand	-0.1	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-	-0.3	-0.5	-0.3	-0.6	-0.3	-0.4	-0.4	-0.4
OECD SUPPLY																	
Americas	-	-	-	-	-	0.1	-	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	-	0.1
Europe	-	-	-	-	-	-	-	-	0.1	-	-	-	-	-	-	-	-
Asia Oceania	-	-	-	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-
Total OECD	-	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.1	0.1	0.1	-	0.1	-	-	-
NON-OECD SUPPLY																	
FSU	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Asia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Latin America	-	-	-	-	-	-	-	-	-	-0.1	-	-	-	-	-	-	-
Middle East	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.1	0.1	-
Total Non-OECD	-	-	-	-	-	-	-	-	-	-0.1	-	-	-0.1	-	-	-	-
Processing Gains	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Global Biofuels	-	-0.1	-	-	-0.1	-0.1	-	-	-0.1	-0.1	-0.1	-0.1	-0.1	-	-	-	-
Total Non-OPEC	-	-	-	0.1	-	-	-	-	0.1	-0.1	-0.1	-	-0.1	0.1	0.1	-	-
OPEC																	
Crude	-	-	-	0.1	-	0.1	-	0.1	-0.2								
NGLs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total OPEC	-	-	-	0.1	-	0.1	-	0.1	-0.2								
Total Supply	-	-	-	0.1	0.1	0.1	0.1	0.1	-								
STOCK CHANGES AND MISCELLANEOUS REPORTED OECD																	
Industry	-	-	-	-	-	-	-	-									
Government	-	-	-	-	-	-	-	-									
Total	-	-	-	-	-	-	-	-									
Floating Storage/Oil in Transit	-	-	-	-	-	-	-	-									
Miscellaneous to balance	0.1	0.3	0.4	0.5	0.3	0.4	0.4	0.3									
Total Stock Ch. & Misc	0.1	0.3	0.4	0.5	0.4	0.4	0.4	0.4	-0.1								
Memo items:																	
Call on OPEC crude + Stock ch.	-0.1	-0.3	-0.4	-0.4	-0.3	-0.3	-0.4	-0.3	-0.1	-0.2	-0.4	-0.3	-0.4	-0.4	-0.5	-0.4	-0.4
Adjusted Call on OPEC + Stock ch.	-	-	-	-	-	0.1	-	-	1.3	0.4	0.2	0.5	0.2	0.3	0.2	0.2	0.2

When submitting their monthly oil statistics, OECD Member countries periodically update data for prior periods. Similar updates to non-OECD data can occur.

Table 2

SUMMARY OF GLOBAL OIL DEMAND

	2010	1Q11	2Q11	3Q11	4Q11	2011	1Q12	2Q12	3Q12	4Q12	2012	1Q13	2Q13	3Q13	4Q13	2013
Demand (mb/d)																
Americas[1]	24.12	24.21	23.71	23.96	23.79	23.92	23.37	23.70	23.93	23.81	23.70	23.40	23.54	23.94	23.89	23.70
Europe[2]	14.70	14.30	14.20	14.78	14.18	14.37	13.78	13.81	14.40	14.01	14.00	13.56	13.54	14.23	13.93	13.82
Asia Oceania[3]	8.10	8.60	7.36	7.98	8.58	8.13	9.08	7.97	8.12	8.50	8.42	9.03	7.83	7.90	8.33	8.27
Total OECD	46.91	47.11	45.28	46.72	46.54	46.41	46.24	45.48	46.46	46.32	46.12	45.99	44.91	46.07	46.15	45.78
Asia	19.61	20.35	20.31	19.78	20.68	20.28	20.87	20.62	20.23	21.23	20.74	21.30	21.27	20.73	21.61	21.23
Middle East	7.34	6.98	7.40	7.83	7.35	7.39	7.19	7.65	8.08	7.57	7.62	7.47	7.89	8.32	7.81	7.87
Latin America	6.00	5.97	6.18	6.39	6.30	6.21	6.18	6.34	6.53	6.43	6.37	6.30	6.46	6.68	6.56	6.50
FSU	4.16	4.23	4.37	4.59	4.59	4.44	4.49	4.56	4.77	4.76	4.65	4.66	4.77	4.94	4.98	4.84
Africa	3.42	3.39	3.35	3.24	3.37	3.34	3.46	3.43	3.37	3.43	3.42	3.52	3.54	3.48	3.54	3.52
Europe	0.67	0.66	0.68	0.71	0.71	0.69	0.68	0.73	0.72	0.72	0.71	0.69	0.73	0.74	0.74	0.72
Total Non-OECD	41.21	41.58	42.29	42.53	43.01	42.35	42.86	43.33	43.70	44.15	43.51	43.94	44.65	44.89	45.23	44.69
World	88.12	88.68	87.57	89.25	89.55	88.77	89.10	88.81	90.16	90.46	89.64	89.93	89.56	90.97	91.39	90.47
of which: US50	19.18	19.17	18.82	18.89	18.71	18.90	18.41	18.71	18.94	18.84	18.73	18.44	18.63	18.96	18.89	18.73
Europe 5*	8.92	8.68	8.52	8.85	8.50	8.64	8.26	8.25	8.57	8.35	8.36	8.16	8.04	8.45	8.30	8.24
China	8.80	9.27	9.26	9.03	9.42	9.24	9.59	9.24	9.29	9.80	9.48	9.78	9.66	9.58	9.97	9.75
Japan	4.44	4.83	3.91	4.31	4.81	4.46	5.28	4.31	4.38	4.69	4.66	5.26	4.18	4.18	4.49	4.52
India	3.37	3.54	3.61	3.29	3.60	3.51	3.67	3.74	3.34	3.63	3.60	3.72	3.83	3.46	3.75	3.69
Russia	2.98	2.99	3.20	3.42	3.39	3.25	3.24	3.38	3.59	3.55	3.44	3.42	3.56	3.75	3.73	3.62
Brazil	2.71	2.67	2.75	2.87	2.85	2.79	2.79	2.82	2.91	2.89	2.85	2.83	2.87	2.97	2.95	2.91
Saudi Arabia	2.76	2.56	2.94	3.18	2.81	2.87	2.66	3.06	3.35	2.99	3.02	2.81	3.19	3.49	3.11	3.15
Canada	2.24	2.28	2.17	2.31	2.28	2.26	2.18	2.21	2.28	2.25	2.23	2.20	2.19	2.27	2.24	2.22
Korea	2.27	2.36	2.05	2.21	2.30	2.23	2.31	2.19	2.29	2.33	2.28	2.31	2.20	2.25	2.34	2.28
Mexico	2.08	2.11	2.12	2.14	2.16	2.13	2.11	2.14	2.10	2.09	2.11	2.11	2.10	2.10	2.12	2.11
Iran	1.84	1.84	1.79	1.78	1.78	1.80	1.83	1.82	1.72	1.71	1.77	1.80	1.77	1.72	1.73	1.75
Total	61.58	62.29	61.12	62.28	62.62	62.08	62.33	61.87	62.76	63.13	62.52	62.84	62.24	63.16	63.63	62.97
% of World	69.9%	70.2%	69.8%	69.8%	69.9%	69.9%	70.0%	69.7%	69.6%	69.8%	69.8%	69.9%	69.5%	69.4%	69.6%	69.6%
Annual Change (% per annum)																
Americas[1]	1.9	1.9	-1.4	-2.1	-1.6	-0.8	-3.5	-0.1	-0.1	0.1	-0.9	0.1	-0.7	0.0	0.4	0.0
Europe[2]	-0.3	-1.0	-1.2	-1.7	-5.1	-2.3	-3.6	-2.7	-2.6	-1.2	-2.5	-1.6	-1.9	-1.2	-0.6	-1.3
Asia Oceania[3]	1.8	0.7	-3.3	0.9	3.0	0.4	5.6	8.2	1.8	-1.0	3.6	-0.6	-1.8	-2.7	-2.0	-1.8
Total OECD	1.2	0.8	-1.6	-1.5	-1.9	-1.1	-1.8	0.4	-0.6	-0.5	-0.6	-0.5	-1.3	-0.8	-0.4	-0.7
Asia	7.7	6.6	2.8	2.9	1.5	3.4	2.5	1.5	2.3	2.7	2.2	2.1	3.2	2.5	1.8	2.4
Middle East	2.9	0.4	0.5	0.3	1.5	0.7	3.1	3.4	3.2	3.1	3.2	3.8	3.1	3.1	3.1	3.2
Latin America	5.6	3.8	3.1	4.0	3.2	3.5	3.4	2.6	2.2	2.0	2.5	2.0	1.9	2.3	2.1	2.1
FSU	3.2	3.5	8.6	7.6	7.5	6.8	6.2	4.4	3.9	3.9	4.6	3.9	4.5	3.7	4.5	4.2
Africa	1.8	-0.2	-4.2	-4.6	-0.9	-2.5	2.1	2.4	4.2	1.7	2.6	1.7	3.0	3.2	3.1	2.7
Europe	-3.0	-0.3	1.8	5.2	2.8	2.4	2.9	8.0	1.8	1.0	3.4	1.9	-0.2	2.7	2.4	1.7
Total Non-OECD	5.4	4.1	2.4	2.5	2.2	2.8	3.1	2.5	2.7	2.7	2.7	2.5	3.0	2.7	2.5	2.7
World	3.1	2.3	0.3	0.4	0.0	0.7	0.5	1.4	1.0	1.0	1.0	0.9	0.8	0.9	1.0	0.9
Annual Change (mb/d)																
Americas[1]	0.46	0.45	-0.33	-0.51	-0.39	-0.20	-0.84	-0.02	-0.03	0.02	-0.22	0.03	-0.16	0.01	0.09	-0.01
Europe[2]	-0.04	-0.15	-0.18	-0.25	-0.77	-0.34	-0.51	-0.39	-0.38	-0.16	-0.36	-0.22	-0.27	-0.17	-0.08	-0.18
Asia Oceania[3]	0.14	0.06	-0.25	0.07	0.25	0.03	0.49	0.61	0.15	-0.08	0.29	-0.06	-0.14	-0.22	-0.17	-0.15
Total OECD	0.57	0.37	-0.76	-0.69	-0.91	-0.50	-0.87	0.20	-0.26	-0.23	-0.29	-0.25	-0.57	-0.39	-0.16	-0.34
Asia	1.40	1.27	0.56	0.55	0.31	0.67	0.51	0.30	0.45	0.55	0.46	0.44	0.65	0.50	0.38	0.49
Middle East	0.21	0.03	0.04	0.02	0.11	0.05	0.21	0.25	0.25	0.22	0.23	0.27	0.24	0.25	0.23	0.25
Latin America	0.32	0.22	0.19	0.24	0.19	0.21	0.20	0.16	0.14	0.13	0.16	0.12	0.12	0.15	0.14	0.13
FSU	0.13	0.14	0.34	0.32	0.32	0.28	0.26	0.19	0.18	0.18	0.20	0.18	0.21	0.18	0.22	0.19
Africa	0.06	-0.01	-0.15	-0.16	-0.03	-0.09	0.07	0.08	0.14	0.06	0.09	0.06	0.10	0.11	0.11	0.09
Europe	-0.02	0.00	0.01	0.03	0.02	0.02	0.02	0.05	0.01	0.01	0.02	0.01	0.00	0.02	0.02	0.01
Total Non-OECD	2.10	1.65	0.99	1.02	0.92	1.14	1.29	1.05	1.17	1.14	1.16	1.08	1.32	1.20	1.08	1.17
World	2.66	2.02	0.24	0.33	0.01	0.64	0.42	1.24	0.90	0.91	0.87	0.83	0.75	0.81	0.92	0.83
Revisions to Oil Demand from Last Month's Report (mb/d)																
Americas[1]	0.32	0.35	0.33	0.33	0.33	0.33	0.32	0.54	0.38	0.30	0.38	0.28	0.33	0.36	0.33	0.33
Europe[2]	0.08	0.08	0.08	0.08	0.08	0.08	0.11	0.17	0.12	0.03	0.11	-0.03	-0.02	0.00	-0.01	-0.01
Asia Oceania[3]	0.25	0.25	0.24	0.28	0.27	0.26	0.31	0.41	0.36	0.26	0.33	0.29	0.33	0.32	0.33	0.32
Total OECD	0.65	0.68	0.65	0.70	0.68	0.68	0.74	1.12	0.86	0.59	0.83	0.54	0.65	0.69	0.66	0.63
Asia	0.04	0.01	0.02	0.02	0.02	0.02	0.02	-0.14	-0.22	-0.17	-0.13	-0.18	-0.14	-0.30	-0.35	-0.24
Middle East	-0.38	-0.48	-0.48	-0.49	-0.49	-0.49	-0.48	-0.44	-0.44	-0.41	-0.44	-0.44	-0.41	-0.40	-0.36	-0.40
Latin America	-0.38	-0.38	-0.37	-0.37	-0.37	-0.37	-0.38	-0.36	-0.37	-0.38	-0.37	-0.39	-0.37	-0.38	-0.39	-0.38
FSU	-0.16	-0.11	-0.11	-0.10	-0.10	-0.11	-0.11	-0.10	-0.03	-0.02	-0.06	-0.06	-0.02	0.07	0.08	0.02
Africa	0.02	0.00	0.00	0.00	0.00	0.00	0.00	-0.03	-0.04	-0.02	-0.02	0.00	-0.01	-0.01	0.02	0.00
Europe	-0.06	-0.06	-0.06	-0.05	-0.06	-0.06	-0.06	-0.01	-0.04	-0.05	-0.04	-0.04	-0.02	-0.03	-0.04	-0.03
Total Non-OECD	-0.91	-1.02	-0.99	-0.99	-0.99	-1.00	-1.01	-1.09	-1.15	-1.06	-1.08	-1.09	-0.97	-1.05	-1.03	-1.03
World	-0.26	-0.34	-0.34	-0.30	-0.31	-0.32	-0.27	0.03	-0.29	-0.48	-0.25	-0.55	-0.32	-0.36	-0.37	-0.40
Revisions to Oil Demand Growth from Last Month's Report (mb/d)																
World	-0.18	-0.06	-0.07	-0.08	-0.04	-0.06	0.07	0.37	0.01	-0.17	0.07	-0.28	-0.35	-0.08	0.11	-0.15

1 As of the August 2012 OMR, includes Chile.

2 As of the August 2012 OMR, includes Estonia and Slovenia.

3 As of the August 2012 OMR, includes Israel.

* France, Germany, Italy, Spain and UK

Table 2a

OECD REGIONAL OIL DEMAND[1]

(million barrels per day)

	2010	2011	2Q11	3Q11	4Q11	1Q12	Mar 12	Apr 12	May 12 [2]	Latest month vs. Apr 12	Latest month vs. May 11
Americas[1]											
LPG&Ethane	2.98	3.01	2.73	2.79	3.16	3.17	3.05	2.89	2.93	0.05	0.16
Naphtha	0.35	0.36	0.37	0.34	0.35	0.35	0.35	0.33	0.35	0.02	0.01
Motor Gasoline	10.64	10.39	10.52	10.56	10.29	10.15	10.38	10.54	10.69	0.15	0.27
Jet/Kerosene	1.67	1.67	1.70	1.73	1.62	1.61	1.65	1.58	1.62	0.04	-0.03
Gasoil/Diesel Oil	4.97	5.08	4.93	5.01	5.19	4.99	4.81	4.83	5.03	0.20	0.17
Residual Fuel Oil	0.96	0.91	0.93	0.82	0.86	0.81	0.88	0.81	0.67	-0.14	-0.22
Other Products	2.54	2.50	2.54	2.71	2.32	2.28	2.21	2.30	2.47	0.17	0.09
Total	24.12	23.92	23.71	23.96	23.79	23.37	23.33	23.29	23.78	0.49	0.45
Europe[2]											
LPG&Ethane	0.96	0.96	0.94	0.93	0.95	1.00	0.95	0.94	0.93	-0.01	0.04
Naphtha	1.27	1.17	1.19	1.13	1.08	1.27	1.27	1.22	1.06	-0.16	-0.10
Motor Gasoline	2.21	2.11	2.18	2.20	2.05	1.91	1.99	2.00	2.01	0.01	-0.15
Jet/Kerosene	1.23	1.24	1.25	1.34	1.18	1.09	1.11	1.18	1.22	0.05	-0.02
Gasoil/Diesel Oil	6.20	6.14	5.83	6.28	6.29	5.97	5.85	5.75	5.70	-0.05	-0.14
Residual Fuel Oil	1.31	1.26	1.25	1.27	1.22	1.21	1.16	1.11	1.10	-0.01	-0.14
Other Products	1.51	1.49	1.57	1.63	1.40	1.34	1.41	1.37	1.59	0.23	0.01
Total	14.70	14.37	14.20	14.78	14.18	13.78	13.74	13.56	13.61	0.05	-0.48
Asia Oceania[3]											
LPG&Ethane	0.86	0.85	0.81	0.80	0.88	0.99	0.96	0.81	0.83	0.02	0.04
Naphtha	1.71	1.71	1.57	1.75	1.73	1.78	1.66	1.56	1.71	0.14	0.09
Motor Gasoline	1.63	1.61	1.53	1.69	1.64	1.59	1.61	1.55	1.57	0.02	0.03
Jet/Kerosene	0.90	0.88	0.66	0.66	0.99	1.19	1.03	0.72	0.60	-0.12	0.02
Gasoil/Diesel Oil	1.69	1.70	1.59	1.68	1.79	1.80	1.81	1.63	1.71	0.08	0.15
Residual Fuel Oil	0.79	0.79	0.68	0.79	0.86	1.00	0.97	0.92	0.91	-0.01	0.27
Other Products	0.51	0.59	0.51	0.60	0.70	0.73	0.75	0.74	0.73	-0.01	0.22
Total	8.10	8.13	7.36	7.98	8.58	9.08	8.81	7.93	8.06	0.13	0.83
OECD											
LPG&Ethane	4.81	4.82	4.48	4.52	4.99	5.17	4.97	4.64	4.70	0.06	0.25
Naphtha	3.33	3.24	3.12	3.23	3.17	3.40	3.28	3.12	3.12	0.00	0.00
Motor Gasoline	14.47	14.12	14.23	14.45	13.98	13.65	13.98	14.09	14.27	0.18	0.15
Jet/Kerosene	3.81	3.79	3.62	3.74	3.78	3.88	3.80	3.48	3.45	-0.04	-0.03
Gasoil/Diesel Oil	12.87	12.91	12.36	12.96	13.28	12.77	12.47	12.21	12.44	0.22	0.18
Residual Fuel Oil	3.07	2.96	2.86	2.88	2.93	3.02	3.01	2.84	2.68	-0.16	-0.09
Other Products	4.56	4.58	4.62	4.94	4.41	4.35	4.37	4.41	4.80	0.39	0.33
Total	46.91	46.41	45.28	46.72	46.54	46.24	45.88	44.79	45.46	0.67	0.80

1 Demand, measured as deliveries from refineries and primary stocks, comprises inland deliveries, international bunkers and refinery fuel. It includes crude for direct burning, oil from non-conventional sources and other sources of supply. Jet/kerosene comprises jet kerosene and non-aviation kerosene. Gasoil comprises diesel, light heating oil and other gasoils. North America comprises US 50 states, US territories, Mexico and Canada.

2 Latest official OECD submissions (MOS).

3 As of the August 2012 OMR, includes Chile.

4 As of the August 2012 OMR, includes Estonia and Slovenia.

5 As of the August 2012 OMR, includes Israel.

Table 2b

OIL DEMAND IN SELECTED OECD COUNTRIES[1]

(million barrels per day)

										Latest month vs.	
	2010	2011	2Q11	3Q11	4Q11	1Q12	Mar 12	Apr 12	May 12 [2]	Apr 12	May 11
United States[3]											
LPG	2.17	2.18	1.96	1.99	2.31	2.38	2.24	2.07	2.16	0.08	0.16
Naphtha	0.26	0.26	0.27	0.25	0.26	0.26	0.25	0.24	0.27	0.02	0.01
Motor Gasoline	8.99	8.74	8.87	8.89	8.61	8.49	8.64	8.84	8.99	0.16	0.21
Jet/Kerosene	1.45	1.44	1.49	1.50	1.39	1.36	1.39	1.37	1.42	0.05	-0.02
Gasoil	3.80	3.85	3.75	3.78	3.92	3.76	3.52	3.66	3.74	0.08	0.09
Residual Fuel Oil	0.54	0.48	0.51	0.36	0.43	0.42	0.42	0.40	0.28	-0.12	-0.18
Other Products	1.97	1.93	1.97	2.12	1.77	1.75	1.64	1.77	1.91	0.14	0.08
Total	19.18	18.90	18.82	18.89	18.71	18.41	18.08	18.36	18.77	0.42	0.35
Japan											
LPG	0.48	0.50	0.50	0.45	0.52	0.63	0.62	0.50	0.52	0.02	0.04
Naphtha	0.78	0.73	0.67	0.75	0.72	0.73	0.70	0.64	0.70	0.06	0.02
Motor Gasoline	1.00	0.98	0.92	1.04	1.00	0.96	0.99	0.94	0.93	-0.01	0.00
Jet/Kerosene	0.55	0.53	0.36	0.34	0.62	0.83	0.71	0.42	0.32	-0.11	0.01
Diesel	0.44	0.44	0.42	0.44	0.47	0.45	0.48	0.42	0.43	0.01	0.05
Other Gasoil	0.40	0.37	0.33	0.33	0.39	0.45	0.43	0.33	0.32	-0.01	0.02
Residual Fuel Oil	0.39	0.44	0.36	0.47	0.52	0.60	0.59	0.56	0.54	-0.01	0.19
Other Products	0.39	0.47	0.36	0.49	0.58	0.64	0.64	0.58	0.61	0.03	0.25
Total	4.44	4.46	3.91	4.31	4.81	5.28	5.16	4.39	4.37	-0.02	0.58
Germany											
LPG	0.11	0.10	0.10	0.11	0.09	0.10	0.11	0.11	0.09	-0.02	0.00
Naphtha	0.39	0.37	0.38	0.36	0.33	0.39	0.36	0.37	0.36	-0.01	-0.03
Motor Gasoline	0.45	0.45	0.47	0.46	0.45	0.42	0.44	0.44	0.43	-0.01	-0.06
Jet/Kerosene	0.18	0.18	0.19	0.19	0.17	0.16	0.17	0.17	0.19	0.02	0.00
Diesel	0.64	0.67	0.67	0.71	0.68	0.64	0.68	0.66	0.68	0.02	-0.02
Other Gasoil	0.45	0.38	0.25	0.44	0.43	0.36	0.25	0.28	0.31	0.03	0.02
Residual Fuel Oil	0.15	0.14	0.14	0.14	0.14	0.14	0.14	0.13	0.13	0.00	0.00
Other Products	0.09	0.10	0.11	0.12	0.11	0.06	0.08	0.07	0.11	0.04	0.00
Total	2.47	2.40	2.31	2.53	2.41	2.27	2.22	2.23	2.30	0.07	-0.10
Italy											
LPG	0.11	0.10	0.08	0.08	0.11	0.12	0.09	0.09	0.08	-0.01	0.01
Naphtha	0.10	0.08	0.09	0.07	0.07	0.07	0.09	0.08	0.06	-0.02	-0.02
Motor Gasoline	0.24	0.23	0.23	0.23	0.22	0.18	0.20	0.19	0.21	0.01	-0.02
Jet/Kerosene	0.09	0.09	0.09	0.11	0.08	0.07	0.07	0.08	0.09	0.01	0.00
Diesel	0.49	0.50	0.52	0.51	0.50	0.43	0.47	0.44	0.48	0.03	-0.04
Other Gasoil	0.12	0.11	0.09	0.10	0.13	0.11	0.10	0.08	0.09	0.01	0.00
Residual Fuel Oil	0.14	0.13	0.13	0.15	0.12	0.13	0.12	0.12	0.10	-0.01	-0.02
Other Products	0.24	0.22	0.23	0.21	0.20	0.18	0.18	0.21	0.20	-0.01	-0.03
Total	1.54	1.45	1.46	1.47	1.43	1.30	1.32	1.29	1.30	0.01	-0.12
France											
LPG	0.12	0.10	0.09	0.08	0.11	0.13	0.12	0.09	0.09	-0.01	0.00
Naphtha	0.14	0.14	0.15	0.14	0.13	0.15	0.15	0.15	0.15	0.00	-0.01
Motor Gasoline	0.18	0.18	0.20	0.19	0.17	0.15	0.16	0.17	0.17	0.00	-0.02
Jet/Kerosene	0.15	0.15	0.15	0.16	0.15	0.14	0.14	0.14	0.14	0.00	0.00
Diesel	0.68	0.69	0.71	0.70	0.69	0.67	0.69	0.70	0.67	-0.03	-0.03
Other Gasoil	0.30	0.27	0.19	0.28	0.27	0.33	0.26	0.23	0.20	-0.03	0.02
Residual Fuel Oil	0.09	0.08	0.08	0.08	0.09	0.09	0.08	0.08	0.07	-0.01	-0.01
Other Products	0.17	0.17	0.19	0.20	0.16	0.14	0.13	0.13	0.18	0.05	-0.01
Total	1.83	1.79	1.76	1.84	1.75	1.80	1.72	1.69	1.67	-0.02	-0.06
United Kingdom											
LPG	0.14	0.13	0.15	0.13	0.12	0.13	0.13	0.12	0.13	0.00	0.00
Naphtha	0.03	0.03	0.03	0.02	0.02	0.03	0.03	0.02	0.02	-0.01	-0.01
Motor Gasoline	0.36	0.34	0.35	0.33	0.33	0.33	0.36	0.35	0.31	-0.04	-0.03
Jet/Kerosene	0.33	0.32	0.31	0.33	0.32	0.30	0.31	0.32	0.33	0.01	0.03
Diesel	0.45	0.45	0.45	0.45	0.47	0.45	0.47	0.49	0.42	-0.06	-0.03
Other Gasoil	0.12	0.12	0.11	0.13	0.11	0.11	0.12	0.11	0.12	0.01	0.01
Residual Fuel Oil	0.07	0.06	0.06	0.06	0.06	0.05	0.05	0.05	0.05	0.00	-0.01
Other Products	0.15	0.15	0.16	0.16	0.14	0.15	0.15	0.14	0.14	0.01	-0.01
Total	1.63	1.61	1.62	1.62	1.57	1.54	1.61	1.60	1.52	-0.08	-0.04
Canada											
LPG	0.34	0.37	0.34	0.35	0.38	0.32	0.34	0.37	0.34	-0.03	0.00
Naphtha	0.08	0.08	0.08	0.08	0.07	0.09	0.10	0.09	0.08	-0.01	0.01
Motor Gasoline	0.74	0.74	0.74	0.78	0.75	0.75	0.79	0.83	0.76	-0.07	0.02
Jet/Kerosene	0.11	0.11	0.11	0.13	0.11	0.13	0.14	0.11	0.09	-0.02	-0.01
Diesel	0.23	0.25	0.25	0.23	0.25	0.25	0.27	0.28	0.26	-0.02	0.03
Other Gasoil	0.31	0.30	0.25	0.32	0.32	0.29	0.28	0.21	0.28	0.07	-0.01
Residual Fuel Oil	0.10	0.09	0.08	0.08	0.09	0.09	0.11	0.07	0.09	0.02	0.00
Other Products	0.32	0.32	0.32	0.35	0.30	0.27	0.30	0.29	0.30	0.01	-0.01
Total	2.24	2.26	2.17	2.31	2.28	2.18	2.33	2.24	2.20	-0.04	0.04

1 Demand, measured as deliveries from refineries and primary stocks, comprises inland deliveries, international bunkers and refinery fuel. It includes crude for direct burning, oil from non-conventional sources and other sources of supply. Jet/kerosene comprises jet kerosene and non-aviation kerosene. Gasoil comprises diesel, light heating oil and other gasoils.

2 Latest official OECD submissions (MOS).

3 US figures exclude US territories.

Table 3
WORLD OIL PRODUCTION
(million barrels per day)

	2011	2012	2013	1Q12	2Q12	3Q12	4Q12	1Q13	May 12	Jun 12	Jul 12
OPEC											
Crude Oil											
Saudi Arabia	9.04			9.65	9.73				9.70	9.70	9.70
Iran	3.62			3.37	3.14				3.20	3.00	2.90
Iraq	2.67			2.69	2.92				2.94	2.91	3.02
UAE	2.50			2.61	2.65				2.65	2.66	2.68
Kuwait	2.24			2.42	2.45				2.44	2.46	2.46
Neutral Zone	0.59			0.60	0.60				0.60	0.60	0.60
Qatar	0.74			0.75	0.74				0.75	0.73	0.75
Angola	1.66			1.77	1.76				1.80	1.71	1.62
Nigeria	2.18			2.06	2.16				2.16	2.16	2.16
Libya	0.46			1.30	1.40				1.42	1.38	1.35
Algeria	1.18			1.16	1.16				1.18	1.16	1.16
Ecuador	0.50			0.48	0.48				0.48	0.48	0.48
Venezuela	2.50			2.51	2.50				2.49	2.51	2.51
Total Crude Oil[6]	29.88			31.36	31.68				31.81	31.46	31.39
Total NGLs[1,6]	5.78	6.22	6.50	6.05	6.13	6.33	6.35	6.38	6.13	6.13	6.33
Total OPEC[6]	35.65			37.41	37.81				37.94	37.59	37.72
OPEC: Historical Composition[6]	35.65			37.41	37.81				37.94	37.59	37.72
NON-OPEC[2]											
OECD											
Americas	14.60	15.66	16.22	15.59	15.60	15.52	15.93	16.05	15.64	15.50	15.57
United States[5]	8.13	8.89	9.30	8.85	8.90	8.77	9.03	9.12	8.93	8.90	8.87
Mexico	2.94	2.89	2.77	2.92	2.94	2.88	2.83	2.81	2.95	2.94	2.92
Canada	3.51	3.86	4.13	3.80	3.75	3.85	4.05	4.10	3.76	3.64	3.77
Chile											
Europe	3.77	3.49	3.32	3.80	3.57	3.10	3.50	3.48	3.57	3.40	3.16
UK	1.11	0.96	0.91	1.11	0.97	0.80	0.97	1.00	0.95	0.91	0.87
Norway	2.04	1.92	1.83	2.09	1.98	1.70	1.93	1.89	2.02	1.86	1.68
Others	0.61	0.61	0.58	0.61	0.61	0.60	0.60	0.59	0.59	0.63	0.61
Pacific	0.57	0.52	0.53	0.52	0.52	0.54	0.52	0.49	0.50	0.54	0.54
Australia	0.48	0.44	0.45	0.43	0.44	0.46	0.44	0.41	0.42	0.46	0.47
Others	0.09	0.08	0.07	0.09	0.08	0.08	0.08	0.08	0.08	0.08	0.08
Total OECD	18.93	19.67	20.07	19.91	19.69	19.15	19.95	20.02	19.71	19.43	19.27
NON-OECD											
Former USSR	13.58	13.67	13.62	13.73	13.67	13.54	13.75	13.72	13.65	13.69	13.73
Russia	10.60	10.71	10.66	10.71	10.68	10.71	10.73	10.72	10.69	10.66	10.68
Others	2.98	2.97	2.96	3.01	2.99	2.83	3.02	3.01	2.96	3.03	3.04
Asia	7.69	7.71	7.69	7.79	7.67	7.67	7.72	7.73	7.75	7.60	7.68
China	4.10	4.16	4.23	4.18	4.10	4.14	4.21	4.21	4.19	4.02	4.11
Malaysia	0.66	0.67	0.66	0.70	0.67	0.66	0.65	0.67	0.67	0.66	0.66
India	0.91	0.91	0.89	0.90	0.91	0.91	0.92	0.91	0.90	0.92	0.93
Indonesia	0.93	0.87	0.81	0.90	0.88	0.85	0.84	0.84	0.88	0.86	0.85
Others	1.08	1.11	1.09	1.12	1.12	1.11	1.10	1.09	1.12	1.13	1.11
Europe	0.14	0.14	0.13	0.14	0.14	0.14	0.13	0.13	0.14	0.14	0.14
Latin America	4.23	4.24	4.39	4.28	4.15	4.20	4.31	4.27	4.18	4.12	4.11
Brazil[5]	2.19	2.22	2.38	2.26	2.12	2.20	2.29	2.28	2.14	2.13	2.15
Argentina	0.69	0.66	0.62	0.68	0.67	0.65	0.65	0.62	0.68	0.64	0.64
Colombia	0.92	0.95	1.01	0.93	0.94	0.94	0.98	0.99	0.94	0.94	0.92
Others	0.43	0.41	0.39	0.41	0.42	0.41	0.40	0.39	0.41	0.42	0.41
Middle East[3]	1.65	1.46	1.48	1.40	1.45	1.50	1.48	1.46	1.46	1.47	1.48
Oman	0.89	0.91	0.95	0.89	0.91	0.93	0.92	0.92	0.94	0.91	0.90
Syria	0.33	0.16	0.14	0.17	0.16	0.16	0.16	0.15	0.16	0.16	0.17
Yemen	0.23	0.19	0.20	0.14	0.18	0.21	0.21	0.21	0.16	0.20	0.21
Others	0.20	0.19	0.19	0.20	0.20	0.19	0.19	0.19	0.20	0.20	0.19
Africa	2.60	2.32	2.34	2.45	2.28	2.28	2.27	2.28	2.26	2.28	2.28
Egypt	0.74	0.73	0.72	0.74	0.74	0.73	0.73	0.73	0.74	0.74	0.73
Gabon	0.25	0.26	0.26	0.26	0.25	0.26	0.26	0.26	0.25	0.26	0.26
Others	1.61	1.33	1.36	1.45	1.29	1.29	1.28	1.29	1.28	1.29	1.29
Total Non-OECD	29.88	29.53	29.64	29.79	29.37	29.32	29.67	29.60	29.44	29.30	29.41
Processing Gains[4]	2.11	2.14	2.18	2.14	2.11	2.16	2.13	2.18	2.10	2.16	2.17
Global Biofuels[5]	1.87	1.87	2.02	1.57	1.82	2.16	1.94	1.61	1.89	1.94	2.16
TOTAL NON-OPEC[6]	52.78	53.21	53.91	53.40	52.98	52.79	53.68	53.41	53.15	52.83	53.01
Non-OPEC: Historical Composition[6]	52.78	53.21	53.91	53.40	52.98	52.79	53.68	53.41	53.15	52.83	53.01
TOTAL SUPPLY	88.44			90.81	90.80				91.10	90.42	90.74

1 Includes condensates reported by OPEC countries, oil from non-conventional sources, e.g. Venezuelan Orimulsion (but not Orinoco extra-heavy oil), and non-oil inputs to Saudi Arabian MTBE. Orimulsion production reportedly ceased from January 2007.
2 Comprises crude oil, condensates, NGLs and oil from non-conventional sources
3 Includes small amounts of production from Israel, Jordan and Bahrain.
4 Net volumetric gains and losses in refining and marine transportation losses.
5 As of the July 2010 OMR, Global Biofuels comprise all world biofuel production including fuel ethanol from the US and Brazil.
6 Total OPEC comprises all countries which were OPEC members at 1 January 2009. OPEC Historical Composition comprises countries which were OPEC members at that point in time. Total Non-OPEC excludes all countries that were OPEC members at 1 January 2009. Non-OPEC Historical Composition excludes countries that were OPEC members at that point in time.
7 As of the August 2012 OMR, includes Chile.
8 As of the August 2012 OMR, includes Estonia and Slovenia.
9 As of the August 2012 OMR, includes Israel.

Table 4

OECD INDUSTRY STOCKS[1] AND QUARTERLY STOCK CHANGES

	RECENT MONTHLY STOCKS[2] in Million Barrels					PRIOR YEARS' STOCKS[2] in Million Barrels			STOCK CHANGES in mb/d			
	Feb2012	Mar2012	Apr2012	May2012	Jun2012*	Jun2009	Jun2010	Jun2011	3Q2011	4Q2011	1Q2012	2Q2012
OECD Americas												
Crude	486.0	502.5	511.5	515.1	512.9	477.6	504.2	502.3	-0.35	-0.04	0.39	0.11
Motor Gasoline	267.5	256.1	246.4	241.5	242.0	245.3	248.7	249.7	0.02	0.09	-0.04	-0.15
Middle Distillate	216.2	206.9	198.2	193.0	189.3	240.0	234.6	216.1	0.16	-0.04	-0.22	-0.19
Residual Fuel Oil	44.1	43.8	42.3	42.9	46.4	45.2	51.7	44.4	-0.01	-0.02	0.02	0.03
Total Products[3]	681.0	666.0	655.6	659.7	672.5	723.8	707.3	674.6	0.30	-0.12	-0.28	0.07
Total[4]	1325.4	1331.0	1330.5	1345.4	1354.2	1364.0	1367.2	1337.1	0.04	-0.34	0.23	0.25
OECD Europe												
Crude	300.5	309.8	312.4	310.8	309.6	345.3	340.4	318.1	-0.11	-0.24	0.26	0.00
Motor Gasoline	97.0	94.0	94.2	90.7	88.3	94.0	97.1	92.7	-0.04	0.07	-0.01	-0.06
Middle Distillate	274.0	274.7	268.2	257.4	248.4	287.7	289.6	270.7	-0.12	0.13	0.03	-0.29
Residual Fuel Oil	82.4	82.3	77.5	79.6	81.5	97.6	100.3	87.2	0.00	-0.04	-0.01	-0.01
Total Products[3]	572.3	569.7	560.3	546.9	537.6	586.8	597.1	566.0	-0.10	0.14	0.00	-0.35
Total[4]	943.2	951.3	944.3	928.0	918.5	1001.3	1006.6	952.6	-0.25	-0.08	0.32	-0.36
OECD Asia Oceania												
Crude	162.3	155.0	165.2	172.0	168.8	170.2	166.4	159.9	-0.02	-0.02	-0.01	0.15
Motor Gasoline	23.9	25.4	26.1	26.6	25.8	26.0	26.2	25.3	0.00	-0.03	0.04	0.00
Middle Distillate	54.7	54.6	59.5	62.9	61.5	62.3	57.7	67.1	0.01	-0.08	-0.07	0.08
Residual Fuel Oil	20.1	19.6	20.2	20.3	19.8	18.9	20.9	21.3	-0.01	-0.01	0.01	0.00
Total Products[3]	153.1	152.2	161.8	167.0	166.0	164.7	168.0	171.9	0.11	-0.19	-0.13	0.15
Total[4]	386.7	377.2	402.5	415.6	410.9	400.9	405.2	405.9	0.08	-0.25	-0.14	0.37
Total OECD												
Crude	948.8	967.3	989.0	997.9	991.3	993.1	1011.0	980.3	-0.48	-0.30	0.64	0.26
Motor Gasoline	388.4	375.5	366.6	358.8	356.1	365.3	372.0	367.6	-0.02	0.13	-0.02	-0.21
Middle Distillate	544.9	536.1	525.8	513.3	499.3	590.0	582.0	553.9	0.05	0.02	-0.26	-0.40
Residual Fuel Oil	146.5	145.7	139.9	142.8	147.7	161.7	172.9	152.9	-0.03	-0.07	0.02	0.02
Total Products[3]	1406.5	1388.0	1377.8	1373.6	1376.1	1475.3	1472.4	1412.5	0.31	-0.17	-0.41	-0.13
Total[4]	2655.3	2659.5	2677.4	2689.0	2683.5	2766.2	2779.0	2695.5	-0.13	-0.66	0.41	0.26

OECD GOVERNMENT-CONTROLLED STOCKS[5] AND QUARTERLY STOCK CHANGES

	RECENT MONTHLY STOCKS[2] in Million Barrels					PRIOR YEARS' STOCKS[2] in Million Barrels			STOCK CHANGES in mb/d			
	Feb2012	Mar2012	Apr2012	May2012	Jun2012*	Jun2009	Jun2010	Jun2011	3Q2011	4Q2011	1Q2012	2Q2012
OECD Americas												
Crude	696.0	696.0	696.0	696.0	696.0	724.1	726.6	726.5	-0.33	0.00	0.00	0.00
Products	1.0	1.0	1.0	1.0	1.0	2.0	2.0	0.0	0.00	0.01	0.00	0.00
OECD Europe												
Crude	188.2	189.1	189.7	188.7	191.0	186.7	185.4	184.9	-0.02	0.04	0.03	0.02
Products	235.0	234.7	234.3	235.2	234.8	241.9	239.5	241.1	-0.01	-0.02	-0.04	0.00
OECD Asia Oceania												
Crude	393.6	393.6	393.5	393.5	393.5	389.1	390.9	391.1	0.00	0.03	0.00	0.00
Products	19.7	20.0	20.0	20.0	20.0	19.2	20.0	20.0	-0.01	0.01	0.00	0.00
Total OECD												
Crude	1277.7	1278.6	1279.1	1278.1	1280.4	1299.9	1302.9	1302.5	-0.36	0.07	0.03	0.02
Products	255.7	255.7	255.3	256.2	255.8	263.1	261.5	261.2	-0.03	0.00	-0.03	0.00
Total[4]	1534.9	1535.8	1535.7	1535.6	1537.4	1564.6	1565.7	1565.0	-0.38	0.07	-0.01	0.02

* estimated

1 Stocks are primary national territory stocks on land (excluding utility stocks and including pipeline and entrepot stocks where known) and include stocks held by industry to meet IEA, EU and national emergency reserve commitments and are subject to government control in emergencies.

2 Closing stock levels.

3 Total products includes gasoline, middle distillates, fuel oil and other products.

4 Total includes NGLs, refinery feedstocks, additives/oxygenates and other hydrocarbons.

5 Includes government-owned stocks and stock holding organisation stocks held for emergency purposes.

Table 5
TOTAL STOCKS ON LAND IN OECD COUNTRIES[1]

('millions of barrels' and 'days')

	End June 2011		End September 2011		End December 2011		End March 2012		End June 2012 [3]	
	Stock Level	Days Fwd[2] Demand	Stock Level	Days Fwd Demand	Stock Level	Days Fwd Demand	Stock Level	Days Fwd Demand	Stock Level	Days Fwd Demand
OECD Americas										
Canada	177.2	75	176.0	78	177.9	80	172.5	-	-	-
Chile	10.2	31	11.5	35	9.9	29	10.5	-	-	-
Mexico	46.5	22	46.1	21	44.4	21	44.8	-	-	-
United States[4]	1807.6	96	1780.9	95	1752.1	96	1778.0	-	-	-
Total[4]	2063.6	86	2036.7	86	2006.4	86	2027.9	86	2051.1	86
OECD Asia Ocenia										
Australia	39.9	39	38.8	37	40.1	39	38.2	-	-	-
Israel	-	-	-	-	-	-	-	-	-	-
Japan	593.2	138	601.1	125	588.5	111	579.5	-	-	-
Korea	175.2	79	173.6	75	166.8	72	164.0	-	-	-
New Zealand	8.7	61	8.7	56	8.3	52	9.0	-	-	-
Total	817.0	102	822.2	96	803.7	88	790.8	99	824.4	101
OECD Europe[5]										
Austria	22.9	82	21.3	81	22.6	92	22.1	-	-	-
Belgium	38.1	58	36.7	58	36.4	56	34.8	-	-	-
Czech Republic	21.7	105	20.1	105	20.7	114	20.2	-	-	-
Denmark	21.5	134	22.4	138	22.4	142	21.4	-	-	-
Estonia	1.2	43	1.2	47	1.3	48	1.2	-	-	-
Finland	27.2	134	26.4	130	29.2	149	29.9	-	-	-
France	166.7	91	160.0	92	165.0	92	164.7	-	-	-
Germany	286.3	113	276.9	115	278.6	123	281.2	-	-	-
Greece	32.6	97	30.9	93	27.9	79	29.1	-	-	-
Hungary	17.3	118	16.2	112	15.4	125	17.2	-	-	-
Ireland	10.2	74	11.3	77	10.7	84	11.7	-	-	-
Italy	147.4	100	147.6	103	145.7	113	147.9	-	-	-
Luxembourg	0.6	10	0.7	11	0.6	10	0.5	-	-	-
Netherlands	119.4	115	115.9	116	103.0	104	121.1	-	-	-
Norway	23.5	91	24.5	92	25.9	106	29.1	-	-	-
Poland	64.6	105	65.2	110	64.5	124	64.5	-	-	-
Portugal	23.3	86	21.9	90	21.9	90	20.9	-	-	-
Slovak Republic	8.9	100	8.3	99	8.5	110	9.0	-	-	-
Slovenia	4.7	82	4.8	84	4.5	81	4.8	-	-	-
Spain	130.1	94	131.2	97	132.8	99	134.3	-	-	-
Sweden	32.5	105	32.6	108	31.5	109	29.6	-	-	-
Switzerland	37.2	138	37.0	140	35.7	138	35.3	-	-	-
Turkey	56.6	71	56.4	80	55.8	80	57.4	-	-	-
United Kingdom	85.4	53	84.7	54	87.8	57	88.6	-	-	-
Total	1379.9	93	1354.1	95	1348.5	98	1376.6	100	1345.5	93
Total OECD	4260.5	91	4213.0	91	4158.5	90	4195.2	92	4220.9	91
DAYS OF IEA Net Imports[6]	-	147	-	144	-	143	-	144	-	-

1 Total Stocks are industry and government-controlled stocks (see breakdown in table below). Stocks are primary national territory stocks on land (excluding utility stocks and including pipeline and entrepot stocks where known) they include stocks held by industry to meet IEA, EU and national emergency reserves commitments and are subject to government control in emergencies.
2 Note that days of forward demand represent the stock level divided by the forward quarter average daily demand and is very different from the days of net imports used for the calculation of IEA Emergency Reserves.
3 End June 2012 forward demand figures are IEA Secretariat forecasts.
4 US figures exclude US territories. Total includes US territories.
5 Data not available for Iceland.
6 Reflects stock levels and prior calendar year's net imports adjusted according to IEA emergency reserve definitions (see www.iea.org/netimports.asp). Net exporting IEA countries are excluded.

TOTAL OECD STOCKS

CLOSING STOCKS	Total	Government[1] controlled	Industry	Total	Government[1] controlled	Industry
	Millions of Barrels			*Days of Fwd. Demand*[2]		
2Q2009	4331	1565	2766	95	34	60
3Q2009	4353	1568	2785	93	34	60
4Q2009	4232	1568	2664	91	34	57
1Q2010	4270	1571	2699	93	34	59
2Q2010	4345	1566	2779	92	33	59
3Q2010	4322	1553	2769	91	33	58
4Q2010	4257	1565	2693	90	33	57
1Q2011	4209	1562	2648	93	35	59
2Q2011	4261	1565	2696	91	33	58
3Q2011	4213	1530	2683	91	33	58
4Q2011	4159	1536	2622	90	33	57
1Q2012	4195	1536	2659	92	34	58
2Q2012	4221	1537	2683	91	33	58

1 Includes government-owned stocks and stock holding organisation stocks held for emergency purposes.
2 Days of forward demand calculated using actual demand except in 2Q2012 (when latest forecasts are used).

Table 6

IEA MEMBER COUNTRY DESTINATIONS OF SELECTED CRUDE STREAMS[1]

(million barrels per day)

	2009	2010	2011	2Q11	3Q11	4Q11	1Q12	Mar 12	Apr 12	May 12	Year Earlier May 11	Year Earlier change
Saudi Light & Extra Light												
Americas	0.52	0.69	0.69	0.72	0.47	0.85	0.84	0.84	0.83	0.87	0.81	0.06
Europe	0.59	0.66	0.83	0.79	0.93	0.88	0.76	0.71	0.84	0.79	0.79	0.00
Asia Oceania	1.28	1.21	1.24	1.14	1.21	1.27	1.37	1.48	1.26	1.21	1.10	0.12
Saudi Medium												
Americas	0.40	0.36	0.37	0.36	0.40	0.40	0.47	0.42	0.49	0.45	0.38	0.07
Europe	0.02	0.00	0.02	0.02	0.05	0.01	0.05	0.09	0.08	0.08	0.02	0.06
Asia Oceania	0.34	0.34	0.40	0.38	0.43	0.40	0.46	0.52	0.47	0.43	0.40	0.03
Saudi Heavy												
Americas	0.03	0.02	0.02	0.03	0.03	0.01	-	-	0.30	0.03	0.04	-0.01
Europe	0.02	0.00	0.01	0.00	0.03	0.03	0.04	0.07	0.12	0.10	0.00	0.10
Asia Oceania	0.15	0.22	0.20	0.21	0.23	0.18	0.21	0.23	0.16	0.20	0.18	0.03
Iraqi Basrah Light[2]												
Americas	0.40	0.36	0.29	0.41	0.31	0.21	0.39	0.40	0.33	0.71	0.38	0.33
Europe	0.12	0.09	0.11	0.10	0.19	0.11	0.14	0.10	0.06	0.08	0.14	-0.06
Asia Oceania	0.24	0.29	0.34	0.26	0.38	0.32	0.26	0.27	0.28	0.28	0.22	0.07
Iraqi Kirkuk												
Americas	0.06	0.03	0.07	0.07	0.05	0.06	0.06	0.04	0.07	0.05	0.03	0.02
Europe	0.31	0.27	0.27	0.31	0.32	0.26	0.20	0.18	0.29	0.18	0.20	-0.02
Asia Oceania	-	-	-	-	-	-	-	-	-	-	-	-
Iranian Light												
Americas	-	-	-	-	-	-	-	-	-	-	-	-
Europe	0.15	0.24	0.23	0.28	0.20	0.21	0.25	0.27	0.19	0.08	0.19	-0.12
Asia Oceania	0.07	0.04	0.04	0.03	0.04	0.03	0.03	0.02	0.04	0.01	0.04	-0.03
Iranian Heavy[3]												
Americas	-	-	-	-	-	-	-	-	-	-	-	-
Europe	0.40	0.49	0.55	0.59	0.73	0.54	0.33	0.29	0.22	0.23	0.59	-0.36
Asia Oceania	0.57	0.52	0.51	0.41	0.51	0.49	0.48	0.38	0.40	0.25	0.37	-0.13
Venezuelan Light & Medium												
Americas	0.39	0.14	0.18	0.30	0.24	0.13	0.07	0.16	0.19	0.26	0.37	-0.11
Europe	0.07	0.02	0.02	0.01	0.02	0.02	0.01	-	-	-	-	-
Asia Oceania	-	-	-	-	-	-	0.01	-	-	0.02	-	-
Venezuelan 22 API and heavier												
Americas	0.75	0.86	0.76	0.77	0.70	0.69	0.68	0.75	0.68	0.55	0.71	-0.16
Europe	0.07	0.06	0.05	0.05	0.06	0.05	0.08	0.11	0.08	0.08	0.04	0.04
Asia Oceania	-	-	-	-	-	-	-	-	-	-	-	-
Mexican Maya												
Americas	0.93	0.91	0.82	0.80	0.84	0.84	0.72	0.69	0.68	0.75	0.89	-0.14
Europe	0.10	0.11	0.12	0.12	0.12	0.12	0.12	0.10	0.15	0.13	0.13	0.00
Asia Oceania	-	-	-	-	-	-	-	-	-	-	-	-
Mexican Isthmus												
Americas	0.01	0.04	0.07	0.08	0.06	0.07	0.04	0.05	0.07	0.01	0.01	0.00
Europe	0.01	0.02	0.01	0.02	0.00	0.01	0.02	0.03	0.05	0.06	0.05	0.02
Asia Oceania	-	-	-	-	-	-	-	-	-	-	-	-
Russian Urals												
Americas	0.15	0.08	0.01	-	-	0.02	-	-	-	0.02	-	-
Europe	1.72	1.80	1.69	1.86	1.51	1.61	1.75	1.63	1.72	1.86	1.95	-0.09
Asia Oceania	-	-	-	-	-	-	-	-	-	-	-	-
Nigerian Light[4]												
Americas	0.54	0.60	0.53	0.60	0.43	0.46	0.25	0.32	0.31	0.22	0.63	-0.42
Europe	0.32	0.34	0.45	0.40	0.54	0.48	0.51	0.32	0.56	0.44	0.52	-0.08
Asia Oceania	0.00	-	0.05	0.04	0.06	0.05	0.03	0.03	0.06	0.12	0.06	0.06
Nigerian Medium												
Americas	0.21	0.25	0.18	0.18	0.18	0.14	0.04	0.11	0.07	0.15	0.08	0.07
Europe	0.13	0.09	0.14	0.17	0.11	0.13	0.26	0.26	0.26	0.27	0.12	0.15
Asia Oceania	-	-	-	-	-	-	-	-	-	-	-	-

1 Data based on monthly submissions from IEA countries to the crude oil import register (in '000 bbl), subject to availability. May differ from Table 8 of the Report.
IEA Americas includes United States and Canada.
IEA Europe includes all countries in OECD Europe except Estonia, Hungary and Slovenia.
IEA Asia Oceania includes Australia, New Zealand, Korea and Japan.

2 Iraqi Total minus Kirkuk.

3 Iranian Total minus Iranian Light.

4 33° API and lighter (e.g., Bonny Light, Escravos, Qua Iboe and Oso Condensate).

Table 7
REGIONAL OECD IMPORTS[1,2]
(thousand barrels per day)

	2009	2010	2011	2Q11	3Q11	4Q11	1Q12	Mar-12	Apr-12	May-12	Year Earlier May-11	Year Earlier % change
Crude Oil												
Americas	7541	7496	6876	7110	6983	6668	6151	6276	6146	6467	6975	-7%
Europe	8893	9072	8985	8846	9331	8903	9119	8873	8934	9060	8940	1%
Asia Oceania	6311	6472	6609	6325	6498	6730	6994	6658	7026	6838	5883	16%
Total OECD	22746	23039	22470	22281	22812	22301	22264	21807	22105	22365	21958	2%
LPG												
Americas	43	34	33	37	35	20	20	30	18	32	52	-38%
Europe	261	285	309	286	305	328	300	278	264	293	251	17%
Asia Oceania	537	565	568	554	587	553	658	724	661	553	549	1%
Total OECD	840	884	910	877	928	902	978	1033	944	878	852	3%
Naphtha												
Americas	22	36	42	51	43	38	15	9	33	27	62	-57%
Europe	336	399	272	313	266	238	399	324	434	312	304	3%
Asia Oceania	849	907	884	837	914	861	839	729	839	806	882	-9%
Total OECD	1207	1343	1198	1202	1223	1137	1253	1061	1306	1145	1248	-8%
Gasoline[3]												
Americas	884	801	761	990	714	654	674	692	785	763	1119	-32%
Europe	206	187	222	229	220	213	280	285	124	210	270	-22%
Asia Oceania	111	84	94	81	91	113	95	121	129	89	75	19%
Total OECD	1200	1073	1078	1300	1026	980	1049	1098	1038	1063	1464	-27%
Jet & Kerosene												
Americas	62	76	77	88	83	67	42	36	56	69	79	-13%
Europe	449	418	396	365	449	449	290	268	386	291	301	-3%
Asia Oceania	60	46	56	49	51	61	77	86	27	48	37	28%
Total OECD	571	539	530	502	584	577	408	390	468	408	417	-2%
Gasoil/Diesel												
Americas	91	100	73	67	67	61	68	83	35	40	45	-13%
Europe	1063	1071	1042	965	981	1101	1026	1118	866	674	953	-29%
Asia Oceania	92	104	147	159	154	171	170	210	170	171	139	23%
Total OECD	1246	1275	1262	1191	1202	1333	1264	1412	1071	885	1137	-22%
Heavy Fuel Oil												
Americas	271	277	268	304	196	228	220	249	180	216	179	20%
Europe	489	464	536	541	624	550	631	550	457	562	603	-7%
Asia Oceania	116	118	153	112	170	182	221	189	171	214	99	116%
Total OECD	876	860	957	958	990	961	1072	988	809	991	881	12%
Other Products												
Americas	877	807	874	896	903	837	753	677	742	874	862	1%
Europe	747	692	690	766	712	619	590	660	676	719	743	-3%
Asia Oceania	353	375	373	298	390	375	389	406	368	364	279	30%
Total OECD	1977	1874	1937	1961	2005	1831	1732	1742	1786	1956	1884	4%
Total Products												
Americas	2250	2132	2128	2434	2042	1905	1791	1775	1851	2020	2399	-16%
Europe	3551	3516	3467	3465	3558	3498	3516	3483	3207	3062	3426	-11%
Asia Oceania	2117	2199	2277	2091	2357	2316	2450	2465	2364	2243	2061	9%
Total OECD	7918	7847	7872	7991	7957	7719	7756	7724	7422	7326	7886	-7%
Total Oil												
Americas	9791	9627	9004	9544	9025	8573	7942	8052	7997	8488	9534	-11%
Europe	12445	12588	12452	12312	12889	12401	12635	12356	12141	12123	12365	-2%
Asia Oceania	8428	8671	8886	8416	8855	9047	9443	9123	9390	9081	7944	14%
Total OECD	30664	30886	30342	30272	30769	30020	30020	29531	29527	29691	29843	-1%

1 Based on Monthly Oil Questionnaire data submitted by OECD countries in tonnes and converted to barrels.
2 Excludes intra-regional trade.
3 Includes additives.

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For information on the data sources, definitions, technical terms and general approach used in preparing the *Oil Market Report (OMR)*, *Medium-Term Oil and Gas Markets (MTOGM)* and *Annual Statistical Supplement* (current issue of the Statistical Supplement dated 10 August 2012), readers are referred to the *Users' Guide* at www.oilmarketreport.org/glossary.asp. It should be noted that the spot crude and product price assessments are based on daily Argus prices, converted when appropriate to US$ per barrel according to the Argus specification of products (Copyright © 2012 Argus Media Limited - all rights reserved).

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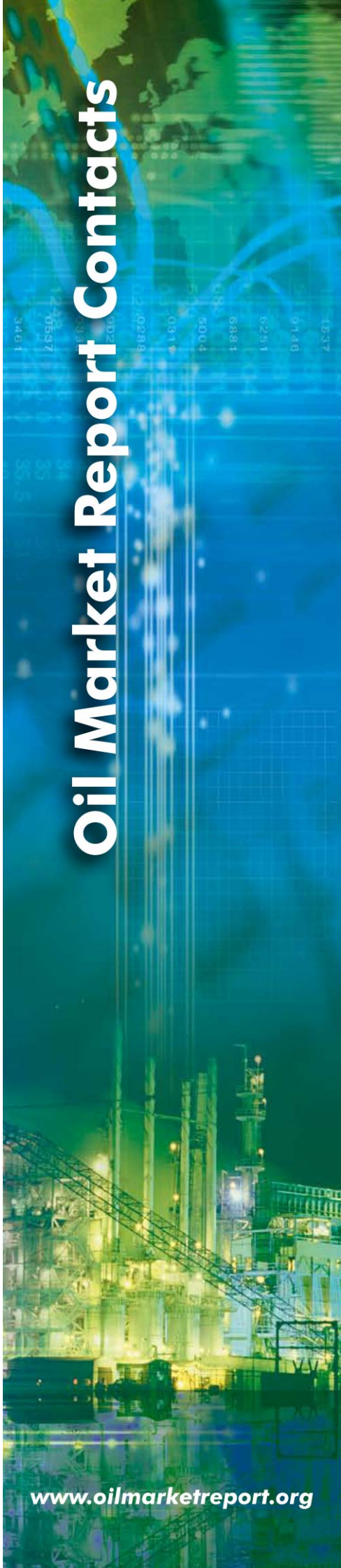

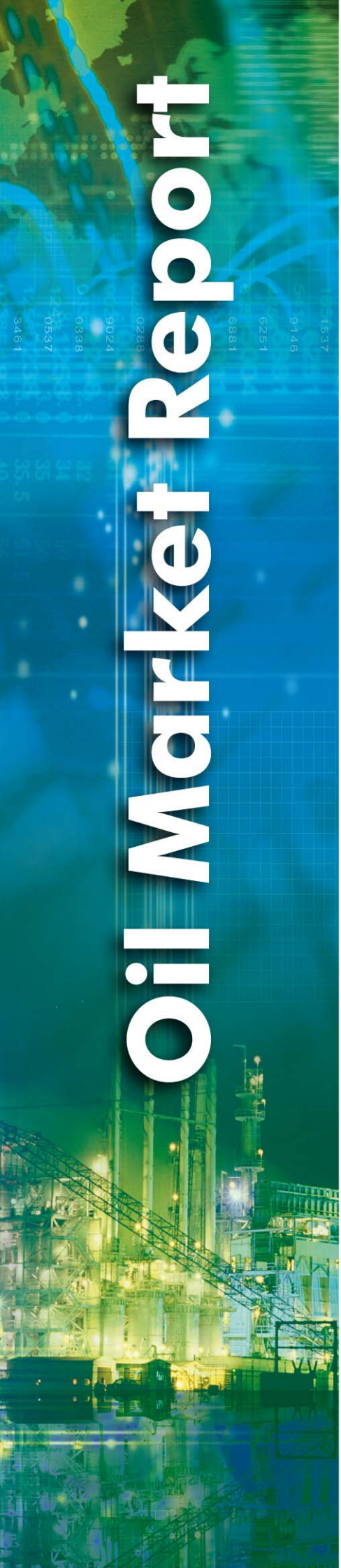

International Energy Agency

12 September 2012

HIGHLIGHTS

- **Oil prices extended earlier gains in August**, but crude prices seemed to plateau in the second half of the month. Brent was last trading at $115/bbl after reaching a high of near $117/bbl around mid-August, while WTI traded at $97, close to its August high. Increases in product prices outpaced and outlasted the crude rally, with gasoline, naphtha and middle distillate prices all posting steep gains.

- **Demand projections for 2012 and 2013 have been raised by 100 kb/d on data revisions for 2011**, to 89.8 mb/d and 90.6 mb/d, respectively, though demand growth forecasts are little changed at around 0.8 mb/d for both years. Demand grew by 1.2 mb/d in 2Q12, buoyed by Japanese utility burn to replace idled nuclear generators.

- **Global oil supply fell by 0.1 mb/d m-o-m to 90.8 mb/d in August from upwardly revised July estimates.** OPEC liquids production growth, led by Nigeria, Angola and Iraq, failed fully to offset unplanned outages in non-OPEC countries. Crude oil imports from Iran are estimated to have inched up in August to 1.1 mb/d, from below 1 mb/d in July. Non-OPEC annual supply growth slowed to just 0.2 mb/d in 3Q12.

- **The 'call on OPEC crude and stock change' is projected to rise by 1.3 mb/d in 3Q12 to 31.1 mb/d**, on the back of a seasonal, quarter-on-quarter uptick in demand of 1.4 mb/d.

- **Improved refining margins spurred steep gains in OECD refinery runs in July and August**, lifting global crude throughput estimates for 3Q12 to 75.7 mb/d, up 1.3 mb/d on 2Q lows and 450 kb/d y-o-y. Non-OECD gains are projected to keep runs flat through 4Q12, lifting annual growth to 1.3 mb/d.

- **OECD industry crude stocks contracted by 16.5 mb in July and a preliminary 23.7 mb last month** on strong refining crude runs. Products built by 32.8 mb and 4.2 mb, respectively. Total industry oil builds of 10.6 mb for July were below normal and preliminary data hint at counter-seasonal draws in August.

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CONFLICTING PERSPECTIVES

Mixed signals are nothing new in the oil market. Ever since the 2008-2009 financial crisis, analysts have fretted about the tug of war between downside price risks emanating from a fragile economy and upside risks raised by geopolitical turmoil, chronic supply disruptions and the so-called "Iranian premium." The idea of an oil market torn between opposing bullish and bearish forces became widely accepted as the fizzling of the economic recovery and a slowdown in demand growth served as bearish backdrop for market disruptions and ongoing geopolitical concerns on the supply side. It has since reached a new paroxysm.

On the one hand, a retail product rally has set off alarm bells in the world's capitals even as greater-than-expected compliance with international sanctions on Iran removed large volumes of oil from the market. Non-OPEC supply has been hit by unprecedented unplanned outages, while fears of potential conflict in Iran and a spillover from the Syrian civil war are on the rise. There have even been some bullish signals on the demand side as estimates of global demand, belying bearish forecasts, beat expectations for 1H2012, and preliminary data suggest that OECD oil stocks drew down counter-seasonally last month.

On the other hand, concerns about the health of the global economy are also rising in the wake of bearish economic indicators from the US, the euro zone and now, increasingly, the engine of oil demand growth of the last decade: China. Recent demand strength notwithstanding, low expectations of future demand are such that the OECD stock cushion actually looks more comfortable today when measured in days of forward demand than before the latest draws. And not all supply news is bullish. A revolution in North American unconventional oil is creating a mid-continent supply bonanza, while long-depressed Iraqi output recently rose to highs unseen since the Iran-Iraq war.

Statistical ambiguity reinforces the market's inherent dichotomy and muddles the picture as single data points can lend themselves to conflicting interpretations. Bearish indicators of a deteriorating economy are enthusiastically greeted by the market as bullish signs that stimulus measures are on the way. OECD inventory readings, once a reliable proxy for global stock movements, are losing relevance as non-OECD economies catch up with mature economies in oil use and OECD stock draws come along with large but unreported builds in non-OECD countries. The rise of those implied stocks has been nothing short of dramatic, as shown in the resurgence of a significant "miscellaneous to balance" item in OMR balances – a clear indication that reported supply, demand and OECD inventories only tell part of the story.

Given wide disparities in OECD stocks between regions and products, whether reported inventories look tight or comfortable may depend on one's point of view. An apparent overhang in US crude stocks offered meagre protection against supply disruptions when those stocks were landlocked and not easily accessed by the market. High OECD crude stocks in recent months have hidden uncomfortably tight product inventories, notably for middle distillates. Conversely, the latest crude stock draws may not be as alarming as they appear, inasmuch as they reflect an unsung renaissance in OECD refining. Emerging from protracted rationalization, OECD refiners have responded to this summer's high margins and low product stocks with a vengeance. The transatlantic clean tanker trade, long depressed, is reviving as products are rushed to premium markets. For consumers, relief may be on the horizon.

Then again, we have yet to assess the full impact of the restructuring of the refining industry. Small facilities serving dedicated markets are increasingly being replaced with large, low-cost, cutting-edge, export-driven plants in centres stretching from the US Gulf Coast to India to the Middle East. Global inter-dependence in product supply is increasing. That could be good news or bad news: the market is becoming more flexible, but also more volatile. The implications of those changes for markets and security are many. Keeping up with them without taking anything for granted is a challenge, but more necessary than ever.

DEMAND

Summary

- **Global demand is forecast to grow at a steady rate of around 0.8 mb/d (0.9%) in both 2012 and 2013 against a weak macroeconomic backdrop.** Assuming GDP growth of 3.3% in 2012 and 3.6% in 2013, total oil product demand is forecast to average 89.8 mb/d in 2012, rising to 90.6 mb/d in 2013.

- **Revisions to historical data leave the 2011 demand estimate 0.2 mb/d higher than reported last month**. That in turn lifts estimated absolute demand by 100 kb/d for both 2012 and 2013, though the forecast of demand growth for both years has been adjusted marginally downwards from last month. The US, Brazilian and Canadian series lead the upside revisions for 2011, respectively up by 115 kb/d, 105 kb/d and 35 b/d.

- **Latest demand estimates show robust 1.2 mb/d (1.4%) year-on-year growth in 2Q12, led by gains in Japan.** Japanese oil demand grew by 0.4 mb/d (10.0%) in 2Q12, as electric utilities sought to replace idled nuclear power generation capacity.

Global Oil Demand (2011-2013)

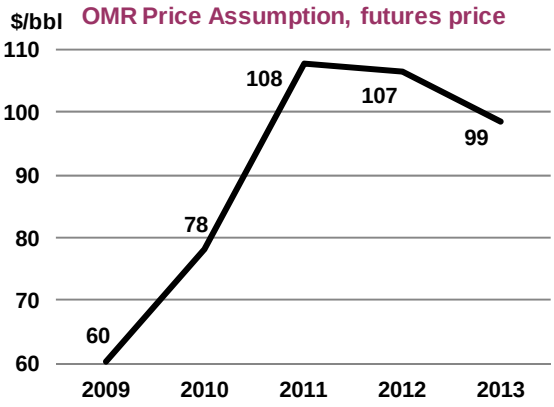
(million barrels per day)

	1Q11	2Q11	3Q11	4Q11	2011	1Q12	2Q12	3Q12	4Q12	2012	1Q13	2Q13	3Q13	4Q13	2013
Africa	3.4	3.3	3.2	3.4	3.3	3.4	3.4	3.4	3.4	3.4	3.5	3.5	3.5	3.5	3.5
Americas	30.3	30.1	30.7	30.4	30.4	29.7	30.2	30.7	30.6	30.3	29.9	30.2	30.9	30.8	30.5
Asia/Pacific	29.0	27.7	27.8	29.2	28.4	30.0	28.6	28.4	29.7	29.2	30.4	29.0	28.7	30.0	29.5
Europe	15.0	14.9	15.5	14.9	15.1	14.5	14.6	15.1	14.7	14.7	14.2	14.3	14.9	14.6	14.5
FSU	4.2	4.4	4.6	4.6	4.4	4.4	4.5	4.7	4.7	4.6	4.6	4.7	4.9	4.9	4.8
Middle East	6.9	7.4	7.8	7.3	7.4	7.1	7.7	8.0	7.5	7.6	7.3	7.8	8.3	7.7	7.8
World	**88.7**	**87.7**	**89.5**	**89.8**	**88.9**	**89.2**	**89.0**	**90.4**	**90.6**	**89.8**	**90.0**	**89.5**	**91.2**	**91.6**	**90.6**
Annual Chg (%)	2.5	0.5	0.8	0.3	1.0	0.5	1.4	0.9	0.9	0.9	0.9	0.6	0.9	1.1	0.9
Annual Chg (mb/d)	2.1	0.4	0.7	0.3	0.9	0.5	1.2	0.8	0.8	0.8	0.8	0.6	0.8	1.0	0.8
Changes from last OMR (mb/d)	0.00	0.11	0.30	0.21	0.16	0.12	0.13	0.19	0.09	0.13	0.04	-0.06	0.20	0.18	0.09

Global Overview

The pace of oil demand growth is expected to remain relatively steady over the next eighteen months, with annual gains of just 0.8 mb/d (0.9%) in both 2012 and 2013 (to 90.6 mb/d). This modest growth rate reflects the combined effects of sluggish global economic activity, historically elevated oil prices and global improvements in energy efficiency. Despite moderating from late-April through mid-June, Brent at the time of writing remained above $110 per barrel, a high level by historical standards. The forward price curve assumed relatively little change in 2012, with Brent futures averaging $107/bbl (compared to $108 in 2011), before falling to just below $99/bbl in 2013. Persistently high prices create an incentive to reduce consumption; this is best encapsulated by the rapid decline in global oil intensity, which is forecast to fall by 2.3% in 2012 and 2.5% in 2013, a greater decline rate than the previous 15-year average of 2.2%. Heightened developed world debt constraints, combined with elevated commodity prices, have helped dampen the macroeconomic backdrop, with a global expansion of around 3.3% foreseen in 2012, accelerating only moderately in 2013 to 3.6% (see *10 August OMR*).

Despite the relatively tepid headline growth, changes in consumption vary greatly by product. Gasoil demand is forecast to expand more rapidly than oil as a whole, with gains of 1.1% in 2012 (to 26.4 mb/d) and 1.4% in 2013 (to 26.8 mb/d). Four key factors are driving gasoil's advance: industrial growth in emerging markets, power generation (non-OECD), a continued shift in transportation fuel demand towards diesel and tighter environmental regulations, which have forced many water-borne vessels to swap fuel oil gasoil bunkers for gasoil. The only other demand segment that looks likely to retain anything approaching strong growth is LPG, which in our balance includes ethane, up 1.0% in 2012 (to 9.3 mb/d) and accelerating to 2.0% in 2013 (to 9.5 mb/d), as petrochemical usage continues to expand.



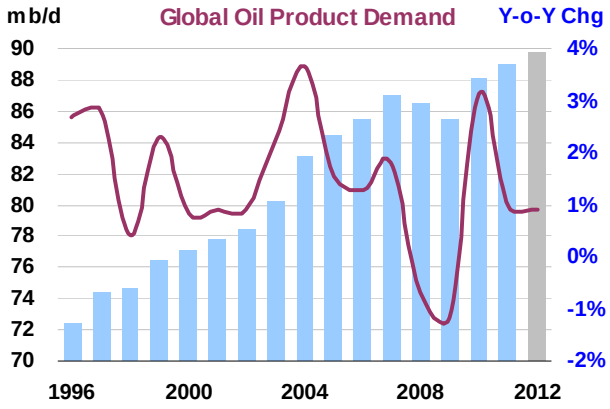
Real GDP Growth

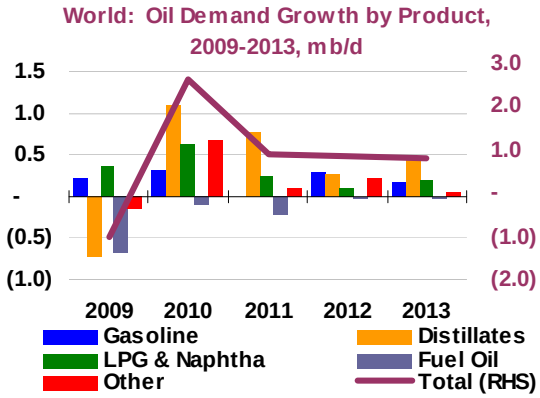
OMR dated 12 Sep 2012

% change	2012	2013
WORLD	**3.3**	**3.6**
OECD	**1.3**	**1.7**
OECD, Americas	2.3	2.2
OECD, Europe	(0.1)	0.8
OECD, Asia & Oceania	2.5	2.4
Non-OECD	**5.5**	**5.7**
Africa	4.9	4.7
Latin America	3.8	4.1
China (excl. Hong Kong)	8.0	8.1
Other Asia	5.5	6.0
Non-OECD Europe	1.4	2.2
FSU	3.1	3.1
Middle East	3.2	3.0

Sources: IEA; IMF; Consensus Economics

Year-on-year (y-o-y) global demand growth picked up momentum in the second quarter, as demand surged to 89.0 mb/d, up by 1.2 mb/d (1.4%) on 2Q2011, compared to growth of 0.5 mb/d for 1Q12. Japan accounts for much of the strong performance in 2Q12: Japanese demand rose by 0.4 mb/d (or 10.0%) to 4.3 mb/d, a consequence of the country's tsunami-related nuclear shortages. The global 2Q12 demand estimate also benefited from upward revisions totalling 115 kb/d from the previous month's estimate, led by adjustments in Brazil (+125 kb/d), Turkey (+65 kb/d) and Canada (+65 kb/d). Despite these additions the 2012 forecast remains restrained, as 2H12 sees slower non-OECD demand growth, while Japanese growth ebbs (on returning nuclear capacities) and Korea decelerates (on government efforts to curb imports).





OECD

OECD oil demand is expected to decline by around 0.3 mb/d (or 0.7%) in 2012, to 46.2 mb/d, as diverging regional trends offset each other. Growth is projected in OECD Asia Oceania on the back of Japanese nuclear outages (+3.3%), contrasting with steep declines in Europe (-2.6%) due to sluggish economic growth and more modest drops in the OECD Americas (-0.8%). The overall outlook is little changed in 2013, when demand is again expected to contract by 0.3 mb/d (-0.7%), but the regional discrepancies wane. A gradual recovery in Japanese nuclear capacity is forecast to reduce oil requirements in Asia Oceania (-1.9%), while a more robust European economic outlook in 2013, with GDP growth of +0.8% assumed following recession in 2012, supports a milder decline rate of 1.3%. Consumption in the Americas essentially remains little changed (+0.1%).

Rising prices and continued economic unease suppressed demand in July, which according to preliminary data contracted by 0.5% y-o-y to 46 mb/d. The sharpest declines were seen in Italy (-5.1% to 1.4 mb/d), Germany (-1.3% to 2.4 mb/d) and Mexico (-1.1% to 2.1 mb/d). In contrast, demand grew in Japan (+3.7% to 4.4 mb/d), France (+3.3% to 1.9 mb/d) and Korea (+0.3% to 2.2 mb/d).

OECD Demand based on Adjusted Preliminary Submissions - July 2012

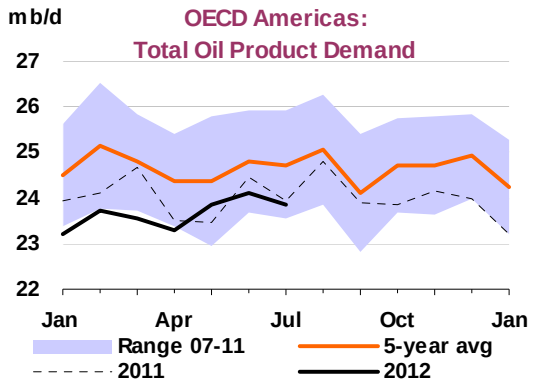
(million barrels per day)

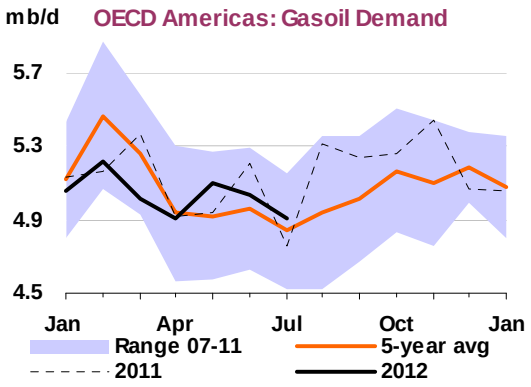
	Gasoline		Jet/Kerosene		Diesel		Other Gasoil		RFO		Other		Total Products	
	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa
OECD Americas*	**10.57**	**-1.6**	**1.72**	**-0.7**	**4.24**	**2.6**	**0.66**	**6.7**	**0.75**	**-0.5**	**5.91**	**-0.54**	**23.85**	**-0.3**
US50	8.87	-2.0	1.48	-0.7	3.50	2.0	0.17	24.3	0.35	9.4	4.43	0.3	18.80	-0.2
Canada	0.81	-0.8	0.13	-4.9	0.23	10.4	0.33	2.5	0.07	15.4	0.78	-2.8	2.34	0.2
Mexico	0.77	2.3	0.06	5.2	0.33	5.1	0.14	5.1	0.21	-17.9	0.58	-3.2	2.09	-1.1
OECD Europe	**2.10**	**-3.3**	**1.34**	**-0.4**	**4.45**	**-1.1**	**1.48**	**-2.1**	**1.21**	**-7.6**	**3.54**	**-3.0**	**14.11**	**-2.5**
Germany	0.43	-2.4	0.20	7.2	0.68	1.9	0.33	-16.8	0.17	19.0	0.57	-1.6	2.38	-1.3
United Kingdom	0.31	-3.7	0.31	2.5	0.44	0.8	0.11	-3.5	0.06	-9.7	0.29	-10.1	1.52	-2.8
France	0.20	-0.6	0.16	0.8	0.73	5.6	0.29	24.8	0.06	-20.9	0.41	-4.8	1.86	3.3
Italy	0.21	-6.7	0.11	-5.9	0.50	-5.5	0.10	8.3	0.15	-11.9	0.33	-5.1	1.40	-5.5
Spain	0.12	-8.9	0.14	-3.5	0.44	-9.1	0.13	-8.2	0.19	-13.7	0.29	-3.4	1.31	-7.9
OECD Asia & Oceania	**1.67**	**-0.5**	**0.63**	**1.9**	**1.26**	**8.5**	**0.43**	**-21.5**	**0.90**	**20.7**	**3.17**	**1.6**	**8.05**	**2.4**
Japan	1.01	-1.5	0.33	5.1	0.46	2.7	0.32	-11.2	0.56	30.0	1.70	3.3	4.38	3.7
Korea	0.21	-0.8	0.12	-5.1	0.29	-3.8	0.11	4.4	0.27	11.8	1.20	-0.4	2.20	0.3
Australia	0.33	2.5	0.13	2.1	0.39	6.0	0.00	0.0	0.02	-6.2	0.18	-3.1	1.04	2.5
OECD Total	**14.34**	**-1.7**	**3.69**	**-0.2**	**9.95**	**1.6**	**2.57**	**-4.0**	**2.85**	**1.8**	**12.61**	**-0.7**	**46.01**	**-0.5**

* Including US territories

Americas

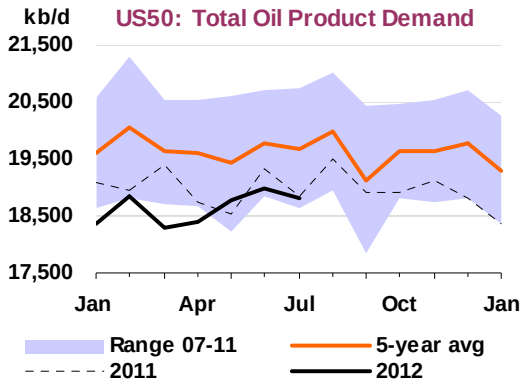
The OECD Americas region (North America plus Chile) saw a modest y-o-y demand contraction of around 0.3% to 23.9 mb/d, according to preliminary data for July. For the year as a whole, demand is projected to decline by around 0.8%, to an average 23.9 mb/d in 2012, driven by steep efficiency gains. Demand is forecast to remain unchanged in 2013, at 23.9 mb/d, as rebounding sentiment is balanced against continued efficiency gains.

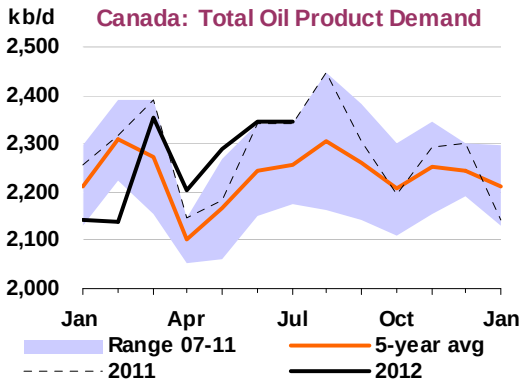




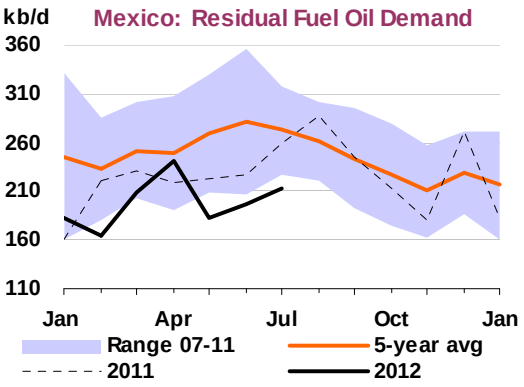
Latest weekly estimates for **US** product demand continue to imply a falling y-o-y trend, with average consumption in the four weeks through to end-August down 1.0% on the corresponding period a year earlier. Distillates (-9.3%), jet/kerosene (-6.0%) and residual fuel oil (-4.5%) accounted for the bulk of the decline, offsetting gains in propane (22.8%) and gasoline (0.7%). Preliminary estimates for July implied a marginally smaller 0.2% y-o-y drop, to 18.8 mb/d, itself an improvement on the revised 1.7% contraction seen in June, to 19.0 mb/d. Despite a fair amount of noise in monthly and weekly data, US consumption of oil products looks persistently biased to the downside. A forecast decline rate of 0.9% is assumed for both 2012 (to 19.0 mb/d) and 2013 (to 18.8 mb/d), as fledgling economic recovery looks set to counterbalance the onset of long–term, structural US consumption decline.

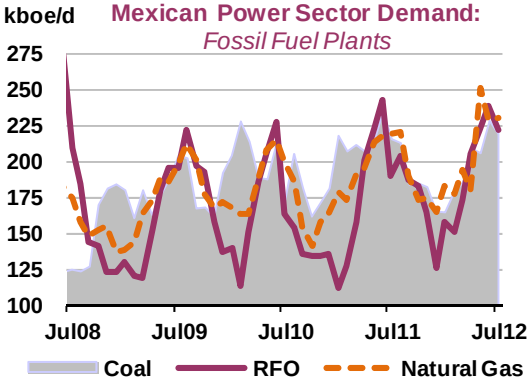
This month's report also includes substantial revisions to US historical baseline data, following the release of the EIA's *Petroleum Supply Annual,* resulting in an upward adjustment of 115 kb/d to consumption estimates for 2011. The bulk of this incremental demand was attributable to LPG, with an average of 100 kb/d of extra demand added in 2011, lifting total LPG demand estimates to 2.3 mb/d for the year. Even though the underlying growth rates, post-2011, are little changed, the base effect means higher numbers throughout.





Canadian oil demand seasonality has changed since 2010, due in part to fast-paced development of the energy-intensive natural resource sector. The economy grew steadily through 1H12. In August, however, the PMI reading dropped to 53 – a level still indicating expansion, but about 1.2 points below average, thus signalling a possible slowdown in growth. In June, strong demand gains for gasoline (14.4%) and diesel (37.5%) were offset by drops in heating oil (-22%), LPG (-17.7%) and 'other products' (-13.7%). Aggregate consumption fell by 7.6% year-on-year. Total oil products demand is to contract marginally by 0.3% in 2012, before rebounding by 0.9%, in 2013. Oil demand remained relatively flat in June (+0.3% on year earlier), after growing by 4.7% in May and 2.7% in April. A baseline addition of 35 kb/d is made to 2011.

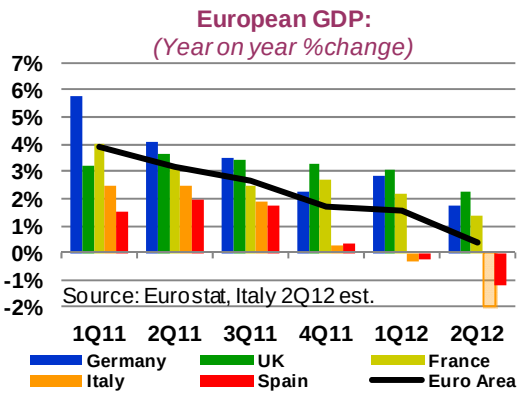


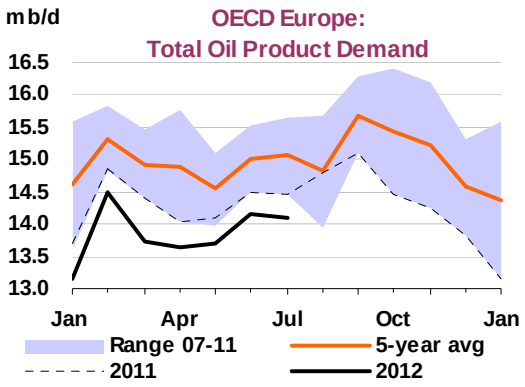


In **Mexico**, oil demand decreased in July (-1.1% y-o-y), extending June's marginal fall (-0.3%). The drop was driven by fuel oil (-18%), which more than offset increases in gasoline (2.3%) and diesel (5.1%). The decline in fuel oil is partially explained by fuel substitution, which is itself driven by low natural gas and coal prices and the addition of new power generation capacity, including 814 MW in combined cycle capacity and 750 MW in hydroelectric capacity). On the other hand, gasoline consumption is expected to remain robust, as consumers increase purchases of light-duty and heavy-duty vehicles, up 11.8% and 9.1%, respectively.

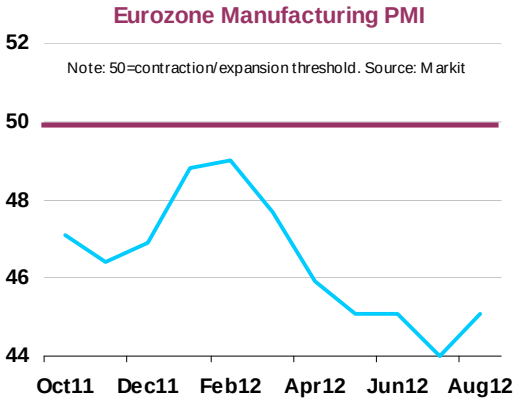
Europe

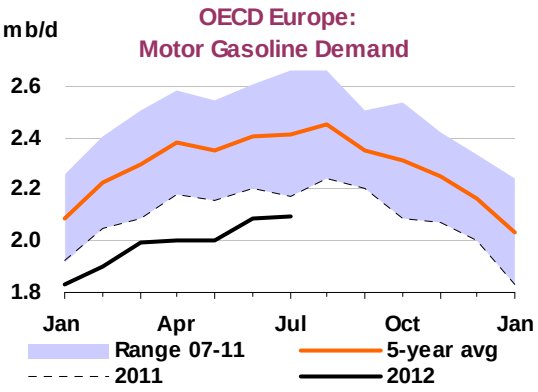
Ailing macroeconomic conditions, not helped by persistently high oil prices, maintained Europe's unenviable position of possessing the weakest growth trend of all the main regions. European oil demand fell by 2.4% in June, to 14.1 mb/d, with transportation fuels particularly suffering: jet/kerosene demand down 5.8% (to 1.2 mb/d) and gasoline down 5.2% (to 2.1 mb/d). Preliminary July estimates point towards a further decline of 2.5%, to 14.1 mb/d.





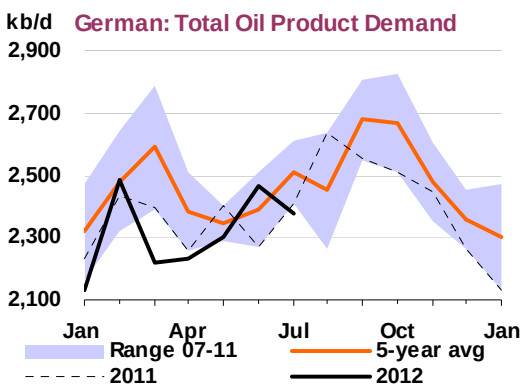
The euro zone officially entered a second, or double-dip, recession in 2Q12, as GDP fell by 0.2% over 1Q12. The indicators for 3Q12 remain downbeat, with manufacturing sentiment – encapsulated by the euro zone PMI – firmly down and below 50. The PMI fell to a 37-month low of 44 in July, before rising modestly to 45.1 in August. Concerns about the region's economic outlook in September led the European Central Bank to agree to buy a potentially unlimited quantity of a country's bonds of one- to three-year maturity, as long as the said country agrees to certain fiscal adjustments. European demand is estimated to fall by around 2.6% in 2012, to 14.0 mb/d, with a moderating decline rate of 1.3% assumed for 2013 (to 13.8 mb/d) as the economic backdrop modestly improves.

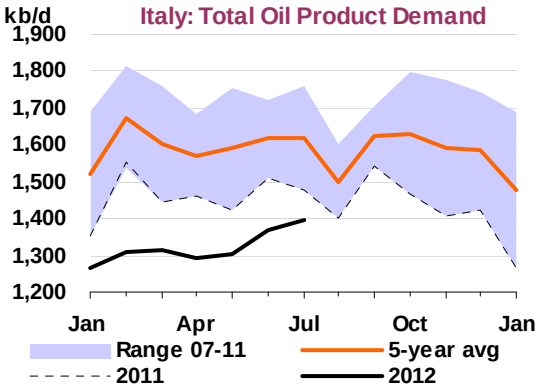




According to preliminary data, oil product deliveries in **Germany** posted a y-o-y decline of 1.3% in July, down dramatically on the sharp 8.6% gain seen in June. Heating oil (-16.8%), Naphtha (-9.2%) and gasoline (-2.4%) led the decrease, while LPG (+20.9%), residual fuel oil (+19.0%) and jet/kerosene (+7.2%) partially offset those declines. Economic growth in 2Q12 showed its worst performance since 4Q10, growing by only 1.7% year-on-year, as the weakening export sector dampened the overall economy. The German PMI fell to a 37-month low of 43 in July, bouncing only marginally in August (44.7), as the economy turned back to domestic consumers to boost growth. Retail price gains in August, with diesel and gasoline up 12% on July, undermining transport fuel demand. Oil demand in 2012 and 2013 is expected around 2.4 mb/d, contracting marginally by 0.8% and 0.1%, respectively. This forecast is subject to revision on the downside in view of the latest bearish economic indicators.

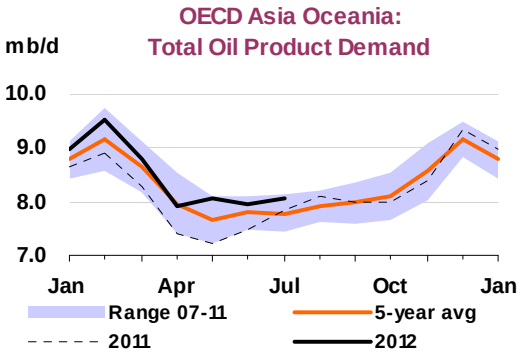
Meanwhile in **Italy**, total oil demand continues to plummet as growth decreased by 5.5% in July, extending 17 consecutive months of contraction (-7.9% average). The greatest losses were seen in diesel (-5.5%), 'others' (-12.3%) and residual fuel oil (-12%). Fiscal consolidation, weak employment and high transport fuel taxes are depleting Italian disposable income and undermining consumer confidence and oil demand. The outlook for both 2012 and 2013 remains depressed, with oil demand in Italy forecast to decline by 8.5% and 3.0%, respectively, averaging out at around 1.3 mb/d in both years.

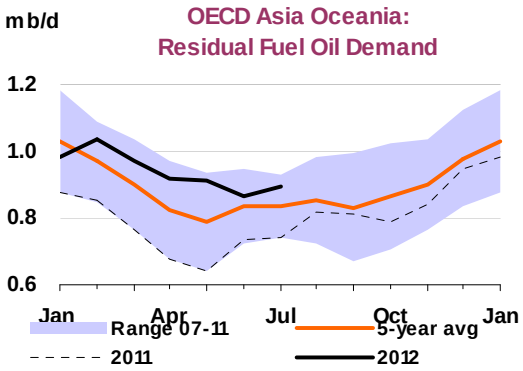




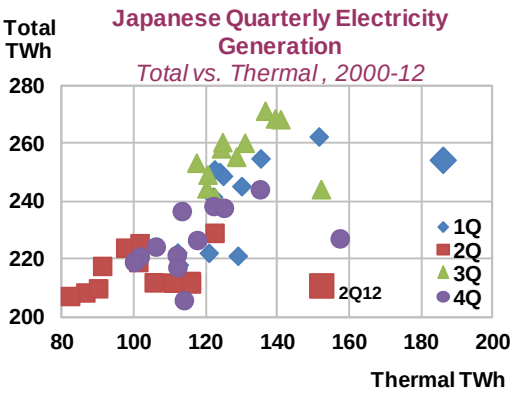
Asia Oceania

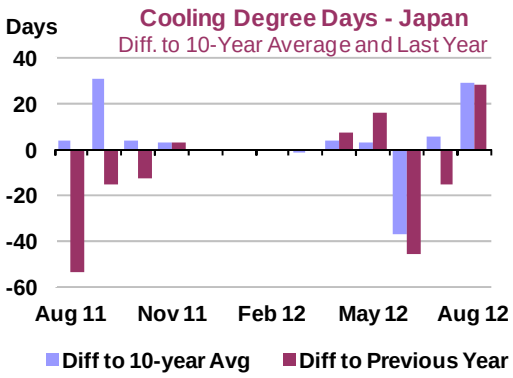
A challenging economic environment, high oil prices and lower-than-expected oil demand from Japanese electricity generators combined to curtail the pace of previously steep demand growth in Asia Oceania (i.e., OECD Pacific plus Israel). Preliminary estimates for July point towards a y-o-y decline of 2.4%, to 8.1 mb/d, compared to the previous six-month average of 7.0%.



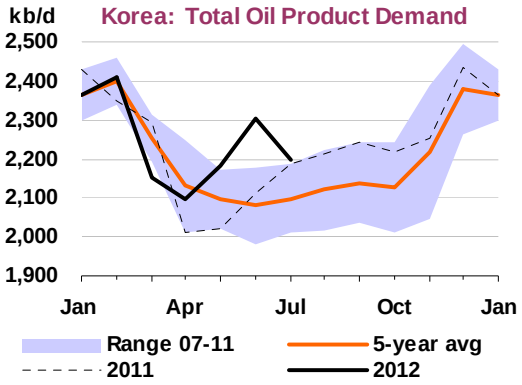


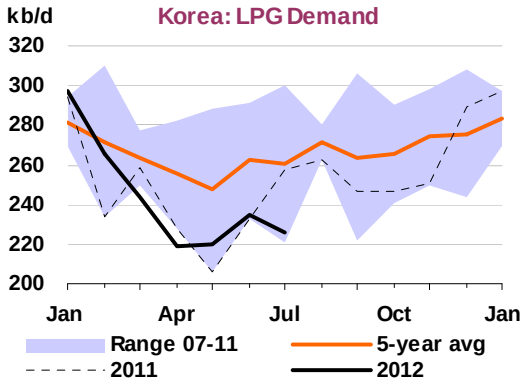
In **Japan**, oil demand rose by 3.7% year-on-year in July, a less dynamic increase when compared with the previous three-month average of 10%. Residual fuel oil (30%), 'other products' (8.5%) and LPG (16.3%) led the increase, but most of the gains were offset by sharp decreases in naphtha (-7.8%) and heating oil (-11.2%). The sudden stall of demand is partially explained by two compounding factors. The first is the comeback of two nuclear plants in the Ohi Prefecture adding 1 TWh of power generation in July, which would scale up to 1.8 TWh in August. The second factor was comparatively low cooling demand in July, as early-summer temperatures were milder than last year and closer to the ten-year average. However, the return of high temperatures in August may signal an increase in residual fuel oil and direct crude burning in the power sector, to compensate for still idle nuclear capacity. During 2Q12, total power generation remained within the normal range, but the share of thermal power was almost 50 TWh more than normal. In 3Q12 we expect thermal generation to account for 65% of total power generation. Currently, our base case scenario includes only two active nuclear reactors in 2012, rising to between four and six by the end of 2013. The latter will require that the new oversight authority of the nuclear industry in Japan approve the restart of some idle capacity. Overall, demand in 2012 is expected to grow to 4.6 mb/d, up by 180 kb/d (+4.0%).





Returning seasonal downtrends in LPG demand led to steep deceleration in **South Korean** oil demand growth. Having risen by as much as 9.1% in June (and 7.9% in May), total oil product demand growth eased to 0.3% in July, to average 2.2 mb/d. Comparisons with July 2011 were likely to have a downwards bias, as peak transportation fuel demand arrived a month early in 2011 and year-earlier reference levels were thus exceptionally high. Government efforts to reduce oil consumption, coupled with the ongoing global economic slowdown, are forecast to reduce the predicted annual 2012 expansion to 1.7%, to 2.3 mb/d, before flattening in 2013.





Non-OECD: Demand by Product
(thousand barrels per day)

	Demand			Annual Chg (kb/d)		Annual Chg (%)	
	May-12	Jun-12	Jul-12	Jun-12	Jul-12	Jun-12	Jul-12
LPG & Ethane	4,649	4,702	4,682	88	174	1.9	3.9
Naphtha	2,885	2,692	2,858	-66	95	-2.4	3.4
Motor Gasoline	8,616	8,757	8,855	383	412	4.6	4.9
Jet Fuel & Kerosene	2,561	2,660	2,748	47	57	1.8	2.1
Gas/Diesel Oil	13,678	13,571	13,358	197	231	1.5	1.8
Residual Fuel Oil	5,277	5,178	5,418	16	203	0.3	3.9
Other Products	5,754	6,113	5,977	402	173	7.0	3.0
Total Products	**43,421**	**43,673**	**43,895**	**1,067**	**1,344**	**2.5**	**3.2**

Non-OECD

The same conditions that have plagued OECD oil consumption – weaker economic growth and price pressures – have also affected non-OECD economies. In their case, however, the result has been slower growth rather than falling demand. Having stalled at around 2.5% growth in June, to 43.7 mb/d, preliminary estimates for July imply an acceleration to 3.2%. Reports of the demise of non-OECD gasoline demand appear to be premature, with growth of 4.6% seen in June (to 8.8 mb/d) and 4.9% in July (to

8.9 mb/d). 'Other products' demand expanded at a robust pace in both months, by 6.5% and 3.2%, respectively, with crude for direct burn in the power sector a notable contributor.

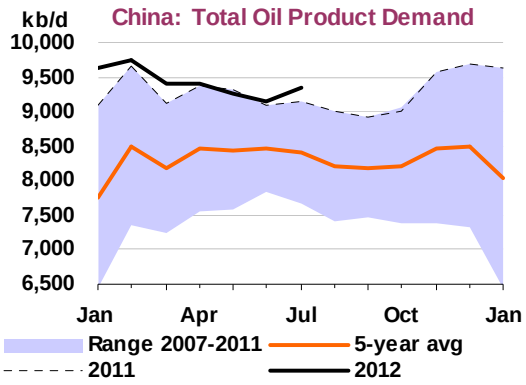
Non-OECD: Demand by Product
(thousand barrels per day)

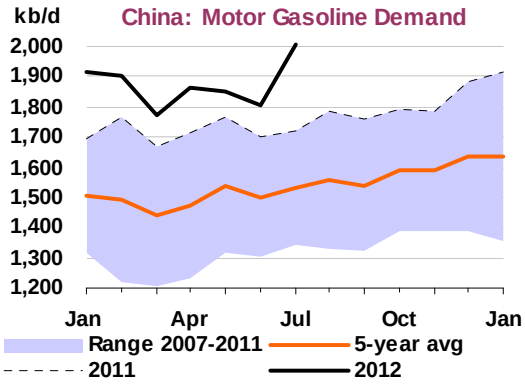
	Demand			Annual Chg (kb/d)		Annual Chg (%)	
	2011	2012	2013	2012	2013	2012	2013
LPG & Ethane	4,586	4,684	4,844	98	159	2.1	3.4
Naphtha	2,818	2,875	2,932	57	58	2.0	2.0
Motor Gasoline	8,352	8,756	9,029	404	273	4.8	3.1
Jet Fuel & Kerosene	2,694	2,734	2,789	40	55	1.5	2.0
Gas/Diesel Oil	13,091	13,396	13,757	305	361	2.3	2.7
Residual Fuel Oil	5,289	5,349	5,445	60	97	1.1	1.8
Other Products	5,560	5,745	5,876	185	132	3.3	2.3
Total Products	**42,390**	**43,538**	**44,672**	**1,148**	**1,134**	**2.7**	**2.6**

Growth of 2.7% is forecast for 2012 as a whole, to 43.5 mb/d. Transportation fuel demand is expected to lead the growth: gasoline demand is forecast to rise by 4.8% (to 8.8 mb/d) while gasoil posts a 2.3% gain (to 13.4 mb/d). A modest deceleration in total non-OECD oil product demand is projected for 2013, up 2.6% to 44.7 mb/d, as economic headwinds curtail the outlook.

China

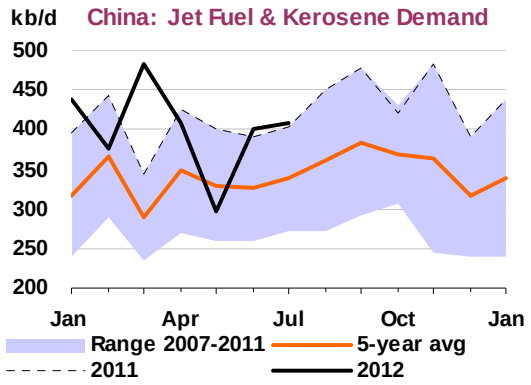
Despite clear signs that the Chinese economy is slowing, apparent demand growth picked up momentum in July, according to preliminary estimates. Figures for July show a rise of 2.2% y-o-y, to 9.4 mb/d, its strongest growth rate since March. Robust gasoline demand in July led the way, up 16.4% to 2.0 mb/d, supported by still rapidly expanding vehicle usage. Petrochemical demand supported 12.5% growth in naphtha consumption, to 0.5 mb/d.

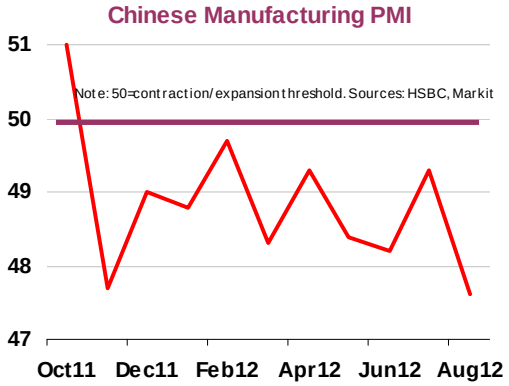




Falling jet fuel prices provided moderate support for jet/kerosene demand, up 0.9% y-o-y in July to 410 kb/d. Jet fuel prices averaged 6 670 yuan/metric tonne in July, a decline of nearly 10% on the month earlier, as steeply lower international prices outweighed any support provided by the weaker yuan.

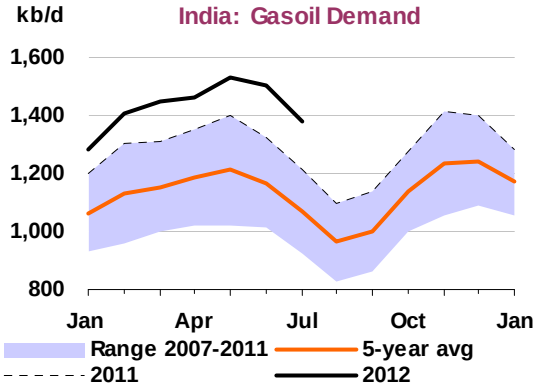
Slower growth in the broader Chinese economy is projected to restrain oil demand growth to a comparatively muted 2.6% in 2012, taking annual average demand up to 9.5 mb/d, with a modest acceleration foreseen in 2013, up 2.9% to 9.8 mb/d. This is significantly slower than the annual growth of nearly 9% seen in 2002-2006, and the double-digit percentage point expansions seen through much of 2010 and early 2011. Government support for the economy will likely restrain the worst of any downside momentum.

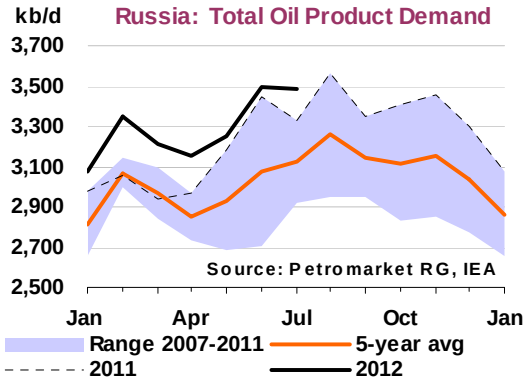




Other Non-OECD

The rapid expansion in **Indian** demand, seen in both May (+4.0% y-o-y) and June (+7.0% y-o-y), continued in July, with the preliminary estimate up 9.4% to 3.7 mb/d. Rampant gasoil demand led the upside, 13.2% higher in July to an average of 1.4 mb/d. Lower than normal monsoon rains, throughout most of July, required extra diesel, as the parched agriculture sector required additional irrigation pumping. Late-July electrical blackouts added to gasoil demand, as many emergency diesel-fired-generators were required. Indian demand growth will likely abate somewhat in the second half of 2012, reflecting the global economic malaise, with a gain of 3.8% assumed to take total demand up to an average of 3.6 mb/d.





Large historical data revisions for notoriously-hard-to-predict **Russia** were seen through 2Q12, as roughly 75 kb/d was taken out of the historical Russian demand estimate for this period. Preliminary estimates of July demand point towards a 4.7% y-o-y gain, to 3.5 mb/d. More testing economic conditions will likely see a modest slowdown in second half demand growth, leaving an annual expansion of about 4.5% for the year as a whole, to 2.4 mb/d. Assuming the worst of the economic slowdown is reserved for 2012, demand growth in Russia will accelerate in 2013, to 5.1%, as total oil product demand averages 3.6 mb/d.

SUPPLY

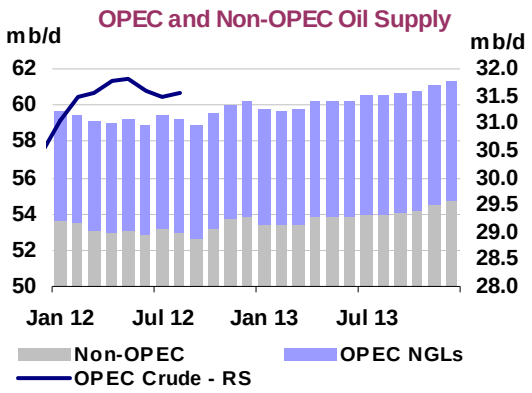
Summary

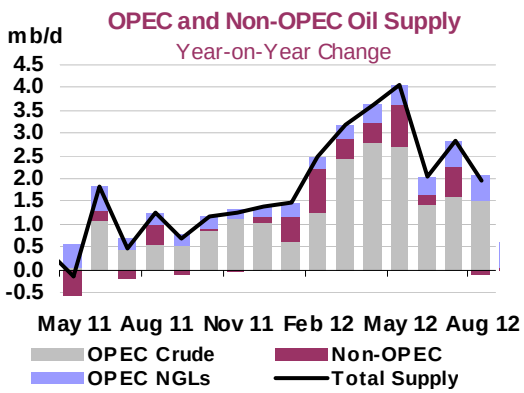
- **Global oil supply fell by 0.1 mb/d month on month (m-o-m) to 90.8 mb/d in August from upwardly revised July estimates, as OPEC liquids production growth failed fully to offset unplanned outages in non-OPEC countries.** Compared to a year ago, global oil production stood 2.0 mb/d higher, with all of the increase coming from OPEC crude and NGLs.

- **OPEC crude oil supplies rose by 45 kb/d to 31.55 mb/d in August from an upward-revised July assessment.** West African producers Nigeria and Angola as well as Iraq posted the largest increases, which were partially offset by reduced supplies from Iran and Saudi Arabia. Imports of Iranian oil inched up to 1.1 mb/d in August from below 1 mb/d in July. Increased exports, however, may be temporary; both US and European officials have proposed to tighten sanctions further from the lack of progress in negotiations with Tehran over its country's nuclear programme.

- **The 'call on OPEC crude and stock change' for 3Q12 was raised by 100 kb/d to 31.1 mb/d due to an upward revision to this month's demand estimates**. However, a projected recovery in non-OPEC supplies in 4Q12 is forecast to cut back the 'call' by a substantial 500 kb/d in the last three months of the year, to 30.6 mb/d, from 3Q12 levels.

- **Non-OPEC supply fell by 0.2 mb/d in August from the prior month and by 0.1 mb/d compared to August 2011.** Planned and unplanned outages slowed down growth in non-OPEC supply to just 0.2 mb/d in 3Q12, from 0.6 mb/d and 0.5 mb/d in the first and second quarters, respectively. Non-OPEC supply is forecast to grow by 0.4 mb/d in 2012 and 0.7 mb/d in 2013, unchanged from last month's assessment.





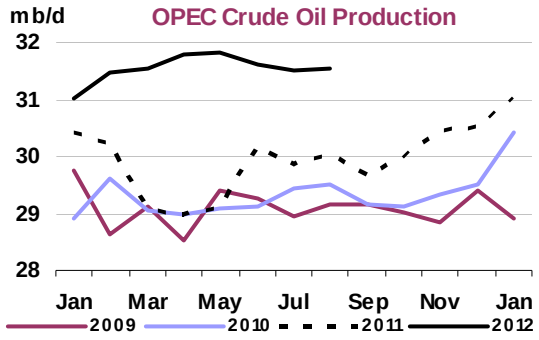
All world oil supply figures for July discussed in this report are IEA estimates. Estimates for OPEC countries, some US states, and Russia are supported by preliminary August supply data.

Note: Random events present downside risk to the non-OPEC production forecast contained in this report. These events can include accidents, unplanned or unannounced maintenance, technical problems, labour strikes, political unrest, guerrilla activity, wars and weather-related supply losses. Specific allowance has been made in the forecast for scheduled maintenance in all regions and for typical seasonal supply outages (including hurricane-related stoppages) in North America. In addition, from July 2007, a nationally allocated (but not field-specific) reliability adjustment has also been applied for the non-OPEC forecast to reflect a historical tendency for unexpected events to reduce actual supply compared with the initial forecast. After heavy outages seen in 2011 and 2012, this adjustment now totals –500 kb/d for non-OPEC as a whole, with most downward adjustments focused in the OECD.

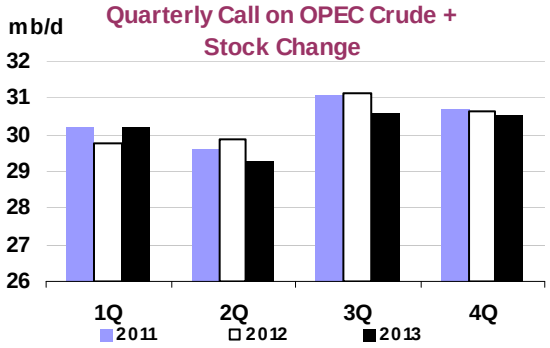
OPEC Crude Oil Supply

OPEC crude oil supply in August posted a modest rise, up by 45 kb/d to 31.55 mb/d compared to an upwardly revised July estimate of 31.5 mb/d. West African producers Angola and Nigeria posted the largest month-on-month increases, with smaller increments coming from Iraq, the UAE and Ecuador. By contrast, Saudi Arabia, Iran and Libya posted monthly declines. August output is in line with average year-to-date OPEC supply of 31.54 mb/d. OPEC's effective spare capacity is assessed at 2.49 mb/d.

An upward revision to this month's demand estimates has led to an increase of 100 kb/d to the 'call on OPEC crude and stock change' for 3Q12, to 31.1 mb/d. But that effect is expected to be short-lived, as a projected recovery in non-OPEC supplies is forecast to cut back the 'call' by a substantial 500 kb/d in 4Q12, to 30.6 mb/d, from 3Q12 levels. Full-year 2012 estimates of the 'call' were raised by 100 kb/d, to 30.3 mb/d.



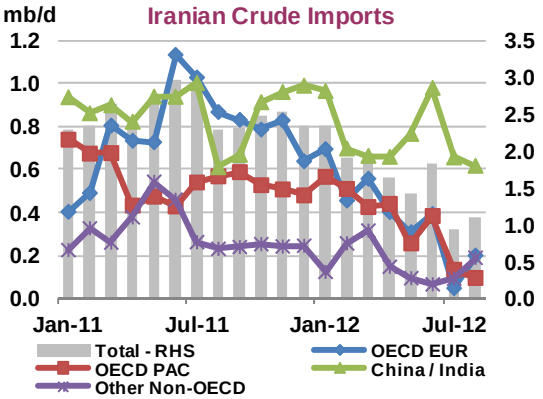
Entire series based on OPEC Composition as of January 2009 onwards (including Angola & Ecuador & excluding Indonesia)



Entire series based on OPEC Composition as of January 2009 onwards (including Angola & Ecuador & excluding Indonesia)

Iranian crude supply in August declined by 50 kb/d to 2.85 mb/d, with production now 650 kb/d below end-2011 levels. Despite the July implementation of stricter US sanctions and the EU embargo of oil imports, crude exports edged up slightly from record-low levels last month. Iranian floating storage levels are estimated to have fallen by 5 mb since end-July while preliminary reports indicate August imports of Iranian crude rose to 1.1 mb/d, compared to an estimated 930 kb/d in July. Given the lack of transparency in shipping data and delay in customs data, both import and export estimates remain subject to revision. Turkey posted the largest increase last month, up around 150 kb/d to 200 kb/d, followed by Malaysia, which saw volumes rise by 100 kb/d to 130 kb/d. Japan, after suspending imports entirely in July, imported slightly less than 100 kb/d in August, well short of average imports of 175 kb/d in 2Q12 and 300 kb/d in 1Q12. Both Japan and India implemented state-backed insurance programs to cover cargoes of Iranian oil. Iran also launched a program to provide insurance cover for oil tankers entering its waters.

Press reports suggest that Iranian exports may post further gains this month. China, South Korea, India and others are poised to increase liftings in September. In addition, a cargo was reportedly sold through the private sector after Tehran, in a bid to maintain exports, allowed for the first time sales outside of the state oil company. The government has granted a consortium of private Iranian companies the right to sell 20% of its oil exports to international markets.



The increase in exports since July's lows, however, may be temporary. Both US and European officials look

poised to tighten sanctions further given the lack of progress in negotiations over Iran's nuclear program. In addition to cracking down on international banking institutions engaging in financial transactions with Iran in recent months, US officials have been vigilant in monitoring illegal reflagging of Iranian tankers by other countries. In response, Tanzania and Sierra Leone deregistered a combined total of 45 tankers that were illegally flagged in their countries. Both governments reported shipping agents acting on behalf of Iran illegally registered the vessels. US lawmakers also targeted the small Pacific island nation of Tuvalu, which reflagged 22 Iranian oil tankers.

Meanwhile, European leaders from France, Germany and the UK are calling for tougher sanctions on Iran due to Tehran's intransigence over its nuclear programme. In addition to the EU oil embargo, which went into effect 1 July, European officials indicated they are prepared to implement more comprehensive sanctions on Iran's oil and financial sectors and plan to discuss new measures in coming weeks.

OPEC Crude Production

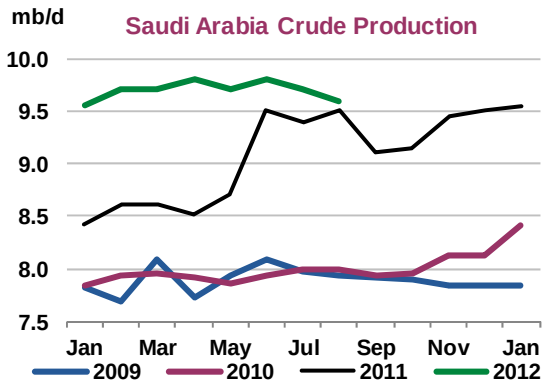
(million barrels per day)

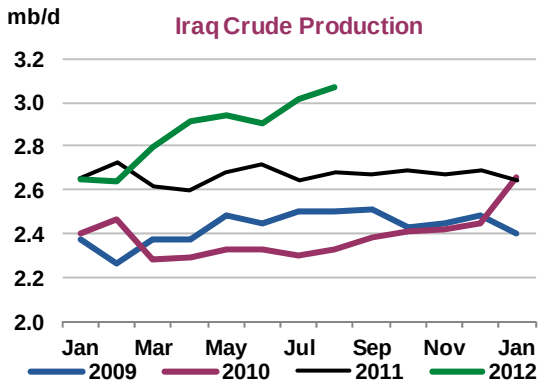
	Jun 2012 Supply	Jul 2012 Supply	Aug 2012 Supply	Sustainable Production Capacity[1]	Spare Capacity vs Aug 2012 Supply	4Q12 Production Capacity Versus Current Capacity
Algeria	1.16	1.19	1.18	1.20	0.02	0.00
Angola	1.71	1.63	1.75	1.85	0.10	0.05
Ecuador	0.48	0.48	0.50	0.54	0.04	0.00
Iran	3.00	2.90	2.85	3.20	0.35	(0.06)
Kuwait[2]	2.76	2.76	2.76	2.84	0.08	0.05
Libya	1.38	1.45	1.38	1.59	0.21	(0.08)
Nigeria[3]	2.20	2.16	2.26	2.59	0.33	(0.02)
Qatar	0.73	0.75	0.75	0.79	0.04	0.00
Saudi Arabia[2]	10.10	10.00	9.90	11.88	1.98	0.00
UAE	2.66	2.68	2.69	2.79	0.10	0.17
Venezuela[4]	2.51	2.49	2.46	2.60	0.14	0.05
OPEC-11	**28.69**	**28.49**	**28.48**	**31.85**	**3.37**	**0.16**
Iraq	2.91	3.02	3.07	3.28	0.22	0.01
Total OPEC	**31.60**	**31.50**	**31.55**	**35.14**	**3.59**	**0.17**
(excluding Iraq, Nigeria, Libya and Iran)					*2.49)*	

1 Capacity levels can be reached within 30 days and sustained for 90 days.
2 Includes half of Neutral Zone production.
3 Nigeria's current capacity estimate excludes some 200 kb/d of shut-in capacity.
4 Includes upgraded Orinoco extra-heavy oil assumed at 355 kb/d in August.

After six months of output hovering around the 10 mb/d mark, crude oil production from **Saudi Arabia** in August edged lower by 100 kb/d, to 9.9 mb/d. Lower output last month may, in part, reflect a dip in buying interest from customers. Demand for Saudi crude from Asian buyers may have rebounded this month given relatively more attractive refining margins. A series of computer attacks on Saudi Aramco's communications system in early August caused protracted disruptions in email traffic with customers. Nonetheless, the company was able to maintain communications via fax and telex throughout the disruption and production operations remained unaffected. It was reported that an Iranian group claimed responsibility for the attack.

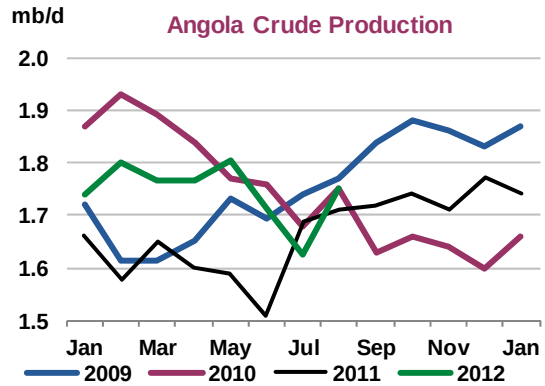
Iraqi crude oil production in August reached its highest level in more than three decades at 3.07 mb/d, up 50 kb/d over July. Increased shipments from the southern ports also lifted exports by close to 50 kb/d to a new high of 2.57 mb/d. Despite persistent problems with lack of storage facilities and low pipeline flows to the country's two new single point mooring (SPM) terminals, incremental volumes are slowly being added, with Basrah shipments up by 36 kb/d to 2.25 mb/d. Additional output is coming from a number of joint-venture projects, including ExxonMobil's West Qurna-1, Eni's Zubair field and the CNPC-led Halfaya project.

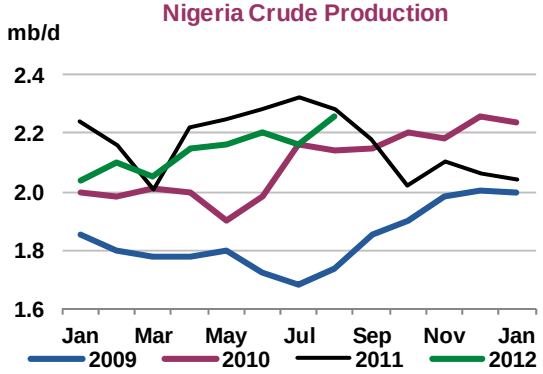




Exports of Kirkuk crude were up by 13 kb/d at 313 kb/d, including 8 kb/d trucked to Jordan. In a goodwill gesture toward Baghdad, exports from the Kurdish Regional Government (KRG) resumed in August. The KRG had suspended exports in April over payment disputes to its foreign contractors by the central government. The KRG initially planned to export 100 kb/d starting in early August but an attack on the Turkish side of the northern export system thwarted those plans. It had initially set a deadline of 31 August to receive the payments but due to the attacks said it would delay suspension of exports until 15 September. Baghdad has responded by making demands of its own regarding past due royalties it says the KRG owes. The deadlock is likely to result in a renewed cut-off of KRG volumes into the northern pipeline system later this month. Meanwhile, oil producer Genel Energy reportedly is using as many as 500 trucks a day to ship its crude oil output from the Kurdish region to Turkey.

Crude oil supplies from **Angola** posted a steep rebound in August as maintenance work at the Girassol field and Palanca export terminal ended. Output rose by 120 kb/d to 1.75 mb/d. Loading schedules indicate Angolan supplies will slip again in September, however. Continued ramp-up of the 220 kb/d Pazflor field and the 140-kb/d Kizomba D satellite fields as well as start-up of the 150 kb/d PSVM field will increase the country's production capacity in 4Q12 to a nameplate 1.9 mb/d. President Jose dos Santos, recently re-elected to continue a 33-year rule, pledged during the electoral campaign to increase crude production and use more of the country's oil wealth for the benefit of the population.



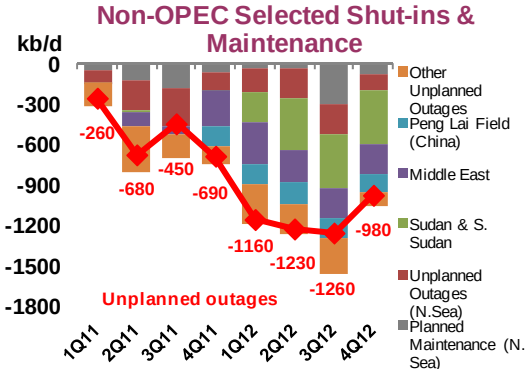


Nigerian crude production also recovered in August, up 100 kb/d to 2.26 mb/d, following the lifting in early August of *force majeure* on Bonny Light crude exports, which had been in place since May. However, loading schedules for September indicate exports may fall to an 11-month low.

Libyan crude supplies were down 70 kb/d in August, to 1.38 mb/d, from a revised 1.45 mb/d for July. The 220-kb/d Ras Lanuf refinery restarted on 31 August and may lead to reduced crude exports of its primary feedstock, light sweet Sarir crude.

Non-OPEC Overview

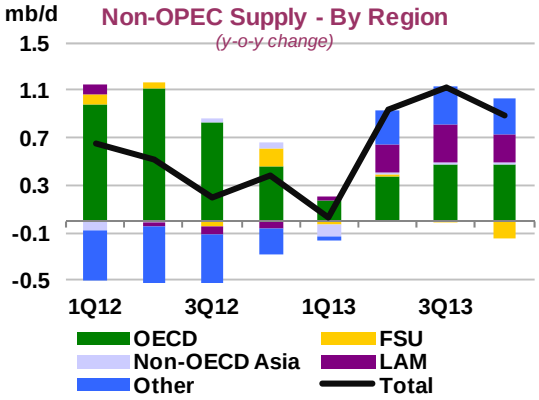
Both planned and unplanned outages contributed to a 190 kb/d fall in August non-OPEC output from the prior month as the US was hit by the most disruptive hurricane since 2008, and North Sea output suffered from strike-related disruptions and planned maintenance. At a 3Q12 average of 52.9 mb/d, non-OPEC supply is still 200 kb/d (0.4%) higher than the prior year, but that rate is much lower than the more than 0.5 mb/d growth seen in the prior two quarters.

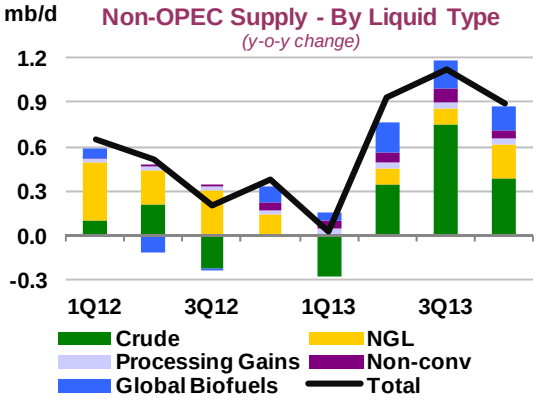


Hurricane Isaac in the US and strikes in Norway were just the latest in a string of disruptions that have kept the level of unplanned shut-ins in non-OPEC countries above 1 mb/d in the last several months. In 3Q12, unplanned outages are expected to reach almost 1.3 mb/d, centred in Sudan, Yemen, Syria, Norway and the US. In the US, Hurricane Isaac has caused a supply shortfall of almost 13 million barrels since 26 August, reducing Gulf of Mexico output by more than 200 kb/d in August and in September. Output from Sudan and South Sudan is expected to remain offline until 2013 pending a comprehensive agreement. Specific field outages at Frade (Brazil), Elgin/Franklin (UK), and Peng Lai (China) are also reducing output in those countries. In the month of September alone, planned maintenance at the Buzzard field in the UK, as well as planned and unplanned maintenance at other North Sea fields will reduce North Sea and Brent-Forties-Oseberg-Ekofisk BFOE output in half to slightly more than 600 kb/d, a record-low level.

Despite persistent unplanned outages in non-OPEC countries, we expect production to rise to 53.6 mb/d in 4Q12, 380 kb/d higher than the prior year, thanks to both continued growth in North American oil sands and light, tight oil output and a recovery in North Sea and Gulf of Mexico production. In 2013, a recalculated contingency factor of 0.5 mb/d is implicit in the estimate of 750 kb/d growth, which is 30 kb/d higher than last month's estimate.

Revisions include downwards adjustments to Azerbaijan, Brazil and China in 2012 that are offset by upwards revisions in Norway and the US.





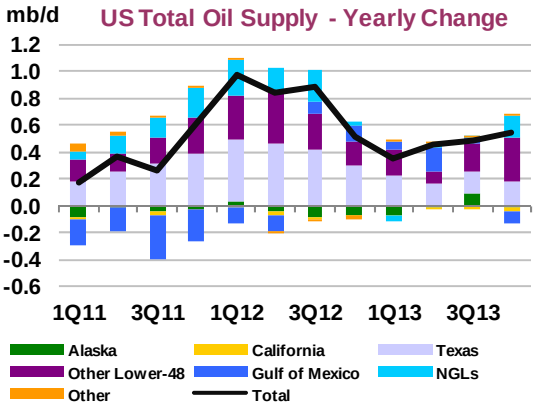
OECD

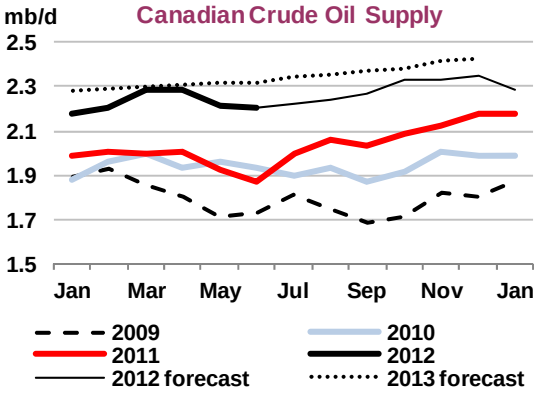
North America

US – August preliminary, Alaska actual, other states estimated: US crude oil production fell by 120 kb/d in August on maintenance at fields connected to the Trans-Alaska oil pipeline and on the impact of shut ins to Gulf of Mexico production from Hurricane Isaac. In Alaska, output fell to around 400 kb/d, the lowest level

since July 1977, while Isaac slashed Gulf of Mexico output by 210 kb/d to 1.2 mb/d in August. Peak shut-in rates reached 1.3 mb/d for four days at the end of the month, with over 90% of oil producing platforms evacuated. Recent US statistics indicate that platforms are in the process of being restaffed, and output is recovering by 50-100 kb/d per day. Shut ins will persist until mid-September, reducing Gulf of Mexico output by an average 210 kb/d for the month. Based on a five-year average of historical tropical storm impacts, the shut-in rate exceeded expectations by around 40 kb/d in 3Q12, assuming no further weather event in September. Our projection of US oil output for 2013 is raised slightly by 90 kb/d, due to higher expectations from the Bakken, especially in 1Q13. US liquids output is now expected to grow from 8.9 mb/d in 2012 to 9.4 mb/d in 2013, a growth of 460 kb/d.

Revisions to US crude and other liquids output from the EIA *Petroleum Supply Annual* result in a minor -10 kb/d revisions to the US outlook in 2003 and in 2009, with much of the revisions centred in Texas. Williston Basin (ND) production is revised upwards due to increased drilling activity, and output should average in excess of 0.7 mb/d in 2013.



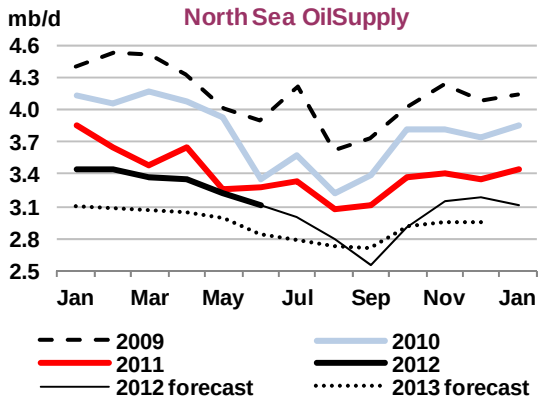


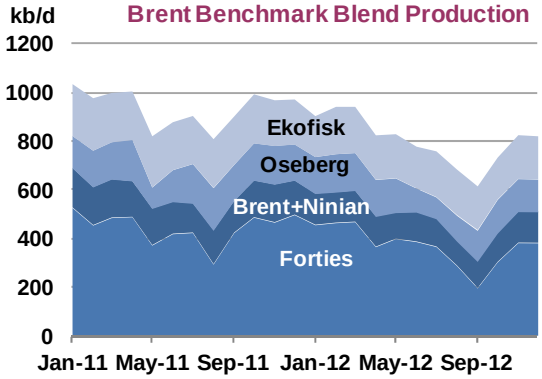
Canada – June preliminary: Canadian oil production reached around 3.7 mb/d in June based on preliminary government data and is expected to breach the 4.0 mb/d mark as early as October. Despite discounts of $10-$20/bbl to WTI in July and August, August data from oil sands producers indicate synthetic crude output has risen by over 200 kb/d since June, to around 1.0 mb/d. Suncor's North Steepbank extension has enabled output of synthetic crude oil to exceed 350 kb/d, and news reports indicated that Cenovus has brought on Phase D of its Christina Lake project, consistent with our expectations. Tropical Storm Leslie is likely to move through Eastern Canada's offshore producing areas. Most of these fields are already offline for planned maintenance, but the storm's impact could cause a slower restart. Canadian output is expected to average 4.0 mb/d in 2H12 and 4.1 mb/d in 2013, largely unchanged from last month's estimate.

North Sea

North Sea liquids production fell by 0.2 mb/d to around 2.8 mb/d in August based on preliminary data, with 3Q12 production also 9% lower than in 2011. A Norwegian oil workers strike reduced output by 60 kb/d in June, 90 kb/d in July, and 40 kb/d in August bringing Norway's oil production to 1.8 mb/d in August. Further labour action was averted in September when oil workers and management agreed on a salary increase and cash payment. In September, production of Brent, Forties, Oseberg and Ekofisk crudes, which together comprise the BFOE benchmark, is likely to reach a record low of around 610 kb/d, with planned maintenance at the Troll field in Norway and at Nexen's Buzzard field in the UK. The 200-kb/d Buzzard field's planned turnaround began on 4 September and is expected to last until mid-October. Planned maintenance of around 300 kb/d and unplanned outages of 110 kb/d in Norway and 120 kb/d in the UK reduced North Sea output to 2.8 mb/d in 3Q12. Planned maintenance of 170 kb/d in 2Q and 3Q12 was around 20 kb/d higher than in the same quarters of 2011, though maintenance was more evenly spaced last year.

Despite the outages, the latest data for June, July, and August indicate production slightly higher than anticipated in both the UK and Norway, resulting in a small (20 kb/d) upwards revision to North Sea supplies in 2H12. The outlook has been adjusted downward by 30 kb/d in Norway in 2013 due to a slight delay to Goliat to 2014, and poor field performance at Gjoa and Alvheim/Klegg that have been carried through the forecast. Taking these revisions into account means Norway's oil supply should fall by 7% to 1.8 mb/d in 2013 and the UK's should fall by 5% to 0.9 mb/d.



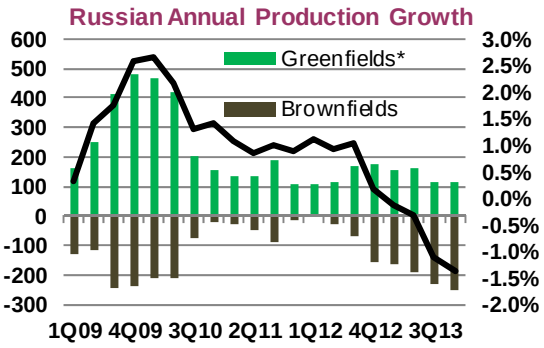


Non-OECD

Former Soviet Union

Russia – August preliminary: Russian oil production rose by 60 kb/d to a new post-Soviet record of 10.7 mb/d in August, thanks to rising Eastern Siberia and NGL output. Gazprom's condensate output increased by around 60 kb/d compared to the prior month, despite a reduction in natural gas supplies. Production at Rosneft's Vankor field rose by 12% month-on-month to almost 400 kb/d. Meanwhile, mature assets in Western Siberia performed better than expected. Lukoil, in particular, managed to reduce the decline rate at its Western Siberian fields from 5% in 2011 to only 2% in the 1H12.

Yet the outlook for the remainder of the year and 2013 may not be as promising as recent performance would suggest. Year-on-year growth rates of crude output slowed slightly to 1.0% in 3Q12 from 1.1% in 2Q12. In the third quarter, brownfield declines have regained momentum, blunting the impact of higher contributions from greenfields. Bashneft, which grew its expensive, heavy oil output by 4% over the last year to over 300 kb/d, has said it does not expect further growth in 2H12. After strengthening by 1% in 2012, Russian production looks set to decline by -0.5% in 2013, unchanged from last month's report.



*Greenfield production includes Sakhalin, Vankor, Verkhnechonskoye, Uvat, Salym, Caspian, and other major field additions of the last 3 years.

Other FSU: Oil production in **Azerbaijan** is stagnating at around 870 kb/d in 3Q12, roughly 7.4% lower than last year. Based on the latest data, production rates are not fully recovering from planned maintenance at the East, West, and Central Azeri fields that occurred in 4Q11. The outlook is therefore revised downward for 2H12 (-30 kb/d) and for 2013 (-20 kb/d) based on the lower baseline. Liquids output is expected to fall by 1.5% next year to average around 890 kb/d. In **Kazakhstan,** the North Caspian Operating Company that is developing the super-giant Kashagan field confirmed that output would not begin until spring 2013, due to problems completing the Bolashak onshore processing plant. According to press reports, construction and installation are 98% complete but commissioning and connections are only 70% complete. Commercial volumes of oil are expected to begin around June,

reaching up to 350 kb/d. Meanwhile, maintenance at the Sour Gas Injection/Second Generation Plant at the Tengiz field is expected to reduce output by 6% y-o-y in Kazakhstan to only 1.5 mb/d in 3Q12, the lowest level since late 2008.

FSU net exports slumped by a seasonal 0.2 mb/d to 8.8 mb/d in July, their lowest level since November 2008, as high Russian refinery runs reduced the availability of crude for export. Total crude shipments dropped by 0.2 mb/d to 6.1 mb/d, their lowest level in a year. Transneft volumes accounted for 130 kb/d of the decline after higher volumes from Baltic ports failed to offset persistently constrained Druzhba pipeline flows and lower deliveries from the Black Sea.

The dramatic decline of Druzhba flows to 940 kb/d, a significant 230 kb/d below year-ago levels, has forced many buyers to look elsewhere for alternative supplies. Only Slovakia has maintained its deliveries at year-ago levels. Shipping data indicate that Poland imported seven seaborne Urals cargoes (160 kb/d) in July, compared with only one earlier in 2012, despite the extra cost incurred via tanker deliveries. Poland's more recent import patterns suggest that Druzhba flows likely remained depressed in August. Poland has since imported another six seaborne Urals cargoes (140 kb/d) plus additional cargoes from Norway and even an Aframax cargo of Urals MED.

Black Sea shipments were hit by maintenance at TCO's Tengiz field which restricted flows through the CPC pipeline to 650 kb/d (-50 kb/d m-o-m). Kazakhstani rail shipments to Novorossiysk fell by an additional 80 kb/d. In the Baltic, 327 kb/d (+90 kb/d m-o-m) were sent via Ust Luga, which offset low maintenance-affected flows from Primorsk. Meanwhile, product export tariffs were lowered, resulting in steady product export levels, maximizing outflows while the terms were preferential. Producers are expecting an increase in crude tariffs in August after a recalculation from the higher Urals price. The resilient level of product exports occurred in spite of healthy domestic demand.

FSU Net Exports of Crude & Petroleum Products

(million barrels per day)

	2010	2011	3Q2011	4Q2011	1Q2012	2Q2012	May 12	Jun 12	Jul 12	Latest month vs. Jun 12	Latest month vs. Jul 11
Crude											
Black Sea	2.10	1.93	1.87	1.92	1.83	1.88	1.70	1.92	1.74	-0.18	0.06
Baltic	1.60	1.50	1.37	1.56	1.48	1.75	1.81	1.54	1.64	0.10	0.30
Arctic/FarEast	0.74	0.67	0.65	0.65	0.62	0.62	0.62	0.64	0.62	-0.02	-0.02
BTC	0.77	0.70	0.69	0.64	0.73	0.68	0.65	0.66	0.67	0.01	-0.02
Crude Seaborne	**5.22**	**4.80**	**4.58**	**4.77**	**4.66**	**4.93**	**4.77**	**4.76**	**4.67**	**-0.09**	**0.32**
Druzhba Pipeline	1.13	1.17	1.18	1.24	1.24	1.11	1.15	1.07	0.94	-0.13	-0.23
Other Routes	0.42	0.53	0.54	0.50	0.51	0.49	0.48	0.50	0.52	0.02	-0.04
Total Crude Exports	**6.76**	**6.50**	**6.30**	**6.51**	**6.42**	**6.53**	**6.40**	**6.34**	**6.13**	**-0.21**	**0.05**
Of Which: Transneft[1]	4.00	4.18	4.09	4.31	4.18	4.35	4.37	4.17	4.04	-0.13	-0.01
Products											
Fuel oil[2]	1.54	1.58	1.59	1.46	1.50	1.61	1.63	1.57	1.57	0.00	-0.12
Gasoil	0.88	0.77	0.72	0.69	0.85	0.74	0.71	0.69	0.70	0.02	-0.01
Other Products	0.43	0.43	0.36	0.33	0.42	0.40	0.40	0.37	0.36	-0.01	-0.03
Total Product	**2.85**	**2.77**	**2.66**	**2.49**	**2.78**	**2.75**	**2.74**	**2.63**	**2.64**	**0.01**	**-0.16**
Total Exports	**9.61**	**9.27**	**8.96**	**9.00**	**9.19**	**9.28**	**9.13**	**8.96**	**8.77**	**-0.19**	**-0.12**
Imports	0.07	0.08	0.10	0.08	0.12	0.06	0.06	0.07	0.08	0.01	0.00
Net Exports	**9.54**	**9.19**	**8.86**	**8.92**	**9.07**	**9.22**	**9.08**	**8.89**	**8.69**	**-0.20**	**-0.12**

Sources: Argus Media Ltd, IEA estimates

[1]Transneft data exclude Russian CPC volumes.

[2]Includes Vacuum Gas Oil

Middle East

Two estimates of **Syrian** oil output emerged this month from official sources. One Syrian government official who travelled to Russia to conclude an oil-for-products barter deal said that output was currently 200 kb/d, while another reported output at 140 kb/d, compared to pre-sanctions petroleum production

of around 370 kb/d. This report assesses that Syrian output averaged 170 kb/d in 1H12, assuming that at least some of the pre-conflict 240 kb/d of refining capacity is operating and that a trickle of crude is still able to find an outlet. The reported barter deal, if concluded, would provide the Syrian regime with much needed gasoline and diesel. The *Wall Street Journal* reported in August that despite international sanctions, Syria's Sytrol has secured 11 contracts to sell crude and that it had secured deals to import half the diesel fuel Syria is projected to need annually, mainly for military and industrial uses.

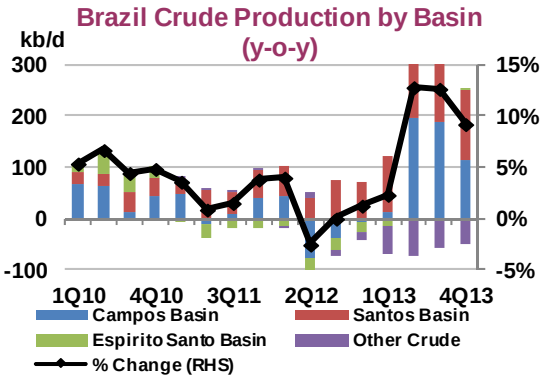
Market observers optimistically greeted news that **Yemen's** 120-kb/d Marib pipeline had been repaired over the course of the summer and that exports would soon increase, yet two new bombings of the pipeline reported in the span of only one week could hinder flows. Currently, operators are holding crude in storage until the line is repaired, and the government asserts that output has not been affected.

Africa

Sudan and South Sudan – Sudan and South Sudan inched closer to a comprehensive agreement that would restore oil exports. In August, the two sides agreed to a one-off compensation from South Sudan to Sudan, as well as pipeline tariffs from the two major oil producing areas in South Sudan. Though South Sudan's leading negotiator to the African Union originally forecasted that output would resume in September, the country's oil and finance ministries do not expect a restart for 4-6 months. The two sides were meeting in Addis Ababa in early September to settle remaining contentious issues on border demarcation. Consistent with our expectations last month, we do not expect a restart to the oil fields in Blocks 1, 2, and 4 until at least mid-2013, while output from Blocks 3 and 7 could restart as soon as January.

Latin America

Brazil – July actual: Brazilian crude output slid slightly for the second month in a row to 2.0 mb/d in July due to continued stagnating output at Campos basin fields. In the second and third quarter, output in the basin fell by around 3% annually, in contrast to 3% and 1% growth in 2010 and 2011. Some of the annual decline is due to the continued shut-in of the 70-kb/d Frade field, but steep offshore decline rates and maintenance at Roncador, Marlim Leste, Marlim Sul, and Cachalote fields is also reducing output. It is clear that decline rates at the Campos basin, which contributes over 80% of Brazil's crude output, are taking a toll, offsetting pre-salt growth from the Santos basin. In 2013, a mid-year restart of the Frade field, a 3Q12 start-up at the 100-kb/d Cidade de Anchieta (Baleia Azul field) FPSO, and new wells at some Campos fields are expected to lift Brazilian crude output by 200 kb/d (1.3%), to 2.3 mb/d. Petrobras' October 2012 target for the start-up to the Baúna and Piracaba (formerly Tiro/Sidon) fields seemed optimistic even before news of a fire at its unfinished FPSO in Singapore looked set to push back the launch to 2013.



Asia

Chinese output bounced back by 70 kb/d to 4.1 mb/d in July after falling sharply in June. Output rebounded from the 30-kb/d Turpan-Hami field and from other offshore fields. Continued lack of information about the timing of a possible restart to the Peng Lai field has caused a 70 kb/d downward revision to 2H12 and a 20 kb/d revision to 2013.

In **India**, ONGC's Mumbai High oil field has been suffering from increasing water cut and lower-than-anticipated recovery rates from new development wells. The company also reported closure of a few wells due to low availability of natural gas for gas recovery. The downturn is broadly in line with expectations and should result in Indian output averaging around 900 kb/d in 2012.

OECD STOCKS

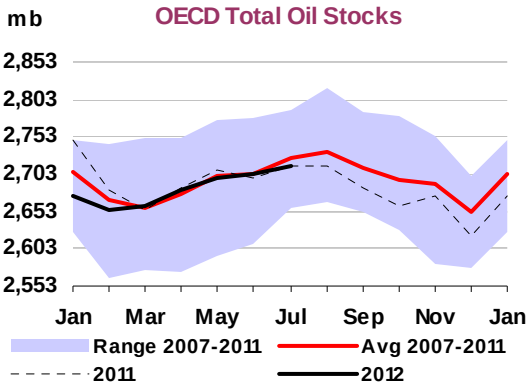
Summary

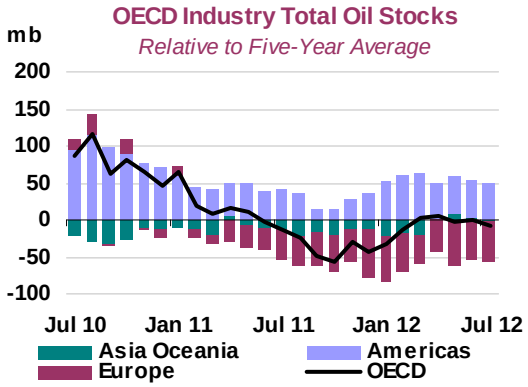
- July OECD industry stocks posted weak seasonal builds of just 10.6 mb, ending at 2 714 mb. The gain was roughly half the five-year average build for the month of 20.7 mb. Inventories slipped to 9.2 mb below the five-year average, from a revised deficit for June of 0.8 mb, much narrower than previously estimated.

- On a forward demand basis, inventory cover looks more comfortable, due mostly to diminishing demand prospects through October. Total OECD stock cover now stands at 58.3 days, 0.2 days above end-June and 0.6 days above a year ago.

- Preliminary data suggest that OECD stocks fell counter-seasonally in August, declining by 21.8 mb. Crude oil led the decline, slumping by 23.7 mb, reflecting both higher refinery runs and disruptions to US production and imports due to Hurricane Isaac.

- The implied Chinese crude oil stock change, calculated as the gap between reported refinery throughput and net imports and production data, stands at 4 mb in July, suggesting that Chinese SPR filling has continued into the third quarter.





OECD Inventory Position at End-July and Revisions to Preliminary Data

OECD commercial oil stocks built by 10.6 mb in July, the fifth consecutive monthly increase, to stand at 2 714 mb at end-month. This rise, however, was significantly weaker than the average 20.7 mb build for the month. Consequently, inventories slipped to 9.2 mb below the five-year average from June's revised deficit of 0.8 mb (previously estimated at 19.2 mb). As in previous months, inventories remain unevenly distributed among the main OECD regions. OECD Americas remains approximately 50 mb in surplus to the five-year average, whereas OECD Europe and Asia Oceania remain 55 mb and 3 mb in deficit, respectively. On a forward demand basis, the inventory picture looks slightly more comfortable, largely due to diminishing demand prospects through October. Total OECD stocks now stand at 58.3 days, 0.2 days above end-June and 0.6 days above a year ago.

The July stock build was driven by a 32.8 mb rise in products. Yet despite that build, OECD total product holdings still lag the five-year average by 42 mb, as stockholders appear unwilling to steadily increase stocks while product markets are in backwardation. Middle distillates and 'other products' accounted for the bulk of the July product stock build, rising by 13.7 mb and 12.7 mb, respectively. Both of those builds were in line with seasonal patterns. Additionally, gasoline rose by 5.9 mb after a sharp counter-seasonal 3.7 mb climb in OECD Europe.

Meanwhile, OECD crude inventories posted a seasonal, albeit steep, draw of 16.5 mb spanning all regions, as spring refinery maintenance wound down. It is noteworthy that June preliminary data were revised upwards by a steep 20.2 mb, 19.4 mb of which was crude oil, largely concentrated in OECD Americas and OECD Europe. Crude oil inventories in the Americas were revised upwards by 10.7 mb, with Canada accounting for 7.4 mb of the revision. OECD Europe crude stocks were adjusted upwards by 7.1 mb following receipt of more complete data.

Revisions versus 10 August 2012 Oil Market Report

(million barrels)

	Americas		*Europe*		*Asia Oceania*		*OECD*	
	May-12	Jun-12	May-12	Jun-12	May-12	Jun-12	May-12	Jun-12
Crude Oil	**8.3**	**10.7**	**0.4**	**7.1**	**0.0**	**1.5**	**8.7**	**19.4**
Gasoline	0.0	-0.7	0.3	0.3	0.0	0.6	0.3	0.3
Middle Distillates	-0.2	-0.7	-0.1	0.6	0.0	0.1	-0.3	-0.1
Residual Fuel Oil	0.1	-0.3	0.3	0.3	0.0	0.0	0.4	0.0
Other Products	0.0	-2.4	0.0	0.1	0.0	0.6	0.0	-1.7
Total Products	**-0.1**	**-4.1**	**0.5**	**1.3**	**0.0**	**1.2**	**0.4**	**-1.5**
Other Oils[1]	0.9	3.3	-1.4	-0.3	0.0	-0.6	-0.5	2.4
Total Oil	**9.1**	**9.9**	**-0.5**	**8.2**	**0.0**	**2.1**	**8.6**	**20.2**

1 Other oils includes NGLs, feedstocks and other hydrocarbons.

Preliminary data imply that OECD total oil stocks drew counter-seasonally in August, declining by 21.8 mb compared to a five-year average 8.3 mb build. However, much of this draw was located in the US where Hurricane Isaac disrupted production and import operations at end-August. Crude oil holdings plummeted by 23.7 mb, with the US slumping by 16.5 mb while Japanese and European stocks declined by 3.3 mb and 3.9 mb, respectively. OECD total product holdings increased by 4.2 mb, driven by rises in 'other products' and middle distillates of 8.6 mb and 8.1 mb, respectively, which offset a 10 mb decrease in gasoline concentrated in the US.

Preliminary Industry Stock Change in July 2012 and Second Quarter 2012

	July 2012 (preliminary)								Second Quarter 2012			
	(million barrels)				*(million barrels per day)*				*(million barrels per day)*			
	Am	Europe	As. Ocean	Total	Am	Europe	As. Ocean	Total	Am	Europe	As. Ocean	Total
Crude Oil	**-6.8**	**-7.5**	**-2.1**	**-16.5**	**-0.22**	**-0.24**	**-0.07**	**-0.53**	**0.25**	**0.08**	**0.17**	**0.49**
Gasoline	0.9	3.7	1.2	5.9	0.03	0.12	0.04	0.19	-0.16	-0.06	0.01	-0.21
Middle Distillates	8.5	2.1	3.2	13.7	0.27	0.07	0.10	0.44	-0.20	-0.28	0.08	-0.41
Residual Fuel Oil	-0.4	-0.1	1.1	0.6	-0.01	0.00	0.04	0.02	0.03	-0.01	0.00	0.02
Other Products	11.8	-0.1	0.9	12.7	0.38	0.00	0.03	0.41	0.36	0.01	0.07	0.45
Total Products	**20.9**	**5.6**	**6.4**	**32.8**	**0.67**	**0.18**	**0.21**	**1.06**	**0.03**	**-0.34**	**0.16**	**-0.15**
Other Oils[1]	-4.5	-0.3	-1.0	-5.8	-0.14	-0.01	-0.03	-0.19	0.10	-0.01	0.06	0.15
Total Oil	**9.5**	**-2.3**	**3.3**	**10.6**	**0.31**	**-0.07**	**0.11**	**0.34**	**0.37**	**-0.27**	**0.39**	**0.49**

1 Other oils includes NGLs, feedstocks and other hydrocarbons.

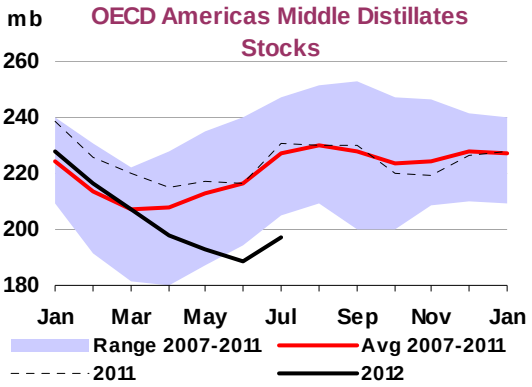
Analysis of Recent OECD Industry Stock Changes

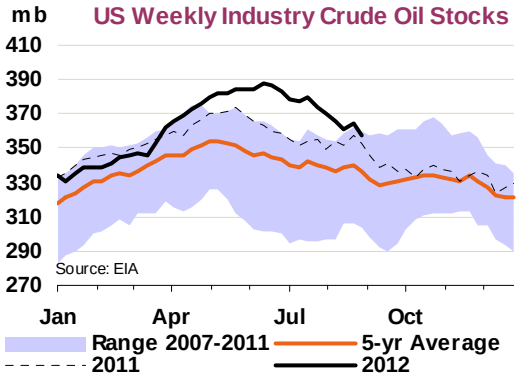
OECD Americas

Commercial oil inventories in OECD Americas rose by 9.5 mb in July after a 20.9 mb build in products outweighed an 11.3 mb drop in crude, NGL and feedstocks holdings. The steepest draw was reported in crude oil, stocks of which fell by a seasonal 6.8 mb, mostly in the US, after a 140 kb/d dip in imports combined with an uptick in refinery runs.

Total products remain close to the five-year average. 'Other products' inventories continued to lead product builds, rising by 11.8 mb on the month, a significantly steeper build than the 7.2 mb five-year average. As with the previous few months, these inventories have been lifted by stronger-than-seasonal restocking of propane in the US, linked to burgeoning domestic natural gas liquids supply. Elsewhere, middle distillates, which have been running below last year's levels due to growing exports to

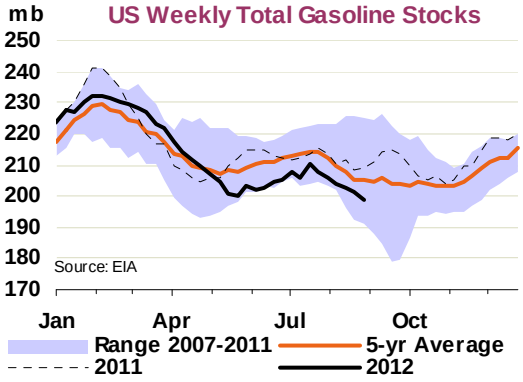
Latin America, built by a seasonal 8.5 mb as seasonally weak demand more than offset a dip in refinery output.



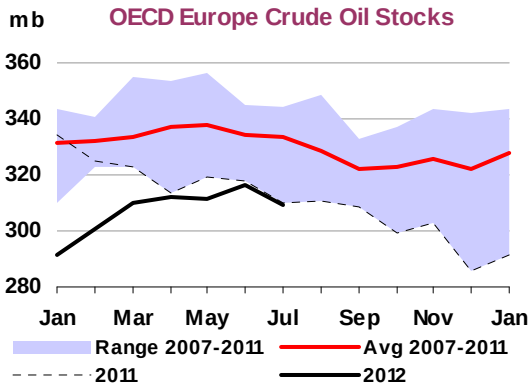


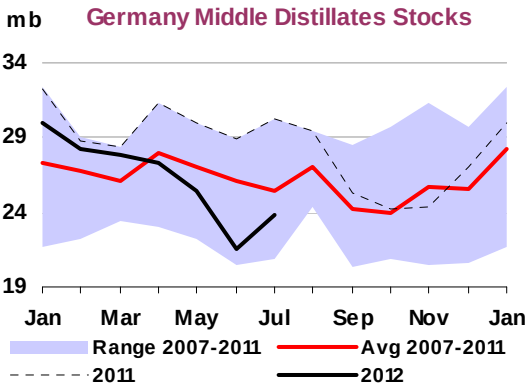
August preliminary data indicate that US total oil stocks slid further by a steep 13.6 mb, led by a 16.5 mb drop in crude oil. Hurricane Isaac, which disrupted operations in the Gulf Coast region during the last week of August, explains much of the draw. In addition to the closure of the Louisiana Offshore Oil Port (LOOP terminal) for three days, which restricted imports, a portion of regional liquids production was also shut in. PADD 3 crude stocks slumped by 7.1 mb during the week ending 31 August, a drop which might have been even greater had Hurricane Isaac not also idled 1.2 mb/d of regional refinery capacity.

After a slow start to the US driving season, gasoline stocks have been on a steady downward path since early-July. Latest data indicate that they fell by 9.0 mb in August to end the month at 202.9 mb, 10 mb below a year-ago. Reports indicate that US consumers stocked up on gasoline ahead of Hurricane Isaac, with four-week average gasoline demand rising to 9.2 mb at end-August, its highest level in a year. Reports also suggest that this tightness in supply is bringing in extra volumes from abroad, notably from Europe.



OECD Europe





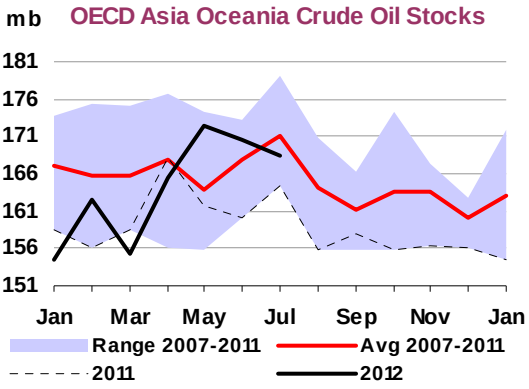
OECD Europe commercial oil holdings drew by 2.3 mb in July after a 5.6 mb build in products failed to offset a significant 7.6 mb decline in crude oil. Total oil inventories continue to lag the five-year average, with the deficit widening to 55.2 mb, from 54.3 mb in June. Crude oil stocks fell after European refineries hiked production (+ 600 kb/d m-o-m) in response to reportedly the highest refinery margins since 2008.

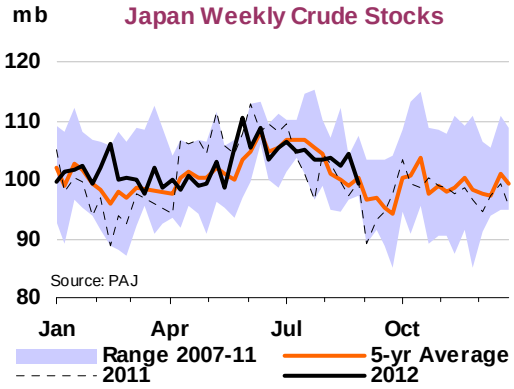
The heaviest draws were noted in France (-2.4 mb), the United Kingdom (-2.2 mb) and Germany (-1.5 mb) which offset rises elsewhere, notably Italy (+1.5 mb).

The rise in refinery output subsequently drove product stocks higher with increases in motor gasoline (+3.7 mb) and middle distillates (+2.1 mb) compensating for minor draws elsewhere. Motor gasoline holdings grew after a rise in France (+2.5 mb) and Germany (+1.3 mb). The build in middle distillates was led by Germany where inventories increased by 2.3 mb on the month, despite consumers' heating oil tanks reaching 56% of capacity, a climb of three percent over both the previous month and year-ago levels.

Preliminary data pertaining to products held in independent storage in Northwest Europe indicate that despite a monthly uptick, inventories still remained in deficit to the five-year average by end-August. Holdings grew after rises in gasoil and gasoline offset falls in naphtha fuel oil and jet kerosene. Data from Euroilstock for EU-15 and Norway signal that stocks fell by 5.6 mb in August led by a seasonal 3.9 mb drop in crude. Meanwhile, refined products drew by 1.6 mb following losses in motor gasoline (-1.3 mb) and fuel oil (-1.2 mb).

OECD Asia Oceania

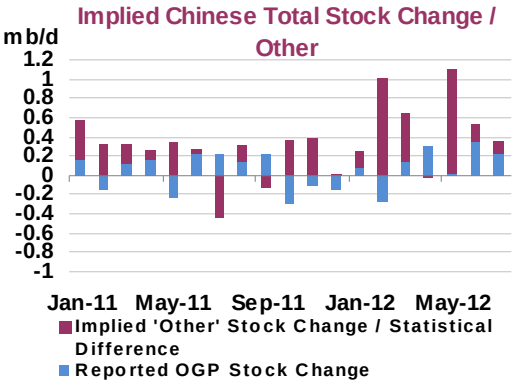


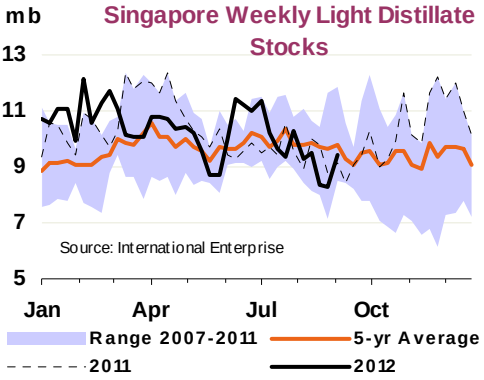


Commercial oil inventories in OECD Asia Oceania (for now excluding Israel) built by 3.4 mb in July with a 6.4 mb rise in product holdings offsetting a combined 3.1 mb drop in crude, NGLs and feedstocks. Japanese crude stocks drew by 2.2 mb after a ramp-up in refinery inputs following second quarter maintenance, outpaced a 200 kb/d hike in crude imports. Regional refinery runs rose by 400 kb/d between June and July outpacing demand with the majority of products being placed in storage. All product categories showed builds during the month, with a notable 3.2 mb rise reported for middle distillates, mostly in Japan.

Weekly data reported by the Petroleum Association of Japan indicate that total industry holdings slumped below the five-year average drawing by 2.6 mb in August. Crude fell by 3.3 mb for the second consecutive as refineries ramped up further. However, this masked the volatility of crude stocks during the month after they initially inched up for the first three weeks of the month before plummeting by over 5 mb in the last week of August and the first week of September. In contrast, product inventories rose by 0.9 mb, as a 2.3 mb increase in kerosene holdings offset draws in naphtha and residual fuel oil of 1.4 mb and 0.5 mb, respectively.

Recent Developments in Singapore and China Stocks





According to *China Oil, Gas and Petrochemicals* (*China OGP*), Chinese commercial oil inventories fell by an equivalent 1.1 mb (data are reported in terms of percentage stock change), to 372 mb at end-July. Crude holdings rose by 7.1 mb as rising crude production and imports outpaced sluggish refinery runs. Products drew by 8.2 mb after refinery output failed to keep pace with demand. Gasoil stocks declined by a significant 6.1 mb while gasoline and kerosene fell by 1.0 mb and 1.1 mb, respectively.

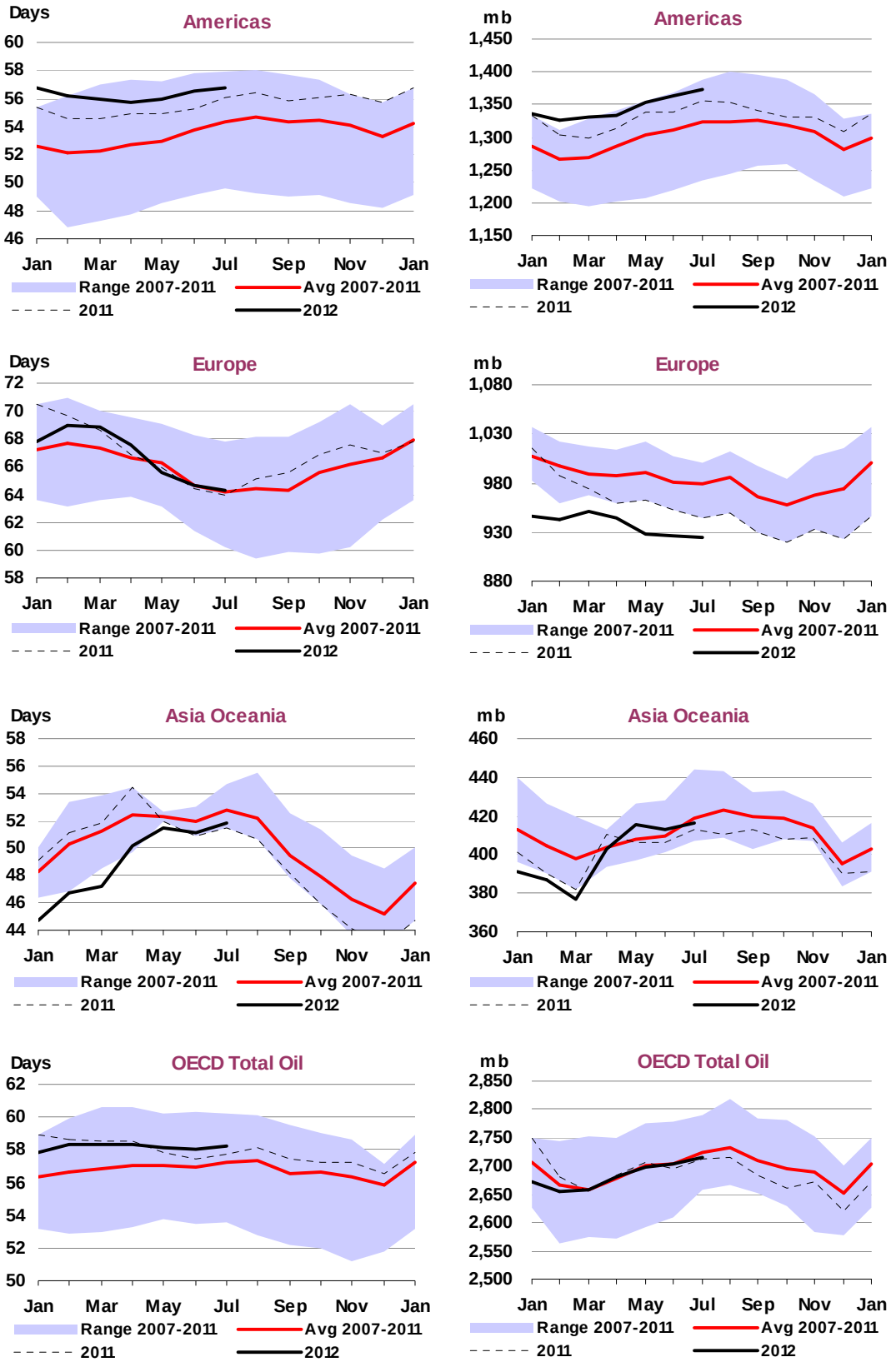
Commercial oil inventories now stand approximately 21 mb higher than year ago levels. However, the implied Chinese total stock change (calculated as the difference between reported refinery runs, net imports and production data) for this period is 104 mb. Notwithstanding the likelihood that this also includes statistical difference and stock changes at 'teapot' refineries, the largest component of this is the filling of recently completed SPR capacity. Indeed, the gap still stands at 4 mb in July implying that SPR building has continued into early 3Q12.

Data from state trade agency, International Enterprise indicate that Singapore onshore product stocks slipped further below the five-year average decreasing by 2.8 mb to stand at 35.7 mb by end-August. Light distillates slid by 1.6 mb over the month but had fallen to three-year lows mid-month after strong gasoline demand from Malaysia and Indonesia combined with low imports of naphtha from Taiwan. However, inventories rebounded somewhat at end-August after exports to the Atlantic Basin dried up. Elsewhere, fuel oil drew by 1.9 mb while middle distillates rose by 0.6 mb.

Regional OECD End-of-Month Industry Stocks

(in days of forward demand and millions barrels of total oil)

Days[1] Million Barrels



1 Days of forward demand are based on average demand over the next three months

PRICES

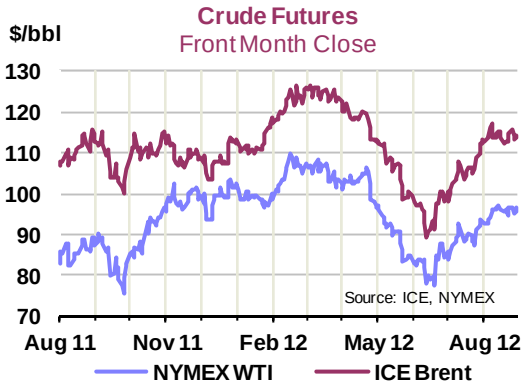
Summary

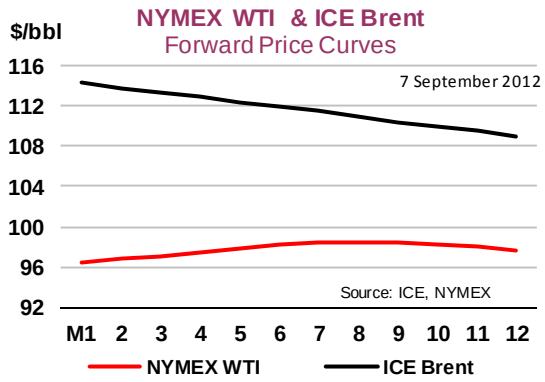
- **Crude oil prices extended their earlier gains into August, but the rally ran out of steam in the second half of August and early September**. On the ICE market, front-month Brent futures reached a high of $116.90/bbl on 16 August, then slid back and traded sideways. Light, sweet crude futures on the CME peaked slightly later at 97.26/bbl on 22 August, ending the first week of September at $96.42/bbl.

- **Product markets outperformed crude prices in August on very low product inventories across the OECD and concerns about refinery outages,** including a deadly blast at Venezuela's giant Amuay refinery and precautionary plant shutdowns in a US Gulf Coast hit by the first major hurricane since 2008. Robust refining margins incentivised higher runs at operating refineries across the OECD, where refining throughputs surged in July and August.

- **Market activity on oil futures exchanges reversed the recent trend of slipping away from the New York CME and London ICE WTI contracts towards the ICE Brent futures contracts.** Data on open interest show the ratio of Brent futures on the London ICE to New York and London WTI oil positions declined more than 5.6 percentage points to 58.2% between 31 July and 4 September.

- **Tanker markets were sluggish in August on low demand and a glut of available vessels.** Clean tanker markets in the Atlantic Basin were a notable exception, as light product exports to the US recovered. Rates on the Middle East-Japan trade fell back in August from recent highs, following an increase in Japanese refinery runs.

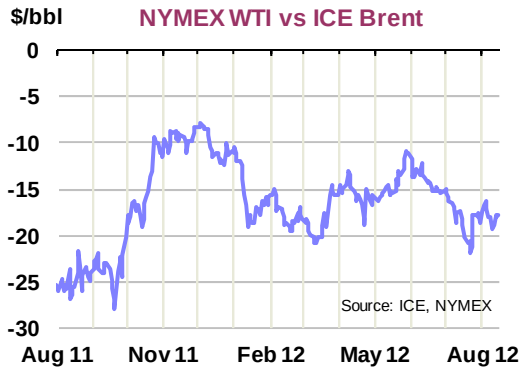


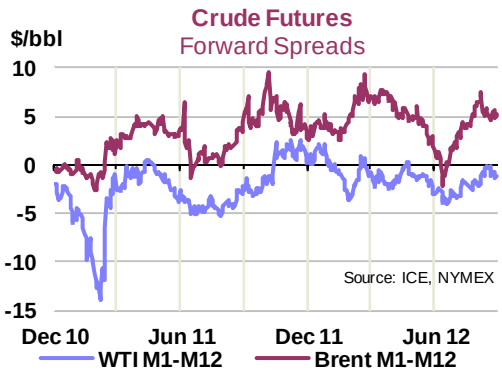


Market Overview

Crude oil markets extended earlier gains into August, buoyed by very steep July and August increases in OECD refinery runs and unplanned outages in non-OPEC crude production. Thanks in part to that resurgence in refining activity, OECD crude inventories posted counter-seasonal draws in August, extending seasonal but steeper-than-usual draws in July. In late August, Hurricane Isaac disrupted crude production and imports in the US Gulf of Mexico, though the effect of that supply shortfall was partly offset by lower crude demand due to precautionary refinery shutdowns and run cuts. Lower exports of Iranian barrels since July may have been a contributing factor.

Yet despite resurgent refinery demand and continued supply concerns, the crude rally appeared to lose momentum in the second half of the month, with ICE Brent prices retreating after 16 August and CME light, sweet crude futures peaking about a week later amid market rumours of an imminent release of US strategic stocks.





In contrast, product prices, which rose along with crude early in the summer, proved more resilient and continued to rally even after crude price gains came to a halt. OECD product inventories had been on the low side, depleted by months of subdued refining output and plant closures in the OECD, especially for key products such as middle distillates. A string of summer refinery outages, including, but not limited to, a deadly blast at Venezuela's giant Amuay refinery and a fire at a large US West Coast refinery, further supported prices in August, as did short-lived but large-scale hurricane-related plant shutdowns in the US Gulf towards the end of the month.

Prompt Month Oil Futures Prices

(monthly and weekly averages, $/bbl)

	Jun	Jul	Aug	Aug-Jul Avg Chg	% Chg	Week Commencing: 06 Aug	13 Aug	20 Aug	27 Aug	03 Sep
NYMEX										
Light Sweet Crude Oil	82.41	87.93	94.16	6.23	6.6	93.09	94.42	96.47	95.68	95.65
RBOB	111.36	118.49	127.25	8.76	6.9	125.15	127.57	129.31	130.78	125.08
No.2 Heating Oil	109.80	118.18	128.25	10.07	7.9	126.17	128.97	130.95	131.39	131.84
No.2 Heating Oil ($/mmbtu)	18.85	20.29	22.02	1.73	7.9	21.66	22.14	22.48	22.56	22.63
Henry Hub Natural Gas ($/mmbtu)	2.50	2.96	2.81	-0.16	-5.5	2.90	2.75	2.78	2.69	2.78
ICE										
Brent	95.93	102.72	112.68	9.95	8.8	111.97	114.90	114.37	112.92	114.16
Gasoil	112.59	119.55	130.02	10.47	8.1	128.01	130.51	133.19	132.55	133.59
Prompt Month Differentials										
NYMEX WTI - ICE Brent	-13.52	-14.79	-18.52	-3.73		-18.88	-20.48	-17.90	-17.24	-18.51
NYMEX No.2 Heating Oil - WTI	27.39	30.25	34.09	3.84		33.08	34.55	34.48	35.72	36.18
NYMEX RBOB - WTI	28.95	30.56	33.09	2.53		32.06	33.15	32.84	35.11	29.43
NYMEX 3-2-1 Crack (RBOB)	28.43	30.45	33.42	2.97		32.40	33.62	33.39	35.31	31.68
NYMEX No.2 - Natural Gas ($/mmbtu)	16.35	17.33	19.21	1.88		18.76	19.39	19.70	19.87	19.86
ICE Gasoil - ICE Brent	16.66	16.83	17.34	0.51		16.04	15.61	18.82	19.63	19.43

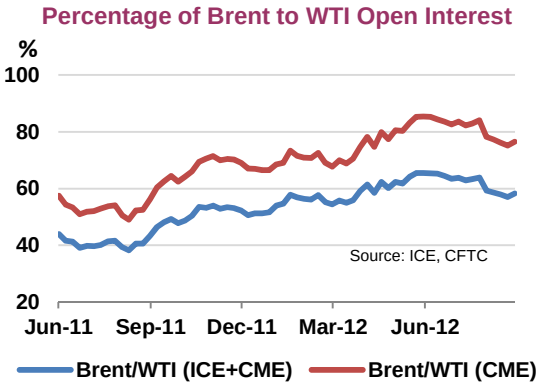
Source: ICE, NYMEX

Exceptionally tight product markets resulted in strong product crack spreads, providing refiners with an incentive to raise their output. Spurred by that resurgence in margins, OECD refiners dramatically increased their throughputs in July and August. The transatlantic arbitrage window reopened for gasoline and later on even for ultra-low sulphur diesel to the US. US RBOB crack spreads, having surged in late August on hurricane news, subsequently retraced some of their gains, though distillate cracks remained well supported.

Meanwhile, money managers raised their net long positions in CME light, sweet crude futures and in ICE Brent futures to their highest level since last May, spurred in part by expectations of fresh economic stimulus and geopolitical concerns.

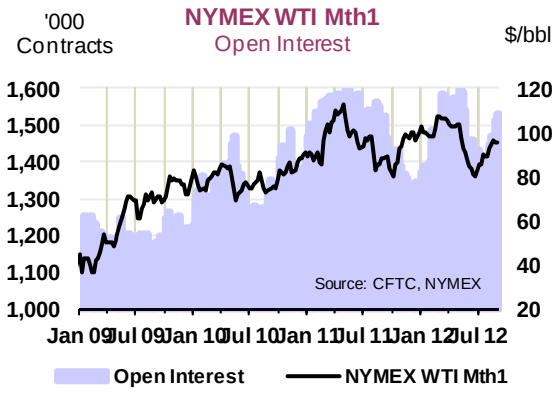
Futures Markets

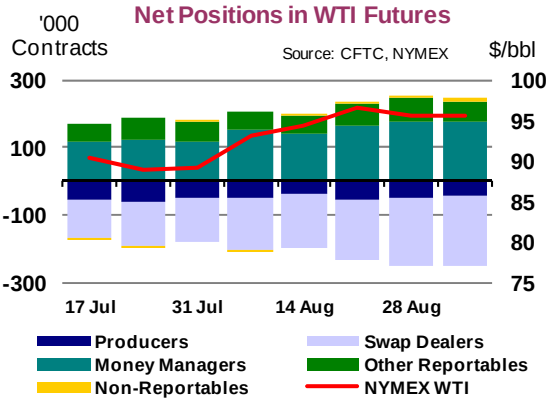
Activity Levels

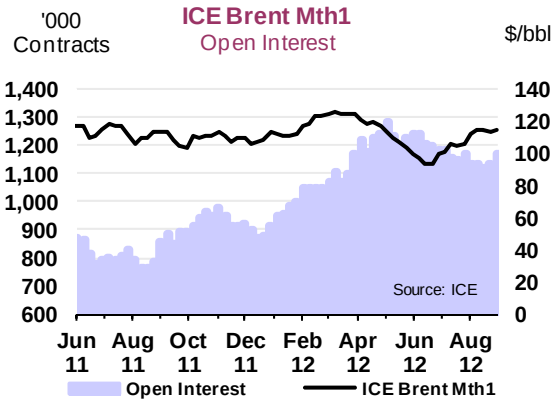


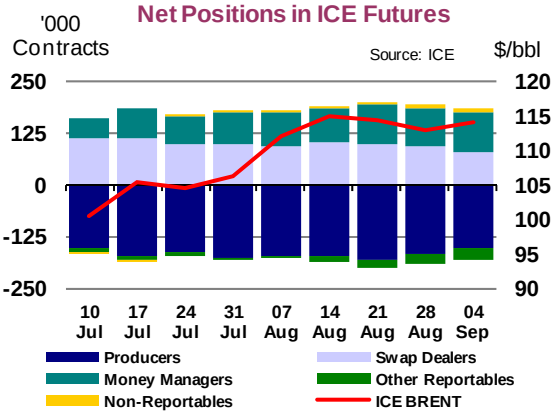
Market activity on oil futures exchanges reversed the recent trend of slipping away from the New York CME and London ICE WTI contracts towards the ICE Brent futures contracts. Data on open interest show the ratio of Brent futures on the London ICE to New York and London WTI oil positions declined more than 5.6 percentage points to 58.2% between 31 July and 4 September, driven by increases of 9.75% and 9% in CME and ICE WTI open interest, respectively. Stripping out ICE WTI contracts, the ratio of Brent to WTI open interest fell even faster, by 7.5 percentage points to 76.5%. In contrast, trade volumes followed a different path. Total trade volumes in CME WTI contracts fell 32% in August 2012 y-o-y and by 19.8% year-to-date, to 11.7 million and 98.7 million contracts, respectively. In contrast, Brent monthly volume inched up by 3% to 12.6 million contracts last month from 12.3 million in August 2011. Year-to-date Brent volume jumped by 17% to 101.5 million contracts, exceeding the volume in CME WTI by more than 2.8 million contracts.

Open interest increased in August in both CME and ICE WTI oil contracts but declined in ICE Brent contracts. At CME, combined open interest in WTI futures and options increased by 7.67% to 2.5 million, while open interest in futures-only contracts increased by 9.75% to 1.53 million, the highest level since May 2012. Over the same period, open interest at the London ICE rose to 0.48 million for WTI futures-only contracts and by 10.5% in futures and options, to 0.59 million contracts. Meanwhile, open interest in ICE Brent futures inched down by 0.06% to 1.17 million contracts, while ICE Brent futures and options increased by 4.7% to 1.5 million contracts from 31 July to 4 September 2012.









Against the backdrop of weak global economic activity, investor expectations of new stimulus measures and the perception of increased possibility of war in the Middle East seem to be the driving force behind the bullish market sentiment.

Economic indicators were downbeat in August and early September, including steeper-than-expected manufacturing contraction in the US and euro area and yet another weak Chinese OPMI index reading. Seeking to back up his July pledge to do "whatever it takes" to preserve the euro, ECB President Mario Draghi announced on 6 September that the ECB Governing Council had agreed to a fully sterilised sovereign bond-buying program, allowing the ECB to buy an unlimited amount of eurozone government debt with maturities of one to three years, provided that governments agree to certain conditions.

Across the Atlantic, Fed Chairman Ben Bernanke lifted expectations of new stimulus measures in his speech at the Fed's annual conference in Jackson Hole, Wyoming. Stopping short from committing to any specific move, Bernanke unambiguously signalled that the Federal Reserve would do more to address the weakness in the US economy. Following a disappointing US jobs market report for August, economists are increasingly convinced that the Federal Reserve will unveil a new set of stimulus measures as early as its 12-13 September meeting, including possibly an extension of its commitment to zero rates into 2015 or a third round of bond purchases meant to lower long-term interest rates and encourage more borrowing and spending.

Reflecting heightened expectations of fresh stimulus measures and higher oil prices, money managers raised their net long positions in CME WTI futures contracts by close to 48% between 31 July and 4 September 2012 to 177 037 contracts, the highest level since May 2012. Money managers in London ICE Brent contracts followed a similar pattern and boosted their bullish wagers, reaching the highest level since 1 May 2012, at 94 723.

Positions on NYMEX Light Sweet Crude Oil (WTI) Futures Contracts

Thousand Contracts

04 September 2012	Long	Short	Net	Long/Short	Δ Net from Prev. Week	Δ Net Vs Last Month
Producers' Positions	266.2	307.3	-41.1	*Short*	↑ 9.0	↑ 7.0
Swap Dealers' Positions	143.1	351.2	-208.1	*Short*	↓ -5.1	↓ -77.9
Money Managers' Positions	216.2	39.1	177.0	*Long*	↑ 1.9	↑ 57.2
Others' Positions	158.0	96.4	61.6	*Long*	↓ -12.6	↑ 7.0
Non-Reportable Positions	78.2	67.5	10.7	*Long*	↑ 6.7	↑ 6.7
Open Interest			**1531.8**		↑ 20.5	↑ 136.1

Source: CFTC

Positions on ICE Brent Crude Oil Futures Contracts

Thousand Contracts

04 September 2012	Long	Short	Net	Long/Short	Δ Net from Prev. Week	Δ Net Vs Last Month
Producers' Positions	474.2	627.5	-153.3	*Short*	↑ 16.6	↑ 22.3
Swap Dealers' Positions	193.5	113.2	80.3	*Long*	↓ -12.0	↓ -16.9
Money Managers' Positions	144.5	49.8	94.7	*Long*	↑ 0.9	↑ 16.1
Others' Positions	16.7	46.2	-29.4	*Short*	↓ -6.2	↓ -23.0
Non-Reportable Positions	45.4	37.7	7.7	*Long*	↑ 0.7	↑ 1.5
Open Interest			1172.1		↑ 36.5	↓ -0.7

Source: ICE

Producers accounted for 20.1% of the short positions and 17.4% of the long positions in CME WTI futures-only contracts at end-August, reducing their net short positions by 14.5% to 41 115 contracts. Swap dealers, who accounted for 25.2% and 38.8% of the open interest on the long side and short side, respectively, increased their bets on falling prices by 60% to 208 137, the largest net futures short positions ever recorded. Producers' and swap dealers' trading activity in the London ICE Brent contracts followed an opposite pattern from CME WTI contracts. Producers in London ICE Brent contracts reduced their net short positions from 175 610 to 153 302 contracts. Similarly, swap dealers reduced their net long positions from 97 219 to 80 345 contracts.

NYMEX RBOB futures and combined open interest increased by more than 15% to 284 399 and 302 817, respectively, over the same period. Open interest in NYMEX heating oil futures contracts was up by 9.3% to 331 284 contracts while open interest in natural gas futures market declined by 2.2% to 1.1 million contracts.

Index investors' long exposure in commodities in July 2012 decreased by $3.1 billion to $281 billion, after edging up by $14.2 billion in June. The notional value of long exposures in both on- and off-WTI Light Sweet Crude Oil futures contracts declined by $1.3 billion in July. The number of long futures equivalent contracts decreased by 31 000 to 523 000, equivalent to $46.4 billion in notional value.

Market Regulation

The US CFTC published its final rule on the definition and interpretation of swaps in the Federal Register on 13 August 2012. The rule will become effective on 12 October 2012, which will also trigger the compliance dates for several other Commission rules, including swap dealers' (SD) and major swap participants' (MSP) registration, SD and MSP swap data reporting and record-keeping, real time reporting of swap transaction and pricing data, internal and external business conduct standards, and position limits.

On 16 August, the US CFTC approved a proposed rule, which will exempt swaps between certain affiliated entities within a corporate group from the clearing requirement if certain conditions are satisfied, while still requiring variation margin for inter-affiliate swaps. The proposed exemption would be limited to (a) swaps between majority-owned affiliates whose financial statements are reported on a consolidated basis (b) swaps between U.S. affiliates, and swaps between a U.S. affiliate and a foreign affiliate located in a jurisdiction with a comparable and comprehensive clearing regime or the non-United States counterparty is otherwise required to clear the swaps it enters into with third parties in compliance with United States law or does not enter into swaps with third parties. Additionally, the proposed rules would require centralized risk management, documentation of the swap agreement, variation margin payments (for financial entities), and satisfaction of reporting requirements.

The comments period for the proposed US CFTC's interpretive guidance, issued on 29 June, on the extraterritorial application of US derivatives regulations ended on 27 August 2012. European and Asian regulators and other market participants raised concerns about the unintended consequences of cross-border application of swaps rules, including potential market disruption or fragmentation resulting in increased systemic risks and reduced market liquidity. The problem of non-US nationals facing compliance and registration requirements with overlapping and sometimes conflicting regulations in the US and their home country was also brought up.

On 10 September, the US CFTC issued a guidance document to clarify the timing of registration requirements for swap dealers. The swap dealer registration rule will take effect on 12 October. Under the current rule, derivatives traders will have 60 days to register as a swap dealer starting from the end of the month in which they hit the $8 billion swap transactions threshold set by the US CFTC for the interim period, implying that earliest registration deadline will be January 2013. Entities, which will hit the threshold level later than October, will have more time to register as a swap dealer.

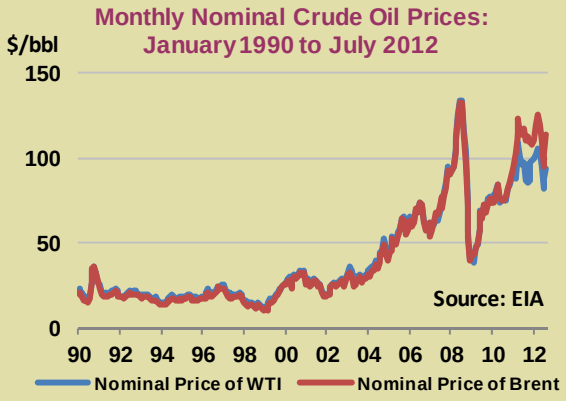
The European Parliament's Economic and Monetary Affairs Committee (ECON) is expected to finalise and vote its version of Markets in Financial Instruments Directive (MiFID) II in September. ECON is expected to have two meetings on 10 and 13 September, followed by a final vote on 26 September. The vote was delayed in July due to contentious issues such as the creation of organised trading facility, pre-trade transparency waivers, measures to limit high-frequency trading and position limits on commodities trading.

On 4 September, Intercontinental Exchange (ICE) announced that it plans to transition all existing over-the-counter (OTC) cleared energy swaps and option products to economically equivalent future and option products on 15 October, earlier than the initially announced date of January 2013, due to strong customer demand. ICE's switch date now corresponds to the compliance dates for several new swaps rules and thereby reduces their clients' exposure to compliance costs associated with the new rules imposed on swap transactions.

Forecasting Price on Opaque Oil Markets

The summer of 2008 saw a spike in crude oil prices to $147/bbl, followed by a steep correction in late 2008/early-2009. A subsequent rebound over the last three years has brought the question of whether it is possible to accurately forecast prices over the medium and longer term.

Making reliable forecasts of oil prices has been of interest to a wide range of economic agents, including policymakers, oil producers and consumers as well as other market participants. However, in a rapidly changing oil market, any forecast of oil prices, especially at longer horizons, is highly uncertain, a fact illustrated by the wide confidence bands around price predictions. Research shows that forecasts based on futures prices, surveys of analyst forecasts, forecasts based on a variety of simple time series regressions and other common forecasting techniques are generally inferior to the random-walk forecast, which implies that the best forecast of crude oil spot prices is simply the current price of oil. Some models improve short-term forecasts up to a year; however, at longer horizons a random walk forecast outperforms all models with the exception of forecasts based on expected inflation due to the large inflation component in the nominal price of oil at longer horizons (See, e.g., Kilian and Baumeister (2012) and Kilian, Alquist and Vigfusson (2012)).



Apart from these simple forecasting techniques, recent research based on more sophisticated VAR-based models showed substantial improvement in short term price forecasting up to a year, and even longer horizon improvement in directional accuracy. These models, using percent change in global oil production, oil price, real global activity and global inventories as their main variables, can be used to not only measure the impact of demand and supply shocks on the price of oil but also to generate projections conditional on different economic scenarios. Although promising, these models also suffer from two distinct limitations. Firstly, they only allow for temporary shocks to global oil supply, such as a disruption in Iranian production, as opposed to a persistent decline in oil supply growth driven by resource constraints, such as finite oil reserves. Secondly, and more importantly, key macroeconomic as well as oil market-specific variables that are the subject of forecasts are not available to the forecaster in real time. Most data are available with a time delay. Furthermore, preliminary data tend to be revised over time. As a result, forecast accuracy is done using ex-post revised data. Therefore, it is not possible to measure the accuracy of forecasts, as opposed to forecasts based on more easily observed futures prices or expected inflation.

Forecasting Price on Opaque Oil Markets (continued)

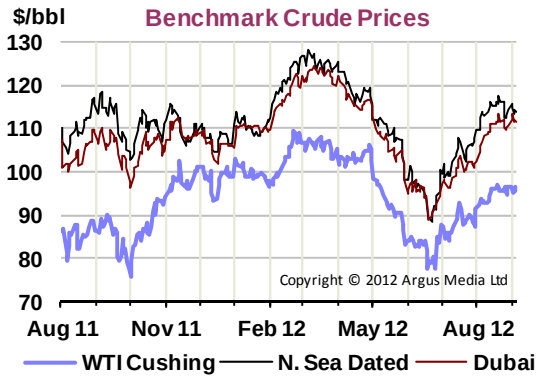
Future of Oil Price Forecasting

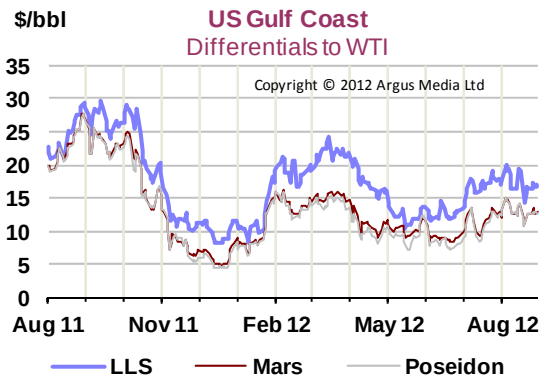
Recent advances in VAR-based modelling and forecasting are very promising. However, the success of these models relies on timely and accurate data on oil market as well as on other macroeconomic indicators. There is an urgent and growing need for more and better data on oil reserves, production, consumption, refining, exports, imports, inventories from both OECD and, particularly, from non-OECD countries, including data on floating storage and storage costs to fully understand oil price dynamics.

Furthermore, models should be augmented to capture the feedback effects of futures prices on producers' and consumers' activities. Recent research using state-of-the-art econometrics finds no systematic, deleterious causality running from so-called 'speculative' activity to prices. However, this research fails to measure the impact of activities of financial players on the formation of expectations by physical market players. At the same time, data limitations are not limited to physical oil markets. Energy derivatives markets are also partially opaque. Therefore, transparency in both the physical and financial markets is essential to better understand possible linkages between the two markets, as well as price dynamics in oil markets more generally.

Spot Crude Oil Prices

Physical crude markets extended their late June and July gains in the first half of August and into the second half, but with few exceptions the rally then seemed to mark a pause. Spot crude price movements mimicked and amplified those in futures markets. On the ICE market, front-month Brent futures appeared to cap a six-week rally around mid-month, reaching a high of $116.90/bbl on 16 August, then slid back to a low of $112.26/bbl on 27 August and ended the first week of September roughly half way between those two points. Light, sweet crude futures on the CME peaked slightly later on 22 August, when the front-month contract reached 97.26/bbl, then fell in the last week of August to a daily low of $94.62/bbl and traded sideways, ending the first week of September at $96.42/bbl.





Spot crude prices followed a similar path, but posted by and large stronger gains in the first three weeks of August than benchmark futures, only to fall back more steeply in late August and early September. Prices in Asia were particularly robust in the first part of August: average weekly prices for Brent in Asia and Dated Tapis rose by roughly $5/bbl between the first and the third week of August, significantly more than gains of $3.38/bbl and $2.40/bbl for CME light, sweet crude and ICE Brent, respectively. By the first week of September, however, both Brent in Asia and Dated Tapis had given up more of their gains than futures benchmark, shedding roughly $1.50/bbl from the third week of August, compared to drops of 81 cents and 21 cents for CME light, sweet crude and ICE Brent, respectively. Similarly, North Sea Dated, after rising by nearly $3.60/bbl between the first and the third week of August, gave back half of those gains by the first week of September.

Spot Crude Oil Prices and Differentials

(monthly and weekly averages, $/bbl)

	Jun	Jul	Aug	Aug-Jul Avg Chg	%	Week Commencing: 06 Aug	13 Aug	20 Aug	27 Aug	03 Sep
Crudes										
North Sea Dated	94.80	102.56	113.36	10.80	10.5	112.54	114.85	116.13	113.04	114.36
Brent (Asia) Mth 1	95.75	102.51	113.04	10.53	10.3	111.05	114.94	116.06	113.95	114.62
WTI (Cushing) Mth 1	82.35	87.90	94.12	6.22	7.1	93.09	94.42	96.29	95.68	95.65
Urals (Mediterranean)	93.25	102.83	113.57	10.75	10.5	113.20	115.55	115.70	112.68	113.62
Dubai	94.33	99.19	108.62	9.43	9.5	106.36	109.95	111.99	110.48	112.04
Tapis (Dated)	99.83	105.71	116.41	10.69	10.1	114.80	117.73	119.70	117.25	118.06
Differential to North Sea Dated										
WTI (Cushing)	-12.45	-14.66	-19.24	-4.57		-19.45	-20.43	-19.84	-17.36	-18.71
Urals (Mediterranean)	-1.55	0.26	0.21	-0.05		0.66	0.70	-0.43	-0.36	-0.74
Dubai	-0.48	-3.38	-4.74	-1.36		-6.18	-4.90	-4.14	-2.55	-2.32
Tapis (Dated)	5.03	3.15	3.05	-0.10		2.26	2.88	3.57	4.21	3.70
Prompt Month Differential										
Forward Cash Brent Mth1-Mth2	-0.03	0.47	1.20	0.74		1.58	1.64	0.97	0.41	0.41
Forward WTI Cushing Mth1-Mth2	-0.30	-0.33	-0.29	0.04		-0.27	-0.30	-0.27	-0.31	-0.33
Forward Dubai Mth1-Mth2	0.95	0.38	0.34	-0.03		0.44	0.35	0.38	0.22	0.74

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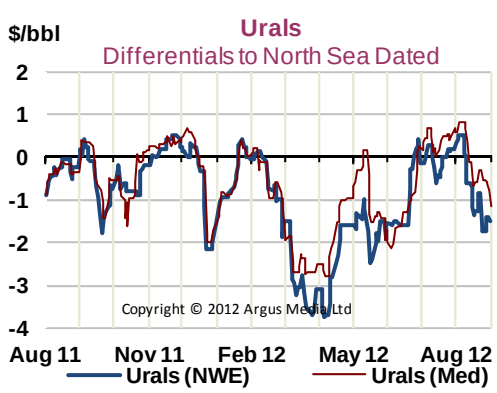
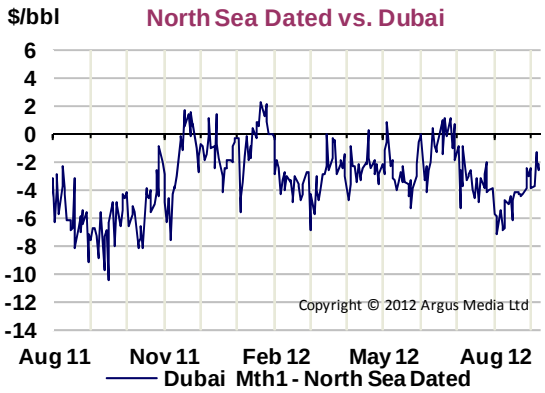
Spot crude price movements did not closely track shifts in measured crude oil inventories. Hurricane Isaac in the US Gulf of Mexico provided North American spot prices with some price support. Not surprisingly, coastal US grades led the region's gains: on average, Light Louisiana Sweet prices gained $8.22/bbl, or nearly 8%, in August versus July, while Poseidon gained $9.19/bbl (or 9.4%) and Mars $8.54/bbl (8.7%). In contrast, grades in markets spared by the hurricane posted more modest advances: WTI at Cushing gained only $6.22/bbl, Alaskan North Slope $7.14/bbl, Californian Kern River $6.70/bbl and Mexican Maya $6.72/bbl. Steep draws in US crude inventories led a counter-seasonal decline in OECD oil stocks in August: US crude stocks declined by an estimated 16.5 mb for the month, compared to 23.7 mb for OECD oil stocks as a whole.

Yet oil prices in August gained less in North America than in other markets. Hurricane effects on crude markets tend to be a wash: weather events rarely disrupt field crude production without also curtailing regional refinery demand. Isaac was no exception: precautionary shutdowns and reduced runs at refineries on the hurricane's onshore path helped blunt the impact on crude supply from the evacuation of offshore platforms. In contrast, planned and unplanned summer outages in North Sea production helped lift prices for North Sea crudes by more than $10/bbl in August. Several West African grades showed even steeper gains of more then $11/bbl, despite a substantial ramp-up in production. Prices for Urals in both Northwest Europe and the Mediterranean, as well as other Mediterranean grades including Es Sider, Suez Blend and Saharan Blend, also posted steep gains in August, with the latter three each gaining more than $11/bbl.

Reduced exports from Iran may have been a factor behind the strength in Mediterranean, North Sea and West African prices in August. In terms of magnitude, the loss of Iranian export barrels since international sanctions were tightened in July dwarfs the deep yet relatively short-lived effect of Hurricane Isaac. That loss is most directly felt in Europe and Asia, traditionally the main export outlets for Iranian crude. In North America, a market long closed to Iranian crude, the effects of reduced Iranian exports are indirectly felt.





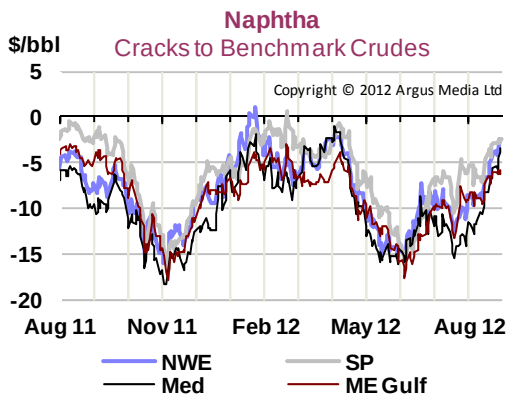
Perhaps not surprisingly, Middle East benchmark Dubai posted one of the strongest performances of all crude grades in August and into early September. Whereas most other major crude gains saw the August price rally fizzle out in the last week of the month and bounced back only marginally in the first week of September, Dubai prices remained relatively firm. Dubai crude gained $5.63/bbl from the first week of August to the third, more than most other grades. Yet while spot crude markets subsequently fell back across the board, Dubai bucked the trend and inched up marginally in late August and early September, extending earlier gains.

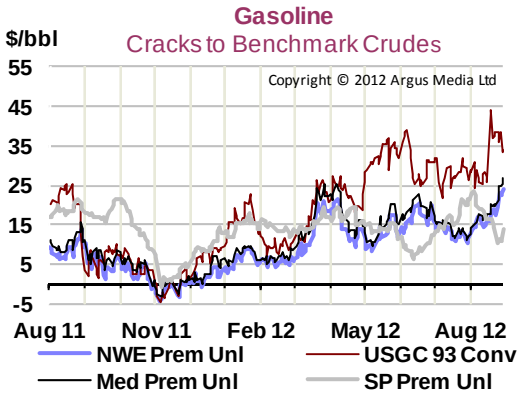
Spot Product Prices

While the crude oil rally, which started in late June, appeared to lose steam in the second half of August, the rally in product prices proved more resilient throughout August and into early September, buoyed as it was by refinery outages in the Americas and Asia and robust global demand for middle distillates. Broadly speaking, product markets, especially for middle distillates, have been far tighter than crude markets. In US futures markets, CME RBOB found stronger support from Hurricane Isaac than crude futures. Prices rallied until end-August, falling back only in early September. Heating oil futures rose more slowly than RBOB futures in the second half or August, following steep gains in the first half, but subsequently held their ground, and by early September showed stronger month-on-month gains than did RBOB prices. In spot markets from the US Gulf Coast to Northwest Europe, the Mediterranean and Singapore, gasoline and naphtha prices posted some of the strongest gains of the product complex in August compared to July. In all markets, Ultra-Low Sulphur Diesel (0.05% gasoil in Asia) remained the highest-priced product, however, with the exception of the US where super unleaded gasoline traded at a premium, albeit a narrowing one.

In August, strength in naphtha markets continued from July, on firm demand from petrochemical producers and a sharp increase in the price of propane, the alternative feedstock. Gasoline and diesel crack spreads rose in both Singapore and the US Gulf coast due to unexpected refinery outages and Hurricane Isaac at the end of the month. However, in Europe gasoline and diesel margins remained lukewarm (with the gasoline crack edging up and the diesel crack falling). Not only were those markets less directly affected by Hurricane Isaac and refinery outages, but margins there were also adversely affected by gains in Brent and Urals prices. Meanwhile, fuel oil markets weakened, mostly on plentiful supply.

Naphtha margins rose by $1.41-1.43/bbl in Europe and by $2.41/bbl in Asia. Naphtha demand from petrochemical companies remained firm, notably in Korea. In Europe, the price of alternative feedstock propane rose steeply, overtaking that of naphtha for the first time since March, thus boosting demand for naphtha from the petrochemical sector. Firm gasoline demand also supported price for naphtha, which can be reformed into gasoline or used as gasoline blending stock. Moreover, naphtha stocks in the ARA region fell by more than 460 kb during the month of August.



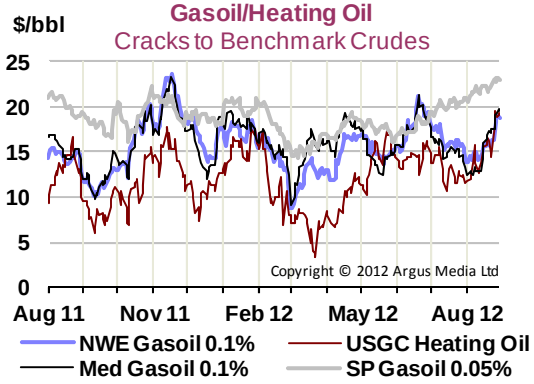


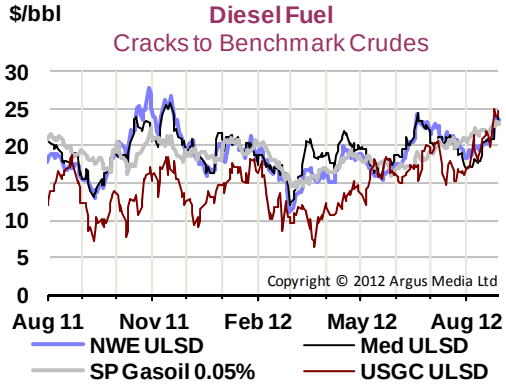
Gasoline margins edged up by $0.26/bbl to Brent in Northwest Europe and by $0.30/bbl to Urals in the Mediterranean. Even stronger were the gasoline crack spreads in Singapore and the US Gulf, increasing by $4.56/bbl to Dubai and $4.90/bbl to LLS, respectively.

Seasonal driving demand continued in the US and drew gasoline stocks by some 9.0 mb in August. In Asia, demand for gasoline increased in Malaysia and Indonesia during Eid al-Fitr, the culmination of the month-long Muslim fasting holiday of Ramadan. Moreover, the abrupt shutdown of the Dung Quat plant, the only refinery in Vietnam, and an outage at Chevron's Richmond refinery, California's second-largest, boosted market sentiment.

Approaching the end of the month, as Hurricane Isaac swept through the US Gulf coast, the price of gasoline in the region skyrocketed for a few days, also leading the increases in gasoline prices in other regions partly. Almost at the same time, news of a deadly blast at the Amuay refinery in Venezuela also supported gasoline crack spreads, though PdV claimed that its exports of refined products remained unaffected.

Diesel margins were a mixed bag. They fell by $0.82-0.86/bbl in Europe but rose by $1.91/bbl in Asia and $2.79/bbl in the US Gulf coast. Yet market sentiment remained relatively bullish, even in Europe, where the decline in diesel cracks stemmed both from Brent and Urals price gains and from a strong supply response. European refiners ramped up diesel production to meet demand, and diesel imports from the Baltic port of Primorsk also weighed on prices.





Refinery outages in Asian countries such as India, Japan and Vietnam tightened gasoil supplies in the region. India in particular steeply increased its imports for off-grid power generation after huge blackouts earlier in the summer. Indonesian and Pakistani high-sulphur gasoil consumption also rose. In the US Gulf, low inventory levels supported prices. For the whole month of August, middle distillate stocks have been below their five-year range. The temporary shutdown of Pemex's Cadereyta refinery also boosted diesel margins.

Spot Product Prices

(monthly and weekly averages, $/bbl)

	Jun	Jul	Aug	Aug-Jul		Week Commencing:					Jun	Jul	Aug
				Chg	%	06 Aug	13 Aug	20 Aug	27 Aug	03 Sep			
Rotterdam, Barges FOB											**Differential to North Sea Dated**		
Premium Unl 10 ppm	110.96	117.06	128.12	11.06	9.4	124.35	130.51	131.37	131.34	136.88	16.16	14.50	14.76
Naphtha	82.10	92.83	105.03	12.21	13.1	102.86	105.88	108.00	108.47	111.25	-12.70	-9.74	-8.33
Jet/Kerosene	112.62	120.10	131.97	11.87	9.9	129.86	132.77	134.85	135.42	137.17	17.82	17.53	18.61
ULSD 10ppm	115.59	123.81	133.78	9.97	8.1	131.88	134.68	136.72	136.69	137.80	20.79	21.25	20.42
Gasoil 0.1%	112.94	119.09	128.98	9.89	8.3	127.16	129.51	132.11	131.75	132.81	18.14	16.53	15.62
LSFO 1%	92.89	98.62	108.11	9.48	9.6	106.62	109.24	110.55	110.11	112.17	-1.91	-3.94	-5.25
HSFO 3.5%	86.80	90.83	98.95	8.12	8.9	97.58	99.66	101.50	100.48	101.65	-8.00	-11.73	-14.41
Mediterranean, FOB Cargoes											**Differential to Urals**		
Premium Unl 10 ppm	112.20	118.39	129.43	11.05	9.3	125.68	131.83	132.68	132.62	138.20	18.94	15.56	15.86
Naphtha	79.75	90.56	102.73	12.17	13.4	100.50	103.52	105.78	106.25	109.05	-13.50	-12.27	-10.84
Jet Aviation fuel	111.36	118.85	130.74	11.90	10.0	128.52	131.47	133.76	134.35	136.11	18.11	16.02	17.17
ULSD 10ppm	114.59	123.19	133.07	9.88	8.0	130.80	134.12	136.43	136.02	137.32	21.34	20.36	19.50
Gasoil 0.1%	111.39	118.31	128.76	10.45	8.8	126.05	129.31	132.72	132.14	132.35	18.14	15.48	15.19
LSFO 1%	93.70	99.80	108.93	9.13	9.1	107.62	110.08	111.07	110.78	112.81	0.45	-3.03	-4.64
HSFO 3.5%	86.08	90.20	98.12	7.92	8.8	96.81	98.84	100.43	99.75	100.72	-7.17	-12.63	-15.45
US Gulf, FOB Pipeline											**Differential to LLS**		
Super Unleaded	126.72	131.90	142.34	10.44	7.9	139.05	140.42	140.89	151.82	148.16	31.79	28.36	30.58
Unleaded	109.88	115.47	128.59	13.12	11.4	125.52	127.85	130.55	133.71	130.15	14.96	11.93	16.83
Jet/Kerosene	112.35	121.58	132.50	10.92	9.0	130.74	132.48	134.65	136.42	134.78	17.43	18.04	20.74
ULSD 10ppm	111.91	121.14	132.15	11.01	9.1	129.79	132.60	134.86	136.10	134.85	16.98	17.60	20.39
No. 6 3%*	86.97	91.58	99.54	7.96	8.7	97.88	100.77	101.93	100.92	101.95	-7.95	-11.96	-12.22
Singapore, FOB Cargoes											**Differential to Dubai**		
Premium Unleaded	104.50	113.35	127.34	14.00	12.3	127.64	130.89	129.06	125.23	123.77	10.17	14.16	18.72
Naphtha	81.04	91.33	103.17	11.84	13.0	100.48	103.70	105.56	106.99	109.36	-13.29	-7.86	-5.44
Jet/Kerosene	110.33	117.53	129.55	12.02	10.2	126.83	130.90	132.70	132.80	134.59	16.00	18.34	20.93
Gasoil 0.05%	111.95	119.27	130.61	11.34	9.5	128.01	131.82	133.98	133.54	134.08	17.63	20.08	21.99
LSWR Cracked	106.38	107.56	115.16	7.60	7.1	113.31	115.72	117.30	117.22	118.46	12.06	8.37	6.54
HSFO 180 CST	94.02	97.92	106.04	8.12	8.3	104.08	106.63	108.36	108.23	109.56	-0.31	-1.27	-2.58
HSFO 380 CST 4%	92.18	96.09	103.99	7.91	8.2	102.09	104.61	106.31	106.08	107.03	-2.15	-3.10	-4.63

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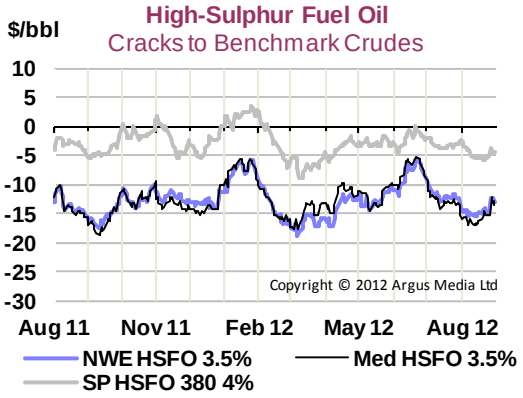
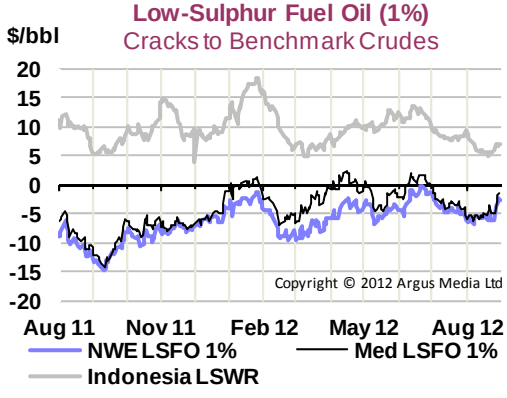
Fuel oil markets weakened in all regions, with HSFO discounts to crude widening in Europe and Singapore. Week Chinese demand for straight-run fuel oil and abundant bunker fuel supply weighed on the fuel oil market, reportedly leading straight-run fuel oil supply in China to be diverted to the Singapore bunker fuel market.

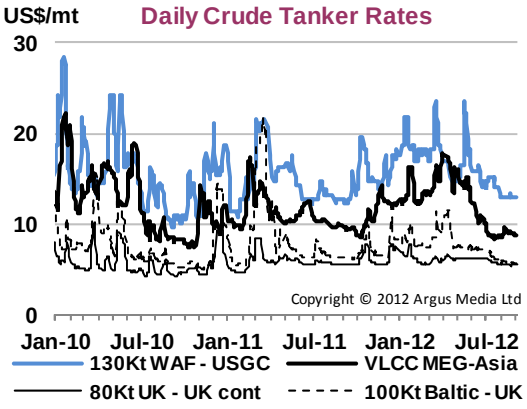


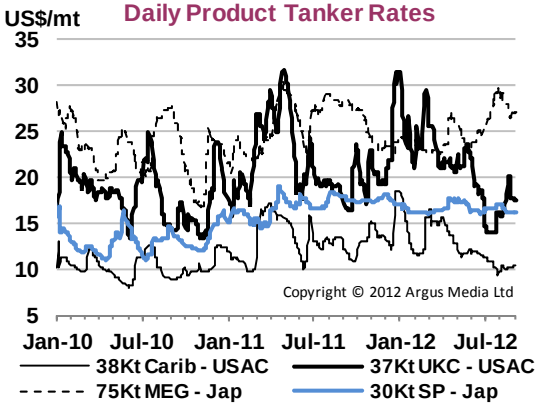


LSWR cracked fuel price differentials in Singapore decreased $1.83/bbl while LSFO discounts to Brent widened to $5.25/bbl in Northwest Europe and to $4.64/bbl to Urals in the Mediterranean. Although demand for power generation was firm, exports from South Korea and south Asian producers were plentiful. Moreover, with Japan's stocks now more comfortable than in 1H12, demand for LSFO became lacklustre. In the meantime, the abrupt shutdown of Amuay refinery, a major source of fuel oil shipments to Asia-Pacific, did not seem to impact on the price of fuel oil.

Freight

Crude tanker rates weakened or at best remained flat in August as the traditional third quarter malaise in line with decreasing oil on the water took hold of markets. When an 8% month-on-month increase in the cost of bunker fuels is factored in, however, time-charter equivalent earnings (TCE's) slumped to finish the month in negative territory. Rates on the VLCC Middle East Gulf – Asia trade remained anchored below $9/mt for most of the month, resulting in the lowest TCE's in more than a decade.





Suezmax markets fared little better. Even with a reasonable amount of activity the benchmark West Africa – US Gulf Coast route traded flat at under $13/mt throughout the month. Despite a three-day closure of the US Gulf Coast LOOP terminal at end-month due to Hurricane Isaac, no upward momentum was reported on trades into the region, again underscoring the bloated nature of the tanker pool. Northwest European Aframax markets were similarly depressed. Production outages in the North Sea reduced the amount of available cargoes and even an uptick in Russian volumes coming out of the Baltic was not enough to create forward momentum.

Clean product tanker markets in the Atlantic Basin have recently been a bright spot in a generally depressed freight market, performing significantly better than those East of Suez. Previously outperforming all other routes due to wide gasoline arbitrage to the US, between end-May and mid-July the transatlantic UK – US Atlantic Coast rate had steadily declined from $23/mt to a low point of below $14/mt after opportunities to move product dried up. Over the past six weeks, however, the rate has rebounded as the US driving season has belatedly taken off, with rates peaking at over $20/mt in the third week of August, largely on fears that Hurricane Isaac could disrupt domestic US gasoline supply. Meanwhile, following steady firming since May, rates on the Middle East Gulf – Japan trade have recently slumped to approximately $27/mt from a high of nearly $30/mt a month earlier. This softening likely resulted from waning Japanese demand for imports after refineries there ramped up following maintenance.

REFINING

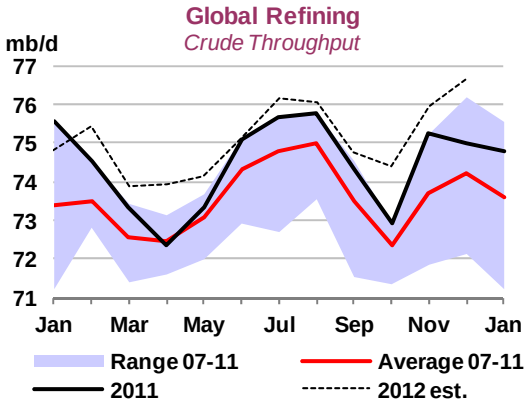
Summary

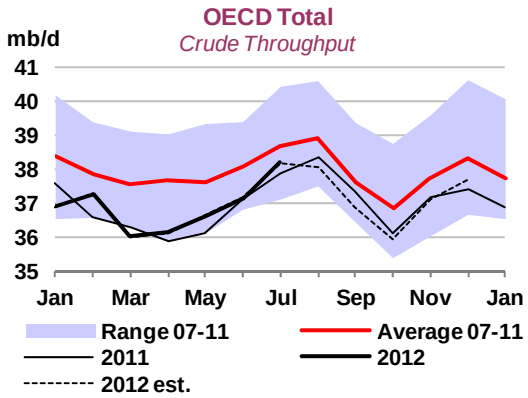
- **Exceptionally strong OECD runs in July and August lifted global crude oil refinery throughput estimates for 3Q12 by 210 kb/d since last month's report.** Global runs are now seen at 75.7 mb/d, up 450 kb/d from a year earlier and 1.3 mb/d above the 2Q seasonal low, as gains in the OECD offset a lower outlook for the non-OECD. Runs in 4Q12 are likely to be sustained at 3Q12 levels, as an expected rebound in China, Africa and the Middle East compounds the impact of further growth in 'Other Asia' to lift annual growth to 1.3 mb/d.

- **OECD crude runs surged more than 1 mb/d in July, as tightening global product markets led to much improved refinery margins.** European runs rose by 0.6 mb/d on the month despite the region's continued demand contractions and recent refinery rationalisations. While US refinery intake plunged in the last week of August, as Hurricane Isaac hit the US Gulf Coast, plants sustained minimal damage and most were restarted quickly. OECD runs averaged 38.2 mb/d in the month, but are seen declining through October as maintenance picks up.

- **Gasoil markets are seen as particularly tight ahead of the northern hemisphere winter, with product inventories low in all key consuming markets.** Atlantic Basin gasoline supplies were also significantly curtailed at end-August, with Hurricane Isaac reducing US Gulf Coast runs and Latin American runs crimped by a deadly refinery fire in Venezuela. European gasoline stocks built up in July, however, providing additional supplies available for transatlantic shipment.

- **Refinery margins generally improved through August**, with European and US Gulf Coast indicator margins rising sharply, while US Midcontinent and Singapore margins fell back from end-July levels. On balance, our new global indicator margins, developed with the help of KBC Advanced Technologies, show a significant improvement in global margins since mid-May, to near-four-year highs in June, as product markets tightened relative to crude. Hurricane Isaac and the deadly explosion at Venezuela's Amuay refinery provided support at end-August.



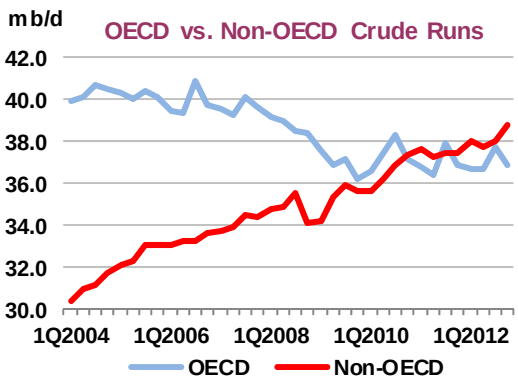


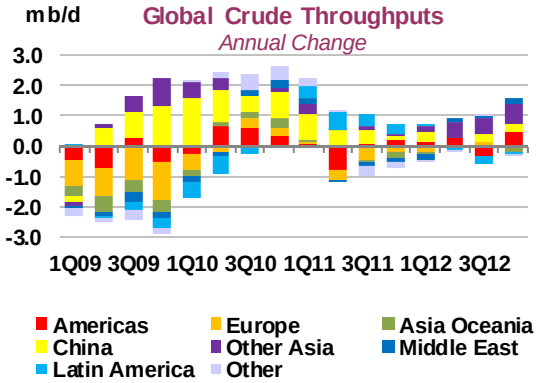
Global Refinery Overview

Despite a sharp seasonal uptick in global refinery crude demand, reductions in baseline OECD refining capacity have helped global product markets tighten, leading to improved product cracks and refinery margins in most key consumer product markets. Preliminary data show global crude runs rising 1 mb/d in June and another 1 mb/d in July, as maintenance wound down in most refining centres and companies took advantage of better margins. The steep increase in OECD runs in July exceeded expectations, given continued weakness in demand and recent capacity rationalisation. While refinery shutdowns in the last

few years have not fully eliminated overcapacity in mature markets, strong margins provided refiners with an incentive to rebuild depleted product inventories and take advantage of strong export demand.

Non-OECD throughputs saw smaller increases month-on-month than those in the OECD, but continue to provide the lion's share of annual growth. In 2Q12, non-OECD, led by Other Asia, provided two-thirds of global increases. Looking forward, the non-OECD region accounts for virtually all projected growth. In addition to continued growth in Other Asian refinery throughputs, an expected rebound in Chinese demand and refinery runs, as well as increased runs in Africa and the Middle East, lift non-OECD runs by 600 kb/d and 1.3 mb/d over year-earlier levels for 3Q12 and 4Q12, respectively. OECD runs stagnate or even contract further in the same timeframe.





In August, product markets were buoyed by Hurricane Isaac in the US Gulf Coast and a deadly refinery accident in Venezuela. Both events took out significant refining capacity and further tightened Atlantic Basin product supplies –particularly gasoline. Globally, diesel markets remain tight ahead of the northern hemisphere winter. Margins have for now improved to a point where refiners are responding to market signals and raising runs as a result.

Global Refinery Crude Throughput[1 2]

(million barrels per day)

	May 12	Jun 12	**2Q2012**	Jul 12	Aug 12	Sep 12	**3Q2012**	Oct 12	Nov 12	Dec 12	**4Q2012**
Americas	18.2	18.7	**18.2**	18.8	18.5	18.1	**18.5**	18.0	18.3	18.4	**18.2**
Europe	11.9	12.1	**11.9**	12.7	12.7	12.3	**12.5**	11.8	12.2	12.4	**12.1**
Asia Oceania	6.6	6.3	**6.5**	6.8	6.8	6.5	**6.7**	6.2	6.7	6.9	**6.6**
Total OECD	**36.6**	**37.2**	**36.6**	**38.2**	**38.0**	**36.9**	**37.7**	**36.0**	**37.1**	**37.7**	**36.9**
FSU	6.1	6.8	**6.4**	6.7	6.7	6.4	**6.6**	6.5	6.7	6.6	**6.6**
Non-OECD Europe	0.5	0.5	**0.5**	0.5	0.5	0.5	**0.5**	0.5	0.5	0.5	**0.5**
China	9.1	8.8	**9.0**	8.9	8.9	9.1	**9.0**	9.4	9.3	9.4	**9.4**
Other Asia	9.2	9.4	**9.3**	9.3	9.4	9.4	**9.3**	9.4	9.5	9.5	**9.5**
Latin America	4.7	4.6	**4.7**	4.7	4.6	4.4	**4.6**	4.6	4.7	4.7	**4.7**
Middle East	5.9	5.8	**5.8**	5.9	6.0	5.9	**5.9**	5.9	5.9	6.0	**5.9**
Africa	2.1	2.1	**2.1**	2.0	2.1	2.2	**2.1**	2.2	2.2	2.3	**2.2**
Total Non-OECD	**37.5**	**37.9**	**37.7**	**37.9**	**38.1**	**37.9**	**38.0**	**38.5**	**38.8**	**39.0**	**38.8**
Total	**74.1**	**75.1**	**74.4**	**76.1**	**76.1**	**74.8**	**75.7**	**74.4**	**76.0**	**76.7**	**75.7**

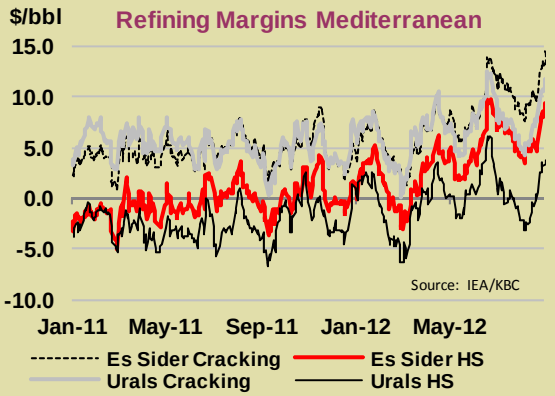
1 Preliminary and estimated runs based on capacity, known outages, economic run cuts and global demand forecast

2 From the report dated 10 August, 2012 OECD Americas include Chile and OECD Asia Oceania includes Israel.

Refinery Margins are Back

After a two-month hiatus, this month's *Oil Market Report* resumes our coverage and estimations of refinery margins. With the help of KBC Advanced Technologies (KBC), we have developed a new set of global indicator refinery margins for primary refined product markets in Northwest Europe, the Mediterranean, the US Gulf Coast and Midcontinent as well as Singapore. These refinery margins include refinery fuel (energy cost), but exclude other variable costs, depreciation and amortisation as explained below.

The resumption of our refinery margin analysis occurs at a time when refining margins themselves are staging a come-back. Margins in Europe have recorded near four-year highs in June and later again in August, while US margins spiked on hurricane shutdowns and outages in late August. Even Singapore indicator margins have improved on recent distillate tightness in Asian markets.



Refinery Yields:

The new refinery margins are based on refinery yields derived from KBC's Petro-SIM simulation, which is a non-linear refinery simulation software. The software includes robust unit-specific models, simulating major refinery process units. Standard calibrations of individual process units enable the production of generic refinery simulations of any configuration and generate, on an optimised basis, blended refinery yields and energy consumption data for any mix of available crudes and refinery feedstocks.

Refinery yields have been prepared for 23 separate cases on a barrel/barrel volumetric basis (volume percent product yield based on volumetric intake of one barrel of indicator crude oil). Exceptions are that petroleum coke is reported on a specific mass basis and the intake of natural gas, which is used in US refineries, is specified on a specific energetic basis. These yields are used to calculate margins using standard product pricing bases. A summary of the results is available to subscribers on our website.

The yields assumed in these indicator cases may not be fully representative of those at modern refineries, however. Constraints imposed by a simplified crude slate, a lack of available feedstocks/blendstocks and a simplified product slate lead to indicative yields that might not fully reflect the economics of a well optimised complex refinery in today's market environment. In some cases, given the constraints of producing simplified 'indicator' margins on the basis of a single crude oil assay without the availability of purchased feedstocks, some product specifications have had to be loosened to enable the model to solve.

Regional differences:

Operating principles and practices vary by region. Within a given continent, they are assumed to be the same. Middle distillate yields are maximised in Europe and Singapore, while US refiners have historically maximised gasoline. This is reflected in the cut-point settings. The CDU and HC kerosene/diesel cut-point is higher in the Singapore cases to further maximise kerosene.

- **European** refinery cases are prepared on a distillate-maximising basis. Yields are set to minimise gasoline production and produce the widest cut of distillates without producing fuel oil uneconomically. Gasoline produced in the European cases meets EuroBOB standards (European blendstock for oxygenate blending). The model assumes 7% volumetric blend of ethanol to produce the current European grade of finished gasoline in compliance with EN228. The calculation will be adjusted as EU member states move towards an EU-wide 10% energetic requirement by 2020. Diesel produced in the European cases conforms to EN590 ultra-low-sulphur diesel, with a specific gravity target of 0.842, which will accommodate post refinery blending of FAME biodiesel. Biofuel blending for distillates is an increasing requirement of the EU pool. However, finished diesel can be blended by either the refinery or marketer. This varies from country to country. These yields assume that the refiner will only receive the margin for producing the conventional fossil distillate. Fuel oil produced for sale generally conforms to international bunker fuel oil quality for low or high sulphur fuel oil. Refinery fuel in Europe is refinery fuel gas topped up with refinery fuel oil. With natural gas generally priced on a fuel oil equivalent basis, margins would be similar whether fuel oil or natural gas is burned as refinery fuel.

Refinery Margins are Back (continued)

- All **US** cases blend to standard US product specifications; no export quality products are assumed. US gasoline is blended to an RBOB specification that will yield finished gasoline when blended to 10% ethanol. The base RBOB conforms with US specifications and is blended to a road octane of 83.7 (R+M)/2 basis. The model does not take account of blending ethanol and thus the gasoline should be valued as RBOB rather than finished motor gasoline. US diesel is blended to a conventional ultra-low sulphur No. 2 fuel oil product meeting the standard US on-road diesel specification. Biodiesel blending in the US is assumed to be an additive to the conventional blend in this refinery model and is blended after it is sold from the refinery. Hence, no specific effort is made to incorporate biodiesel in the model cases for US diesel blending. At present, US biodiesel blending is 1-2% in most markets. As in other cases, fuel oil production meets international bunker fuel standards for LSFO and HSFO. All US cases assume the use of purchased natural gas as an energy source after refinery-generated fuel gas. This boosts the refinery's net product yields by around 2% relative to other regions.
- **Singapore** refinery cases are prepared on a distillate maximising basis, with an emphasis on marginal kerosene, which is a high value product in the Singapore market. They produce a naphtha yield of five weight percent on crude oil, conforming to a volume yield of 6-6.5% depending on the crude oil used. Gasoline is produced to a 95-research octane (RON), 10 ppm sulphur content and is assumed to be 100% conventional with no biofuel blending. Diesel is produced to a ULSD equivalent with 10 ppm sulphur, a cetane number of 51 and a maximum specific gravity of 0.845, with no accommodation made for FAME biodiesel blending. As in the other regions, fuel oil produced for sale generally conforms to international bunker fuel oil quality for LSFO and HSFO. Refinery fuel is refinery fuel gas and fuel oil.

Operating costs:

Operating costs are highly dependent on a number of key parameters, including size and complexity of the refinery, utilisation rates, local wage expectations for refinery workers, employment and environmental regulations. Different countries/regions thus have a wide variation in operating expenditures (Opex), which has a direct impact on refinery net cash margins. Operating costs vary with refinery throughput, as some components of costs are fixed (such as labour, insurance) while other vary with throughput (such as catalyst and chemical consumption). Thus low throughputs on economic and maintenance bases can lead to higher per barrel Opex. A further difficulty with refinery operating cost information is that it is not necessarily reported on a common basis, possibly including or excluding energy costs, financing costs, maintenance costs, depreciation etc.

Operating cost indications are usually considered commercially sensitive information, though it is often possible to glean this information from public companies, and especially from pure-play independent refining companies, since their financial reporting tends to give more detailed information about their refinery sector operations. From these types of reports, we assume typical operating costs for the margin cases as follow:

Indicative Refining Operating Cost (Opex), excluding energy, depreciation and amortisation

- US Gulf Coast and US Midcontinent $3.30/bbl
- Northwest Europe and Mediterranean $4/bbl
- Singapore $3/bbl

Opex here excludes energy cost, which is accounted for in the refining margins, and depreciation and amortisation, which will vary widely with refinery configuration, age and local accounting/tax requirements.

For more information regarding the model, yields and assumptions please see a more detailed document available on our website at http://www.oilmarketreport.org/refinerysp.asp

IEA/KBC Global Indicator Refining Margins

($/bbl)

	Monthly Average				Change	Average for week ending:				
	May 12	Jun 12	Jul 12	Aug 12	Aug 12-Jul 12	03 Aug	10 Aug	17 Aug	24 Aug	31 Aug
NW Europe										
Brent (Cracking)	5.48	9.21	8.69	8.61	-0.08	7.15	6.84	8.49	8.83	11.96
Urals (Cracking)	5.28	8.92	6.66	6.41	-0.24	4.84	4.16	5.70	7.27	10.51
Brent (Hydroskimming)	0.92	4.56	3.63	2.94	-0.68	1.92	1.59	2.66	2.95	5.99
Urals (Hydroskimming)	-0.37	3.36	0.28	-0.74	-1.02	-1.60	-2.56	-1.71	-0.07	2.95
Mediterranean										
Es Sider (Cracking)	6.73	10.63	10.72	9.89	-0.84	8.78	8.43	9.70	9.96	12.97
Urals (Cracking)	5.79	9.89	7.43	6.79	-0.64	5.51	4.88	5.97	7.59	10.47
Es Sider (Hydroskimming)	3.05	6.86	6.58	5.27	-1.30	4.56	4.08	5.06	5.13	8.07
Urals (Hydroskimming)	-0.98	3.49	0.08	-1.33	-1.40	-1.90	-2.93	-2.27	-0.74	1.98
US Gulf Coast										
50/50 HLS/LLS (Cracking)	8.38	10.02	8.48	12.28	3.79	10.20	11.18	11.06	11.85	15.93
Mars (Cracking)	3.42	4.78	3.71	5.68	1.97	4.98	4.72	4.44	5.28	8.53
ASCI (Cracking)	3.11	4.50	3.32	5.17	1.85	4.50	4.32	3.92	4.74	7.95
50/50 HLS/LLS (Coking)	9.10	10.92	9.64	13.37	3.73	11.63	12.10	11.90	12.73	17.37
50/50 Maya/Mars (Coking)	3.19	5.53	6.01	8.76	2.75	7.93	7.85	7.77	8.49	11.51
ASCI (Coking)	6.13	7.89	7.51	9.98	2.48	8.95	8.99	8.41	9.39	13.48
US Midcon										
WTI (Cracking)	26.34	27.11	26.99	34.42	7.43	37.38	34.46	33.83	30.26	36.23
30/70 WCS/Bakken (Cracking)	27.57	34.27	29.73	32.84	3.11	39.78	33.03	30.97	26.62	35.70
Bakken (Cracking)	29.74	35.69	31.58	36.93	5.35	42.70	37.59	34.35	30.67	40.45
WTI (Coking)	27.54	28.55	28.58	36.16	7.58	39.85	36.17	35.33	31.44	38.24
20/70 WCS/Bakken (Coking)	29.35	36.64	32.40	36.23	3.83	43.61	36.63	34.19	29.28	39.42
Bakken (Coking)	29.92	36.04	31.96	37.34	5.38	43.53	37.99	34.63	30.78	41.00
Singapore										
Dubai (Hydroskimming)	-0.30	0.29	1.28	1.72	0.44	2.25	2.02	1.48	0.87	1.81
Tapis (Hydroskimming)	-1.73	2.39	2.47	2.41	-0.06	2.19	2.17	2.53	1.74	3.27
Dubai (Hydrocracking)	4.16	4.20	6.04	7.60	1.56	7.57	8.05	7.77	6.89	7.23
Tapis (Hydrocracking)	-0.56	2.77	4.04	5.10	1.06	4.40	5.05	5.63	4.57	5.39

Global Indicator Refining Margins are calculated for various complexity configurations, each optimesd for processing the specific crude(s) in a specific refining centre. Margins include energy cost, but exclude other variable costs, depreciation and amortisation. Consequently, reported margins should be taken as an indication, or proxy, of changes in profitability for a given refining centre. No attempt is made to model or otherwise comment upon the relative economics of specific refineries running individual crude slates and producing custom product sales, nor are these calculations intended to infer the marginal values of crude for pricing purposes.

Source: IEA, KBC Advanced Technologies (KBC)

OECD Refinery Throughput

OECD refinery throughputs were much stronger than anticipated in July, surging more than 1 mb/d in total, as refinery margins improved and maintenance wound down to seasonal lows. Increases in European throughputs were particularly strong, both on a monthly and annual basis, especially in view of continued sharp regional demand contractions and recent capacity rationalisation. By tightening product supply in the Atlantic Basin, however, the latter helped regional refinery margins surge from mid-May to June, when they reached highs unseen since 2008. Japanese refinery runs also rebounded in July from their June seasonal low-point as some refiners returned from maintenance. North American runs in the meantime were largely unchanged both on an annual and yearly basis.

OECD Americas refinery runs were roughly flat m-o-m in July, in line with preliminary data and estimates. Regional runs averaged 18.8 mb/d, slightly below year earlier levels, when Hovensa's 350 kb/d St. Croix refinery was still in operations. US refiners maintained relatively high utilisation rates through July, averaging more than 88% of capacity, on healthy margins and robust export demand. US product exports in June totalled some 3.2 mb/d, of which 31% went to Latin America, 14% to Mexico,

14% to Canada and 21% to Europe. Canadian refinery throughputs also rebounded in July, to its highest level since February, as Imperial's Edmonton refinery completed maintenance and possibly on higher domestic oil sands production. Preliminary weekly data indicate Canadian runs rose further in August.

Refinery Crude Throughput and Utilisation in OECD Countries
(million barrels per day)

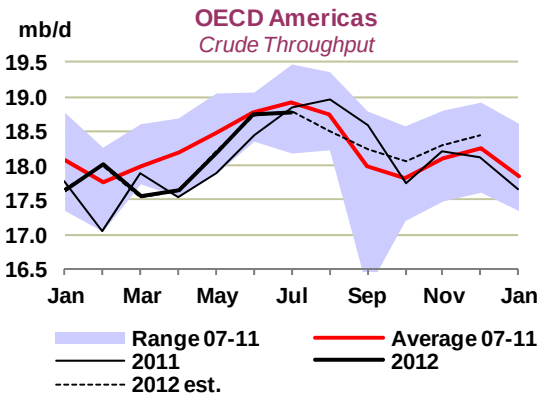
	Feb 12	Mar 12	Apr 12	May 12	Jun 12	Jul 12	Change from Jun 12	Change from Jul 11	Utilisation rate[1] Jul 12	Utilisation rate[1] Jul 11
US[2]	14.66	14.55	14.61	15.18	15.63	15.65	0.02	0.06	88.3%	89.0%
US Virgin Islands	0.19	0.00	0.00	0.00	0.00	0.00	0.00	-0.30	0.0%	84.9%
Canada	1.75	1.67	1.65	1.59	1.69	1.73	0.04	0.12	94.3%	87.9%
Chile	0.15	0.16	0.15	0.17	0.17	0.17	0.00	-0.02	73.5%	83.0%
Mexico	1.25	1.18	1.22	1.27	1.25	1.23	-0.03	0.07	74.3%	70.2%
OECD Americas	**18.01**	**17.55**	**17.63**	**18.21**	**18.74**	**18.78**	**0.03**	**-0.07**	**87.6%**	**88.8%**
France	1.09	1.04	1.04	1.03	1.24	1.38	0.14	0.04	88.1%	80.4%
Germany	1.91	1.80	1.91	1.88	1.81	1.95	0.15	-0.07	91.7%	94.8%
Italy	1.50	1.39	1.33	1.49	1.44	1.60	0.16	0.05	73.4%	70.9%
Netherlands	1.10	1.02	1.07	1.09	1.06	1.03	-0.03	-0.01	79.9%	80.6%
Spain	1.15	1.08	1.05	1.01	1.10	1.29	0.18	0.27	85.0%	72.1%
United Kingdom	1.50	1.48	1.52	1.44	1.43	1.44	0.01	-0.07	86.9%	80.4%
Other OECD Europe	3.92	3.79	3.90	3.92	4.00	3.98	-0.02	0.05	80.4%	79.5%
OECD Europe	**12.16**	**11.61**	**11.81**	**11.86**	**12.08**	**12.66**	**0.58**	**0.27**	**82.9%**	**80.0%**
Japan	3.49	3.47	3.31	3.00	2.82	3.18	0.36	0.01	69.2%	68.9%
South Korea	2.64	2.46	2.48	2.63	2.59	2.63	0.04	0.11	96.2%	92.0%
Other Asia Oceania	1.00	0.94	0.90	0.93	0.93	0.95	0.02	0.01	77.2%	76.3%
OECD Asia Oceania	**7.12**	**6.87**	**6.69**	**6.56**	**6.34**	**6.76**	**0.42**	**0.14**	**79.0%**	**77.4%**
OECD Total	**37.29**	**36.03**	**36.14**	**36.63**	**37.16**	**38.19**	**1.03**	**0.34**	**84.4%**	**83.0%**

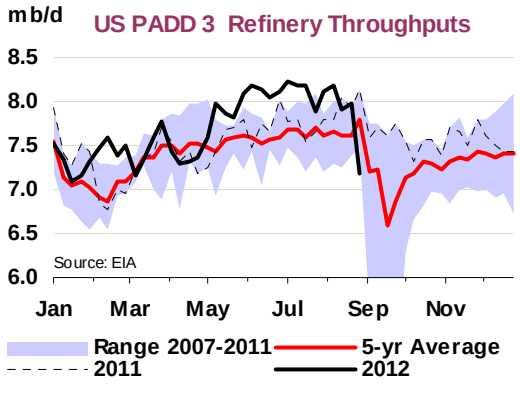
1 Expressed as a percentage, based on crude throughput and current operable refining capacity

2 US50

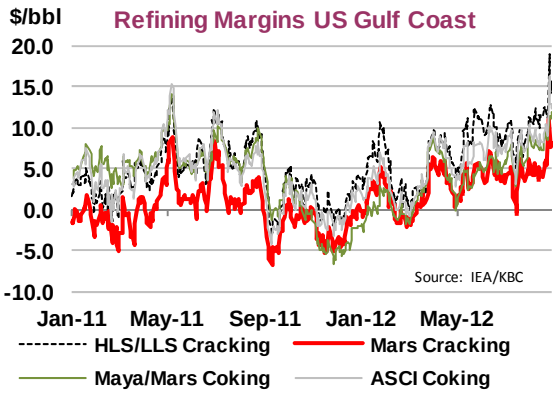
3 OECD Americas includes Chile and OECD Asia Oceania includes Israel. OECD Europe includes Slovenia and Estonia, though neither country has a refinery

US refinery crude intake remained high through August, until the season's first major hurricane, Hurricane Isaac, caused US Gulf Coast runs to plummet in the last week of the month. As a result, US refinery runs were adjusted downward by 185 kb/d since last month's report, to 15.3 mb/d. At the storm's peak, 1.2 mb/d of refinery capacity was shut, with the precautionary closure of five refineries. Another six refineries in the storm's path reduced runs, cutting Gulf Coast runs by almost 700 kb/d in total for the week ending 31 August. That left total US crude intake at 14.6 mb/d, some 770 kb/d below a week earlier and 1.2 mb/d below the July peak. By early September, most refineries were restarting operations, with only Phillips 66's 247 kb/d Alliance refinery still shut due to flooding and a power loss.



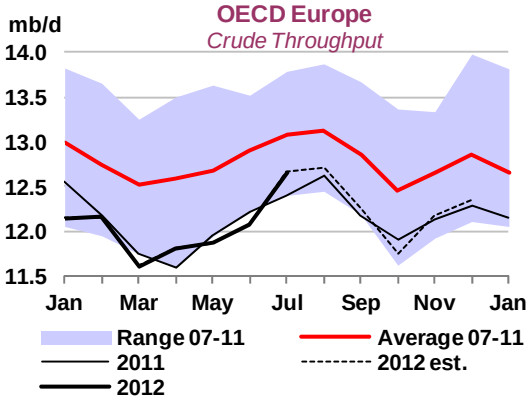


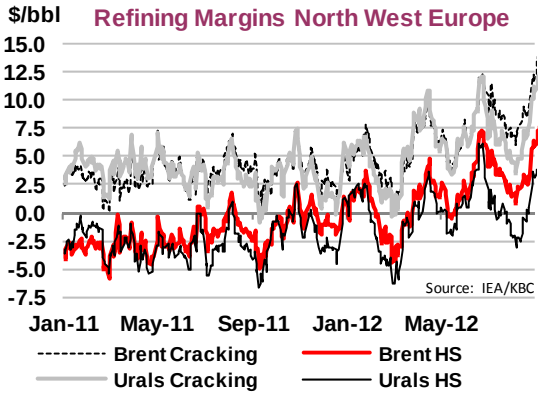
Refinery runs on the US West Coast also fell during August, in part due to a fire and subsequent shutdown at Chevron's Richmond refinery in California. The plant's only crude unit was damaged in a fire in early August. The repairs could take months to complete according to industry experts. In the meantime, all other units at the refinery continue to operate, producing gasoline, diesel and jet fuel at reduced rates. Margins on the West Coast were also supported by an outage at Valero's Benicia refinery in California.



On the East Coast, throughputs were expected to rebound in late September. Regional runs had fallen to around 1 mb/d since the end of last year from 1.3 mb/d during the summer of 2011. The 185 kb/d Trainer refinery in Pennsylvania, which Delta Airlines bought from Phillips 66, was in the process of restarting in early September. The new owners announced they would produce jet fuel at full capacity by the end of the month. The plant had been closed since September 2011, but is finishing a complete turnaround. Delta is reportedly looking to source Bakken crude for its new plant, as a lower-cost alternative to its previous North Sea and African diet. The refinery would bring in the crude by rail. Other refineries in the region have been betting on cheaper US crude supplies. PBF Energy recently announced it was expanding rail facilities to bring in US crudes to its 190 kb/d Delaware City refinery.

OECD European refinery throughputs surged almost 0.6 mb/d in July, to their highest level in 20 months, to 12.7 mb/d. Crude intake in Spain rose 180 kb/d, while France, Germany and Italy also recorded gains of around 150 kb/d each. Preliminary data show no decline in UK runs despite the shutdown of the 220 kb/d Coryton plant in early June. The UK administrator of bankrupt Petroplus sold the plant to a joint venture (JV) including Dutch storage firm Vopak, Shell and UK fuel supplier Greenergy, which will convert the site to a product terminal. Compounded by upwardly revised June estimates, July data were some 400 kb/d above our previous expectations.

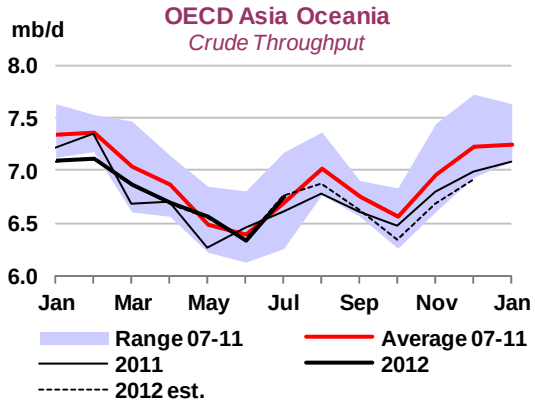


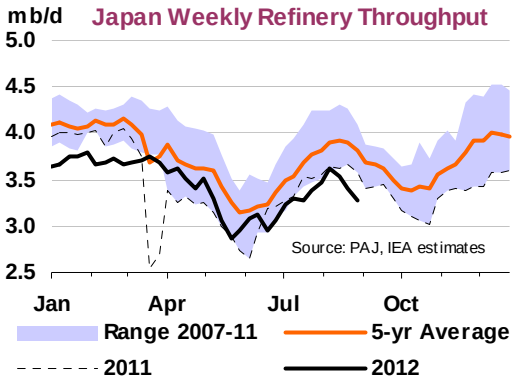


The surge in runs in July comes after margins in both Northwest Europe and the Mediterranean rose by an average $3.9/bbl in June. Margins eased somewhat in July, but remained relatively high, and were again boosted in the second half of August, on both refinery outages in the US and Venezuela and ahead of September plant maintenance in Europe and Russia. Product cracks for both gasoline and diesel led the improvement in margins, as earlier inventory drawdowns tightened Atlantic Basin product markets. Inventory building and improved export demand provided support, as year-on-year regional demand growth remained negative. European demand has contracted annually by nearly 0.5 mb/d so far this year, and the near-term outlook remains weak.

European refinery closures completed or announced since the start of the economic downturn in 2008 now amount to 1.6 mb/d of aggregate capacity, including 530 kb/d in 2011 and 345 kb/d so far this year. Another 150 kb/d will be shed in the fourth quarter with the shutdown of ERG's Rome refinery and as Exxon reduce capacity at its Fawley plant in the UK later this year.

OECD Asia Oceania throughputs surged 420 kb/d in July, led by the return of Japanese refiners from maintenance. Japanese crude oil intake rose 360 kb/d from a month earlier, while other Asian countries inched marginally higher. South Korean operators sustained runs above 2.6 mb/d, representing a 96% utilisation rate, the highest in the OECD. Korean refiners exported 1.2 mb/d of oil products in July, of which 42% was diesel and another 21% jet fuel. According to weekly data from the Petroleum Association of Japan, Japanese crude runs rose another 100 kb/d in August. A powerful typhoon hit the Japanese island of Okinawa in late August, when Japanese refiner Nansei Sekiyu shut its 100 kb/d Nishihara refinery for a week. The plant resumed operations on 31 August.

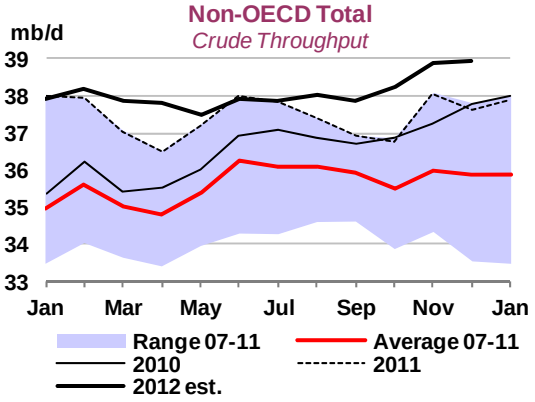


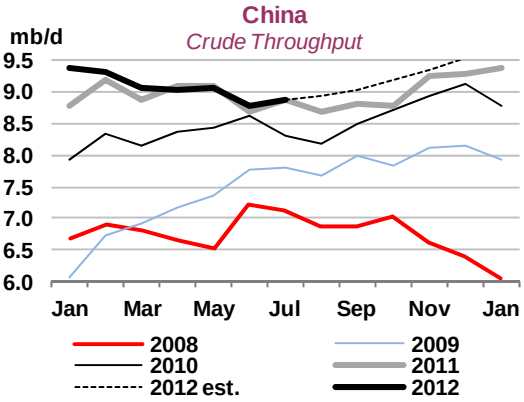


Also in Japan, Cosmo Oil announced in late August that it will permanently shut its 140 kb/d Sakaide refinery in July 2013. The company said it would probably have to further cut capacity to comply with regulations requiring companies to either reduce distillation capacity or upgrade its units to boost clean-product yields by 2014. Japan has so far committed to shut 830 kb/d of capacity since early 2008, of which about 50% has been completed, as domestic demand is in structural decline (down 0.9 mb/d from 2005 to 2011).

Non-OECD Refinery Throughput

Non-OECD throughput estimates are largely unchanged for 2Q12 since last month's report, averaging 37.7 mb/d. Slightly higher than expected runs in Asia mostly offset lower runs in Africa, FSU and the Middle East. Annual growth in non-OECD crude runs stood just above 0.5 mb/d, compared to 0.3 mb/d in 1Q12. Increases were almost entirely accounted for by non-OECD Asia, in particular India.



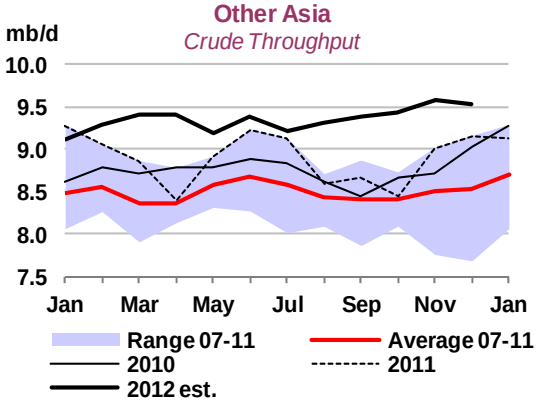


The outlook for non-OECD refinery runs has been lowered somewhat for 3Q12, although growth is expected to be sustained at nearly 0.6 mb/d. A downward revision of 120 kb/d since last month's report stems mostly from Latin America, where a deadly accident at Venezuela's largest refinery in August lowered crude intake. Annual growth is expected to accelerate in 4Q12 to 1.3 mb/d, as Chinese refinery runs rebound and growth resumes in Africa with the restart of Libya's Ras Lanuf refinery in August. Middle Eastern crude intake may also grow as Saudi Aramco and Total start trial runs at the 400 kb/d Jubail refinery at the end of the year.

China's refinery crude throughput averaged 8.9 mb/d in August, slightly higher than July, and 2.6% above a year earlier and the strongest growth since November 2011. The increase in refinery runs came as Chinese refiners took advantage of higher gasoil and gasoline prices. Refiners also replenished product inventories, which had been depleted over preceding months. China's National Development and Reform Commission raised retail guidance prices for gasoline by 4% to Yuan 390/mt ($61/mt) and diesel by 5% to Yuan 370/mt, effective August 10. Industry surveys suggest companies were planning further increases in September.

Looking ahead, we expect refinery runs to improve with a rebound in oil demand after the 2Q slump, both over 3Q and in particular for 4Q12. Sinopec, which is planning to start up a new 200 kb/d crude unit at its Maoming refinery, is expected to raise runs at the plant from 280 kb/d this year to 340 kb/d next year. That is less than incremental capacity, as an older crude unit will be retired and secondary units will not be completed before 2014. PetroChina is also planning to expand refining capacity before the end of the year at its Sichuan Hohhot and Huabei facilities. Including Sinopec's 160 kb/d Jinling expansion, which was to start in September, total Chinese additions could amount to 800 kb/d before end-year.

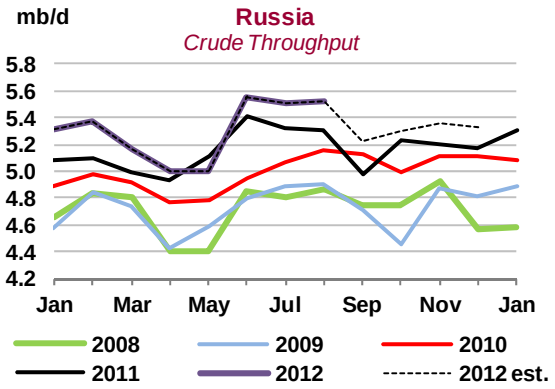
In 'Other Asia', runs continue to be supported by healthy growth in India. Indian crude intake is estimated to have averaged 4.4 mb/d in July, 250 kb/d higher than a year earlier, with increases stemming from new capacity. In particular, Essar's Vadinar refinery reported crude runs of 410 kb/d, compared to 250 kb/d a year earlier, as the plant was expanded earlier this year, first to 360 kb/d in March then to 400 kb/d in June, from 210 kb/d previously. Other increases came from the new Bina refinery, which was just starting trial runs last summer. We also assume 150 kb/d runs at the Bathinda refinery, compared to nameplate capacity of 180 kb/d. The plant was reportedly commissioned in March, and formally inaugurated in April.

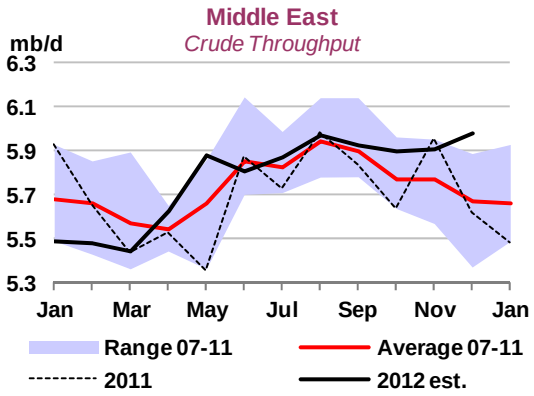


Elsewhere in the region, Singapore's refinery runs fell 50 kb/d in July as Shell shut a crude unit at its 500 kb/d plant. The unit, which has a capacity of 170 kb/d, is now expected to be offline until mid-September. Meanwhile, Vietnam's Dung Quat refinery resumed full operations in August, after having been closed since June. Sri Lanka shut its only refinery in late August after a floating pipeline in the port of Colombo was damaged. The repairs were expected to only take a few days, but state run Ceypetco was looking to secure gasoil and fuel oil cargoes for September delivery to make up for the shortfall.

Russian refinery runs were sustained at elevated levels through August, averaging just over 5.5 mb/d. This is substantially higher than a year ago, but is largely due to Taneco's new Nizhnekamsk refinery, which started refinery runs in August 2011. Russian throughputs are expected to decline markedly in September, as refiners embark on planned autumn turnarounds. A total of 495 kb/d of capacity is estimated to be offline in September and 400 kb/d in October (compared to less than 200 kb/d over the summer months). The refinery turnarounds, which also include a lot of hydrotreater shutdowns, is

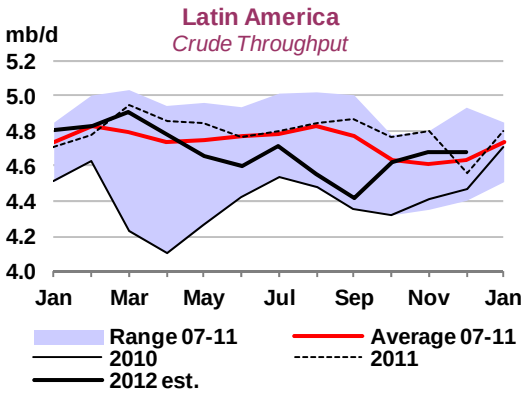
expected to cut gasoil exports. Elsewhere in the **FSU**, Belarus will also cut runs in September due to maintenance work at the 320 kb/d Mozyr refinery, though partly offset by higher runs at the Novopolotsk plant which was shut for parts of August after a fire on 1 August.

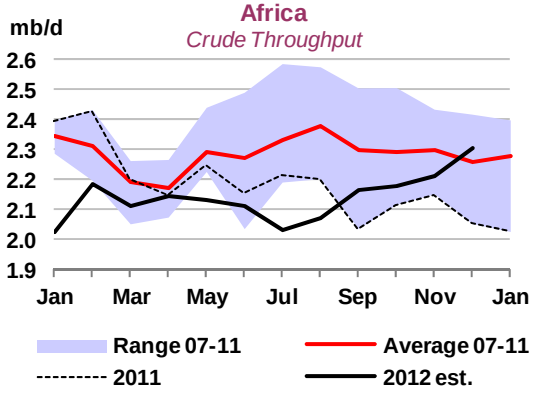




Middle Eastern refinery runs were lower than expected in June. According to JODI data, Saudi Arabian crude intake fell 70 kb/d from May, in contrast to a slight improvement expected, to 1.69 mb/d. Yemen's Aden refinery restarted runs in early August, after an eight-month shutdown. The 150 kb/d refinery has not operated above 85 kb/d in the last seven years. Regional crude runs could be augmented before the end of the year, when the Aramco-Total JV Jubail refinery starts test runs. Full operations at the 400 kb/d project are now targeted for 3Q13.

In **Latin America**, a devastating explosion at Venezuela's Amuay refinery significantly curtailed the regional outlook for August and September. The 645 kb/d plant is believed to have been running significantly below capacity before the explosion, which killed as many as 42 people on 25 August. Some units have reportedly resumed operations, and the plant reached runs of about 260 kb/d by early September, according to the oil minister, who added that runs would return to normal rates within days. Brazil's refinery runs were largely in line with expectations, averaging 1.93 mb/d in July, up 40 kb/d from a month earlier and 170 kb/d above 2011. Separately, Valero announced in August it will convert its Aruba refinery to an oil product terminal by the end of the year, as profitability of the plant remains poor and no buyers have been found. The refinery already stopped processing crude in March of this year.





African refinery runs remained depressed over the summer due in part to serious maintenance shutdowns of Algeria's largest refinery, the 300 kb/d Skikda plant. The refinery, which was completely shut for a 15-day period in July is expected to undergo extensive maintenance shutdowns lasting until December. Providing some regional relief, Libya's largest refinery, the 220 kb/d Ras Lanuf plant, reportedly resumed operations at the end of August, a month earlier than expected. While current throughput rates are unknown, we assume the plant will run at reduced rates until the end of the year.

Table 1
WORLD OIL SUPPLY AND DEMAND
(million barrels per day)

	2009	2010	1Q11	2Q11	3Q11	4Q11	2011	1Q12	2Q12	3Q12	4Q12	2012	1Q13	2Q13	3Q13	4Q13	2013
OECD DEMAND																	
Americas[1]	23.7	24.1	24.2	23.8	24.2	24.0	24.1	23.5	23.8	24.2	24.1	23.9	23.6	23.6	24.2	24.1	23.9
Europe[2]	14.7	14.7	14.3	14.2	14.8	14.2	14.4	13.8	13.8	14.3	14.0	14.0	13.6	13.6	14.2	13.9	13.8
Asia Oceania[3]	8.0	8.1	8.6	7.4	8.0	8.6	8.1	9.1	8.0	8.1	8.4	8.4	9.1	7.8	7.9	8.3	8.2
Total OECD	46.3	46.9	47.1	45.4	47.0	46.8	46.6	46.3	45.6	46.6	46.5	46.2	46.2	45.0	46.3	46.3	45.9
NON-OECD DEMAND																	
FSU	4.0	4.2	4.2	4.4	4.6	4.6	4.4	4.4	4.5	4.7	4.7	4.6	4.6	4.7	4.9	4.9	4.8
Europe	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
China	7.9	8.8	9.3	9.3	9.0	9.4	9.2	9.6	9.3	9.3	9.8	9.5	9.8	9.6	9.6	10.1	9.8
Other Asia	10.3	10.9	11.1	11.1	10.8	11.2	11.0	11.3	11.4	11.1	11.4	11.3	11.5	11.6	11.3	11.7	11.5
Latin America	5.7	6.0	6.1	6.3	6.5	6.4	6.3	6.3	6.4	6.6	6.5	6.4	6.4	6.5	6.8	6.6	6.6
Middle East	7.1	7.3	6.9	7.4	7.8	7.3	7.4	7.1	7.7	8.0	7.5	7.6	7.3	7.8	8.3	7.7	7.8
Africa	3.4	3.3	3.4	3.3	3.2	3.4	3.3	3.4	3.4	3.4	3.4	3.4	3.5	3.5	3.5	3.5	3.5
Total Non-OECD	39.1	41.1	41.6	42.3	42.6	43.0	42.4	42.8	43.4	43.8	44.1	43.5	43.8	44.6	44.9	45.3	44.7
Total Demand[4]	85.4	88.1	88.7	87.7	89.5	89.8	88.9	89.2	89.0	90.4	90.6	89.8	90.0	89.5	91.2	91.6	90.6
OECD SUPPLY																	
Americas[1,7]	13.6	14.1	14.3	14.3	14.5	15.3	14.6	15.6	15.6	15.7	16.0	15.7	16.1	16.2	16.3	16.7	16.3
Europe[2]	4.5	4.1	4.0	3.7	3.5	3.7	3.8	3.8	3.6	3.2	3.4	3.5	3.4	3.3	3.1	3.3	3.3
Asia Oceania[3]	0.6	0.7	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.5	0.5
Total OECD	18.8	18.9	18.9	18.6	18.6	19.6	18.9	19.9	19.7	19.4	20.0	19.8	20.1	20.1	19.9	20.5	20.1
NON-OECD SUPPLY																	
FSU	13.3	13.5	13.6	13.6	13.5	13.6	13.6	13.7	13.6	13.5	13.7	13.6	13.7	13.6	13.5	13.6	13.6
Europe	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
China	3.8	4.1	4.2	4.2	4.0	4.0	4.1	4.2	4.1	4.1	4.1	4.1	4.2	4.2	4.2	4.2	4.2
Other Asia[5]	3.6	3.7	3.7	3.5	3.6	3.6	3.6	3.6	3.6	3.5	3.5	3.6	3.5	3.5	3.4	3.4	3.5
Latin America[5,7]	3.9	4.1	4.2	4.2	4.2	4.3	4.2	4.3	4.1	4.1	4.3	4.2	4.3	4.4	4.4	4.5	4.4
Middle East	1.7	1.7	1.8	1.7	1.7	1.5	1.6	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Africa[5]	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.4	2.3	2.3	2.3	2.3	2.3	2.3	2.4	2.4	2.3
Total Non-OECD	29.0	29.8	30.2	29.8	29.8	29.7	29.9	29.8	29.3	29.2	29.5	29.4	29.5	29.6	29.5	29.7	29.6
Processing Gains[6]	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.2	2.2	2.2	2.2	2.2
Global Biofuels[7]	1.6	1.8	1.5	1.9	2.2	1.8	1.9	1.6	1.8	2.2	1.9	1.9	1.6	2.0	2.4	2.1	2.0
Total Non-OPEC[5]	51.4	52.6	52.8	52.4	52.7	53.2	52.8	53.4	52.9	52.9	53.6	53.2	53.4	53.8	54.0	54.5	53.9
OPEC																	
Crude[8]	29.1	29.2	29.9	29.4	29.9	30.3	29.9	31.4	31.7								
NGLs	4.9	5.4	5.8	5.7	5.8	5.9	5.8	6.0	6.1	6.3	6.4	6.2	6.4	6.4	6.6	6.6	6.5
Total OPEC[5]	34.0	34.6	35.7	35.1	35.6	36.2	35.7	37.4	37.9								
Total Supply[9]	85.4	87.3	88.4	87.6	88.3	89.4	88.4	90.8	90.8								
STOCK CHANGES AND MISCELLANEOUS																	
Reported OECD																	
Industry	-0.1	0.1	-0.4	0.5	-0.1	-0.7	-0.2	0.4	0.5								
Government	0.1	0.0	0.0	0.0	-0.4	0.1	-0.1	0.0	0.0								
Total	0.0	0.1	-0.5	0.5	-0.5	-0.6	-0.3	0.4	0.5								
Floating Storage/Oil in Transit	0.3	-0.2	0.2	-0.2	-0.2	0.0	-0.1	-0.4	0.8								
Miscellaneous to balance[10]	-0.3	-0.7	0.0	-0.4	-0.4	0.3	-0.2	1.6	0.6								
Total Stock Ch. & Misc	0.0	-0.8	-0.3	-0.2	-1.2	-0.4	-0.5	1.6	1.9								
Memo items:																	
Call on OPEC crude + Stock ch.[11]	29.1	30.0	30.2	29.6	31.1	30.7	30.4	29.7	29.9	31.1	30.6	30.3	30.2	29.3	30.6	30.5	30.2
Adjusted Call on OPEC + Stock ch.[12]	28.8	29.3	30.2	29.1	30.6	30.9	30.2	31.3	30.4	31.2	30.7	30.9	30.3	29.3	30.6	30.6	30.2

1 As of August 2012 OMR, OECD Americas includes Chile.
2 As of August 2012 OMR, OECD Europe includes Estonia and Slovenia.
3 As of August 2012 OMR, OECD Asia Oceania includes Israel.
4 Measured as deliveries from refineries and primary stocks, comprises inland deliveries, international marine bunkers, refinery fuel, crude for direct burning, oil from non-conventional sources and other sources of supply.
5 Other Asia includes Indonesia throughout. Latin America excludes Ecuador throughout. Africa excludes Angola throughout.
Total Non-OPEC excludes all countries that were members of OPEC at 1 January 2009.
Total OPEC comprises all countries which were OPEC members at 1 January 2009.
6 Net volumetric gains and losses in the refining process and marine transportation losses.
7 As of the July 2010 OMR, Global Biofuels comprise all world biofuel production including fuel ethanol from the US and Brazil.
8 As of the March 2006 OMR, Venezuelan Orinoco heavy crude production is included within Venezuelan crude estimates. Orimulsion fuel remains within the OPEC NGL and non-conventional category, but Orimulsion production reportedly ceased from January 2007.
9 Comprises crude oil, condensates, NGLs, oil from non-conventional sources and other sources of supply.
10 Includes changes in non-reported stocks in OECD and non-OECD areas.
11 Equals the arithmetic difference between total demand minus total non-OPEC supply minus OPEC NGLs.
12 Equals the "Call on OPEC + Stock Ch." with "Miscellaneous to balance" added for historical periods and with an average of "Miscellaneous to balance" for the most recent 8 quarters added for forecast periods.

Table 1A
WORLD OIL SUPPLY AND DEMAND: CHANGES FROM LAST MONTH'S TABLE 1

(million barrels per day)

	2009	2010	1Q11	2Q11	3Q11	4Q11	2011	1Q12	2Q12	3Q12	4Q12	2012	1Q13	2Q13	3Q13	4Q13	2013
OECD DEMAND																	
Americas	-	-	-	0.1	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2
Europe	-	-	-	-	-	-	-	-	-	-0.1	-	-	-	-	-0.1	-	-
Asia Oceania	-	-	-	-	-	-	-	-	-	-	-0.1	-	-	-0.1	-	-0.1	-
Total OECD	-	-	-	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.1	0.2	0.1	0.1
NON-OECD DEMAND																	
FSU	-	-	-	-	-	-	-	-	-0.1	-0.1	-	-0.1	-	-0.1	-0.1	-	-0.1
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.1	-
Other Asia	-	-	-	-	-	-	-	-	-	0.1	-	-	-	-	0.1	0.1	-
Latin America	-	-	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Middle East	-	-	-0.1	-	-	-	-	-0.1	-	-	-0.1	-	-0.1	-	-0.1	-0.1	-0.1
Africa	-	-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Non-OECD	-	-0.1	-	-	-	-	-	-	-	0.1	-0.1	-	-0.1	-0.1	-	0.1	-
Total Demand	-	-0.1	-	0.1	0.3	0.2	0.2	0.1	0.1	0.2	0.1	0.1	0.1	-	0.2	0.2	0.1
OECD SUPPLY																	
Americas	-	-	-	-	-	-	-	-	-	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Europe	-	-	-	-	-	-	-	-	-	0.1	-0.1	-	-	-	-	-	-
Asia Oceania	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total OECD	-	-	-	-	-	-	-	-	-	0.3	0.1	0.1	0.1	-	0.1	0.1	0.1
NON-OECD SUPPLY																	
FSU	-	-	-	-	-	-	-	-	-	-0.1	-	-	-	-	-	-	-
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-	-0.1	-	-	-	-	-	-
Other Asia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Latin America	-	-	-	-	-	-	-	-	-	-0.1	-	-	-	-	-	-	-
Middle East	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Non-OECD	-	-	-	-	-	-	-	-	-0.1	-0.2	-0.2	-0.1	-0.1	-	-0.1	-0.1	-
Processing Gains	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Global Biofuels	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Non-OPEC	-	-	-	-	-	-	-	-	-	0.1	-0.1	-	-	-	-	-	-
OPEC																	
Crude	-	-	-	-	-	-	-	-	-								
NGLs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total OPEC	-	-	-	-	-	-	-	-	-								
Total Supply	-	-	-	-	-	-	-	-	-								
STOCK CHANGES AND MISCELLANEOUS																	
REPORTED OECD																	
Industry	-	-	-	-0.1	-	-	-	-	0.2								
Government	-	-	-	-	-	-	-	-	-								
Total	-	-	-	-0.1	-	-	-	-	0.2								
Floating Storage/Oil in Transit	-	-	-	-	-	-	-	-	-								
Miscellaneous to balance	-	0.1	-	-0.1	-0.3	-0.2	-0.2	-0.1	-0.4								
Total Stock Ch. & Misc	-	0.1	-	-0.2	-0.3	-0.2	-0.2	-0.1	-0.1								
Memo items:																	
Call on OPEC crude + Stock ch.	-	-0.1	-	0.2	0.3	0.2	0.2	0.1	0.2	0.1	0.2	0.1	0.1	-0.1	0.2	0.2	0.1
Adjusted Call on OPEC + Stock ch.	-	-	-	0.1	-	-	-	-	-0.2	-	0.1	-	-0.1	-0.2	0.1	-	-

When submitting their monthly oil statistics, OECD Member countries periodically update data for prior periods. Similar updates to non-OECD data can occur.

Table 2

SUMMARY OF GLOBAL OIL DEMAND

	2010	1Q11	2Q11	3Q11	4Q11	2011	1Q12	2Q12	3Q12	4Q12	2012	1Q13	2Q13	3Q13	4Q13	2013
Demand (mb/d)																
Americas[1]	24.12	24.24	23.81	24.21	24.00	24.07	23.48	23.77	24.15	24.05	23.86	23.57	23.63	24.19	24.12	23.88
Europe[2]	14.70	14.30	14.20	14.78	14.18	14.37	13.78	13.82	14.34	14.00	13.99	13.55	13.57	14.18	13.89	13.80
Asia Oceania[3]	8.10	8.60	7.36	7.98	8.58	8.13	9.08	7.99	8.09	8.44	8.40	9.07	7.75	7.89	8.27	8.24
Total OECD	46.91	47.14	45.38	46.97	46.76	46.56	46.34	45.58	46.58	46.49	46.25	46.19	44.96	46.26	46.28	45.92
Asia	19.66	20.36	20.32	19.79	20.65	20.28	20.89	20.64	20.36	21.22	20.77	21.30	21.25	20.82	21.76	21.28
Middle East	7.32	6.92	7.38	7.82	7.34	7.37	7.13	7.69	8.04	7.50	7.59	7.33	7.85	8.27	7.70	7.79
Latin America	6.04	6.05	6.26	6.47	6.38	6.29	6.25	6.43	6.60	6.50	6.45	6.36	6.54	6.75	6.63	6.57
FSU	4.15	4.21	4.36	4.57	4.57	4.43	4.45	4.48	4.71	4.72	4.59	4.62	4.68	4.86	4.93	4.77
Africa	3.30	3.36	3.33	3.22	3.36	3.32	3.45	3.40	3.37	3.43	3.41	3.52	3.52	3.49	3.54	3.52
Europe	0.68	0.66	0.68	0.71	0.72	0.69	0.68	0.73	0.72	0.72	0.71	0.69	0.73	0.74	0.73	0.72
Total Non-OECD	41.14	41.57	42.34	42.58	43.02	42.38	42.85	43.37	43.79	44.09	43.53	43.82	44.56	44.93	45.31	44.66
World	88.06	88.71	87.71	89.55	89.77	88.94	89.18	88.95	90.37	90.58	89.77	90.01	89.52	91.19	91.59	90.58
of which: US50	19.18	19.15	18.86	19.08	18.94	19.01	18.49	18.72	19.07	19.04	18.83	18.56	18.63	19.05	19.05	18.83
Europe 5*	8.92	8.68	8.52	8.85	8.50	8.64	8.26	8.20	8.55	8.35	8.34	8.16	8.01	8.41	8.26	8.21
China	8.80	9.27	9.26	9.03	9.42	9.24	9.59	9.26	9.29	9.78	9.48	9.76	9.62	9.57	10.07	9.75
Japan	4.44	4.83	3.91	4.31	4.81	4.46	5.28	4.30	4.36	4.63	4.64	5.26	4.06	4.14	4.41	4.47
India	3.37	3.54	3.61	3.29	3.60	3.51	3.67	3.74	3.49	3.67	3.64	3.72	3.85	3.57	3.84	3.74
Russia	2.98	2.99	3.20	3.42	3.39	3.25	3.21	3.30	3.54	3.52	3.39	3.38	3.48	3.69	3.70	3.57
Brazil	2.77	2.78	2.86	2.98	2.95	2.89	2.89	2.95	3.02	3.00	2.96	2.93	3.00	3.08	3.06	3.02
Saudi Arabia	2.76	2.56	2.94	3.18	2.81	2.87	2.66	3.09	3.38	2.99	3.03	2.80	3.23	3.51	3.11	3.16
Canada	2.24	2.32	2.22	2.36	2.26	2.29	2.21	2.28	2.37	2.28	2.28	2.23	2.27	2.41	2.31	2.31
Korea	2.27	2.36	2.05	2.21	2.30	2.23	2.31	2.19	2.25	2.32	2.27	2.29	2.19	2.25	2.34	2.27
Mexico	2.08	2.11	2.12	2.14	2.16	2.13	2.11	2.14	2.10	2.11	2.11	2.12	2.11	2.11	2.12	2.12
Iran	1.84	1.84	1.79	1.78	1.78	1.80	1.83	1.86	1.72	1.71	1.78	1.80	1.77	1.72	1.73	1.75
Total	61.64	62.43	61.32	62.64	62.93	62.33	62.52	62.03	63.14	63.40	62.78	63.03	62.24	63.51	63.99	63.19
% of World	70.0%	70.4%	69.9%	70.0%	70.1%	70.1%	70.1%	69.7%	69.9%	70.0%	69.9%	70.0%	69.5%	69.6%	69.9%	69.8%
Annual Change (% per annum)																
Americas[1]	1.9	2.0	-1.0	-1.1	-0.8	-0.2	-3.1	-0.2	-0.3	0.2	-0.8	0.4	-0.6	0.2	0.3	0.1
Europe[2]	-0.3	-1.0	-1.2	-1.7	-5.1	-2.3	-3.6	-2.7	-3.0	-1.3	-2.6	-1.6	-1.8	-1.1	-0.8	-1.3
Asia Oceania[3]	1.8	0.7	-3.3	0.9	3.0	0.4	5.6	8.5	1.4	-1.6	3.3	-0.2	-2.9	-2.4	-2.1	-1.9
Total OECD	1.2	0.9	-1.4	-0.9	-1.5	-0.8	-1.7	0.4	-0.8	-0.6	-0.7	-0.3	-1.4	-0.7	-0.5	-0.7
Asia	7.9	6.4	2.7	2.7	1.1	3.2	2.6	1.5	2.9	2.8	2.4	2.0	3.0	2.3	2.6	2.4
Middle East	2.8	0.4	0.5	0.3	1.5	0.7	3.1	4.2	2.8	2.2	3.1	2.8	2.0	2.9	2.7	2.6
Latin America	6.1	4.6	3.8	4.6	3.9	4.2	3.3	2.9	2.0	1.8	2.5	1.8	1.7	2.3	2.0	2.0
FSU	3.2	3.4	8.5	7.5	7.3	6.7	5.6	2.7	2.9	3.3	3.6	3.8	4.5	3.3	4.5	4.0
Africa	-1.9	2.9	-1.3	-1.6	2.4	0.6	2.5	2.0	4.8	2.2	2.9	2.2	3.5	3.4	3.3	3.1
Europe	-1.4	-1.7	0.4	3.8	2.6	1.3	2.9	7.3	1.3	-0.5	2.7	1.5	-0.5	2.9	2.4	1.6
Total Non-OECD	5.2	4.4	2.7	2.7	2.3	3.0	3.1	2.4	2.9	2.5	2.7	2.3	2.7	2.6	2.8	2.6
World	3.1	2.5	0.5	0.8	0.3	1.0	0.5	1.4	0.9	0.9	0.9	0.9	0.6	0.9	1.1	0.9
Annual Change (mb/d)																
Americas[1]	0.46	0.48	-0.23	-0.26	-0.18	-0.05	-0.76	-0.04	-0.06	0.05	-0.20	0.09	-0.14	0.04	0.07	0.02
Europe[2]	-0.04	-0.15	-0.18	-0.25	-0.77	-0.34	-0.52	-0.38	-0.44	-0.18	-0.38	-0.22	-0.25	-0.16	-0.11	-0.19
Asia Oceania[3]	0.14	0.06	-0.25	0.07	0.25	0.03	0.49	0.62	0.11	-0.14	0.27	-0.02	-0.23	-0.19	-0.17	-0.16
Total OECD	0.57	0.40	-0.66	-0.44	-0.70	-0.35	-0.80	0.20	-0.39	-0.26	-0.31	-0.15	-0.62	-0.32	-0.21	-0.33
Asia	1.45	1.23	0.53	0.52	0.23	0.62	0.53	0.31	0.57	0.57	0.49	0.41	0.61	0.47	0.54	0.51
Middle East	0.20	0.03	0.04	0.02	0.11	0.05	0.21	0.31	0.22	0.16	0.23	0.20	0.16	0.23	0.20	0.20
Latin America	0.35	0.26	0.23	0.29	0.24	0.26	0.20	0.18	0.13	0.12	0.15	0.11	0.11	0.15	0.13	0.13
FSU	0.13	0.14	0.34	0.32	0.31	0.28	0.23	0.12	0.13	0.15	0.16	0.17	0.20	0.16	0.21	0.19
Africa	-0.06	0.09	-0.04	-0.05	0.08	0.02	0.08	0.07	0.16	0.07	0.10	0.07	0.12	0.11	0.11	0.11
Europe	-0.01	-0.01	0.00	0.03	0.02	0.01	0.02	0.05	0.01	0.00	0.02	0.01	0.00	0.02	0.02	0.01
Total Non-OECD	2.04	1.75	1.10	1.12	0.99	1.24	1.28	1.04	1.21	1.07	1.15	0.97	1.19	1.14	1.22	1.13
World	2.61	2.15	0.44	0.68	0.29	0.88	0.48	1.24	0.82	0.81	0.84	0.82	0.57	0.82	1.01	0.81
Revisions to Oil Demand from Last Month's Report (mb/d)																
Americas[1]	0.00	0.03	0.09	0.25	0.21	0.15	0.11	0.07	0.22	0.25	0.16	0.16	0.10	0.25	0.23	0.19
Europe[2]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	-0.06	-0.01	-0.02	-0.01	0.03	-0.05	-0.04	-0.02
Asia Oceania[3]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	-0.04	-0.06	-0.02	0.04	-0.07	-0.01	-0.06	-0.02
Total OECD	0.00	0.03	0.09	0.25	0.21	0.15	0.10	0.10	0.12	0.18	0.12	0.20	0.05	0.19	0.13	0.14
Asia	0.04	0.01	0.01	0.01	-0.04	0.00	0.02	0.02	0.12	-0.01	0.04	-0.01	-0.02	0.09	0.15	0.05
Middle East	-0.02	-0.06	-0.01	-0.01	-0.01	-0.02	-0.06	0.04	-0.04	-0.08	-0.03	-0.13	-0.04	-0.05	-0.10	-0.08
Latin America	0.03	0.08	0.08	0.08	0.08	0.08	0.07	0.09	0.07	0.07	0.08	0.06	0.08	0.07	0.06	0.07
FSU	-0.01	-0.01	-0.01	-0.01	-0.02	-0.01	-0.04	-0.08	-0.06	-0.04	-0.06	-0.05	-0.09	-0.08	-0.05	-0.07
Africa	-0.12	-0.02	-0.02	-0.02	-0.02	-0.02	-0.01	-0.03	0.00	0.00	-0.01	0.01	-0.01	0.01	0.01	0.00
Europe	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Non-OECD	-0.07	-0.01	0.05	0.05	0.01	0.02	-0.02	0.04	0.09	-0.06	0.01	-0.12	-0.09	0.04	0.07	-0.02
World	-0.07	0.02	0.14	0.30	0.22	0.17	0.08	0.14	0.21	0.12	0.14	0.07	-0.04	0.22	0.20	0.12
Revisions to Oil Demand Growth from Last Month's Report (mb/d)																
World	-0.05	0.13	0.20	0.35	0.28	0.24	0.06	-0.01	-0.08	-0.11	-0.03	-0.01	-0.17	0.01	0.09	-0.02

1 As of the August 2012 OMR, includes Chile.

2 As of the August 2012 OMR, includes Estonia and Slovenia.

3 As of the August 2012 OMR, includes Israel.

* France, Germany, Italy, Spain and UK

Table 2a

OECD REGIONAL OIL DEMAND[1]

(million barrels per day)

	2010	2011	3Q11	4Q11	1Q12	2Q12	Apr 12	May 12	Jun 12 [2]	Latest month vs. May 12	Latest month vs. Jun 11
Americas[3]											
LPG&Ethane	2.98	3.11	2.87	3.27	3.17	2.87	2.88	2.93	2.80	-0.13	0.00
Naphtha	0.35	0.36	0.33	0.34	0.35	0.34	0.33	0.37	0.32	-0.06	-0.09
Motor Gasoline	10.64	10.43	10.61	10.31	10.16	10.68	10.45	10.70	10.90	0.20	0.10
Jet/Kerosene	1.67	1.67	1.74	1.62	1.61	1.67	1.60	1.63	1.79	0.16	0.01
Gasoil/Diesel Oil	4.97	5.15	5.10	5.26	5.09	5.01	4.90	5.10	5.04	-0.07	-0.17
Residual Fuel Oil	0.96	0.89	0.83	0.87	0.82	0.74	0.81	0.66	0.75	0.09	-0.15
Other Products	2.54	2.45	2.72	2.33	2.28	2.44	2.33	2.47	2.53	0.05	-0.02
Total	24.12	24.07	24.21	24.00	23.48	23.77	23.30	23.87	24.13	0.26	-0.32
Europe[4]											
LPG&Ethane	0.96	0.96	0.93	0.95	1.00	0.93	0.94	0.93	0.91	-0.03	-0.05
Naphtha	1.27	1.17	1.13	1.08	1.27	1.11	1.22	1.08	1.04	-0.04	-0.11
Motor Gasoline	2.21	2.11	2.20	2.05	1.91	2.03	2.00	2.00	2.09	0.08	-0.11
Jet/Kerosene	1.23	1.24	1.34	1.18	1.08	1.22	1.18	1.23	1.25	0.02	-0.08
Gasoil/Diesel Oil	6.20	6.14	6.28	6.29	5.97	5.91	5.82	5.74	6.16	0.42	0.26
Residual Fuel Oil	1.31	1.26	1.27	1.22	1.21	1.10	1.11	1.10	1.10	0.00	-0.17
Other Products	1.51	1.49	1.63	1.40	1.34	1.52	1.37	1.61	1.60	-0.01	-0.09
Total	14.70	14.37	14.78	14.18	13.78	13.82	13.64	13.69	14.14	0.45	-0.35
Asia Oceania[5]											
LPG&Ethane	0.86	0.85	0.80	0.88	0.99	0.81	0.81	0.83	0.80	-0.03	0.05
Naphtha	1.71	1.71	1.75	1.73	1.78	1.68	1.56	1.71	1.77	0.06	0.15
Motor Gasoline	1.63	1.61	1.69	1.64	1.59	1.56	1.55	1.57	1.56	-0.01	0.00
Jet/Kerosene	0.90	0.88	0.66	0.99	1.19	0.65	0.72	0.60	0.62	0.02	0.01
Gasoil/Diesel Oil	1.69	1.70	1.68	1.79	1.80	1.69	1.63	1.71	1.73	0.03	0.09
Residual Fuel Oil	0.79	0.79	0.79	0.86	1.00	0.90	0.92	0.91	0.87	-0.04	0.13
Other Products	0.51	0.59	0.60	0.70	0.73	0.70	0.74	0.73	0.62	-0.12	0.04
Total	8.10	8.13	7.98	8.58	9.08	7.99	7.93	8.06	7.97	-0.10	0.49
OECD											
LPG&Ethane	4.81	4.92	4.60	5.10	5.17	4.61	4.63	4.70	4.51	-0.19	-0.01
Naphtha	3.33	3.24	3.22	3.16	3.40	3.13	3.12	3.16	3.13	-0.03	-0.05
Motor Gasoline	14.47	14.15	14.50	14.00	13.66	14.27	14.00	14.27	14.55	0.27	-0.01
Jet/Kerosene	3.81	3.79	3.75	3.79	3.88	3.54	3.50	3.46	3.66	0.20	-0.05
Gasoil/Diesel Oil	12.87	12.98	13.06	13.34	12.86	12.61	12.36	12.55	12.93	0.38	0.18
Residual Fuel Oil	3.07	2.94	2.90	2.94	3.02	2.74	2.84	2.67	2.72	0.05	-0.19
Other Products	4.56	4.54	4.95	4.42	4.35	4.66	4.43	4.81	4.74	-0.07	-0.07
Total	46.91	46.56	46.97	46.76	46.34	45.58	44.88	45.63	46.24	0.61	-0.19

1 Demand, measured as deliveries from refineries and primary stocks, comprises inland deliveries, international bunkers and refinery fuel. It includes crude for direct burning, oil from non-conventional sources and other sources of supply. Jet/kerosene comprises jet kerosene and non-aviation kerosene. Gasoil comprises diesel, light heating oil and other gasoils. North America comprises US 50 states, US territories, Mexico and Canada.
2 Latest official OECD submissions (MOS).
3 As of the August 2012 OMR, includes Chile.
4 As of the August 2012 OMR, includes Estonia and Slovenia.
5 As of the August 2012 OMR, includes Israel.

Table 2b

OIL DEMAND IN SELECTED OECD COUNTRIES[1]

(million barrels per day)

										Latest month vs.	
	2010	2011	3Q11	4Q11	1Q12	2Q12	Apr 12	May 12	Jun 12 [2]	May 12	Jun 11
United States[3]											
LPG	2.17	2.28	2.07	2.42	2.38	2.11	2.07	2.16	2.09	-0.06	0.05
Naphtha	0.26	0.26	0.25	0.26	0.26	0.25	0.24	0.27	0.24	-0.03	-0.06
Motor Gasoline	8.99	8.76	8.91	8.63	8.49	8.96	8.84	8.99	9.04	0.05	-0.03
Jet/Kerosene	1.45	1.44	1.50	1.40	1.36	1.45	1.37	1.42	1.56	0.14	0.00
Gasoil	3.80	3.90	3.84	3.99	3.83	3.73	3.71	3.74	3.73	-0.02	-0.22
Residual Fuel Oil	0.54	0.46	0.38	0.44	0.42	0.35	0.40	0.28	0.37	0.09	-0.11
Other Products	1.97	1.90	2.13	1.80	1.75	1.88	1.77	1.91	1.96	0.05	0.03
Total	19.18	19.01	19.08	18.94	18.49	18.72	18.40	18.77	18.99	0.22	-0.34
Japan											
LPG	0.48	0.50	0.45	0.52	0.63	0.50	0.50	0.52	0.47	-0.05	0.04
Naphtha	0.78	0.73	0.75	0.72	0.73	0.66	0.64	0.70	0.65	-0.05	-0.03
Motor Gasoline	1.00	0.98	1.04	1.00	0.96	0.93	0.94	0.93	0.93	0.00	-0.02
Jet/Kerosene	0.55	0.53	0.34	0.62	0.83	0.35	0.42	0.32	0.31	0.00	0.01
Diesel	0.44	0.44	0.44	0.47	0.45	0.43	0.42	0.43	0.45	0.02	0.00
Other Gasoil	0.40	0.37	0.33	0.39	0.45	0.32	0.33	0.32	0.32	0.00	0.01
Residual Fuel Oil	0.39	0.44	0.47	0.52	0.60	0.54	0.56	0.54	0.51	-0.04	0.12
Other Products	0.39	0.47	0.49	0.58	0.64	0.57	0.58	0.61	0.50	-0.12	0.07
Total	4.44	4.46	4.31	4.81	5.28	4.30	4.39	4.37	4.13	-0.24	0.19
Germany											
LPG	0.11	0.10	0.11	0.09	0.10	0.10	0.11	0.09	0.11	0.01	0.00
Naphtha	0.39	0.37	0.36	0.33	0.39	0.35	0.37	0.36	0.33	-0.03	-0.04
Motor Gasoline	0.45	0.45	0.46	0.45	0.42	0.44	0.44	0.43	0.44	0.01	-0.02
Jet/Kerosene	0.18	0.18	0.19	0.17	0.16	0.18	0.17	0.19	0.19	0.00	0.00
Diesel	0.64	0.67	0.71	0.68	0.64	0.67	0.66	0.68	0.68	0.00	0.04
Other Gasoil	0.45	0.38	0.44	0.43	0.36	0.36	0.28	0.31	0.48	0.17	0.21
Residual Fuel Oil	0.15	0.14	0.14	0.14	0.14	0.13	0.13	0.13	0.13	-0.01	0.00
Other Products	0.09	0.10	0.12	0.11	0.06	0.10	0.07	0.11	0.11	0.00	-0.01
Total	2.47	2.40	2.53	2.41	2.27	2.33	2.23	2.30	2.47	0.16	0.20
Italy											
LPG	0.11	0.10	0.08	0.11	0.12	0.08	0.09	0.08	0.08	-0.01	0.00
Naphtha	0.10	0.08	0.07	0.07	0.07	0.08	0.08	0.06	0.09	0.03	0.02
Motor Gasoline	0.24	0.23	0.23	0.22	0.18	0.21	0.19	0.21	0.23	0.02	-0.01
Jet/Kerosene	0.09	0.09	0.11	0.08	0.07	0.08	0.08	0.09	0.08	0.00	-0.02
Diesel	0.49	0.50	0.51	0.50	0.43	0.47	0.44	0.48	0.49	0.02	-0.05
Other Gasoil	0.12	0.11	0.10	0.13	0.11	0.09	0.08	0.09	0.10	0.01	0.01
Residual Fuel Oil	0.14	0.13	0.15	0.12	0.13	0.11	0.12	0.10	0.11	0.01	-0.04
Other Products	0.24	0.22	0.21	0.20	0.18	0.20	0.21	0.20	0.19	-0.02	-0.06
Total	1.54	1.45	1.47	1.43	1.30	1.32	1.29	1.30	1.37	0.06	-0.14
France											
LPG	0.12	0.10	0.08	0.11	0.13	0.09	0.09	0.09	0.08	0.00	0.00
Naphtha	0.14	0.14	0.14	0.13	0.15	0.15	0.15	0.15	0.15	0.00	0.00
Motor Gasoline	0.18	0.18	0.19	0.17	0.15	0.17	0.17	0.17	0.18	0.01	-0.02
Jet/Kerosene	0.15	0.15	0.16	0.15	0.14	0.15	0.14	0.14	0.16	0.01	0.01
Diesel	0.68	0.69	0.70	0.69	0.67	0.70	0.70	0.67	0.73	0.06	0.01
Other Gasoil	0.30	0.27	0.28	0.27	0.33	0.23	0.23	0.20	0.25	0.04	0.04
Residual Fuel Oil	0.09	0.08	0.08	0.09	0.09	0.07	0.08	0.07	0.07	0.00	-0.01
Other Products	0.17	0.17	0.20	0.16	0.14	0.16	0.13	0.18	0.16	-0.02	-0.04
Total	1.83	1.79	1.84	1.75	1.80	1.71	1.69	1.67	1.78	0.11	-0.01
United Kingdom											
LPG	0.14	0.13	0.13	0.12	0.13	0.12	0.12	0.13	0.11	-0.02	-0.05
Naphtha	0.03	0.03	0.02	0.02	0.03	0.02	0.02	0.02	0.03	0.01	0.00
Motor Gasoline	0.36	0.34	0.33	0.33	0.33	0.33	0.35	0.31	0.33	0.02	-0.02
Jet/Kerosene	0.33	0.32	0.33	0.32	0.30	0.31	0.32	0.33	0.29	-0.03	-0.05
Diesel	0.45	0.45	0.45	0.47	0.45	0.46	0.49	0.42	0.47	0.05	0.01
Other Gasoil	0.12	0.12	0.13	0.11	0.11	0.11	0.11	0.12	0.11	-0.01	-0.01
Residual Fuel Oil	0.07	0.06	0.06	0.06	0.05	0.05	0.05	0.05	0.05	0.00	-0.01
Other Products	0.15	0.15	0.16	0.14	0.15	0.14	0.14	0.14	0.13	-0.01	-0.04
Total	1.63	1.61	1.62	1.57	1.54	1.55	1.60	1.52	1.53	0.01	-0.16
Canada											
LPG	0.34	0.37	0.35	0.38	0.32	0.32	0.36	0.34	0.26	-0.08	-0.06
Naphtha	0.08	0.08	0.07	0.06	0.09	0.09	0.09	0.10	0.08	-0.02	-0.01
Motor Gasoline	0.74	0.76	0.80	0.75	0.76	0.81	0.74	0.77	0.92	0.16	0.12
Jet/Kerosene	0.11	0.12	0.13	0.12	0.13	0.11	0.12	0.10	0.12	0.02	0.00
Diesel	0.23	0.28	0.25	0.29	0.28	0.30	0.29	0.30	0.31	0.01	0.08
Other Gasoil	0.31	0.29	0.34	0.28	0.28	0.27	0.21	0.31	0.27	-0.04	-0.08
Residual Fuel Oil	0.10	0.09	0.08	0.09	0.09	0.07	0.07	0.08	0.07	0.00	-0.01
Other Products	0.32	0.31	0.35	0.29	0.27	0.31	0.31	0.30	0.31	0.01	-0.05
Total	2.24	2.29	2.36	2.26	2.21	2.28	2.20	2.29	2.35	0.06	0.01

1 Demand, measured as deliveries from refineries and primary stocks, comprises inland deliveries, international bunkers and refinery fuel. It includes crude for direct burning, oil from non-conventional sources and other sources of supply. Jet/kerosene comprises jet kerosene and non-aviation kerosene. Gasoil comprises diesel, light heating oil and other gasoils.
2 Latest official OECD submissions (MOS).
3 US figures exclude US territories.

Table 3
WORLD OIL PRODUCTION
(million barrels per day)

	2011	2012	2013	1Q12	2Q12	3Q12	4Q12	1Q13	Jun 12	Jul 12	Aug 12
OPEC											
Crude Oil											
Saudi Arabia	9.04			9.65	9.77				9.80	9.70	9.60
Iran	3.62			3.37	3.14				3.00	2.90	2.85
Iraq	2.67			2.69	2.92				2.91	3.02	3.07
UAE	2.50			2.61	2.65				2.66	2.68	2.69
Kuwait	2.24			2.42	2.45				2.46	2.46	2.46
Neutral Zone	0.59			0.60	0.60				0.60	0.60	0.60
Qatar	0.74			0.75	0.74				0.73	0.75	0.75
Angola	1.66			1.77	1.76				1.71	1.63	1.75
Nigeria	2.18			2.06	2.17				2.20	2.16	2.26
Libya	0.46			1.30	1.40				1.38	1.45	1.38
Algeria	1.18			1.16	1.16				1.16	1.19	1.18
Ecuador	0.50			0.48	0.48				0.48	0.48	0.50
Venezuela	2.50			2.51	2.50				2.51	2.49	2.46
Total Crude Oil[6]	29.88			31.36	31.73				31.60	31.50	31.55
Total NGLs[1,6]	5.78	6.22	6.50	6.05	6.13	6.33	6.35	6.38	6.13	6.33	6.33
Total OPEC[6]	35.65			37.41	37.86				37.73	37.83	37.88
OPEC: Historical Composition[6]	35.65			37.41	37.86				37.73	37.83	37.88
NON-OPEC[2]											
OECD											
Americas[7]	14.59	15.73	16.32	15.58	15.57	15.73	16.05	16.14	15.52	15.72	15.75
United States[5]	8.13	8.94	9.39	8.84	8.89	8.91	9.12	9.20	8.89	9.01	8.83
Mexico	2.94	2.90	2.78	2.92	2.94	2.91	2.84	2.82	2.94	2.92	2.95
Canada	3.51	3.87	4.13	3.80	3.72	3.90	4.07	4.11	3.68	3.78	3.95
Chile	0.01	0.01	0.01	0.02	0.01	0.01	0.02	0.01	0.01	0.01	0.02
Europe[8]	3.77	3.50	3.28	3.80	3.59	3.15	3.44	3.44	3.45	3.37	3.16
UK	1.11	0.98	0.93	1.11	1.01	0.82	0.97	1.01	1.01	0.94	0.79
Norway	2.04	1.93	1.80	2.09	1.98	1.76	1.89	1.86	1.86	1.86	1.80
Others	0.61	0.59	0.56	0.61	0.60	0.57	0.58	0.57	0.59	0.57	0.58
Asia Oceania[9]	0.57	0.54	0.53	0.52	0.54	0.54	0.54	0.49	0.52	0.55	0.54
Australia	0.48	0.45	0.45	0.43	0.45	0.46	0.46	0.41	0.44	0.47	0.46
Others	0.09	0.09	0.08	0.09	0.09	0.08	0.09	0.09	0.09	0.08	0.09
Total OECD	18.93	19.76	20.14	19.90	19.70	19.43	20.03	20.07	19.50	19.64	19.46
NON-OECD											
Former USSR	13.58	13.64	13.59	13.73	13.62	13.49	13.72	13.70	13.65	13.64	13.43
Russia	10.60	10.70	10.65	10.71	10.68	10.70	10.72	10.71	10.66	10.66	10.73
Others	2.98	2.94	2.94	3.02	2.94	2.79	3.00	2.98	2.99	2.98	2.71
Asia	7.69	7.68	7.66	7.79	7.66	7.64	7.63	7.69	7.56	7.64	7.63
China	4.10	4.12	4.20	4.18	4.10	4.11	4.11	4.17	4.02	4.09	4.13
Malaysia	0.66	0.67	0.66	0.70	0.67	0.66	0.65	0.67	0.66	0.66	0.66
India	0.91	0.91	0.89	0.90	0.90	0.90	0.92	0.91	0.90	0.90	0.88
Indonesia	0.93	0.87	0.81	0.90	0.88	0.85	0.84	0.84	0.86	0.85	0.85
Others	1.08	1.11	1.09	1.12	1.12	1.12	1.11	1.09	1.11	1.13	1.11
Europe	0.14	0.14	0.13	0.14	0.14	0.14	0.13	0.13	0.14	0.14	0.14
Latin America	4.23	4.21	4.40	4.28	4.15	4.13	4.27	4.29	4.12	4.00	4.18
Brazil[5]	2.19	2.21	2.40	2.26	2.12	2.17	2.28	2.31	2.13	2.11	2.18
Argentina	0.69	0.65	0.62	0.68	0.67	0.61	0.65	0.62	0.64	0.54	0.65
Colombia	0.92	0.94	0.99	0.93	0.94	0.94	0.94	0.97	0.94	0.93	0.95
Others	0.43	0.41	0.39	0.41	0.41	0.41	0.40	0.39	0.41	0.41	0.41
Middle East[3]	1.65	1.46	1.48	1.40	1.45	1.50	1.48	1.46	1.47	1.48	1.51
Oman	0.89	0.91	0.95	0.89	0.91	0.93	0.92	0.92	0.91	0.90	0.93
Syria	0.33	0.16	0.14	0.17	0.16	0.16	0.16	0.15	0.16	0.17	0.16
Yemen	0.23	0.19	0.20	0.14	0.18	0.21	0.21	0.21	0.20	0.21	0.21
Others	0.20	0.19	0.19	0.20	0.20	0.19	0.19	0.19	0.20	0.19	0.19
Africa	2.60	2.32	2.33	2.45	2.28	2.27	2.27	2.27	2.28	2.28	2.27
Egypt	0.74	0.73	0.72	0.74	0.74	0.73	0.73	0.73	0.74	0.73	0.73
Gabon	0.25	0.26	0.26	0.26	0.25	0.26	0.26	0.26	0.26	0.26	0.26
Others	1.61	1.33	1.35	1.45	1.29	1.28	1.28	1.28	1.29	1.29	1.28
Total Non-OECD	29.88	29.44	29.60	29.79	29.30	29.16	29.51	29.54	29.22	29.17	29.16
Processing Gains[4]	2.11	2.14	2.18	2.14	2.11	2.16	2.13	2.18	2.16	2.17	2.17
Global Biofuels[5]	1.86	1.87	2.02	1.57	1.83	2.16	1.94	1.61	1.95	2.16	2.16
TOTAL NON-OPEC[6]	52.78	53.21	53.93	53.39	52.94	52.90	53.60	53.41	52.82	53.14	52.95
Non-OPEC: Historical Composition[6]	52.78	53.21	53.93	53.39	52.94	52.90	53.60	53.41	52.82	53.14	52.95
TOTAL SUPPLY	88.43			90.80	90.81				90.55	90.98	90.83

1 Includes condensates reported by OPEC countries, oil from non-conventional sources, e.g. Venezuelan Orimulsion (but not Orinoco extra-heavy oil), and non-oil inputs to Saudi Arabian MTBE. Orimulsion production reportedly ceased from January 2007.
2 Comprises crude oil, condensates, NGLs and oil from non-conventional sources
3 Includes small amounts of production from Jordan and Bahrain.
4 Net volumetric gains and losses in refining and marine transportation losses.
5 As of the July 2010 OMR, Global Biofuels comprise all world biofuel production including fuel ethanol from the US and Brazil.
6 Total OPEC comprises all countries which were OPEC members at 1 January 2009. OPEC Historical Composition comprises countries which were OPEC members at that point in time. Total Non-OPEC excludes all countries that were OPEC members at 1 January 2009. Non-OPEC Historical Composition excludes countries that were OPEC members at that point in time.
7 As of the August 2012 OMR, includes Chile.
8 As of the August 2012 OMR, includes Estonia and Slovenia.
9 As of the August 2012 OMR, includes Israel.

Table 4

OECD INDUSTRY STOCKS[1] AND QUARTERLY STOCK CHANGES

	RECENT MONTHLY STOCKS[2] in Million Barrels					PRIOR YEARS' STOCKS[2] in Million Barrels			STOCK CHANGES in mb/d			
	Mar2012	Apr2012	May2012	Jun2012	Jul2012*	Jul2009	Jul2010	Jul2011	3Q2011	4Q2011	1Q2012	2Q2012
OECD Americas												
Crude	501.2	510.0	523.4	523.7	516.8	474.8	498.2	488.5	-0.33	-0.02	0.38	0.25
Motor Gasoline	256.1	246.8	241.5	241.4	242.3	242.8	253.9	247.8	0.01	0.09	-0.03	-0.16
Middle Distillate	206.9	198.2	192.8	188.6	197.0	245.5	247.3	230.9	0.15	-0.04	-0.22	-0.20
Residual Fuel Oil	43.8	42.3	43.0	46.1	45.7	43.3	50.1	46.4	-0.02	-0.02	0.02	0.03
Total Products[3]	666.1	656.6	659.6	668.5	689.3	731.0	730.3	702.5	0.29	-0.14	-0.27	0.03
Total[4]	1330.5	1333.8	1354.5	1364.1	1373.6	1369.9	1386.9	1354.8	0.03	-0.35	0.24	0.37
OECD Europe												
Crude	309.8	312.4	311.2	316.7	309.2	341.7	334.4	310.1	-0.11	-0.24	0.26	0.08
Motor Gasoline	94.0	94.2	91.0	88.7	92.4	92.1	95.3	92.7	-0.04	0.07	-0.01	-0.06
Middle Distillate	274.7	268.2	257.2	249.0	251.1	295.3	287.9	270.0	-0.12	0.13	0.03	-0.28
Residual Fuel Oil	82.3	77.7	79.9	81.8	81.7	89.9	95.4	86.3	0.00	-0.04	-0.01	-0.01
Total Products[3]	569.7	560.6	547.4	538.9	544.5	584.2	589.8	567.6	-0.10	0.14	0.00	-0.34
Total[4]	951.3	944.6	927.5	926.7	924.4	996.9	992.5	945.0	-0.25	-0.08	0.32	-0.27
OECD Asia Oceania												
Crude	155.0	165.2	172.0	170.3	168.2	170.5	170.7	164.1	-0.02	-0.02	-0.01	0.17
Motor Gasoline	25.4	26.1	26.6	26.4	27.6	23.7	24.4	25.3	0.00	-0.03	0.04	0.01
Middle Distillate	54.6	59.5	62.9	61.6	64.8	67.4	59.1	66.9	0.01	-0.08	-0.07	0.08
Residual Fuel Oil	19.6	20.2	20.3	19.8	20.9	19.1	20.1	21.2	-0.01	-0.01	0.01	0.00
Total Products[3]	152.2	161.8	167.0	167.2	173.6	170.2	169.2	177.1	0.11	-0.19	-0.13	0.16
Total[4]	377.2	402.5	415.6	413.0	416.3	406.7	409.4	412.7	0.08	-0.25	-0.14	0.39
Total OECD												
Crude	965.9	987.5	1006.6	1010.7	994.2	987.0	1003.2	962.6	-0.47	-0.28	0.63	0.49
Motor Gasoline	375.5	367.1	359.1	356.4	362.3	358.7	373.6	365.8	-0.03	0.13	-0.01	-0.21
Middle Distillate	536.2	525.8	513.0	499.2	512.9	608.1	594.3	567.8	0.04	0.01	-0.25	-0.41
Residual Fuel Oil	145.7	140.2	143.1	147.7	148.3	152.4	165.6	153.9	-0.03	-0.07	0.01	0.02
Total Products[3]	1388.1	1379.0	1374.0	1374.6	1407.4	1485.3	1489.4	1447.3	0.30	-0.19	-0.40	-0.15
Total[4]	2659.0	2680.9	2697.6	2703.7	2714.3	2773.5	2788.8	2712.5	-0.14	-0.68	0.42	0.49

OECD GOVERNMENT-CONTROLLED STOCKS[5] AND QUARTERLY STOCK CHANGES

	RECENT MONTHLY STOCKS[2] in Million Barrels					PRIOR YEARS' STOCKS[2] in Million Barrels			STOCK CHANGES in mb/d			
	Mar2012	Apr2012	May2012	Jun2012	Jul2012*	Jul2009	Jul2010	Jul2011	3Q2011	4Q2011	1Q2012	2Q2012
OECD Americas												
Crude	696.0	696.0	696.0	696.0	696.0	724.1	726.6	718.2	-0.33	0.00	0.00	0.00
Products	1.0	1.0	1.0	1.0	1.0	2.0	2.0	0.0	0.00	0.01	0.00	0.00
OECD Europe												
Crude	189.1	189.7	188.7	192.6	193.7	185.6	185.3	183.4	-0.02	0.04	0.03	0.04
Products	234.7	234.3	235.2	234.6	234.6	243.1	238.5	241.1	-0.01	-0.02	-0.04	0.00
OECD Asia Oceania												
Crude	393.6	393.5	393.5	393.5	393.5	388.5	388.9	389.1	0.00	0.03	0.00	0.00
Products	20.0	20.0	20.0	20.0	20.0	19.2	20.0	18.5	-0.01	0.01	0.00	0.00
Total OECD												
Crude	1278.6	1279.1	1278.1	1282.1	1283.2	1298.1	1300.7	1290.8	-0.36	0.07	0.03	0.04
Products	255.7	255.3	256.2	255.7	255.7	264.3	260.5	259.6	-0.03	0.00	-0.03	0.00
Total[4]	1535.8	1535.7	1535.6	1539.0	1540.1	1564.2	1562.6	1551.8	-0.38	0.07	-0.01	0.04

* estimated

1 Stocks are primary national territory stocks on land (excluding utility stocks and including pipeline and entrepot stocks where known) and include stocks held by industry to meet IEA, EU and national emergency reserve commitments and are subject to government control in emergencies.

2 Closing stock levels.

3 Total products includes gasoline, middle distillates, fuel oil and other products.

4 Total includes NGLs, refinery feedstocks, additives/oxygenates and other hydrocarbons.

5 Includes government-owned stocks and stock holding organisation stocks held for emergency purposes.

Table 5
TOTAL STOCKS ON LAND IN OECD COUNTRIES[1]

('millions of barrels' and 'days')

	End June 2011		End September 2011		End December 2011		End March 2012		End June 2012 [3]	
	Stock Level	Days Fwd[2] Demand	Stock Level	Days Fwd Demand	Stock Level	Days Fwd Demand	Stock Level	Days Fwd Demand	Stock Level	Days Fwd Demand
OECD Americas										
Canada	177.2	75	176.0	78	177.9	80	171.2	76	174.0	-
Chile	10.2	31	11.5	35	9.9	29	10.5	30	10.3	-
Mexico	46.5	22	46.1	21	44.4	21	44.8	21	45.3	-
United States[4]	1808.5	95	1780.9	94	1750.7	95	1778.8	95	1809.4	-
Total[4]	2064.5	85	2036.7	85	2005.0	86	2027.4	86	2061.0	85
OECD Asia Ocenia										
Australia	39.9	39	38.8	37	40.1	39	38.2	36	40.4	-
Israel	-	-	-	-	-	-	-	-	-	-
Japan	593.2	138	601.1	125	588.5	111	579.5	135	601.3	-
Korea	175.2	79	173.6	75	166.8	72	164.0	75	176.7	-
New Zealand	8.7	61	8.7	56	8.3	52	9.0	61	8.0	-
Total	817.0	102	822.2	96	803.7	88	790.8	99	826.5	102
OECD Europe[5]										
Austria	22.9	82	21.3	81	22.6	91	22.1	87	21.2	-
Belgium	38.1	58	36.7	58	36.4	56	34.8	57	38.6	-
Czech Republic	21.7	105	20.1	105	20.7	114	20.2	101	18.6	-
Denmark	21.5	134	22.4	138	22.4	142	21.4	133	19.4	-
Estonia	1.2	43	1.2	47	1.3	48	1.2	42	1.1	-
Finland	27.2	134	26.4	130	29.2	149	29.9	159	28.0	-
France	166.7	91	160.0	92	165.0	92	164.7	96	163.7	-
Germany	286.3	113	276.9	115	278.6	123	281.2	121	280.2	-
Greece	32.6	97	30.9	93	27.9	79	29.1	94	28.9	-
Hungary	17.3	118	16.2	112	15.4	125	17.2	143	15.9	-
Ireland	10.2	74	11.3	77	10.7	84	11.7	91	10.5	-
Italy	147.4	100	147.6	103	145.7	113	147.9	112	145.2	-
Luxembourg	0.6	10	0.7	11	0.6	10	0.5	8	0.6	-
Netherlands	119.4	115	115.9	116	103.0	104	121.1	117	112.6	-
Norway	23.5	91	24.5	92	25.9	106	29.1	115	27.4	-
Poland	64.6	105	65.2	110	64.5	126	64.5	118	62.7	-
Portugal	23.3	86	21.9	90	21.9	90	20.9	88	20.4	-
Slovak Republic	8.9	100	8.3	99	8.5	110	9.0	124	9.0	-
Slovenia	4.7	82	4.8	84	4.5	81	4.8	90	4.6	-
Spain	130.1	94	131.2	97	132.8	99	134.3	104	132.8	-
Sweden	32.5	105	32.6	108	31.5	109	29.6	98	28.9	-
Switzerland	37.2	138	37.0	140	35.7	138	35.3	142	35.2	-
Turkey	56.6	71	56.4	80	55.8	80	57.4	74	60.7	-
United Kingdom	85.4	53	84.7	54	87.8	57	88.6	57	89.0	-
Total	1379.9	93	1354.1	95	1348.5	98	1376.6	100	1355.2	94
Total OECD	4261.4	91	4213.0	90	4157.1	90	4194.8	92	4242.7	91
DAYS OF IEA Net Imports[6]	-	147	-	144	-	143	-	144	-	150

1 Total Stocks are industry and government-controlled stocks (see breakdown in table below). Stocks are primary national territory stocks on land (excluding utility stocks and including pipeline and entrepot stocks where known) they include stocks held by industry to meet IEA, EU and national emergency reserves commitments and are subject to government control in emergencies.
2 Note that days of forward demand represent the stock level divided by the forward quarter average daily demand and is very different from the days of net imports used for the calculation of IEA Emergency Reserves.
3 End June 2012 forward demand figures are IEA Secretariat forecasts.
4 US figures exclude US territories. Total includes US territories.
5 Data not available for Iceland.
6 Reflects stock levels and prior calendar year's net imports adjusted according to IEA emergency reserve definitions (see www.iea.org/netimports.asp). Net exporting IEA countries are excluded.

TOTAL OECD STOCKS

CLOSING STOCKS	Total	Government[1] controlled	Industry	Total	Government[1] controlled	Industry
	Millions of Barrels			*Days of Fwd. Demand[2]*		
2Q2009	4331	1565	2766	95	34	60
3Q2009	4353	1568	2785	93	34	60
4Q2009	4232	1568	2664	91	34	57
1Q2010	4270	1571	2699	93	34	59
2Q2010	4345	1566	2779	92	33	59
3Q2010	4322	1553	2769	91	33	58
4Q2010	4257	1565	2693	90	33	57
1Q2011	4216	1562	2654	93	34	59
2Q2011	4261	1565	2696	91	33	57
3Q2011	4213	1530	2683	90	33	57
4Q2011	4157	1536	2621	90	33	57
1Q2012	4195	1536	2659	92	34	58
2Q2012	4243	1539	2704	91	33	58

1 Includes government-owned stocks and stock holding organisation stocks held for emergency purposes.
2 Days of forward demand calculated using actual demand except in 2Q2012 (when latest forecasts are used).

Table 6

IEA MEMBER COUNTRY DESTINATIONS OF SELECTED CRUDE STREAMS[1]

(million barrels per day)

	2009	2010	2011	3Q11	4Q11	1Q12	2Q12	Apr 12	May 12	Jun 12	Year Earlier Jun 11	Year Earlier change
Saudi Light & Extra Light												
Americas	0.52	0.69	0.69	0.47	0.85	0.84	0.87	0.83	0.87	0.90	0.73	0.17
Europe	0.59	0.66	0.83	0.93	0.88	0.76	0.91	0.84	0.79	1.11	0.80	0.30
Asia Oceania	1.28	1.21	1.24	1.21	1.27	1.37	1.21	1.26	1.21	1.15	1.08	0.07
Saudi Medium												
Americas	0.40	0.36	0.37	0.40	0.40	0.47	0.44	0.49	0.46	0.36	0.37	-0.01
Europe	0.02	0.00	0.02	0.05	0.01	0.05	0.07	0.08	0.08	0.05	0.05	0.01
Asia Oceania	0.34	0.34	0.40	0.43	0.40	0.46	0.42	0.47	0.43	0.37	0.40	-0.04
Saudi Heavy												
Americas	0.03	0.02	0.02	0.03	0.01	-	0.15	0.30	0.03	0.11	0.02	0.09
Europe	0.02	0.00	0.01	0.03	0.03	0.04	0.12	0.12	0.10	0.13	0.00	0.13
Asia Oceania	0.15	0.22	0.20	0.23	0.18	0.21	0.18	0.16	0.20	0.17	0.22	-0.05
Iraqi Basrah Light[2]												
Americas	0.40	0.36	0.29	0.31	0.21	0.39	0.55	0.33	0.71	0.61	0.39	0.23
Europe	0.12	0.09	0.11	0.19	0.11	0.14	0.18	0.06	0.08	0.41	0.14	0.28
Asia Oceania	0.24	0.29	0.34	0.38	0.32	0.26	0.34	0.28	0.28	0.46	0.15	0.31
Iraqi Kirkuk												
Americas	0.06	0.03	0.07	0.05	0.06	0.06	0.08	0.07	0.05	0.12	0.14	-0.02
Europe	0.31	0.27	0.27	0.32	0.26	0.20	0.23	0.29	0.18	0.24	0.44	-0.20
Asia Oceania	-	-	-	-	-	-	-	-	-	-	-	-
Iranian Light												
Americas	-	-	-	-	-	-	-	-	-	-	-	-
Europe	0.15	0.24	0.23	0.20	0.21	0.25	0.16	0.19	0.08	0.21	0.28	-0.08
Asia Oceania	0.07	0.04	0.04	0.04	0.03	0.03	0.02	0.04	0.01	0.01	0.02	0.00
Iranian Heavy[3]												
Americas	-	-	-	-	-	-	-	-	-	-	-	-
Europe	0.40	0.49	0.55	0.73	0.54	0.33	0.21	0.22	0.23	0.19	0.83	-0.64
Asia Oceania	0.57	0.52	0.51	0.51	0.49	0.48	0.38	0.40	0.25	0.50	0.44	0.06
Venezuelan Light & Medium												
Americas	0.39	0.14	0.18	0.24	0.13	0.07	0.15	0.19	0.26	-	0.40	-
Europe	0.07	0.02	0.02	0.02	0.02	0.01	-	-	-	-	0.01	-
Asia Oceania	-	-	-	-	-	0.01	0.01	-	0.02	0.02	-	-
Venezuelan 22 API and heavier												
Americas	0.75	0.86	0.76	0.70	0.69	0.68	0.57	0.68	0.55	0.48	0.78	-0.30
Europe	0.07	0.06	0.05	0.06	0.05	0.08	0.09	0.08	0.08	0.10	0.07	0.03
Asia Oceania	-	-	-	-	-	-	-	-	-	-	-	-
Mexican Maya												
Americas	0.93	0.91	0.82	0.84	0.84	0.72	0.69	0.68	0.75	0.63	0.79	-0.16
Europe	0.10	0.11	0.12	0.12	0.12	0.12	0.14	0.15	0.13	0.14	0.10	0.04
Asia Oceania	-	-	-	-	-	-	-	-	-	-	-	-
Mexican Isthmus												
Americas	0.01	0.04	0.07	0.06	0.07	0.04	0.03	0.07	0.01	0.01	0.14	-0.13
Europe	0.01	0.02	0.01	0.00	0.01	0.02	0.05	0.05	0.06	0.02	-	-
Asia Oceania	-	-	-	-	-	-	-	-	-	-	-	-
Russian Urals												
Americas	0.15	0.08	0.01	-	0.02	-	0.01	-	0.02	-	-	-
Europe	1.72	1.80	1.69	1.51	1.61	1.75	1.76	1.72	1.86	1.69	1.59	0.10
Asia Oceania	-	-	-	-	-	-	-	-	-	-	-	-
Nigerian Light[4]												
Americas	0.54	0.60	0.53	0.43	0.46	0.25	0.30	0.31	0.22	0.38	0.58	-0.19
Europe	0.32	0.34	0.45	0.54	0.48	0.51	0.52	0.56	0.44	0.56	0.40	0.17
Asia Oceania	0.00	-	0.05	0.06	0.05	0.03	0.06	0.06	0.12	0.00	0.03	-0.03
Nigerian Medium												
Americas	0.21	0.25	0.18	0.18	0.14	0.04	0.07	0.07	0.15	-	0.23	-
Europe	0.13	0.09	0.14	0.11	0.13	0.26	0.25	0.26	0.27	0.21	0.24	-0.04
Asia Oceania	-	-	-	-	-	-	-	-	-	-	-	-

1 Data based on monthly submissions from IEA countries to the crude oil import register (in '000 bbl), subject to availability. May differ from Table 8 of the Report.
IEA Americas includes United States and Canada.
IEA Europe includes all countries in OECD Europe except Estonia, Hungary and Slovenia.
IEA Asia Oceania includes Australia, New Zealand, Korea and Japan.

2 Iraqi Total minus Kirkuk.

3 Iranian Total minus Iranian Light.

4 33° API and lighter (e.g., Bonny Light, Escravos, Qua Iboe and Oso Condensate).

Table 7
REGIONAL OECD IMPORTS[1,2]

(thousand barrels per day)

	2009	2010	2011	3Q11	4Q11	1Q12	2Q12	Apr-12	May-12	Jun-12	Year Earlier Jun-11	Year Earlier % change
Crude Oil												
Americas	7541	7496	6876	6983	6668	6151	6460	6146	6646	6581	6939	-5%
Europe	8893	9072	8985	9331	8903	9119	9147	8934	9060	9449	9213	3%
Asia Oceania	6311	6472	6609	6498	6730	6994	6727	7026	6838	6315	6348	-1%
Total OECD	22746	23039	22470	22812	22301	22264	22334	22105	22545	22345	22812	-2%
LPG												
Americas	43	34	33	35	20	20	28	18	32	33	38	-13%
Europe	261	285	309	305	328	300	281	264	293	284	308	-8%
Asia Oceania	537	565	568	587	553	658	597	661	553	580	454	28%
Total OECD	840	884	910	928	902	978	906	944	878	897	801	12%
Naphtha												
Americas	22	36	42	43	38	15	34	33	27	42	70	-40%
Europe	336	399	272	266	238	399	354	434	312	318	323	-2%
Asia Oceania	849	907	884	914	861	839	878	839	806	993	864	15%
Total OECD	1207	1343	1198	1223	1137	1253	1267	1306	1145	1353	1257	8%
Gasoline[3]												
Americas	884	801	761	714	654	679	782	772	744	832	954	-13%
Europe	206	187	222	220	213	280	170	125	210	174	246	-29%
Asia Oceania	111	84	94	91	113	95	92	129	89	59	72	-19%
Total OECD	1200	1073	1078	1026	980	1054	1044	1025	1044	1064	1272	-16%
Jet & Kerosene												
Americas	62	76	77	83	67	42	61	56	67	60	87	-31%
Europe	449	418	396	449	449	290	373	386	291	445	386	15%
Asia Oceania	60	46	56	51	61	77	38	27	48	41	57	-29%
Total OECD	571	539	530	584	577	408	473	468	406	546	531	3%
Gasoil/Diesel												
Americas	91	100	73	67	61	71	45	35	40	59	65	-9%
Europe	1063	1071	1042	981	1101	1026	859	866	674	1044	811	29%
Asia Oceania	92	104	147	154	171	170	177	170	171	190	131	45%
Total OECD	1246	1275	1262	1202	1333	1268	1081	1071	885	1293	1007	28%
Heavy Fuel Oil												
Americas	271	277	268	196	228	220	217	180	216	254	308	-18%
Europe	489	464	536	624	550	631	546	457	562	619	554	12%
Asia Oceania	116	118	153	170	182	221	203	171	214	223	106	111%
Total OECD	876	860	957	990	961	1072	966	809	991	1097	968	13%
Other Products												
Americas	877	807	874	903	837	751	838	745	874	892	871	2%
Europe	747	692	690	712	619	590	651	675	724	551	752	-27%
Asia Oceania	353	375	373	390	375	389	369	368	364	375	269	39%
Total OECD	1977	1874	1937	2005	1831	1730	1858	1789	1962	1818	1893	-4%
Total Products												
Americas	2250	2132	2128	2042	1905	1798	2005	1840	2001	2173	2394	-9%
Europe	3551	3516	3467	3558	3498	3516	3235	3208	3068	3434	3381	2%
Asia Oceania	2117	2199	2277	2357	2316	2450	2355	2364	2243	2460	1954	26%
Total OECD	7918	7847	7872	7957	7719	7763	7594	7412	7312	8068	7729	4%
Total Oil												
Americas	9791	9627	9004	9025	8573	7949	8464	7986	8647	8754	9644	-9%
Europe	12445	12588	12452	12889	12401	12635	12381	12142	12128	12883	12594	2%
Asia Oceania	8428	8671	8886	8855	9047	9443	9082	9390	9081	8776	8302	6%
Total OECD	30664	30886	30342	30769	30020	30027	29928	29518	29856	30413	30541	0%

1 Based on Monthly Oil Questionnaire data submitted by OECD countries in tonnes and converted to barrels.
2 Excludes intra-regional trade.
3 Includes additives.

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User's Guide and Glossary to the IEA *Oil Market Report*

For information on the data sources, definitions, technical terms and general approach used in preparing the *Oil Market Report (OMR)*, *Medium-Term Oil and Gas Markets (MTOGM)* and *Annual Statistical Supplement* (current issue of the Statistical Supplement dated 10 August 2012), readers are referred to the *Users' Guide* at www.oilmarketreport.org/glossary.asp. It should be noted that the spot crude and product price assessments are based on daily Argus prices, converted when appropriate to US$ per barrel according to the Argus specification of products (Copyright © 2012 Argus Media Limited - all rights reserved).

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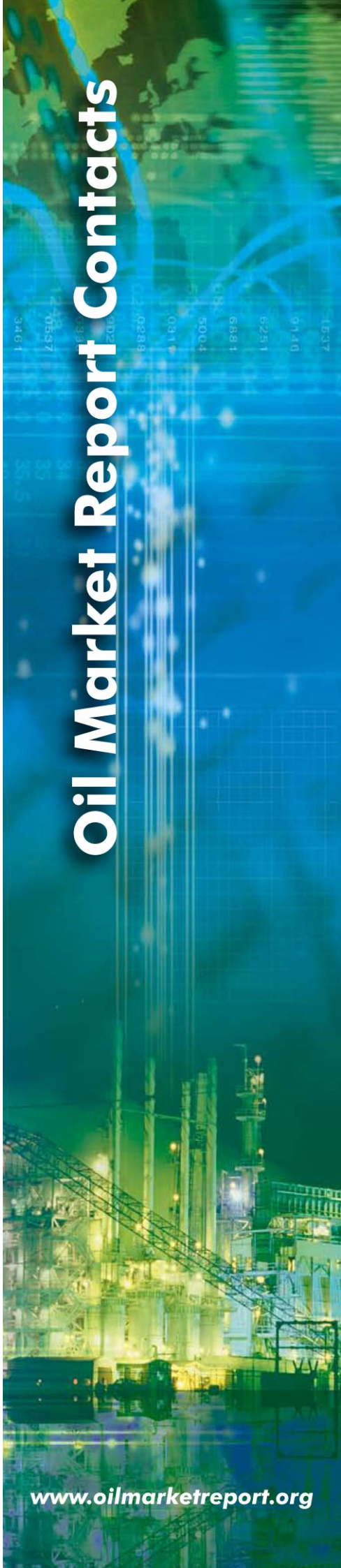

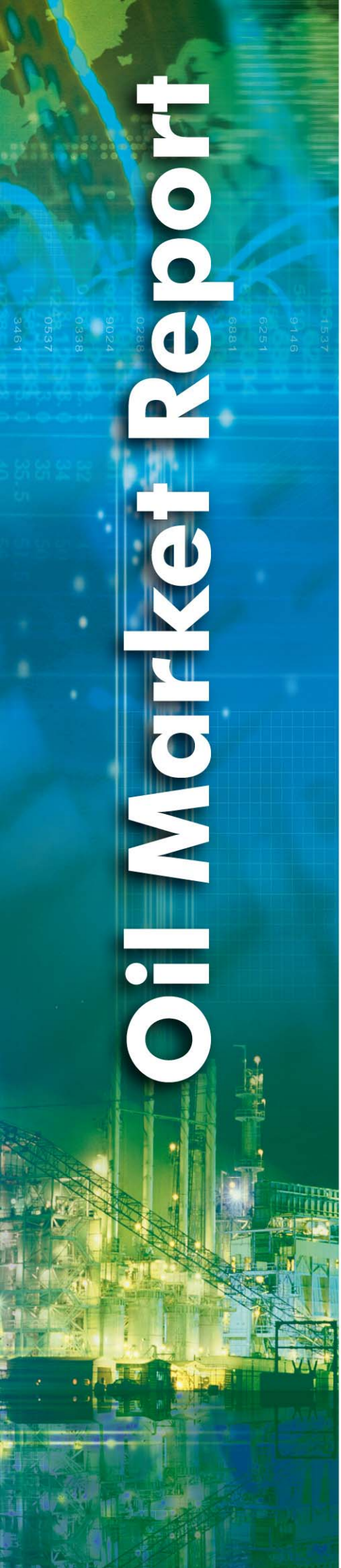

International Energy Agency

12 October 2012

HIGHLIGHTS

- **Crude oil prices traded in a narrow range in September, as renewed concerns about the economy blunted the effect of escalating tensions in the Middle East**. Brent averaged $113.03/bbl and WTI $94.56/bbl, a gain of about $0.40/bbl. Brent rose a further $2/bbl in early October, to $115/bbl at the time of writing.

- **Estimates of global demand growth were revised down to 0.7 mb/d for 2012 (to 89.7 mb/d) but kept at 0.8 mb/d for 2013 (to 90.5 mb/d).** The IMF's downward revision to its forecast of economic growth – to 3.3% in 2012 and 3.6% in 2013 – had been anticipated and does not affect our forecast.

- **Non-OPEC output growth is expected to bounce back to 0.7 mb/d in 2013 (to 53.9 mb/d) after outages cut growth to 0.4 mb/d (to 53.2 mb/d) in 2012.** Both estimates are up by a marginal 10 kb/d since last month. Supply recovers by 0.6 mb/d (to 53.6 mb/d) in 4Q12, from maintenance and hurricane disruptions in 3Q12.

- **OPEC crude oil supply fell to an eight-month low in September, down 510 kb/d to 31.17 mb/d.** Higher supplies from Iraq and Libya failed to offset reduced output from Nigeria, Iran and Saudi Arabia. Weak demand cut 'call on OPEC crude and stock change' by 400 kb/d for 3Q12, to 30.7 mb/d.

- **OECD industry stocks declined by a counter-seasonal 11.2 mb in August** led by a stronger-than-seasonal draw in the US after Hurricane Isaac disrupted production and imports end-month, but preliminary data suggest stocks rebounded by 13.0 mb in September. Forward demand cover stands at 58.8 days, 0.1 days lower than July.

- **Global refinery crude demand estimates have been revised up by 140 kb/d for 3Q12,** to average 75.8 mb/d. Robust refinery margins lifted runs in Europe, more than offsetting lower-than-expected US runs in September. In contrast, 4Q12 throughputs have been lowered by 250 kb/d, to 75.4 mb/d, on outages and a lower demand outlook.

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Note to Subscribers:

This month's ***Oil Market Report*** coincides with the release of ***Medium-Term Oil Market Report***, 2012. This month's report is an abbreviated release of our monthly statistics, plus front page Highlights and a lead article only. The normal *OMR* format with detailed written analysis will resume for the November edition.

Please note that *MTOMR* data does not include the latest monthly data submissions and forecast as published in the October *OMR* tables due to publication deadlines, and minor discrepancies may therefore exist.

IN SEARCH OF THE NEW NORMAL

This month's *OMR* is shorter than usual and reduced to its statistical content, as it coincides with the release of the *Medium-Term Oil Market Report (MTOMR) 2012*. (A complete set of accompanying MODS statistics is also available this month.) We will return to the normal *OMR* format, fully loaded with commentary and analysis, in November.

This is a good time to be looking at the mid-term horizon, since so much has changed in the oil market, the global economy and the world at large in the 16 months since our last full five-year outlook (an update was issued in December). The net result of those changes – in particular, an expected rebuilding of OPEC spare capacity -- could be said to signal a return to more 'normal' market conditions than we had become accustomed to. Yet as outlined in the *MTOMR*, this rebalancing of supply and demand will be accompanied with such sweeping changes in regional balances that it is more likely to feel like uncharted territory than familiar ground.

Recent market developments – the usual focus of the *OMR* – already feel anything but normal. Stock movements and refining activity are making a mockery of seasonal patterns. Heating oil futures are in backwardation, discouraging inventory building at a time of year when Northern Hemisphere market participants would typically be stockpiling. Oil prices in general remain elevated, and in parts of North America retail product prices are spiking near record highs, yet preliminary data suggest OECD oil stocks built counter-seasonally last month. In Europe, refiners, buoyed by a dramatic turnaround in refining margins, have been postponing seasonal maintenance and, despite much lower processing capacity than last year, are pushing far more crude through the system.

The clearest departure from 'business as usual' may be the reduction in Iranian exports since July as a result of expanded international sanctions. Whereas many expected the sanctions to lose some bite in September, as Iranian exporters and some of their clients were reportedly seeking ways to get around insurance constraints, in fact compliance appears to have tightened, and Iranian crude deliveries fell to an estimated 860 kb/d, a new low.

It looked last month as if the loss of Iranian supplies might have something to do with a counter-seasonal draw in OECD oil stocks in August. Preliminary data for September do not support that view. Total OECD oil stocks rebounded last month, rising by a provisional 13 mb, compared to an average 21 mb draw in the last five years. Stocks surged by nearly 10 mb in the US (compared to an average 1.5 mb build), barely edged lower in Europe (compared to an average 19 mb draw) and built by 5 mb in Japan (compared to a 3.4 mb draw). Product stocks were more of a mixed bag, however, falling by 3.3 mb in the US, three times as fast as normal, but building by nearly 2 mb in Europe on strong refinery runs, instead of the average 11.4 mb draw.

The paradox is that US product stocks have been falling faster than normal and European refiners have been running flat out despite tepid product demand in both markets. Hurricane disruptions and a string of refinery glitches (especially on the West Coast) are only part of the US story. In both regions, the bottom line is that exports have become a key driver of refining activity and profits, not just the outlet for surplus product that they used to be. To wit, in Europe even gasoline cracks have staged a dramatic recovery, despite vanishing demand at home.

How long European refining margins can remain at their current high levels in unclear. Despite pockets of concern, though, chances are market signals will work and supply and demand will balance, albeit in new and ever-changing ways. In a rapidly globalising product market, the adequacy of seasonal product stocks in any given market is getting increasingly hard to gauge. And judging from the shifts forecasted in the *MTOMR*, this is just the beginning.

DEMAND

Tables

Global Oil Demand (2011-2013)

(million barrels per day)

	1Q11	2Q11	3Q11	4Q11	2011	1Q12	2Q12	3Q12	4Q12	2012	1Q13	2Q13	3Q13	4Q13	2013
Africa	3.4	3.3	3.2	3.4	3.3	3.4	3.4	3.4	3.4	3.4	3.5	3.5	3.5	3.5	3.5
Americas	30.3	30.1	30.7	30.4	30.4	29.7	30.3	30.6	30.5	30.3	29.9	30.2	30.9	30.8	30.4
Asia/Pacific	29.0	27.7	27.8	29.2	28.4	30.0	28.6	28.6	29.7	29.2	30.4	29.0	28.8	30.1	29.6
Europe	15.0	14.9	15.5	14.9	15.1	14.5	14.6	14.9	14.6	14.6	14.2	14.2	14.8	14.5	14.4
FSU	4.2	4.4	4.6	4.6	4.4	4.4	4.5	4.7	4.7	4.6	4.6	4.7	4.9	4.9	4.8
Middle East	6.9	7.4	7.8	7.3	7.4	7.1	7.7	8.0	7.5	7.6	7.3	7.8	8.2	7.7	7.8
World	**88.7**	**87.7**	**89.5**	**89.8**	**88.9**	**89.2**	**89.0**	**90.1**	**90.4**	**89.7**	**89.9**	**89.5**	**91.1**	**91.5**	**90.5**
Annual Chg (%)	2.5	0.4	0.8	0.3	1.0	0.6	1.5	0.6	0.7	0.8	0.8	0.5	1.1	1.2	0.9
Annual Chg (mb/d)	2.2	0.4	0.7	0.2	0.9	0.5	1.3	0.5	0.6	0.7	0.7	0.5	1.0	1.1	0.8
Changes from last OMR (mb/d)	-0.02	-0.03	0.01	0.00	-0.01	0.04	0.06	-0.27	-0.21	-0.10	-0.12	-0.08	-0.08	-0.12	-0.10

OECD Demand based on Adjusted Preliminary Submissions - August 2012

(million barrels per day)

	Gasoline		Jet/Kerosene		Diesel		Other Gasoil		RFO		Other		Total Products	
	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa
OECD Americas*	**10.71**	**0.2**	**1.74**	**-4.5**	**4.34**	**-3.4**	**0.86**	**4.0**	**0.87**	**3.4**	**5.83**	**-4.82**	**24.35**	**-1.8**
US50	8.95	0.2	1.48	-6.0	3.53	-5.2	0.37	27.5	0.38	8.6	4.31	-6.6	19.03	-2.4
Canada	0.84	0.9	0.14	5.7	0.27	13.3	0.32	-11.4	0.10	20.5	0.81	0.3	2.47	1.1
Mexico	0.78	-0.8	0.06	5.4	0.33	0.1	0.14	0.1	0.28	-3.7	0.59	0.5	2.19	-0.5
OECD Europe	**2.11**	**-5.9**	**1.32**	**-0.1**	**4.39**	**-3.8**	**1.37**	**-21.4**	**1.15**	**-7.0**	**3.58**	**-2.9**	**13.92**	**-5.9**
Germany	0.43	-10.5	0.19	5.6	0.70	-4.5	0.27	-45.0	0.14	0.3	0.65	7.0	2.39	-9.5
United Kingdom	0.32	-4.5	0.33	0.5	0.46	1.5	0.14	-0.3	0.04	-21.7	0.29	-4.0	1.58	-2.0
France	0.18	-5.7	0.16	-0.5	0.68	-1.3	0.20	-27.9	0.08	-6.9	0.36	-9.5	1.66	-8.0
Italy	0.21	-10.1	0.11	0.0	0.43	-9.7	0.08	-11.0	0.16	4.9	0.30	-10.6	1.29	-7.8
Spain	0.13	-5.7	0.13	-7.8	0.46	-2.7	0.12	-3.3	0.17	-4.1	0.29	-3.7	1.30	-4.0
OECD Asia & Oceania	**1.76**	**-0.1**	**0.65**	**-1.1**	**1.27**	**11.1**	**0.43**	**-15.1**	**0.93**	**13.1**	**3.30**	**2.9**	**8.34**	**3.0**
Japan	1.10	-0.2	0.35	4.8	0.45	5.4	0.32	3.1	0.60	19.6	1.77	1.5	4.60	3.8
Korea	0.21	-2.7	0.12	-16.1	0.28	-3.5	0.11	-2.0	0.25	0.2	1.27	5.4	2.24	1.0
Australia	0.33	1.1	0.13	1.1	0.38	1.7	0.00	0.0	0.02	-14.0	0.17	-1.6	1.03	0.5
OECD Total	**14.57**	**-0.8**	**3.72**	**-2.4**	**10.00**	**-2.0**	**2.66**	**-13.6**	**2.95**	**1.7**	**12.71**	**-2.4**	**46.61**	**-2.3**

* Including US territories

Non-OECD: Demand by Product

(thousand barrels per day)

	Demand			Annual Chg (kb/d)		Annual Chg (%)	
	Jun-12	Jul-12	Aug-12	Jul-12	Aug-12	Jul-12	Aug-12
LPG & Ethane	4,701	4,730	4,686	224	106	5.0	2.3
Naphtha	2,692	2,734	2,743	-29	86	-1.0	3.2
Motor Gasoline	8,748	8,781	8,831	353	329	4.2	3.9
Jet Fuel & Kerosene	2,656	2,832	2,749	141	24	5.2	0.9
Gas/Diesel Oil	13,543	13,422	13,281	329	157	2.5	1.2
Residual Fuel Oil	5,169	5,411	5,241	203	4	3.9	0.1
Other Products	6,106	6,028	5,909	217	207	3.7	3.6
Total Products	**43,615**	**43,938**	**43,439**	**1,437**	**912**	**3.4**	**2.1**

Non-OECD: Demand by Region

(thousand barrels per day)

	Demand			Annual Chg (kb/d)		Annual Chg (%)	
	Jun-12	Jul-12	Aug-12	Jul-12	Aug-12	Jul-12	Aug-12
Africa	3,459	3,384	3,322	189	132	5.9	4.1
Asia	20,424	20,643	20,068	755	400	3.8	2.0
FSU	4,674	4,645	4,757	165	24	3.7	0.5
Latin America	6,507	6,566	6,621	205	112	3.2	1.7
Middle East	7,844	7,980	7,955	78	256	1.0	3.3
Non-OECD Europe	708	719	715	44	-12	6.6	-1.6
Total Products	**43,615**	**43,938**	**43,439**	**1,437**	**912**	**3.4**	**2.1**

SUPPLY

Tables

OPEC Crude Production

(million barrels per day)

	Jul 2012 Supply	Aug 2012 Supply	Sep 2012 Supply	Sustainable Production Capacity[1]	Spare Capacity vs Sept 2012 Supply	4Q12 Production Capacity Versus Current Capacity
Algeria	1.19	1.18	1.17	1.20	0.03	0.00
Angola	1.63	1.79	1.75	1.85	0.10	0.05
Ecuador	0.48	0.50	0.50	0.54	0.04	0.00
Iran	2.90	2.85	2.63	3.20	0.57	(0.06)
Kuwait[2]	2.76	2.76	2.78	2.84	0.06	0.05
Libya	1.45	1.38	1.44	1.51	0.07	0.00
Nigeria[3]	2.16	2.30	2.06	2.57	0.51	0.00
Qatar	0.75	0.75	0.75	0.79	0.04	0.00
Saudi Arabia[2]	10.00	9.90	9.80	11.88	2.08	0.00
UAE	2.68	2.69	2.69	2.79	0.10	0.17
Venezuela[4]	2.56	2.51	2.48	2.60	0.12	0.05
OPEC-11	**28.56**	**28.61**	**28.05**	**31.75**	**3.70**	**0.26**
Iraq	3.02	3.07	3.12	3.29	0.17	0.00
Total OPEC	**31.57**	**31.68**	**31.17**	**35.05**	**3.88**	**0.26**
(excluding Iraq, Nigeria, Libya and Iran)					*2.56)*	

1 Capacity levels can be reached within 30 days and sustained for 90 days.
2 Includes half of Neutral Zone production.
3 Nigeria's current capacity estimate excludes some 200 kb/d of shut-in capacity.
4 Includes upgraded Orinoco extra-heavy oil assumed at 355 kb/d in September.

Non-OPEC Supply

(million barrels per day)

	2011	1Q12	2Q12	3Q12	4Q12	2012	1Q13	2Q13	3Q13	4Q13	2013
Americas	14.6	15.6	15.5	15.7	16.1	15.7	16.2	16.3	16.3	16.7	16.4
Europe	3.8	3.8	3.6	3.2	3.4	3.5	3.5	3.3	3.1	3.3	3.3
Asia Oceania	0.6	0.5	0.5	0.6	0.5	0.6	0.5	0.5	0.6	0.5	0.5
Total OECD	**18.9**	**19.9**	**19.6**	**19.6**	**20.1**	**19.8**	**20.2**	**20.1**	**20.0**	**20.6**	**20.2**
Former USSR	13.6	13.7	13.6	13.5	13.7	13.6	13.7	13.6	13.4	13.6	13.6
Europe	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
China	4.1	4.2	4.1	4.1	4.1	4.1	4.2	4.2	4.2	4.2	4.2
Other Asia	3.6	3.6	3.5	3.5	3.5	3.5	3.5	3.5	3.4	3.4	3.5
Latin America	4.2	4.3	4.1	4.1	4.2	4.2	4.3	4.4	4.4	4.5	4.4
Middle East	1.6	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Africa	2.6	2.4	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.4	2.3
Total Non-OECD	**29.9**	**29.8**	**29.3**	**29.2**	**29.5**	**29.4**	**29.5**	**29.5**	**29.4**	**29.7**	**29.5**
Processing Gains	2.1	2.1	2.1	2.2	2.1	2.1	2.2	2.2	2.2	2.2	2.2
Global Biofuels	1.9	1.6	1.8	2.2	1.9	1.9	1.6	2.0	2.4	2.1	2.0
Total Non-OPEC	**52.8**	**53.4**	**52.9**	**53.0**	**53.6**	**53.2**	**53.5**	**53.8**	**53.9**	**54.5**	**53.9**
Annual Chg (mb/d)	0.1	0.6	0.4	0.3	0.3	0.4	0.1	1.0	0.9	0.9	0.7
Changes from last OMR (mb/d)	0.0	0.1	0.0	-0.1	0.1	0.0	0.1	0.0	-0.1	0.1	0.0

All world oil supply figures for August discussed in this report are IEA estimates. Estimates for OPEC countries, some US states, and Russia are supported by preliminary September supply data.

Note: Random events present downside risk to the non-OPEC production forecast contained in this report. These events can include accidents, unplanned or unannounced maintenance, technical problems, labour strikes, political unrest, guerrilla activity, wars and weather-related supply losses. Specific allowance has been made in the forecast for scheduled maintenance in all regions and for typical seasonal supply outages (including hurricane-related stoppages) in North America. In addition, from July 2007, a nationally allocated (but not field-specific) reliability adjustment has also been applied for the non-OPEC forecast to reflect a historical tendency for unexpected events to reduce actual supply compared with the initial forecast. After heavy outages seen in 2011 and 2012, this adjustment now totals –500 kb/d for non-OPEC as a whole, with most downward adjustments focused in the OECD.

OECD STOCKS

Tables & Charts

Preliminary Industry Stock Change in August 2012 and Second Quarter 2012

	August 2012 (preliminary) (million barrels)				August 2012 (preliminary) (million barrels per day)				Second Quarter 2012 (million barrels per day)			
	Am	Europe	As. Ocean	Total	Am	Europe	As. Ocean	Total	Am	Europe	As. Ocean	Total
Crude Oil	**-16.6**	**2.7**	**-9.7**	**-23.6**	**-0.54**	**0.09**	**-0.31**	**-0.76**	**0.24**	**0.07**	**0.17**	**0.48**
Gasoline	-7.5	-1.9	0.6	-8.7	-0.24	-0.06	0.02	-0.28	-0.16	-0.06	0.01	-0.21
Middle Distillates	5.1	6.7	6.3	18.1	0.17	0.22	0.20	0.58	-0.21	-0.28	0.08	-0.41
Residual Fuel Oil	-1.9	-1.6	1.0	-2.4	-0.06	-0.05	0.03	-0.08	0.03	-0.01	0.00	0.02
Other Products	7.9	0.4	0.9	9.2	0.26	0.01	0.03	0.30	0.36	0.01	0.08	0.45
Total Products	**3.8**	**3.6**	**8.8**	**16.2**	**0.12**	**0.12**	**0.28**	**0.52**	**0.02**	**-0.34**	**0.16**	**-0.16**
Other Oils[1]	-2.0	1.1	-2.9	-3.8	-0.06	0.04	-0.09	-0.12	0.09	0.00	0.06	0.15
Total Oil	**-14.8**	**7.5**	**-3.8**	**-11.2**	**-0.48**	**0.24**	**-0.12**	**-0.36**	**0.36**	**-0.27**	**0.39**	**0.48**

1 Other oils includes NGLs, feedstocks and other hydrocarbons.

Revisions versus 12 September 2012 Oil Market Report

(million barrels)

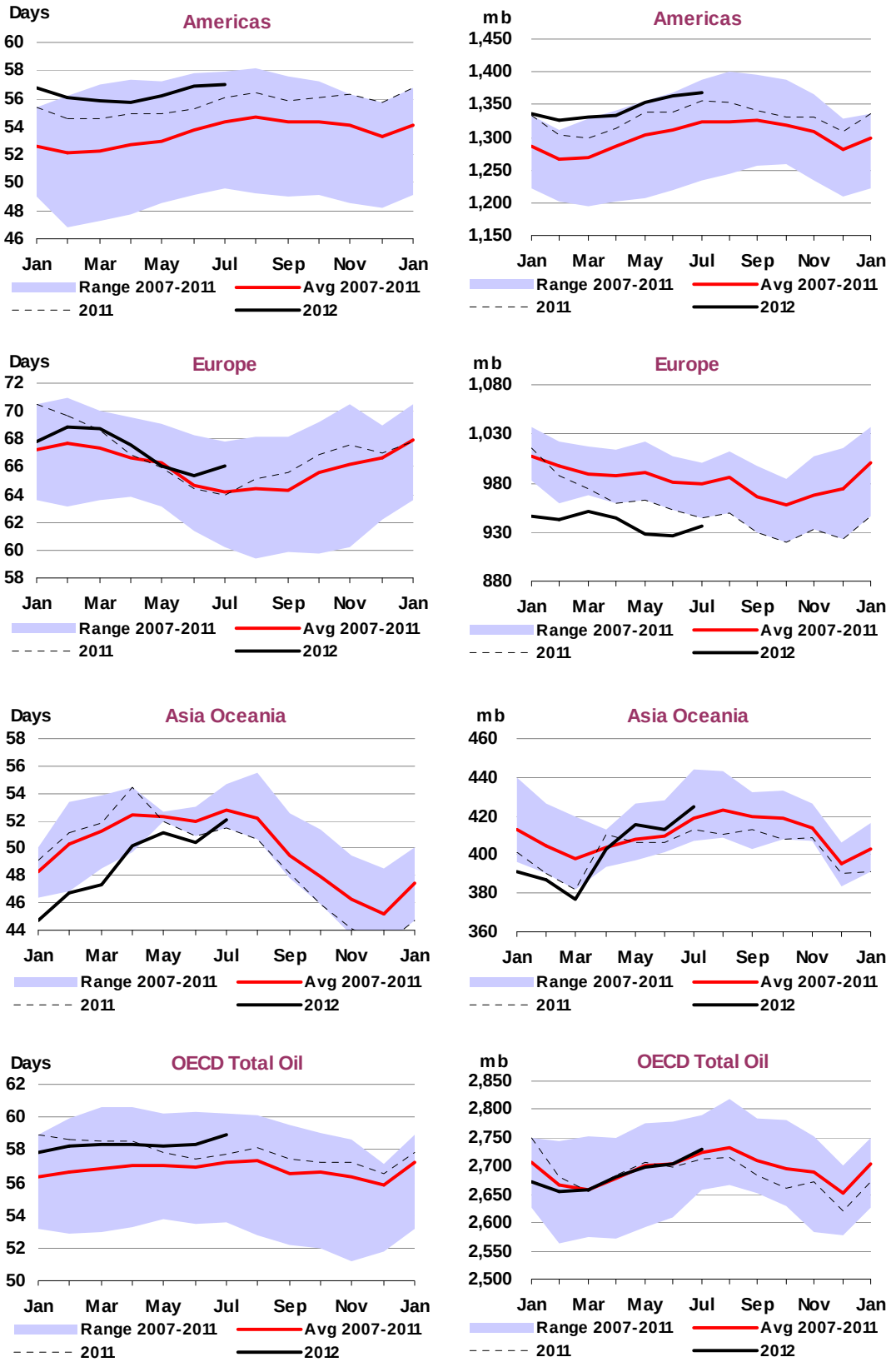
	Americas		*Europe*		*Asia Oceania*		*OECD*	
	Jun-12	Jul-12	Jun-12	Jul-12	Jun-12	Jul-12	Jun-12	Jul-12
Crude Oil	**-0.3**	**-7.9**	**-0.4**	**-1.0**	**0.0**	**8.5**	**-0.7**	**-0.5**
Gasoline	-0.2	0.8	0.0	1.1	0.0	-0.3	-0.2	1.6
Middle Distillates	-0.5	0.4	-0.2	5.3	0.0	-0.1	-0.8	5.6
Residual Fuel Oil	0.0	-0.1	0.0	3.8	0.0	0.1	0.0	3.8
Other Products	0.0	-3.3	0.0	3.3	0.0	-0.2	0.0	-0.2
Total Products	**-0.8**	**-2.2**	**-0.2**	**13.5**	**0.0**	**-0.5**	**-1.0**	**10.8**
Other Oils[1]	-0.2	4.1	0.5	-0.4	0.0	0.5	0.2	4.2
Total Oil	**-1.3**	**-6.0**	**-0.2**	**12.1**	**0.0**	**8.5**	**-1.4**	**14.5**

1 Other oils includes NGLs, feedstocks and other hydrocarbons.

Regional OECD End-of-Month Industry Stocks

(in days of forward demand and millions barrels of total oil)

Days[1] Million Barrels



1 Days of forward demand are based on average demand over the next three months

PRICES

Tables

Prompt Month Oil Futures Prices

(monthly and weekly averages, $/bbl)

	Jul	Aug	Sep	Sep-Aug Avg Chg	% Chg	Week Commencing: 10 Sep	17 Sep	24 Sep	01 Oct	08 Oct
NYMEX										
Light Sweet Crude Oil	87.93	94.16	94.56	0.40	0.4	97.61	93.73	91.46	90.82	89.33
RBOB	118.49	127.25	125.84	-1.41	-1.1	126.39	121.95	129.80	121.67	121.51
No.2 Heating Oil	118.18	128.25	132.12	3.87	2.9	134.56	130.64	131.38	131.64	132.06
No.2 Heating Oil ($/mmbtu)	20.29	22.02	22.68	0.66	2.9	23.10	22.43	22.55	22.60	22.67
Henry Hub Natural Gas ($/mmbtu)	2.96	2.81	2.92	0.11	3.8	2.97	2.82	3.08	3.44	3.40
ICE										
Brent	102.72	112.68	113.03	0.36	0.3	115.95	111.09	110.94	111.31	111.82
Gasoil	119.55	130.02	132.54	2.52	1.9	134.89	131.32	130.37	130.58	132.35
Prompt Month Differentials										
NYMEX WTI - ICE Brent	-14.79	-18.52	-18.48	0.04		-18.34	-17.36	-19.48	-20.49	-22.49
NYMEX No.2 Heating Oil - WTI	30.25	34.09	37.56	3.47		36.95	36.91	39.92	40.82	42.73
NYMEX RBOB - WTI	30.56	33.09	31.28	-1.80		28.79	28.22	38.33	30.85	32.18
NYMEX 3-2-1 Crack (RBOB)	30.45	33.42	33.38	-0.04		31.51	31.12	38.86	34.17	35.70
NYMEX No.2 - Natural Gas ($/mmbtu	17.33	19.21	19.76	0.55		20.13	19.61	19.47	19.16	19.27
ICE Gasoil - ICE Brent	16.83	17.34	19.51	2.17		18.95	20.23	19.43	19.27	20.53

Source: ICE, NYMEX

Positions on NYMEX Light Sweet Crude Oil (WTI) Futures Contracts

Thousand Contracts

02 October 2012	Long	Short	Net	Long/Short	Δ Net from Prev. Week	Δ Net Vs Last Month
Producers' Positions	274.3	292.6	-18.3	*Short*	↑ 10.8	↑ 22.8
Swap Dealers' Positions	148.7	354.2	-205.5	*Short*	↑ 10.1	↑ 2.6
Money Managers' Positions	201.1	59.8	141.3	*Long*	↓ -12.8	↓ -35.7
Others' Positions	165.3	90.8	74.6	*Long*	↓ -2.6	↑ 13.0
Non-Reportable Positions	76.6	68.7	7.9	*Long*	↓ -5.5	↓ -2.8
Open Interest			**1556.9**		↑ 1.0	↑ 25.1

Source: CFTC

Positions on ICE Brent Crude Oil Futures Contracts

Thousand Contracts

02 October 2012	Long	Short	Net	Long/Short	Δ Net from Prev. Week	Δ Net Vs Last Month
Producers' Positions	485.8	590.5	-104.8	*Short*	↓ -4.8	↑ 48.5
Swap Dealers' Positions	179.8	149.9	30.0	*Long*	↓ -0.6	↓ -50.4
Money Managers' Positions	143.0	35.2	107.8	*Long*	↑ 7.2	↑ 13.0
Others' Positions	9.3	46.9	-37.6	*Short*	↓ -1.4	↓ -8.1
Non-Reportable Positions	43.0	38.4	4.6	*Long*	↓ -0.4	↓ -3.0
Open Interest			**1157.4**		↓ -12.6	↓ -14.7

Source: ICE

Spot Crude Oil Prices and Differentials

(monthly and weekly averages, $/bbl)

	Jul	Aug	Sep	Sep-Aug Avg Chg	Sep-Aug %	Week Commencing: 10 Sep	17 Sep	24 Sep	01 Oct	08 Oct
Crudes										
North Sea Dated	102.56	113.36	112.95	-0.41	-0.4	115.60	111.66	110.20	111.22	112.49
Brent (Asia) Mth 1	102.51	113.04	113.81	0.77	0.7	116.10	113.00	111.49	111.66	110.96
WTI (Cushing) Mth 1	87.90	94.12	94.51	0.39	0.4	97.61	93.67	91.33	90.82	89.33
Urals (Mediterranean)	102.83	113.57	111.81	-1.77	-1.6	113.99	110.70	108.92	109.80	111.69
Dubai	99.19	108.62	111.13	2.51	2.3	113.74	110.22	108.50	108.25	107.55
Tapis (Dated)	105.71	116.41	116.75	0.35	0.3	119.28	115.42	114.26	115.32	116.59
Differential to North Sea Dated										
WTI (Cushing)	-14.66	-19.24	-18.45	0.79		-17.99	-17.98	-18.87	-20.40	-23.16
Urals (Mediterranean)	0.26	0.21	-1.15	-1.36		-1.61	-0.96	-1.28	-1.42	-0.80
Dubai	-3.38	-4.74	-1.83	2.91		-1.86	-1.44	-1.70	-2.97	-4.94
Tapis (Dated)	3.15	3.05	3.80	0.75		3.68	3.76	4.06	4.10	4.10
Prompt Month Differential										
Forward Cash Brent Mth1-Mth2	0.47	1.20	0.55	-0.66		0.50	0.61	0.67	0.68	0.80
Forward WTI Cushing Mth1-Mth2	-0.33	-0.29	-0.35	-0.06		-0.33	-0.36	-0.36	-0.38	-0.40
Forward Dubai Mth1-Mth2	0.38	0.34	0.83	0.49		1.00	0.85	0.73	0.63	0.55

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Spot Product Prices

(monthly and weekly averages, $/bbl)

	Jul	Aug	Sep	Sep-Aug *Chg*	Sep-Aug %	Week Commencing: 10 Sep	17 Sep	24 Sep	01 Oct	08 Oct	Jul	Aug	Sep
Rotterdam, Barges FOB											**Differential to North Sea D**		
Premium Unl 10 ppm	117.06	128.12	133.45	5.33	4.2	136.21	130.94	129.76	130.70	130.96	14.50	14.76	20.49
Naphtha	92.83	105.03	108.63	3.60	3.4	112.10	105.30	105.88	107.10	109.27	-9.74	-8.33	-4.32
Jet/Kerosene	120.10	131.97	135.19	3.22	2.4	138.15	133.27	132.16	132.86	134.49	17.53	18.61	22.23
ULSD 10ppm	123.81	133.78	137.29	3.51	2.6	139.06	136.20	136.11	137.69	138.68	21.25	20.42	24.34
Gasoil 0.1%	119.09	128.98	132.06	3.08	2.4	133.94	131.09	130.41	131.08	133.40	16.53	15.62	19.11
LSFO 1%	98.62	108.11	110.43	2.33	2.2	113.38	109.38	106.79	105.43	102.61	-3.94	-5.25	-2.52
HSFO 3.5%	90.83	98.95	100.03	1.08	1.1	102.12	98.86	97.48	96.25	94.51	-11.73	-14.41	-12.93
Mediterranean, FOB Cargoes											**Differential to Urals**		
Premium Unl 10 ppm	118.39	129.43	134.68	5.24	4.1	137.52	132.17	130.82	131.80	132.10	15.56	15.86	22.87
Naphtha	90.56	102.73	106.21	3.48	3.4	109.85	102.79	103.16	104.47	106.66	-12.27	-10.84	-5.60
Jet Aviation fuel	118.85	130.74	133.93	3.19	2.4	137.01	131.89	130.72	131.50	133.09	16.02	17.17	22.13
ULSD 10ppm	123.19	133.07	136.40	3.33	2.5	139.08	135.18	134.00	135.78	137.33	20.36	19.50	24.59
Gasoil 0.1%	118.31	128.76	131.26	2.50	1.9	133.50	130.37	128.82	129.68	131.89	15.48	15.19	19.45
LSFO 1%	99.80	108.93	111.52	2.59	2.4	114.39	110.77	108.10	106.41	103.48	-3.03	-4.64	-0.29
HSFO 3.5%	90.20	98.12	99.33	1.21	1.2	101.37	98.34	96.89	95.36	93.54	-12.63	-15.45	-12.48
US Gulf, FOB Pipeline											**Differential to LLS**		
Super Unleaded	131.90	142.34	143.54	1.20	0.8	148.95	138.23	139.75	141.29	135.16	28.36	30.58	30.39
Unleaded	115.47	128.59	127.73	-0.86	-0.7	130.55	124.91	125.80	127.03	126.76	11.93	16.83	14.58
Jet/Kerosene	121.58	132.50	133.72	1.22	0.9	136.57	131.72	132.02	132.21	132.48	18.04	20.74	20.57
ULSD 10ppm	121.14	132.15	133.95	1.80	1.4	136.59	131.89	132.66	134.45	134.55	17.60	20.39	20.80
No. 6 3%*	91.58	99.54	100.88	1.34	1.3	103.84	99.12	98.83	97.17	95.05	-11.96	-12.22	-12.27
Singapore, FOB Cargoes											**Differential to Dubai**		
Premium Unleaded	113.35	127.34	125.78	-1.57	-1.2	128.43	125.20	125.71	126.11	128.60	14.16	18.72	14.65
Naphtha	91.33	103.17	106.99	3.82	3.7	110.16	104.09	104.37	104.24	104.38	-7.86	-5.44	-4.13
Jet/Kerosene	117.53	129.55	132.58	3.03	2.3	135.24	130.94	129.55	129.89	129.90	18.34	20.93	21.46
Gasoil 0.05%	119.27	130.61	132.61	2.00	1.5	134.46	131.79	130.11	130.29	129.95	20.08	21.99	21.49
LSWR Cracked	107.56	115.16	116.66	1.50	1.3	119.30	116.22	112.64	110.42	107.40	8.37	6.54	5.53
HSFO 180 CST	97.92	106.04	107.86	1.82	1.7	110.45	106.82	104.59	103.77	100.80	-1.27	-2.58	-3.27
HSFO 380 CST 4%	96.09	103.99	105.56	1.57	1.5	108.08	104.40	102.73	102.03	99.34	-3.10	-4.63	-5.57

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REFINING

Tables

Global Refinery Crude Throughput[1 2]

(million barrels per day)

	Jun 12	2Q2012	Jul 12	Aug 12	Sep 12	3Q2012	Oct 12	Nov 12	Dec 12	4Q2012	Jan 13
Americas	18.7	**18.2**	18.8	18.4	17.8	**18.3**	17.7	18.1	18.2	**18.0**	17.4
Europe	12.1	**11.9**	12.8	12.8	12.5	**12.7**	12.1	12.2	12.4	**12.2**	12.2
Asia Oceania	6.4	**6.5**	6.7	6.9	6.7	**6.8**	6.3	6.6	6.8	**6.6**	7.0
Total OECD	**37.2**	**36.6**	**38.3**	**38.1**	**37.0**	**37.8**	**36.1**	**36.9**	**37.4**	**36.8**	**36.6**
FSU	6.8	**6.4**	6.7	6.7	6.4	**6.6**	6.4	6.6	6.6	**6.5**	6.6
Non-OECD Europe	0.5	**0.5**	0.5	0.5	0.5	**0.5**	0.5	0.5	0.5	**0.5**	0.5
China	8.8	**9.0**	8.9	8.9	9.1	**9.0**	9.2	9.3	9.4	**9.3**	9.7
Other Asia	9.4	**9.3**	9.3	9.4	9.3	**9.3**	9.3	9.5	9.4	**9.4**	9.5
Latin America	4.6	**4.7**	4.7	4.7	4.3	**4.6**	4.7	4.7	4.7	**4.7**	4.5
Middle East	5.8	**5.8**	6.0	6.0	5.9	**6.0**	5.9	5.9	6.0	**5.9**	5.9
Africa	2.1	**2.2**	2.0	2.1	2.2	**2.1**	2.2	2.2	2.3	**2.2**	2.2
Total Non-OECD	**38.0**	**37.8**	**38.1**	**38.2**	**37.8**	**38.1**	**38.1**	**38.7**	**38.9**	**38.6**	**39.0**
Total	**75.2**	**74.4**	**76.4**	**76.3**	**74.8**	**75.8**	**74.3**	**75.7**	**76.4**	**75.4**	**75.6**

1 Preliminary and estimated runs based on capacity, known outages, economic run cuts and global demand forecast

2 From the report dated 10 August, 2012 OECD Americas include Chile and OECD Asia Oceania includes Israel.

Refinery Crude Throughput and Utilisation in OECD Countries

(million barrels per day)

							Change from		Utilisation rate[1]	
	Mar 12	Apr 12	May 12	Jun 12	Jul 12	Aug 12	*Jul 12*	*Aug 11*	Aug 12	Aug 11
US[2]	14.55	14.61	15.18	15.63	15.66	15.27	-0.38	-0.28	86.4%	89.1%
US Virgin Islands	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.30	0.0%	84.9%
Canada	1.67	1.65	1.59	1.69	1.73	1.80	0.07	0.12	98.0%	91.6%
Chile	0.16	0.15	0.17	0.17	0.16	0.16	0.00	-0.03	72.5%	86.9%
Mexico	1.18	1.22	1.27	1.25	1.23	1.21	-0.02	-0.03	73.3%	74.9%
OECD Americas	**17.55**	**17.63**	**18.21**	**18.74**	**18.77**	**18.45**	**-0.33**	**-0.52**	**86.2%**	**89.6%**
France	1.04	1.04	1.03	1.24	1.38	1.37	0.00	0.00	87.9%	82.3%
Germany	1.80	1.91	1.88	1.81	1.96	1.97	0.01	-0.05	92.4%	94.7%
Italy	1.39	1.33	1.49	1.44	1.60	1.60	0.00	-0.06	73.4%	76.1%
Netherlands	1.02	1.07	1.09	1.06	1.04	1.03	-0.01	-0.01	79.8%	80.8%
Spain	1.08	1.05	1.01	1.10	1.32	1.25	-0.07	0.18	82.5%	76.0%
United Kingdom	1.48	1.52	1.44	1.43	1.44	1.41	-0.03	-0.10	67.4%	65.5%
Other OECD Europe	3.79	3.90	3.92	4.00	4.02	4.13	0.11	0.19	83.8%	79.8%
OECD Europe	**11.61**	**11.81**	**11.86**	**12.08**	**12.76**	**12.76**	**0.00**	**0.15**	**81.3%**	**79.2%**
Japan	3.47	3.31	3.00	2.82	3.15	3.30	0.15	-0.07	71.8%	73.3%
South Korea	2.46	2.48	2.63	2.59	2.63	2.62	-0.02	0.19	95.6%	88.9%
Other Asia Oceania	0.94	0.90	0.93	0.95	0.97	0.96	0.00	-0.01	78.8%	79.8%
OECD Asia Oceania	**6.87**	**6.69**	**6.56**	**6.36**	**6.75**	**6.88**	**0.13**	**0.10**	**80.4%**	**79.2%**
OECD Total	**36.03**	**36.14**	**36.63**	**37.18**	**38.28**	**38.08**	**-0.20**	**-0.27**	**83.5%**	**83.4%**

1 Expressed as a percentage, based on crude throughput and current operable refining capacity

2 US50

3 OECD Americas includes Chile and OECD Asia Oceania includes Israel. OECD Europe includes Slovenia and Estonia, though neither country has a refinery

Table 1
WORLD OIL SUPPLY AND DEMAND

(million barrels per day)

	2009	2010	1Q11	2Q11	3Q11	4Q11	2011	1Q12	2Q12	3Q12	4Q12	2012	1Q13	2Q13	3Q13	4Q13	2013
OECD DEMAND																	
Americas[1]	23.7	24.1	24.2	23.8	24.2	24.0	24.1	23.5	23.8	24.0	24.0	23.8	23.5	23.6	24.1	24.1	23.8
Europe[2]	14.7	14.7	14.3	14.2	14.8	14.2	14.4	13.8	13.8	14.2	13.9	13.9	13.5	13.5	14.1	13.8	13.7
Asia Oceania[3]	8.0	8.1	8.6	7.4	8.0	8.6	8.1	9.1	8.0	8.2	8.6	8.5	9.1	7.8	8.0	8.4	8.3
Total OECD	46.3	46.9	47.1	45.4	47.0	46.8	46.6	46.4	45.6	46.3	46.4	46.2	46.1	44.9	46.2	46.3	45.9
NON-OECD DEMAND																	
FSU	4.0	4.2	4.2	4.4	4.6	4.6	4.4	4.4	4.5	4.7	4.7	4.6	4.6	4.7	4.9	4.9	4.8
Europe	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
China	7.9	8.8	9.3	9.3	9.0	9.4	9.2	9.6	9.3	9.2	9.6	9.4	9.7	9.6	9.5	9.9	9.7
Other Asia	10.3	10.9	11.1	11.1	10.8	11.2	11.0	11.3	11.4	11.1	11.5	11.3	11.6	11.6	11.3	11.7	11.6
Latin America	5.7	6.0	6.1	6.3	6.5	6.4	6.3	6.3	6.4	6.6	6.5	6.5	6.4	6.6	6.8	6.6	6.6
Middle East	7.1	7.3	6.9	7.4	7.8	7.3	7.4	7.1	7.7	8.0	7.5	7.6	7.3	7.8	8.2	7.7	7.8
Africa	3.4	3.3	3.4	3.3	3.2	3.4	3.3	3.4	3.4	3.4	3.4	3.4	3.5	3.5	3.5	3.5	3.5
Total Non-OECD	39.1	41.1	41.6	42.3	42.6	43.0	42.4	42.8	43.4	43.8	43.9	43.5	43.8	44.5	44.9	45.2	44.6
Total Demand[4]	85.4	88.1	88.7	87.7	89.5	89.8	88.9	89.2	89.0	90.1	90.4	89.7	89.9	89.5	91.1	91.5	90.5
OECD SUPPLY																	
Americas[1,7]	13.6	14.1	14.4	14.3	14.5	15.3	14.6	15.6	15.5	15.7	16.1	15.7	16.2	16.3	16.3	16.7	16.4
Europe[2]	4.5	4.1	4.0	3.7	3.5	3.7	3.8	3.8	3.6	3.2	3.4	3.5	3.5	3.3	3.1	3.3	3.3
Asia Oceania[3]	0.6	0.7	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.6	0.5	0.6	0.5	0.5	0.6	0.5	0.5
Total OECD	18.8	18.9	19.0	18.6	18.6	19.6	18.9	19.9	19.6	19.6	20.1	19.8	20.2	20.1	20.0	20.6	20.2
NON-OECD SUPPLY																	
FSU	13.3	13.5	13.6	13.6	13.5	13.6	13.6	13.7	13.6	13.5	13.7	13.7	13.7	13.6	13.4	13.6	13.6
Europe	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
China	3.8	4.1	4.2	4.2	4.0	4.0	4.1	4.2	4.1	4.1	4.1	4.1	4.2	4.2	4.2	4.2	4.2
Other Asia[5]	3.6	3.7	3.7	3.5	3.6	3.6	3.6	3.6	3.5	3.5	3.5	3.5	3.5	3.5	3.4	3.4	3.5
Latin America[5,7]	3.9	4.1	4.2	4.2	4.2	4.3	4.2	4.3	4.1	4.1	4.2	4.2	4.3	4.4	4.4	4.5	4.4
Middle East	1.7	1.7	1.8	1.7	1.7	1.5	1.6	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Africa[5]	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.4	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.4	2.3
Total Non-OECD	29.0	29.8	30.2	29.8	29.8	29.7	29.9	29.8	29.3	29.2	29.5	29.4	29.5	29.5	29.4	29.7	29.5
Processing Gains[6]	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.2	2.2	2.2	2.2	2.2
Global Biofuels[7]	1.6	1.8	1.5	1.9	2.2	1.8	1.9	1.6	1.8	2.2	1.9	1.9	1.6	2.0	2.4	2.1	2.0
Total Non-OPEC[5]	51.4	52.6	52.8	52.4	52.7	53.2	52.8	53.4	52.9	53.0	53.6	53.2	53.5	53.8	53.9	54.5	53.9
OPEC																	
Crude[8]	29.1	29.2	29.9	29.4	29.9	30.3	29.9	31.4	31.7	31.5							
NGLs	4.9	5.4	5.8	5.7	5.8	5.9	5.8	6.0	6.1	6.3	6.4	6.2	6.4	6.4	6.6	6.6	6.5
Total OPEC[5]	34.0	34.6	35.7	35.1	35.6	36.2	35.7	37.4	37.9	37.8							
Total Supply[9]	85.4	87.3	88.4	87.6	88.4	89.4	88.4	90.8	90.7	90.8							
STOCK CHANGES AND MISCELLANEOUS																	
Reported OECD																	
Industry	-0.1	0.1	-0.4	0.5	-0.1	-0.7	-0.2	0.4	0.5								
Government	0.1	0.0	0.0	0.0	-0.4	0.1	-0.1	0.0	0.0								
Total	0.0	0.1	-0.5	0.5	-0.5	-0.6	-0.3	0.4	0.5								
Floating Storage/Oil in Transit	0.3	-0.2	0.2	-0.2	-0.2	0.0	-0.1	-0.4	0.2								
Miscellaneous to balance[10]	-0.3	-0.7	0.0	-0.4	-0.4	0.3	-0.1	1.6	1.1								
Total Stock Ch. & Misc	0.0	-0.8	-0.3	-0.2	-1.2	-0.4	-0.5	1.6	1.7	0.7							
Memo items:																	
Call on OPEC crude + Stock ch.[11]	29.1	30.0	30.2	29.6	31.1	30.7	30.4	29.7	30.0	30.7	30.4	30.2	30.0	29.2	30.6	30.3	30.0
Adjusted Call on OPEC + Stock ch.[12]	28.8	29.3	30.2	29.1	30.6	30.9	30.2	31.3	31.1	30.8	30.5	30.9	30.1	29.3	30.7	30.4	30.1

1 As of August 2012 OMR, OECD Americas includes Chile.
2 As of August 2012 OMR, OECD Europe includes Estonia and Slovenia.
3 As of August 2012 OMR, OECD Asia Oceania includes Israel.
4 Measured as deliveries from refineries and primary stocks, comprises inland deliveries, international marine bunkers, refinery fuel, crude for direct burning, oil from non-conventional sources and other sources of supply.
5 Other Asia includes Indonesia throughout. Latin America excludes Ecuador throughout. Africa excludes Angola throughout.
Total Non-OPEC excludes all countries that were members of OPEC at 1 January 2009.
Total OPEC comprises all countries which were OPEC members at 1 January 2009.
6 Net volumetric gains and losses in the refining process and marine transportation losses.
7 As of the July 2010 OMR, Global Biofuels comprise all world biofuel production including fuel ethanol from the US and Brazil.
8 As of the March 2006 OMR, Venezuelan Orinoco heavy crude production is included within Venezuelan crude estimates. Orimulsion fuel remains within the OPEC NGL and non-conventional category, but Orimulsion production reportedly ceased from January 2007.
9 Comprises crude oil, condensates, NGLs, oil from non-conventional sources and other sources of supply.
10 Includes changes in non-reported stocks in OECD and non-OECD areas.
11 Equals the arithmetic difference between total demand minus total non-OPEC supply minus OPEC NGLs.
12 Equals the "Call on OPEC + Stock Ch." with "Miscellaneous to balance" added for historical periods and with an average of "Miscellaneous to balance" for the most recent 8 quarters added for forecast periods.

Table 1A
WORLD OIL SUPPLY AND DEMAND: CHANGES FROM LAST MONTH'S TABLE 1

(million barrels per day)

	2009	2010	1Q11	2Q11	3Q11	4Q11	2011	1Q12	2Q12	3Q12	4Q12	2012	1Q13	2Q13	3Q13	4Q13	2013
OECD DEMAND																	
Americas	-	-	-	-	-	-	-	-	-	-0.2	-0.1	-	-	-	-0.1	-	-
Europe	-	-	-	-	-	-	-	-	-	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Asia Oceania	-	-	-	-	-	-	-	-	-	0.1	0.1	0.1	-	-	0.1	0.1	0.1
Total OECD	-	-	-	-	-	-	-	-	-	-0.2	-	-0.1	-0.1	-0.1	-0.1	-	-0.1
NON-OECD DEMAND																	
FSU	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-0.1	-0.1	-	-	-	-	-0.1	-0.1
Other Asia	-	-	-	-	-	-	-	-	-	0.1	0.1	-	-	-	-	-	-
Latin America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Middle East	-	-	-	-	-	-	-	-	-	-0.1	-	-	-	-	-	-	-
Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Non-OECD	-	-	-	-	-	-	-	-	-	-	-0.2	-	-0.1	-	-	-0.1	-
Total Demand	-	-	-	-	-	-	-	-	-	-0.3	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
OECD SUPPLY																	
Americas	-	-	-	-	-	-	-	-	-0.1	-	0.1	-	0.1	0.1	0.1	0.1	0.1
Europe	-	-	-	-	-	-	-	-	-	0.1	-0.1	-	-	-	-	-	-
Asia Oceania	-	-	-	-	-	-	-	-	-	0.1	-	-	-	-	-	-	-
Total OECD	-	-	-	-	-	-	-	-	-0.1	0.1	-	-	0.1	-	0.1	0.1	0.1
NON-OECD SUPPLY																	
FSU	-	-	-	-	-	-	-	-	-	0.1	-	-	-	-	-0.1	-	-
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Asia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Latin America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Middle East	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Non-OECD	-	-	-	-	-	-	-	-	-	-	-0.1	-	-	-0.1	-0.2	-	-0.1
Processing Gains	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Global Biofuels	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Non-OPEC	-	-	-	-	-	-	-	-	-0.1	0.1	-	-	0.1	-	-0.1	0.1	-
OPEC																	
Crude	-	-	-	-	-	-	-	-	-								
NGLs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total OPEC	-	-	-	-	-	-	-	-	-								
Total Supply	-	-	-	-	-	-	-	-	-0.1								
STOCK CHANGES AND MISCELLANEOUS																	
REPORTED OECD																	
Industry	-	-	-	-	-	-	-	-	-								
Government	-	-	-	-	-	-	-	-	-								
Total	-	-	-	-	-	-	-	-	-								
Floating Storage/Oil in Transit	-	-	-	-	-	-	-	-	-0.6								
Miscellaneous to balance	-	-	-	-	-	-	-	-	0.5								
Total Stock Ch. & Misc	-	-	-	-	-	-	-	-	-0.1								
Memo items:																	
Call on OPEC crude + Stock ch.	-	-	-	-	-	-	-	-	0.1	-0.4	-0.2	-0.1	-0.2	-0.1	-	-0.2	-0.1
Adjusted Call on OPEC + Stock ch.	-	-	-	-	-	-	-	-	0.6	-0.3	-0.1	-	-0.2	-	0.1	-0.1	-0.1

When submitting their monthly oil statistics, OECD Member countries periodically update data for prior periods. Similar updates to non-OECD data can occur.

Table 2

SUMMARY OF GLOBAL OIL DEMAND

	2010	1Q11	2Q11	3Q11	4Q11	2011	1Q12	2Q12	3Q12	4Q12	2012	1Q13	2Q13	3Q13	4Q13	2013
Demand (mb/d)																
Americas[1]	24.14	24.24	23.81	24.21	24.00	24.07	23.49	23.81	23.97	24.00	23.82	23.55	23.59	24.10	24.11	23.84
Europe[2]	14.70	14.30	14.20	14.78	14.18	14.37	13.78	13.83	14.18	13.89	13.92	13.49	13.52	14.07	13.81	13.72
Asia Oceania[3]	8.10	8.60	7.36	7.98	8.58	8.13	9.08	7.98	8.19	8.56	8.45	9.09	7.79	7.99	8.38	8.31
Total OECD	46.93	47.14	45.38	46.97	46.76	46.56	46.35	45.62	46.34	46.44	46.19	46.13	44.91	46.16	46.29	45.87
Asia	19.65	20.36	20.32	19.79	20.65	20.28	20.89	20.64	20.38	21.14	20.76	21.28	21.24	20.84	21.67	21.26
Middle East	7.32	6.92	7.38	7.82	7.34	7.37	7.13	7.69	7.97	7.45	7.56	7.31	7.83	8.22	7.67	7.76
Latin America	6.04	6.05	6.26	6.47	6.38	6.29	6.25	6.44	6.62	6.50	6.45	6.38	6.57	6.79	6.65	6.60
FSU	4.15	4.21	4.36	4.57	4.57	4.43	4.45	4.47	4.70	4.70	4.58	4.59	4.67	4.85	4.91	4.76
Africa	3.30	3.36	3.33	3.22	3.36	3.32	3.45	3.40	3.37	3.42	3.41	3.50	3.52	3.48	3.55	3.51
Europe	0.68	0.66	0.68	0.71	0.72	0.69	0.68	0.73	0.73	0.72	0.71	0.69	0.73	0.75	0.73	0.72
Total Non-OECD	41.14	41.57	42.34	42.58	43.02	42.38	42.84	43.38	43.76	43.93	43.48	43.76	44.55	44.94	45.17	44.61
World	88.07	88.70	87.71	89.55	89.77	88.94	89.19	88.99	90.09	90.38	89.67	89.88	89.46	91.10	91.47	90.48
of which: US50	19.18	19.15	18.86	19.08	18.94	19.01	18.49	18.72	18.80	18.89	18.73	18.45	18.53	18.91	18.97	18.72
Europe 5*	8.92	8.68	8.52	8.85	8.50	8.64	8.26	8.20	8.43	8.27	8.29	8.12	7.98	8.32	8.19	8.15
China	8.80	9.27	9.26	9.03	9.42	9.24	9.59	9.26	9.24	9.64	9.43	9.72	9.60	9.55	9.94	9.70
Japan	4.44	4.83	3.91	4.31	4.81	4.46	5.28	4.30	4.44	4.70	4.68	5.28	4.10	4.21	4.50	4.52
India	3.37	3.54	3.61	3.30	3.60	3.51	3.67	3.74	3.54	3.72	3.67	3.74	3.85	3.59	3.86	3.76
Russia	2.98	2.99	3.20	3.42	3.39	3.25	3.21	3.30	3.53	3.50	3.39	3.36	3.48	3.68	3.67	3.55
Brazil	2.77	2.78	2.86	2.98	2.95	2.89	2.89	2.96	3.03	3.00	2.97	2.95	3.02	3.12	3.08	3.04
Saudi Arabia	2.76	2.56	2.94	3.18	2.81	2.87	2.66	3.09	3.33	2.94	3.01	2.78	3.20	3.48	3.07	3.13
Canada	2.26	2.32	2.22	2.36	2.26	2.29	2.22	2.32	2.41	2.33	2.32	2.28	2.30	2.44	2.35	2.34
Korea	2.27	2.36	2.05	2.21	2.30	2.23	2.31	2.19	2.23	2.32	2.26	2.29	2.19	2.24	2.33	2.26
Mexico	2.08	2.11	2.12	2.14	2.16	2.13	2.11	2.14	2.14	2.15	2.14	2.17	2.14	2.12	2.15	2.14
Iran	1.84	1.84	1.79	1.78	1.78	1.80	1.83	1.86	1.72	1.71	1.78	1.80	1.77	1.72	1.73	1.75
Total	61.66	62.43	61.32	62.64	62.93	62.33	62.53	62.08	62.84	63.18	62.66	62.94	62.18	63.38	63.83	63.08
% of World	70.0%	70.4%	69.9%	70.0%	70.1%	70.1%	70.1%	69.8%	69.7%	69.9%	69.9%	70.0%	69.5%	69.6%	69.8%	69.7%
Annual Change (% per annum)																
Americas[1]	2.0	2.1	-1.2	-1.0	-1.0	-0.3	-3.1	0.0	-1.0	0.0	-1.0	0.2	-0.9	0.5	0.5	0.1
Europe[2]	-0.3	-1.0	-1.2	-1.7	-5.1	-2.3	-3.6	-2.6	-4.1	-2.0	-3.1	-2.1	-2.3	-0.7	-0.6	-1.4
Asia Oceania[3]	1.8	0.7	-3.3	0.9	3.0	0.4	5.6	8.3	2.7	-0.3	4.0	0.0	-2.3	-2.4	-2.1	-1.7
Total OECD	1.3	0.9	-1.5	-0.9	-1.6	-0.8	-1.7	0.5	-1.4	-0.7	-0.8	-0.5	-1.6	-0.4	-0.3	-0.7
Asia	7.9	6.5	2.7	2.7	1.1	3.2	2.6	1.6	3.0	2.4	2.4	1.9	2.9	2.3	2.5	2.4
Middle East	2.8	0.4	0.5	0.3	1.5	0.7	3.1	4.2	1.9	1.6	2.7	2.4	1.7	3.2	2.8	2.6
Latin America	6.1	4.6	3.8	4.6	3.9	4.2	3.3	3.0	2.3	1.8	2.6	2.1	2.0	2.6	2.3	2.3
FSU	3.2	3.4	8.5	7.5	7.3	6.7	5.6	2.7	2.7	2.8	3.4	3.3	4.4	3.4	4.4	3.9
Africa	-1.9	2.9	-1.3	-1.6	2.4	0.6	2.4	1.9	4.8	1.9	2.8	1.7	3.5	3.3	3.6	3.0
Europe	-1.4	-1.7	0.4	3.8	2.6	1.3	2.9	7.2	2.7	-0.5	3.0	1.5	-0.5	2.7	2.4	1.5
Total Non-OECD	5.2	4.4	2.7	2.7	2.4	3.0	3.1	2.5	2.8	2.1	2.6	2.1	2.7	2.7	2.8	2.6
World	3.1	2.5	0.4	0.8	0.3	1.0	0.6	1.5	0.6	0.7	0.8	0.8	0.5	1.1	1.2	0.9
Annual Change (mb/d)																
Americas[1]	0.48	0.49	-0.28	-0.25	-0.24	-0.07	-0.75	0.00	-0.24	0.00	-0.25	0.06	-0.22	0.13	0.11	0.02
Europe[2]	-0.04	-0.15	-0.18	-0.25	-0.77	-0.34	-0.52	-0.37	-0.61	-0.28	-0.45	-0.29	-0.31	-0.11	-0.08	-0.20
Asia Oceania[3]	0.14	0.06	-0.25	0.07	0.25	0.03	0.49	0.61	0.21	-0.02	0.32	0.00	-0.18	-0.20	-0.18	-0.14
Total OECD	0.59	0.40	-0.71	-0.43	-0.75	-0.37	-0.79	0.24	-0.64	-0.31	-0.37	-0.23	-0.71	-0.17	-0.15	-0.32
Asia	1.44	1.24	0.53	0.53	0.23	0.63	0.53	0.32	0.59	0.49	0.48	0.40	0.60	0.47	0.53	0.50
Middle East	0.20	0.03	0.04	0.02	0.11	0.05	0.21	0.31	0.15	0.12	0.20	0.17	0.13	0.25	0.21	0.19
Latin America	0.35	0.26	0.23	0.29	0.24	0.26	0.20	0.19	0.15	0.12	0.16	0.13	0.13	0.18	0.15	0.15
FSU	0.13	0.14	0.34	0.32	0.31	0.28	0.23	0.12	0.12	0.13	0.15	0.15	0.20	0.16	0.21	0.18
Africa	-0.06	0.09	-0.04	-0.05	0.08	0.02	0.08	0.06	0.15	0.06	0.09	0.06	0.12	0.11	0.12	0.10
Europe	-0.01	-0.01	0.00	0.03	0.02	0.01	0.02	0.05	0.02	0.00	0.02	0.01	0.00	0.02	0.02	0.01
Total Non-OECD	2.04	1.75	1.10	1.13	0.99	1.24	1.27	1.04	1.18	0.92	1.10	0.91	1.17	1.18	1.24	1.13
World	2.63	2.15	0.39	0.70	0.24	0.87	0.49	1.28	0.55	0.60	0.73	0.69	0.46	1.01	1.09	0.81
Revisions to Oil Demand from Last Month's Report (mb/d)																
Americas[1]	0.02	0.00	0.00	0.00	0.00	0.00	0.01	0.04	-0.18	-0.06	-0.05	-0.02	-0.04	-0.09	-0.02	-0.04
Europe[2]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	-0.16	-0.11	-0.07	-0.06	-0.05	-0.11	-0.08	-0.08
Asia Oceania[3]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	0.10	0.12	0.05	0.02	0.04	0.10	0.11	0.07
Total OECD	0.02	0.00	0.00	0.00	0.00	0.00	0.01	0.04	-0.24	-0.05	-0.06	-0.06	-0.06	-0.10	0.01	-0.05
Asia	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	-0.08	-0.01	-0.01	-0.01	0.02	-0.09	-0.02
Middle East	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.07	-0.04	-0.03	-0.02	-0.02	-0.05	-0.04	-0.03
Latin America	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.00	0.01	0.02	0.03	0.04	0.02	0.03
FSU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	-0.02	-0.01	-0.02	-0.01	-0.01	-0.03	-0.02
Africa	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	0.00	-0.02	0.00	0.00	0.00	-0.01
Europe	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.00
Total Non-OECD	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	-0.03	-0.16	-0.05	-0.06	-0.01	0.01	-0.13	-0.05
World	0.02	0.00	0.00	0.00	0.00	0.00	0.01	0.04	-0.27	-0.20	-0.11	-0.13	-0.07	-0.09	-0.12	-0.10
Revisions to Oil Demand Growth from Last Month's Report (mb/d)																
World	0.02	0.01	-0.04	0.02	-0.05	-0.02	0.01	0.04	-0.27	-0.20	-0.11	-0.13	-0.11	0.19	0.08	0.01

1 As of the August 2012 OMR, includes Chile.

2 As of the August 2012 OMR, includes Estonia and Slovenia.

3 As of the August 2012 OMR, includes Israel.

* France, Germany, Italy, Spain and UK

Table 2a

OECD REGIONAL OIL DEMAND[1]

(million barrels per day)

	2010	2011	3Q11	4Q11	1Q12	2Q12	May 12	Jun 12	Jul 12 [2]	Latest month vs. Jun 12	Latest month vs. Jul 11
Americas[3]											
LPG&Ethane	2.98	3.11	2.87	3.27	3.17	2.87	2.91	2.85	2.93	0.08	0.06
Naphtha	0.35	0.36	0.33	0.34	0.35	0.35	0.37	0.33	0.31	-0.02	-0.05
Motor Gasoline	10.66	10.43	10.61	10.31	10.17	10.69	10.74	10.78	10.57	-0.21	-0.17
Jet/Kerosene	1.67	1.67	1.74	1.62	1.61	1.68	1.63	1.80	1.74	-0.06	0.01
Gasoil/Diesel Oil	4.98	5.15	5.10	5.26	5.09	5.01	5.10	5.01	4.76	-0.25	0.00
Residual Fuel Oil	0.96	0.89	0.83	0.87	0.82	0.75	0.66	0.77	0.81	0.05	0.06
Other Products	2.53	2.45	2.72	2.33	2.28	2.47	2.47	2.62	2.68	0.06	-0.02
Total	24.14	24.07	24.21	24.00	23.49	23.81	23.89	24.17	23.82	-0.35	-0.10
Europe[4]											
LPG&Ethane	0.96	0.96	0.93	0.95	1.00	0.93	0.93	0.91	0.91	0.00	0.00
Naphtha	1.27	1.17	1.13	1.08	1.27	1.11	1.08	1.04	1.08	0.03	-0.06
Motor Gasoline	2.21	2.11	2.20	2.05	1.91	2.03	2.01	2.09	2.07	-0.02	-0.10
Jet/Kerosene	1.23	1.24	1.34	1.18	1.08	1.22	1.23	1.25	1.31	0.06	-0.04
Gasoil/Diesel Oil	6.20	6.14	6.28	6.29	5.97	5.91	5.74	6.17	6.06	-0.11	0.05
Residual Fuel Oil	1.31	1.26	1.27	1.22	1.21	1.10	1.10	1.10	1.11	0.01	-0.20
Other Products	1.51	1.49	1.63	1.40	1.34	1.52	1.61	1.60	1.54	-0.06	-0.07
Total	14.70	14.37	14.78	14.18	13.78	13.83	13.69	14.16	14.06	-0.10	-0.41
Asia Oceania[5]											
LPG&Ethane	0.86	0.85	0.80	0.88	0.99	0.81	0.83	0.80	0.86	0.06	0.05
Naphtha	1.71	1.71	1.75	1.73	1.78	1.68	1.71	1.77	1.72	-0.05	0.00
Motor Gasoline	1.63	1.61	1.69	1.64	1.59	1.56	1.57	1.56	1.67	0.11	-0.01
Jet/Kerosene	0.90	0.88	0.66	0.99	1.19	0.65	0.60	0.62	0.63	0.01	0.01
Gasoil/Diesel Oil	1.69	1.70	1.68	1.79	1.80	1.68	1.71	1.71	1.75	0.04	0.05
Residual Fuel Oil	0.79	0.79	0.79	0.86	1.00	0.90	0.91	0.87	0.91	0.05	0.17
Other Products	0.51	0.59	0.60	0.70	0.73	0.70	0.73	0.62	0.55	-0.06	-0.03
Total	8.10	8.13	7.98	8.58	9.08	7.98	8.06	7.93	8.09	0.16	0.23
OECD											
LPG&Ethane	4.81	4.92	4.60	5.10	5.17	4.61	4.68	4.56	4.70	0.14	0.10
Naphtha	3.33	3.24	3.22	3.16	3.40	3.14	3.16	3.14	3.11	-0.03	-0.11
Motor Gasoline	14.49	14.15	14.50	14.00	13.67	14.28	14.31	14.43	14.31	-0.12	-0.28
Jet/Kerosene	3.81	3.79	3.75	3.79	3.88	3.54	3.46	3.67	3.68	0.01	-0.02
Gasoil/Diesel Oil	12.88	12.98	13.06	13.34	12.86	12.60	12.55	12.89	12.57	-0.32	0.10
Residual Fuel Oil	3.07	2.94	2.90	2.94	3.02	2.75	2.67	2.73	2.83	0.10	0.03
Other Products	4.55	4.54	4.95	4.42	4.35	4.70	4.81	4.83	4.77	-0.06	-0.11
Total	46.93	46.56	46.97	46.76	46.35	45.62	45.65	46.26	45.97	-0.29	-0.28

1 Demand, measured as deliveries from refineries and primary stocks, comprises inland deliveries, international bunkers and refinery fuel. It includes crude for direct burning, oil from non-conventional sources and other sources of supply. Jet/kerosene comprises jet kerosene and non-aviation kerosene. Gasoil comprises diesel, light heating oil and other gasoils. North America comprises US 50 states, US territories, Mexico and Canada.
2 Latest official OECD submissions (MOS).
3 As of the August 2012 OMR, includes Chile.
4 As of the August 2012 OMR, includes Estonia and Slovenia.
5 As of the August 2012 OMR, includes Israel.

Table 2b

OIL DEMAND IN SELECTED OECD COUNTRIES[1]

(million barrels per day)

	2010	2011	3Q11	4Q11	1Q12	2Q12	May 12	Jun 12	Jul 12 [2]	Latest month vs. Jun 12	Latest month vs. Jul 11
United States[3]											
LPG	2.17	2.28	2.07	2.42	2.38	2.11	2.16	2.09	2.13	0.03	0.08
Naphtha	0.26	0.26	0.25	0.26	0.26	0.25	0.27	0.24	0.21	-0.03	-0.06
Motor Gasoline	8.99	8.76	8.91	8.63	8.49	8.96	8.99	9.04	8.84	-0.20	-0.21
Jet/Kerosene	1.45	1.44	1.50	1.40	1.36	1.45	1.42	1.56	1.47	-0.08	-0.01
Gasoil	3.80	3.90	3.84	3.99	3.83	3.73	3.74	3.73	3.55	-0.17	-0.01
Residual Fuel Oil	0.54	0.46	0.38	0.44	0.42	0.35	0.28	0.37	0.41	0.04	0.09
Other Products	1.97	1.90	2.13	1.80	1.75	1.88	1.91	1.96	2.04	0.08	-0.05
Total	19.18	19.01	19.08	18.94	18.49	18.72	18.77	18.99	18.66	-0.33	-0.18
Japan											
LPG	0.48	0.50	0.45	0.52	0.63	0.50	0.52	0.47	0.53	0.06	0.07
Naphtha	0.78	0.73	0.75	0.72	0.73	0.66	0.70	0.65	0.68	0.03	-0.06
Motor Gasoline	1.00	0.98	1.04	1.00	0.96	0.93	0.93	0.93	1.01	0.08	-0.02
Jet/Kerosene	0.55	0.53	0.34	0.62	0.83	0.35	0.32	0.31	0.33	0.01	0.01
Diesel	0.44	0.44	0.44	0.47	0.45	0.43	0.43	0.45	0.46	0.01	0.01
Other Gasoil	0.40	0.37	0.33	0.39	0.45	0.32	0.32	0.32	0.33	0.01	-0.02
Residual Fuel Oil	0.39	0.44	0.47	0.52	0.60	0.54	0.54	0.51	0.56	0.05	0.12
Other Products	0.39	0.47	0.49	0.58	0.64	0.57	0.61	0.50	0.46	-0.04	0.01
Total	4.44	4.46	4.31	4.81	5.28	4.30	4.37	4.13	4.36	0.23	0.14
Germany											
LPG	0.11	0.10	0.11	0.09	0.10	0.10	0.09	0.11	0.12	0.01	0.01
Naphtha	0.39	0.37	0.36	0.33	0.39	0.35	0.36	0.33	0.36	0.03	0.00
Motor Gasoline	0.45	0.45	0.46	0.45	0.42	0.44	0.43	0.44	0.43	-0.01	-0.01
Jet/Kerosene	0.18	0.18	0.19	0.17	0.16	0.18	0.19	0.19	0.19	0.00	0.00
Diesel	0.64	0.67	0.71	0.68	0.64	0.67	0.68	0.68	0.69	0.00	0.02
Other Gasoil	0.45	0.38	0.44	0.43	0.36	0.36	0.31	0.48	0.39	-0.09	0.00
Residual Fuel Oil	0.15	0.14	0.14	0.14	0.14	0.13	0.13	0.13	0.13	0.01	-0.01
Other Products	0.09	0.10	0.12	0.11	0.06	0.10	0.11	0.11	0.11	0.00	0.00
Total	2.47	2.40	2.53	2.41	2.27	2.33	2.30	2.47	2.42	-0.04	0.02
Italy											
LPG	0.11	0.10	0.08	0.11	0.12	0.08	0.08	0.08	0.09	0.01	0.01
Naphtha	0.10	0.08	0.07	0.07	0.07	0.08	0.06	0.09	0.07	-0.03	0.01
Motor Gasoline	0.24	0.23	0.23	0.22	0.18	0.21	0.21	0.23	0.22	0.00	0.00
Jet/Kerosene	0.09	0.09	0.11	0.08	0.07	0.08	0.09	0.08	0.10	0.01	-0.02
Diesel	0.49	0.50	0.51	0.50	0.43	0.47	0.48	0.49	0.49	0.00	-0.03
Other Gasoil	0.12	0.11	0.10	0.13	0.11	0.09	0.09	0.10	0.10	0.00	0.01
Residual Fuel Oil	0.14	0.13	0.15	0.12	0.13	0.11	0.10	0.11	0.12	0.01	-0.05
Other Products	0.24	0.22	0.21	0.20	0.18	0.20	0.20	0.19	0.20	0.01	-0.02
Total	1.54	1.45	1.47	1.43	1.30	1.32	1.30	1.37	1.38	0.01	-0.10
France											
LPG	0.12	0.10	0.08	0.11	0.13	0.09	0.09	0.08	0.08	0.00	0.00
Naphtha	0.14	0.14	0.14	0.13	0.15	0.15	0.15	0.15	0.15	-0.01	0.00
Motor Gasoline	0.18	0.18	0.19	0.17	0.15	0.17	0.17	0.18	0.19	0.00	-0.01
Jet/Kerosene	0.15	0.15	0.16	0.15	0.14	0.15	0.14	0.16	0.16	0.01	0.00
Diesel	0.68	0.69	0.70	0.69	0.67	0.70	0.67	0.73	0.73	0.00	0.03
Other Gasoil	0.30	0.27	0.28	0.27	0.33	0.23	0.20	0.25	0.29	0.04	0.05
Residual Fuel Oil	0.09	0.08	0.08	0.09	0.09	0.07	0.07	0.07	0.06	-0.01	-0.02
Other Products	0.17	0.17	0.20	0.16	0.14	0.16	0.18	0.16	0.15	-0.02	-0.05
Total	1.83	1.79	1.84	1.75	1.80	1.71	1.67	1.78	1.80	0.02	0.00
United Kingdom											
LPG	0.14	0.13	0.13	0.12	0.13	0.12	0.13	0.11	0.12	0.01	-0.02
Naphtha	0.03	0.03	0.02	0.02	0.03	0.02	0.02	0.03	0.02	-0.01	0.00
Motor Gasoline	0.36	0.34	0.33	0.33	0.33	0.33	0.31	0.33	0.31	-0.02	-0.01
Jet/Kerosene	0.33	0.32	0.33	0.32	0.30	0.31	0.33	0.29	0.30	0.01	0.00
Diesel	0.45	0.45	0.45	0.47	0.45	0.46	0.42	0.47	0.45	-0.03	0.01
Other Gasoil	0.12	0.12	0.13	0.11	0.11	0.11	0.12	0.11	0.12	0.01	0.01
Residual Fuel Oil	0.07	0.06	0.06	0.06	0.05	0.05	0.05	0.05	0.05	0.00	-0.02
Other Products	0.15	0.15	0.16	0.14	0.15	0.14	0.14	0.13	0.14	0.00	-0.02
Total	1.63	1.61	1.62	1.57	1.54	1.55	1.52	1.53	1.51	-0.02	-0.05
Canada											
LPG	0.34	0.37	0.35	0.38	0.32	0.32	0.32	0.31	0.37	0.06	-0.01
Naphtha	0.08	0.08	0.07	0.06	0.09	0.10	0.10	0.09	0.10	0.00	0.02
Motor Gasoline	0.75	0.76	0.80	0.75	0.77	0.82	0.81	0.81	0.84	0.03	0.02
Jet/Kerosene	0.11	0.12	0.13	0.12	0.13	0.12	0.10	0.13	0.15	0.02	0.02
Diesel	0.24	0.28	0.25	0.29	0.28	0.30	0.30	0.31	0.26	-0.06	0.04
Other Gasoil	0.31	0.29	0.34	0.28	0.28	0.26	0.31	0.24	0.26	0.02	-0.06
Residual Fuel Oil	0.10	0.09	0.08	0.09	0.09	0.08	0.08	0.09	0.09	0.00	0.03
Other Products	0.32	0.31	0.35	0.29	0.27	0.34	0.30	0.40	0.38	-0.03	0.03
Total	2.26	2.29	2.36	2.26	2.22	2.32	2.31	2.38	2.43	0.05	0.09

1 Demand, measured as deliveries from refineries and primary stocks, comprises inland deliveries, international bunkers and refinery fuel. It includes crude for direct burning, oil from non-conventional sources and other sources of supply. Jet/kerosene comprises jet kerosene and non-aviation kerosene. Gasoil comprises diesel, light heating oil and other gasoils.
2 Latest official OECD submissions (MOS).
3 US figures exclude US territories.

Table 3
WORLD OIL PRODUCTION
(million barrels per day)

	2011	2012	2013	2Q12	3Q12	4Q12	1Q13	2Q13	Jul 12	Aug 12	Sep 12
OPEC											
Crude Oil											
Saudi Arabia	9.04			9.77	9.60				9.70	9.60	9.50
Iran	3.62			3.14	2.80				2.90	2.85	2.63
Iraq	2.67			2.92	3.07				3.02	3.07	3.12
UAE	2.50			2.65	2.69				2.68	2.69	2.69
Kuwait	2.24			2.45	2.47				2.46	2.46	2.48
Neutral Zone	0.59			0.60	0.60				0.60	0.60	0.60
Qatar	0.74			0.74	0.75				0.75	0.75	0.75
Angola	1.66			1.76	1.72				1.63	1.79	1.75
Nigeria	2.18			2.17	2.17				2.16	2.30	2.06
Libya	0.46			1.40	1.42				1.45	1.38	1.44
Algeria	1.18			1.16	1.18				1.19	1.18	1.17
Ecuador	0.50			0.48	0.49				0.48	0.50	0.50
Venezuela	2.50			2.50	2.52				2.56	2.51	2.48
Total Crude Oil[6]	29.88			31.73	31.47				31.57	31.68	31.17
Total NGLs[1,6]	5.78	6.22	6.50	6.13	6.33	6.35	6.38	6.41	6.33	6.33	6.33
Total OPEC[6]	35.65			37.86	37.81				37.90	38.01	37.50
OPEC: Historical Composition[6]	35.65			37.86	37.81				37.90	38.01	37.50
NON-OPEC[2]											
OECD											
Americas[7]	14.60	15.73	16.40	15.50	15.70	16.14	16.24	16.26	15.64	15.81	15.64
United States[5]	8.14	8.95	9.47	8.86	8.88	9.20	9.29	9.40	8.92	8.85	8.87
Mexico	2.94	2.90	2.79	2.93	2.90	2.85	2.82	2.80	2.90	2.95	2.84
Canada	3.51	3.87	4.13	3.69	3.91	4.07	4.11	4.06	3.81	4.00	3.92
Chile	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02
Europe[8]	3.77	3.50	3.28	3.59	3.25	3.38	3.45	3.30	3.52	3.26	2.95
UK	1.11	0.98	0.93	1.01	0.87	0.95	1.02	0.96	1.03	0.84	0.73
Norway	2.04	1.92	1.79	1.98	1.80	1.84	1.84	1.78	1.90	1.84	1.65
Others	0.61	0.60	0.57	0.60	0.58	0.59	0.58	0.57	0.59	0.58	0.57
Asia Oceania[9]	0.57	0.55	0.53	0.54	0.61	0.54	0.49	0.54	0.68	0.60	0.54
Australia	0.48	0.47	0.45	0.46	0.53	0.46	0.41	0.46	0.60	0.52	0.45
Others	0.09	0.09	0.08	0.09	0.08	0.09	0.09	0.08	0.08	0.09	0.09
Total OECD	18.93	19.79	20.21	19.63	19.55	20.06	20.18	20.10	19.84	19.67	19.13
NON-OECD											
Former USSR	13.58	13.65	13.56	13.62	13.54	13.72	13.71	13.60	13.64	13.50	13.46
Russia	10.60	10.71	10.62	10.68	10.71	10.73	10.73	10.64	10.66	10.73	10.75
Others	2.98	2.94	2.94	2.94	2.82	2.98	2.98	2.96	2.98	2.78	2.70
Asia	7.69	7.67	7.66	7.64	7.63	7.63	7.69	7.67	7.64	7.62	7.64
China	4.10	4.12	4.20	4.10	4.11	4.11	4.17	4.20	4.09	4.13	4.10
Malaysia	0.66	0.67	0.66	0.67	0.66	0.65	0.67	0.66	0.66	0.66	0.65
India	0.91	0.91	0.89	0.90	0.90	0.92	0.91	0.90	0.90	0.88	0.93
Indonesia	0.93	0.87	0.81	0.88	0.85	0.84	0.84	0.82	0.85	0.85	0.85
Others	1.09	1.11	1.09	1.09	1.11	1.10	1.09	1.09	1.13	1.10	1.10
Europe	0.14	0.14	0.13	0.15	0.14	0.13	0.13	0.13	0.15	0.14	0.14
Latin America	4.23	4.18	4.38	4.15	4.08	4.23	4.27	4.37	4.00	4.07	4.18
Brazil[5]	2.19	2.19	2.39	2.12	2.12	2.25	2.30	2.38	2.12	2.10	2.16
Argentina	0.69	0.65	0.62	0.67	0.61	0.65	0.62	0.62	0.54	0.65	0.65
Colombia	0.92	0.94	0.98	0.94	0.94	0.93	0.96	0.98	0.93	0.92	0.96
Others	0.43	0.41	0.39	0.41	0.41	0.40	0.39	0.39	0.41	0.41	0.41
Middle East[3]	1.65	1.46	1.46	1.45	1.50	1.48	1.46	1.46	1.48	1.51	1.50
Oman	0.89	0.91	0.95	0.91	0.93	0.92	0.92	0.94	0.90	0.93	0.94
Syria	0.33	0.16	0.14	0.16	0.16	0.16	0.15	0.14	0.17	0.16	0.16
Yemen	0.23	0.19	0.18	0.18	0.21	0.21	0.21	0.19	0.21	0.21	0.21
Others	0.20	0.19	0.19	0.20	0.19	0.19	0.19	0.19	0.19	0.19	0.19
Africa	2.60	2.32	2.33	2.28	2.27	2.27	2.27	2.30	2.28	2.27	2.28
Egypt	0.74	0.73	0.72	0.74	0.73	0.73	0.73	0.73	0.73	0.73	0.73
Gabon	0.25	0.26	0.26	0.25	0.26	0.26	0.26	0.26	0.26	0.26	0.26
Others	1.61	1.33	1.36	1.29	1.28	1.28	1.28	1.31	1.29	1.28	1.29
Total Non-OECD	29.88	29.43	29.52	29.29	29.17	29.46	29.54	29.53	29.20	29.11	29.19
Processing Gains[4]	2.11	2.14	2.18	2.11	2.16	2.13	2.18	2.16	2.17	2.17	2.13
Global Biofuels[5]	1.86	1.87	2.03	1.83	2.16	1.94	1.61	2.03	2.16	2.16	2.16
TOTAL NON-OPEC[6]	52.79	53.22	53.95	52.86	53.04	53.59	53.51	53.82	53.36	53.12	52.61
Non-OPEC: Historical Composition[6]	52.79	53.22	53.95	52.86	53.04	53.59	53.51	53.82	53.36	53.12	52.61
TOTAL SUPPLY	88.44			90.72	90.84				91.27	91.13	90.11

1 Includes condensates reported by OPEC countries, oil from non-conventional sources, e.g. Venezuelan Orimulsion (but not Orinoco extra-heavy oil), and non-oil inputs to Saudi Arabian MTBE. Orimulsion production reportedly ceased from January 2007.
2 Comprises crude oil, condensates, NGLs and oil from non-conventional sources
3 Includes small amounts of production from Jordan and Bahrain.
4 Net volumetric gains and losses in refining and marine transportation losses.
5 As of the July 2010 OMR, Global Biofuels comprise all world biofuel production including fuel ethanol from the US and Brazil.
6 Total OPEC comprises all countries which were OPEC members at 1 January 2009. OPEC Historical Composition comprises countries which were OPEC members at that point in time. Total Non-OPEC excludes all countries that were OPEC members at 1 January 2009. Non-OPEC Historical Composition excludes countries that were OPEC members at that point in time.
7 As of the August 2012 OMR, includes Chile.
8 As of the August 2012 OMR, includes Estonia and Slovenia.
9 As of the August 2012 OMR, includes Israel.

Table 4

OECD INDUSTRY STOCKS[1] AND QUARTERLY STOCK CHANGES

	RECENT MONTHLY STOCKS[2] in Million Barrels					PRIOR YEARS' STOCKS[2] in Million Barrels			STOCK CHANGES in mb/d			
	Apr2012	May2012	Jun2012	Jul2012	Aug2012*	Aug2009	Aug2010	Aug2011	3Q2011	4Q2011	1Q2012	2Q2012
OECD Americas												
Crude	510.0	523.4	523.4	508.9	492.3	464.1	505.0	485.2	-0.34	-0.02	0.38	0.24
Motor Gasoline	246.8	241.0	241.1	243.1	235.6	238.3	255.1	245.4	0.01	0.09	-0.03	-0.16
Middle Distillate	198.2	193.0	188.1	197.4	202.6	249.3	251.6	230.3	0.15	-0.04	-0.22	-0.21
Residual Fuel Oil	42.3	42.8	46.1	45.7	43.8	42.0	47.2	46.7	-0.02	-0.02	0.02	0.03
Total Products[3]	656.6	658.9	667.7	687.1	690.9	730.8	734.6	701.3	0.29	-0.14	-0.27	0.02
Total[4]	1333.8	1353.8	1362.8	1367.6	1352.8	1357.8	1400.3	1353.3	0.03	-0.35	0.24	0.35
OECD Europe												
Crude	312.4	311.2	316.3	308.1	310.9	335.5	348.5	310.5	-0.11	-0.24	0.26	0.07
Motor Gasoline	94.2	91.0	88.7	93.5	91.7	94.8	95.2	91.1	-0.04	0.07	-0.01	-0.06
Middle Distillate	268.2	257.2	248.8	256.4	263.1	309.0	290.4	270.1	-0.12	0.13	0.03	-0.28
Residual Fuel Oil	77.7	79.9	81.8	85.5	83.9	91.6	95.7	90.8	0.00	-0.04	-0.01	-0.01
Total Products[3]	560.6	547.4	538.7	558.0	561.7	605.5	592.4	573.2	-0.10	0.14	0.00	-0.34
Total[4]	944.6	927.5	926.5	936.5	944.0	1012.1	1010.0	949.9	-0.25	-0.08	0.32	-0.27
OECD Asia Oceania												
Crude	165.2	172.0	170.3	176.6	166.9	165.0	161.6	155.6	-0.02	-0.02	-0.01	0.17
Motor Gasoline	26.1	26.6	26.4	27.3	27.9	24.2	23.9	25.3	0.00	-0.03	0.04	0.01
Middle Distillate	59.5	62.9	61.6	64.6	70.9	71.4	63.8	70.3	0.01	-0.08	-0.07	0.08
Residual Fuel Oil	20.2	20.3	19.8	21.0	22.0	21.8	20.6	19.4	-0.01	-0.01	0.01	0.00
Total Products[3]	161.8	167.0	167.3	173.1	182.0	182.8	177.0	181.2	0.11	-0.19	-0.13	0.16
Total[4]	402.5	415.6	413.0	424.8	421.0	413.8	409.0	410.7	0.08	-0.25	-0.14	0.39
Total OECD												
Crude	987.5	1006.6	1010.0	993.7	970.1	964.6	1015.0	951.3	-0.47	-0.28	0.63	0.48
Motor Gasoline	367.1	358.5	356.2	363.9	355.2	357.3	374.2	361.8	-0.03	0.13	-0.01	-0.21
Middle Distillate	525.8	513.1	498.4	518.4	536.6	629.8	605.7	570.7	0.04	0.01	-0.25	-0.41
Residual Fuel Oil	140.2	142.9	147.7	152.2	149.7	155.4	163.5	156.8	-0.03	-0.07	0.01	0.02
Total Products[3]	1379.0	1373.3	1373.6	1418.3	1434.5	1519.1	1504.0	1455.7	0.30	-0.19	-0.40	-0.16
Total[4]	2680.9	2697.0	2702.3	2728.9	2717.7	2783.6	2819.3	2713.9	-0.14	-0.68	0.42	0.48

OECD GOVERNMENT-CONTROLLED STOCKS[5] AND QUARTERLY STOCK CHANGES

	RECENT MONTHLY STOCKS[2] in Million Barrels					PRIOR YEARS' STOCKS[2] in Million Barrels			STOCK CHANGES in mb/d			
	Apr2012	May2012	Jun2012	Jul2012	Aug2012*	Aug2009	Aug2010	Aug2011	3Q2011	4Q2011	1Q2012	2Q2012
OECD Americas												
Crude	696.0	696.0	696.0	696.0	695.8	724.1	726.6	696.5	-0.33	0.00	0.00	0.00
Products	1.0	1.0	1.0	1.0	1.0	2.0	2.0	0.0	0.00	0.01	0.00	0.00
OECD Europe												
Crude	189.7	188.7	192.6	194.2	194.4	186.1	182.9	183.1	-0.02	0.04	0.03	0.04
Products	234.3	235.2	234.6	233.8	233.8	244.4	239.3	240.5	-0.01	-0.02	-0.04	0.00
OECD Asia Oceania												
Crude	393.5	393.5	393.5	393.4	393.4	388.5	387.0	390.6	0.00	0.03	0.00	0.00
Products	20.0	20.0	20.0	20.0	20.0	19.2	20.0	18.7	-0.01	0.01	0.00	0.00
Total OECD												
Crude	1279.1	1278.1	1282.1	1283.6	1283.7	1298.7	1296.4	1270.2	-0.36	0.07	0.03	0.04
Products	255.3	256.2	255.7	254.8	254.8	265.6	261.3	259.2	-0.03	0.00	-0.03	0.00
Total[4]	1535.7	1535.6	1539.0	1539.7	1539.8	1566.0	1559.1	1530.8	-0.38	0.07	-0.01	0.04

* estimated

1 Stocks are primary national territory stocks on land (excluding utility stocks and including pipeline and entrepot stocks where known) and include stocks held by industry to meet IEA, EU and national emergency reserve commitments and are subject to government control in emergencies.

2 Closing stock levels.

3 Total products includes gasoline, middle distillates, fuel oil and other products.

4 Total includes NGLs, refinery feedstocks, additives/oxygenates and other hydrocarbons.

5 Includes government-owned stocks and stock holding organisation stocks held for emergency purposes.

Table 5
TOTAL STOCKS ON LAND IN OECD COUNTRIES[1]

('millions of barrels' and 'days')

	End June 2011		End September 2011		End December 2011		End March 2012		End June 2012 [3]	
	Stock Level	Days Fwd[2] Demand	Stock Level	Days Fwd Demand	Stock Level	Days Fwd Demand	Stock Level	Days Fwd Demand	Stock Level	Days Fwd Demand
OECD Americas										
Canada	177.4	75	176.0	78	177.9	80	171.2	76	172.7	-
Chile	10.2	31	11.5	35	9.9	29	10.5	30	10.3	-
Mexico	46.5	22	46.1	21	44.4	21	44.8	21	45.3	-
United States[4]	1808.5	95	1780.9	94	1750.7	95	1778.8	95	1809.4	-
Total[4]	2064.6	85	2036.7	85	2005.0	86	2027.4	86	2059.8	86
OECD Asia Ocenia										
Australia	39.9	39	38.8	37	40.1	39	38.2	37	40.4	-
Israel	-	-	-	-	-	-	-	-	-	-
Japan	593.2	138	601.1	125	588.5	111	579.5	135	601.3	-
Korea	175.2	79	173.6	75	166.8	72	164.0	75	176.7	-
New Zealand	8.7	61	8.7	56	8.3	52	9.0	61	8.0	-
Total	817.0	102	822.2	96	803.7	88	790.8	99	826.5	101
OECD Europe[5]										
Austria	22.9	82	21.3	81	22.6	91	22.1	86	21.1	-
Belgium	38.1	58	36.7	58	36.4	56	34.8	57	38.6	-
Czech Republic	21.7	105	20.1	105	20.7	114	20.2	101	18.6	-
Denmark	21.5	134	22.4	138	22.4	142	21.4	133	19.5	-
Estonia	1.2	43	1.2	47	1.3	48	1.2	42	1.1	-
Finland	27.2	134	26.4	130	29.2	149	29.9	159	28.0	-
France	166.7	91	160.0	92	165.0	92	164.7	96	163.7	-
Germany	286.3	113	276.9	115	278.6	123	281.2	121	280.2	-
Greece	32.6	97	30.9	93	27.9	79	29.1	94	28.9	-
Hungary	17.3	118	16.2	112	15.4	125	17.2	143	15.9	-
Ireland	10.2	74	11.3	77	10.7	84	11.7	91	10.5	-
Italy	147.4	100	147.6	103	145.7	113	147.9	112	145.2	-
Luxembourg	0.6	10	0.7	11	0.6	10	0.5	8	0.6	-
Netherlands	119.4	115	115.9	116	103.0	104	121.1	117	112.6	-
Norway	23.5	91	24.5	92	25.9	106	29.1	115	27.4	-
Poland	64.6	105	65.2	110	64.5	126	64.5	118	62.7	-
Portugal	23.3	86	21.9	90	21.9	90	20.9	88	20.4	-
Slovak Republic	8.9	100	8.3	99	8.5	110	9.0	124	9.0	-
Slovenia	4.7	82	4.8	84	4.5	81	4.8	90	4.6	-
Spain	130.1	94	131.2	97	132.8	99	134.3	104	132.8	-
Sweden	32.5	105	32.6	108	31.5	109	29.6	98	29.0	-
Switzerland	37.2	138	37.0	140	35.7	138	35.3	142	35.2	-
Turkey	56.6	71	56.4	80	55.8	80	57.4	74	60.7	-
United Kingdom	85.4	53	84.7	54	87.8	57	88.6	57	88.7	-
Total	1379.9	93	1354.1	95	1348.5	98	1376.6	100	1355.0	96
Total OECD	4261.5	91	4213.0	90	4157.1	90	4194.8	92	4241.3	92
DAYS OF IEA Net Imports[6]	-	147	-	144	-	143	-	144	-	150

1 Total Stocks are industry and government-controlled stocks (see breakdown in table below). Stocks are primary national territory stocks on land (excluding utility stocks and including pipeline and entrepot stocks where known) they include stocks held by industry to meet IEA, EU and national emergency reserves commitments and are subject to government control in emergencies.
2 Note that days of forward demand represent the stock level divided by the forward quarter average daily demand and is very different from the days of net imports used for the calculation of IEA Emergency Reserves.
3 End June 2012 forward demand figures are IEA Secretariat forecasts.
4 US figures exclude US territories. Total includes US territories.
5 Data not available for Iceland.
6 Reflects stock levels and prior calendar year's net imports adjusted according to IEA emergency reserve definitions (see www.iea.org/netimports.asp). Net exporting IEA countries are excluded.

TOTAL OECD STOCKS

CLOSING STOCKS	Total	Government[1] controlled	Industry	Total	Government[1] controlled	Industry
	Millions of Barrels			*Days of Fwd. Demand[2]*		
2Q2009	4331	1565	2766	95	34	60
3Q2009	4353	1568	2785	93	34	60
4Q2009	4232	1568	2664	91	34	57
1Q2010	4270	1571	2699	93	34	59
2Q2010	4345	1566	2779	92	33	59
3Q2010	4322	1553	2769	91	33	58
4Q2010	4257	1565	2693	90	33	57
1Q2011	4216	1562	2654	93	34	59
2Q2011	4262	1565	2697	91	33	57
3Q2011	4213	1530	2683	90	33	57
4Q2011	4157	1536	2621	90	33	57
1Q2012	4195	1536	2659	92	34	58
2Q2012	4241	1539	2702	92	33	58

1 Includes government-owned stocks and stock holding organisation stocks held for emergency purposes.
2 Days of forward demand calculated using actual demand except in 2QYYYY (when latest forecasts are used).

Table 6

IEA MEMBER COUNTRY DESTINATIONS OF SELECTED CRUDE STREAMS[1]

(million barrels per day)

	2009	2010	2011	3Q11	4Q11	1Q12	2Q12	May 12	Jun 12	Jul 12	Year Earlier Jul 11	Year Earlier change
Saudi Light & Extra Light												
Americas	0.52	0.69	0.69	0.47	0.85	0.84	0.87	0.87	0.90	0.68	0.53	0.15
Europe	0.59	0.66	0.83	0.93	0.88	0.76	0.91	0.79	1.11	0.96	0.96	0.00
Asia Oceania	1.28	1.21	1.24	1.21	1.27	1.37	1.21	1.21	1.15	1.25	1.25	-0.01
Saudi Medium												
Americas	0.40	0.36	0.37	0.40	0.40	0.47	0.44	0.46	0.36	0.41	0.43	-0.02
Europe	0.02	0.00	0.02	0.05	0.01	0.05	0.07	0.08	0.05	0.06	0.04	0.02
Asia Oceania	0.34	0.34	0.40	0.43	0.40	0.46	0.42	0.43	0.37	0.46	0.38	0.09
Saudi Heavy												
Americas	0.03	0.02	0.02	0.03	0.01	-	0.15	0.03	0.11	0.03	0.02	0.01
Europe	0.02	0.00	0.01	0.03	0.03	0.04	0.12	0.10	0.13	0.16	0.04	0.12
Asia Oceania	0.15	0.22	0.20	0.23	0.18	0.21	0.18	0.20	0.17	0.20	0.25	-0.05
Iraqi Basrah Light[2]												
Americas	0.40	0.36	0.29	0.31	0.21	0.39	0.55	0.71	0.61	0.41	0.22	0.19
Europe	0.12	0.09	0.11	0.19	0.11	0.14	0.18	0.08	0.41	0.50	0.17	0.33
Asia Oceania	0.24	0.29	0.34	0.38	0.32	0.26	0.34	0.28	0.46	0.41	0.41	0.00
Iraqi Kirkuk												
Americas	0.06	0.03	0.07	0.05	0.06	0.06	0.08	0.05	0.12	0.04	-	-
Europe	0.31	0.27	0.27	0.32	0.26	0.20	0.23	0.18	0.24	0.18	0.40	-0.21
Asia Oceania	-	-	-	-	-	-	-	-	-	-	-	-
Iranian Light												
Americas	-	-	-	-	-	-	-	-	-	-	-	-
Europe	0.15	0.24	0.23	0.20	0.21	0.25	0.16	0.08	0.21	0.00	0.23	-0.22
Asia Oceania	0.07	0.04	0.04	0.04	0.03	0.03	0.02	0.01	0.01	-	0.03	-
Iranian Heavy[3]												
Americas	-	-	-	-	-	-	-	-	-	-	-	-
Europe	0.40	0.49	0.55	0.73	0.54	0.33	0.21	0.23	0.19	0.04	0.80	-0.76
Asia Oceania	0.57	0.52	0.51	0.51	0.49	0.48	0.38	0.25	0.50	0.02	0.51	-0.50
Venezuelan Light & Medium												
Americas	0.39	0.14	0.18	0.24	0.13	0.07	0.15	0.26	-	0.19	0.18	0.02
Europe	0.07	0.02	0.02	0.02	0.02	0.01	-	-	-	0.02	0.01	0.01
Asia Oceania	-	-	-	-	-	0.01	0.01	0.02	0.02	-	-	-
Venezuelan 22 API and heavier												
Americas	0.75	0.86	0.76	0.70	0.69	0.68	0.58	0.55	0.50	0.71	0.79	-0.08
Europe	0.07	0.06	0.05	0.06	0.05	0.08	0.09	0.08	0.10	0.12	0.07	0.06
Asia Oceania	-	-	-	-	-	-	-	-	-	-	-	-
Mexican Maya												
Americas	0.93	0.91	0.82	0.84	0.84	0.72	0.69	0.75	0.63	0.76	0.82	-0.06
Europe	0.10	0.11	0.12	0.12	0.12	0.12	0.14	0.13	0.14	0.11	0.17	-0.06
Asia Oceania	-	-	-	-	-	-	-	-	-	-	-	-
Mexican Isthmus												
Americas	0.01	0.04	0.07	0.06	0.07	0.04	0.03	0.01	0.01	0.09	0.05	0.03
Europe	0.01	0.02	0.01	0.00	0.01	0.02	0.05	0.06	0.02	0.05	0.01	0.04
Asia Oceania	-	-	-	-	-	-	-	-	-	-	-	-
Russian Urals												
Americas	0.15	0.08	0.01	-	0.02	-	0.01	0.02	-	0.02	-	-
Europe	1.72	1.80	1.69	1.51	1.61	1.75	1.76	1.86	1.69	1.97	1.64	0.33
Asia Oceania	-	-	-	-	-	-	-	-	-	-	-	-
Nigerian Light[4]												
Americas	0.54	0.60	0.53	0.43	0.46	0.25	0.31	0.22	0.41	0.22	0.59	-0.37
Europe	0.32	0.34	0.45	0.54	0.48	0.51	0.52	0.44	0.56	0.62	0.44	0.19
Asia Oceania	0.00	-	0.05	0.06	0.05	0.03	0.06	0.12	0.00	-	0.06	-
Nigerian Medium												
Americas	0.21	0.25	0.18	0.18	0.14	0.04	0.07	0.15	-	0.16	0.21	-0.05
Europe	0.13	0.09	0.14	0.11	0.13	0.26	0.25	0.27	0.21	0.31	0.06	0.25
Asia Oceania	-	-	-	-	-	-	-	-	-	-	-	-

1 Data based on monthly submissions from IEA countries to the crude oil import register (in '000 bbl), subject to availability. May differ from Table 8 of the Report.
IEA Americas includes United States and Canada.
IEA Europe includes all countries in OECD Europe except Estonia, Hungary and Slovenia.
IEA Asia Oceania includes Australia, New Zealand, Korea and Japan.

2 Iraqi Total minus Kirkuk.

3 Iranian Total minus Iranian Light.

4 33° API and lighter (e.g., Bonny Light, Escravos, Qua Iboe and Oso Condensate).

Table 7
REGIONAL OECD IMPORTS[1,2]
(thousand barrels per day)

	2009	2010	2011	3Q11	4Q11	1Q12	2Q12	May-12	Jun-12	Jul-12	Year Earlier Jul-11	Year Earlier % change
Crude Oil												
Americas	7541	7496	6876	6983	6668	6151	6495	6646	6688	6200	7188	-14%
Europe	8893	9072	8985	9331	8903	9119	9152	9060	9463	9788	9232	6%
Asia Oceania	6311	6472	6609	6498	6730	6994	6727	6838	6315	6778	6497	4%
Total OECD	22746	23039	22470	22812	22301	22264	22374	22545	22467	22766	22916	-1%
LPG												
Americas	43	34	33	35	20	20	28	32	33	35	28	24%
Europe	261	285	309	305	328	300	281	293	285	241	281	-14%
Asia Oceania	537	565	568	587	553	658	597	553	580	526	649	-19%
Total OECD	840	884	910	928	902	978	906	878	898	802	959	-16%
Naphtha												
Americas	22	36	42	43	38	15	34	27	42	10	41	-76%
Europe	336	399	272	266	238	399	363	312	344	331	337	-2%
Asia Oceania	849	907	884	914	861	839	878	806	993	816	888	-8%
Total OECD	1207	1343	1198	1223	1137	1253	1275	1145	1379	1157	1266	-9%
Gasoline[3]												
Americas	884	801	761	714	654	679	799	763	863	801	759	6%
Europe	206	187	222	220	213	280	180	210	204	270	218	24%
Asia Oceania	111	84	94	91	113	95	92	89	59	65	79	-18%
Total OECD	1200	1073	1078	1026	980	1054	1071	1063	1125	1136	1056	8%
Jet & Kerosene												
Americas	62	76	77	83	67	42	61	67	59	45	110	-59%
Europe	449	418	396	449	449	290	375	291	451	481	446	8%
Asia Oceania	60	46	56	51	61	77	38	48	41	60	42	44%
Total OECD	571	539	530	584	577	408	474	406	551	586	598	-2%
Gasoil/Diesel												
Americas	91	100	73	67	61	71	45	40	59	43	81	-46%
Europe	1063	1071	1042	981	1101	1026	860	674	1044	994	961	3%
Asia Oceania	92	104	147	154	171	170	177	171	190	222	152	46%
Total OECD	1246	1275	1262	1202	1333	1268	1081	885	1293	1259	1194	5%
Heavy Fuel Oil												
Americas	271	277	268	196	228	220	217	216	254	207	186	12%
Europe	489	464	536	624	550	631	534	562	584	590	641	-8%
Asia Oceania	116	118	153	170	182	221	203	214	223	223	145	53%
Total OECD	876	860	957	990	961	1072	954	991	1061	1019	972	5%
Other Products												
Americas	877	807	874	903	837	751	839	874	896	829	994	-17%
Europe	747	692	690	712	619	590	664	724	590	668	667	0%
Asia Oceania	353	375	373	390	375	389	369	364	375	339	362	-6%
Total OECD	1977	1874	1937	2005	1831	1730	1872	1962	1861	1836	2023	-9%
Total Products												
Americas	2250	2132	2128	2042	1905	1798	2022	2019	2207	1971	2198	-10%
Europe	3551	3516	3467	3558	3498	3516	3256	3067	3501	3574	3551	1%
Asia Oceania	2117	2199	2277	2357	2316	2450	2355	2243	2460	2250	2318	-3%
Total OECD	7918	7847	7872	7957	7719	7763	7633	7330	8168	7795	8067	-3%
Total Oil												
Americas	9791	9627	9004	9025	8573	7949	8517	8666	8894	8171	9386	-13%
Europe	12445	12588	12452	12889	12401	12635	12408	12127	12964	13362	12783	5%
Asia Oceania	8428	8671	8886	8855	9047	9443	9082	9081	8776	9028	8814	2%
Total OECD	30664	30886	30342	30769	30020	30027	30007	29874	30634	30561	30983	-1%

1 Based on Monthly Oil Questionnaire data submitted by OECD countries in tonnes and converted to barrels.
2 Excludes intra-regional trade.
3 Includes additives.

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User's Guide and Glossary to the IEA *Oil Market Report*

For information on the data sources, definitions, technical terms and general approach used in preparing the *Oil Market Report (OMR)*, *Medium-Term Oil Market (MTOMR)* and *Annual Statistical Supplement* (current issue of the Statistical Supplement dated 10 August 2012), readers are referred to the *Users' Guide* at www.oilmarketreport.org/glossary.asp. It should be noted that the spot crude and product price assessments are based on daily Argus prices, converted when appropriate to US$ per barrel according to the Argus specification of products (Copyright © 2012 Argus Media Limited - all rights reserved).

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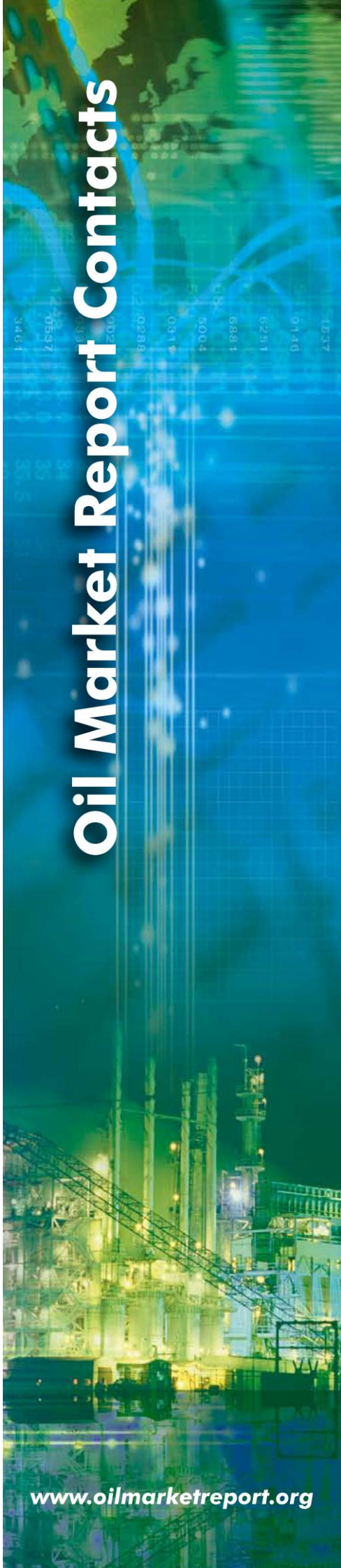

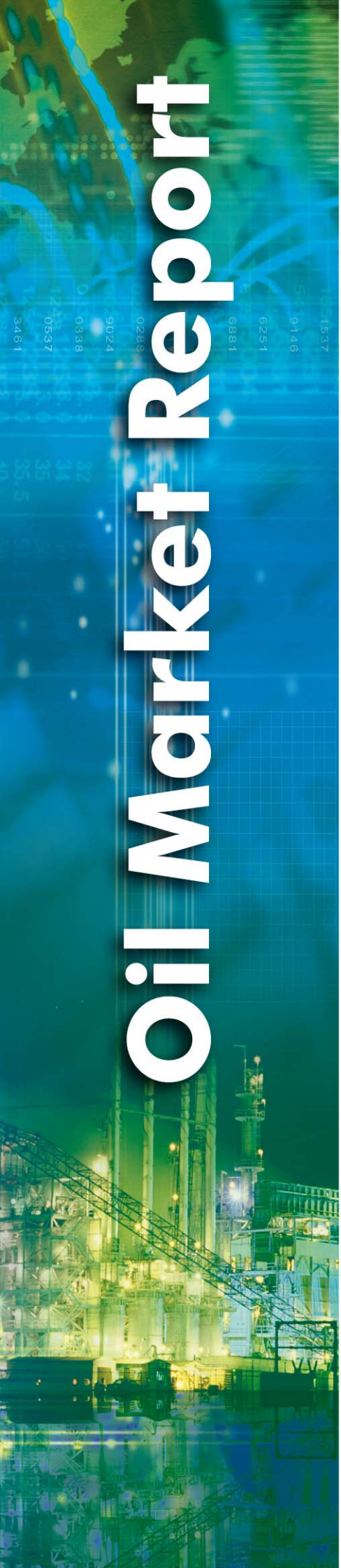

International Energy Agency

13 November 2012

HIGHLIGHTS

- **Oil futures prices fell to four-month lows in late October and early November** amid mounting pessimism over the global economic outlook. Prices fell further after the US presidential election on worries over the so-called US 'fiscal cliff' looming at end-year, with Brent last trading at $109.25/bbl and WTI at $86/bbl.

- **The forecast of 4Q12 global oil demand has been cut by 290 kb/d since last month's report**, to 90.1 mb/d, reflecting persistent weakness in Europe and the impact of Hurricane Sandy in the US. The 2012 growth forecast has been reduced by 60 kb/d to 670 kb/d.

- **Non-OPEC production rebounded by 840 kb/d in October, to 53.4 mb/d**, after seasonal maintenance and weather disrupted output in September. Non-OPEC supplies are expected to grow by 460 kb/d in 2012 and by 860 kb/d in 2013, to 54.1 mb/d.

- **OPEC crude oil supply dipped by 30 kb/d to 31.15 mb/d in October**, a nine-month low, even as Iran halted a seven-month supply downtrend with a small rebound. The 'call on OPEC crude and stock change' for 4Q12 has been lowered by 500 kb/d, to 30 mb/d, due to a weaker demand outlook and a stronger forecast of non-OPEC supply.

- **September OECD total oil commercial inventories increased by a steep, counter-seasonal 15.2 mb in September**, extending six months of builds, to 2 746 mb. Forward demand cover stood at 59.6 days, flat with an upwardly revised August estimate. Preliminary data indicate OECD oil stocks rose by 5.5 mb in October.

- **Global refinery throughputs averaged 75.9 mb/d in 3Q12,** as recovering Chinese runs and strong OECD margins, notably in Europe, offset US hurricane outages. A seasonal dip is expected to leave 4Q12 runs at 75.5 mb/d. Annual growth is projected to rise to 1.1 mb/d in 4Q12 from 0.6 mb/d in 3Q12.

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13 November 2012

OMR PUBLISHING SCHEDULE 2013

Please find below the 2013 release dates for the ***Oil Market Report***:

Friday 18 January
Wednesday 13 February
Wednesday 13 March
Thursday 11 April
Tuesday 14 May*
Wednesday 12 June
Thursday 11 July**
Friday 09 August
Thursday 12 September
Friday 11 October
Thursday 14 November
Wednesday 11 December

This information is also available at: **oilmarketreport.org/schedule** and **omrpublic.iea.org/schedule**.

The 2013 Edition of the ***Medium-Term Oil Market Report (MTOMR) will be released on the same date as the ***OMR*** of 14 May 2013. The ***OMR*** of this date will comprise the usual data and projections through end-2014, but with heavily abridged text.

****The ***OMR*** of 11 July will contain projections through end-2014.

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THE NEW LOOK AND FEEL OF OIL SUPPLY RISK

Judging from the record so far, 2012 may go down in oil history not just as one of exceptionally frequent supply disruptions, but also as one when no production shortfall seemed large enough to affect global oil markets in a truly big way. Such apparent resilience, due in part to the sorry state of the global economy, is somewhat misleading, however.

The havoc recently wreaked by Hurricane Sandy on US product distribution is just the latest in a string of glitches spanning the oil map and the whole length of the supply chain. Rarely have so many things gone wrong in the oil patch at the same time. Mishaps from Brazil to Yemen cut non-OPEC crude supply by a substantial 1.3 mb/d in 3Q12, even as expanded international sanctions wiped more than 1 mb/d of Iranian exports off the map, adding to hiccups elsewhere in OPEC. Following the devastating East Japan earthquake and tsunami last year, Sandy reminded us that disruptions in the downstream can be as painful for end-users as they are in the upstream. The storm cut off product supplies to much of the US's single largest market, the patch of East Coast running from Washington to southern Connecticut, adding to a long list of unplanned outages and shutdowns earlier at refineries in the US, Venezuela, Europe, Japan and the Caribbean.

At first blush, the oil market seems to have taken those disruptions in its stride. Not only did record supply losses fail to make a dent in OECD oil stocks, but the latter built counter-seasonally in 3Q. After falling from March to June, crude prices rebounded around July, only to fall again later. In the last six weeks alone, benchmark futures shed about $8/bbl. Traders recently cut their bullish bets on crude prices to lows unseen in years. Far from rising after Sandy, product prices slid even as bottlenecks forced parts of New Jersey and New York to ration gasoline for the first time since the 1970s.

The disruptions would have hit much harder if the economy had not been far weaker than expected. Estimates of 4Q12 oil demand have been cut by 850 kb/d since June on slower-than-expected economic expansion, including 300 kb/d in this report. The North American supply revolution, a surge in Saudi and Iraqi supplies to 30-year highs and record Russian output also helped blunt the impact of supply losses elsewhere. Together, supply and demand factors helped trim the 'call on OPEC' by 500 kb/d for 4Q12 in this month's report.

But conventional metrics don't fully capture the disruptive nature of supply shortfalls, especially if those occur near the retail level. That international product prices failed to rise after Sandy is no consolation to the millions of Americans stranded by power losses and oil distribution breakdowns.

Relatively benign price outcomes should not be cause for complacency. Growing reliance on international trade for product supply is spreading oil supply risk from the upstream to the downstream. Increased product market integration means consumers in all regions are increasingly exposed to local shortfalls in refining or product distribution, even as they remain exposed to traditional crude supply disruption risks. This will be even more so when supply/demand product balances start tightening again.

Meanwhile, natural disasters in the US and Japan have exposed domestic vulnerabilities that, unlike crude supply disruptions, are not typically considered a matter of international policy. But shifting global market conditions may call for a fresh approach to evaluating supply risks, and policymakers may benefit from experience sharing across borders in a bid to define best practices and help minimize the potential impact of future disruptions, both locally and globally.

DEMAND

Summary

- **Estimates of global demand for 4Q12 have been reduced by 0.3 mb/d from last month's report, to 90.1 mb/d**, expanding on other downwards revisions earlier this year. The lower 4Q12 estimate reflects downward adjustments to the US demand estimate in the wake of Hurricane Sandy and a lower European 4Q12 starting point on account of big September curtailments.

- **Global demand is now forecast to grow by 670 kb/d in 2012 (60 kb/d less than assumed last month) and 830 kb/d in 2013, taking total consumption up to an average of 90.4 mb/d in 2013 (0.1 mb/d less than assumed last month).** A weak economic backdrop – with the global economy forecast to rise by 3.3% in 2012 and 3.6% in 2013 – continues to restrain oil demand growth throughout the forecast.

- **Hurricane Sandy is expected to have trimmed US demand by 230 kb/d in October**, reflecting widespread disruptions in US East Coast travel, and product deliveries during and after the storm.

- **Gasoil demand during the northern hemisphere's heating season is projected to be close to year-earlier levels**, reflecting weather forecasts of a colder winter partly offsetting the impact of a weak economic outlook. Winter temperatures were exceptionally warm in the US last year, and a return to lower average temperatures would, with all else held equal, result in higher heating oil demand.

- **The geographical distribution of demand growth remains contrasted, with the expansion focused in non-OECD countries while OECD demand as a whole declines.** A macroeconomic split underpins the difference. OECD demand is forecast to decline by 1.1% in 2012 and by a further 0.7% in 2013 (to 45.8 mb/d). In contrast, non-OECD demand is forecast to rise by 2.8% in 2012 and by 2.6% in 2013 (to 44.7 mb/d).

- **Estimates of global demand for 3Q12 are roughly unchanged from last month's report despite significant but equally offsetting revisions at the country level.** Ascendant adjustments to the US and Turkey of 275 kb/d and 135 kb/d, respectively, account for most of the revisions on the upside for August, while Canada (-115 kb/d) and Germany (-100 kb/d) make up the most sizeable reductions. For September downward revisions are led by the US (down by 150 kb/d), Russia (-115 kb/d), India (110 kb/d), Italy (-105 kb/d), Spain (-100 kb/d), Mexico (-90 kb/d) and France (-85 kb/d), while notable additions were seen for China (+505 kb/d) and Japan (+105 kb/d).

Global Oil Demand (2011-2013)

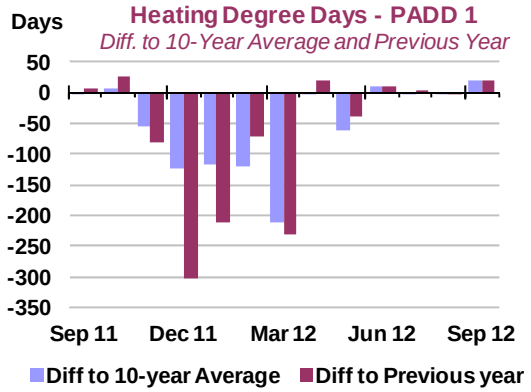
(million barrels per day)

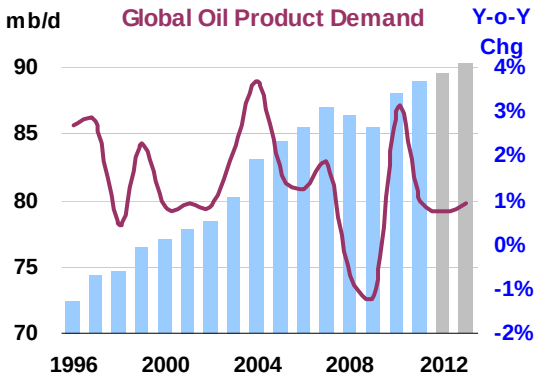
	1Q11	2Q11	3Q11	4Q11	2011	1Q12	2Q12	3Q12	4Q12	2012	1Q13	2Q13	3Q13	4Q13	2013
Africa	3.3	3.3	3.2	3.3	3.3	3.4	3.4	3.4	3.4	3.4	3.5	3.5	3.5	3.5	3.5
Americas	30.3	30.1	30.7	30.4	30.4	29.7	30.3	30.6	30.3	30.2	30.0	30.2	30.8	30.7	30.4
Asia/Pacific	29.0	27.7	27.8	29.2	28.4	30.0	28.6	28.8	29.9	29.3	30.4	29.1	28.9	30.1	29.7
Europe	15.0	14.9	15.5	14.9	15.1	14.5	14.6	14.8	14.4	14.6	14.1	14.1	14.7	14.5	14.4
FSU	4.2	4.4	4.6	4.6	4.4	4.4	4.5	4.7	4.6	4.5	4.6	4.6	4.8	4.9	4.7
Middle East	6.9	7.4	7.8	7.3	7.4	7.1	7.7	8.0	7.4	7.6	7.3	7.8	8.2	7.7	7.8
World	**88.7**	**87.7**	**89.5**	**89.7**	**88.9**	**89.2**	**89.0**	**90.1**	**90.1**	**89.6**	**89.9**	**89.4**	**91.0**	**91.3**	**90.4**
Annual Chg (%)	2.5	0.4	0.8	0.2	1.0	0.5	1.5	0.7	0.4	0.8	0.8	0.5	1.0	1.4	0.9
Annual Chg (mb/d)	2.1	0.4	0.7	0.2	0.8	0.5	1.3	0.6	0.3	0.7	0.7	0.4	0.9	1.2	0.8
Changes from last OMR (mb/d)	-0.02	-0.02	-0.02	-0.03	-0.02	-0.04	-0.03	0.04	-0.29	-0.08	0.02	-0.05	-0.10	-0.13	-0.07

Global Overview

Hurricane Sandy wreaked havoc in product distribution on the US East Coast in late October and into November, severely disrupting product deliveries. The storm made landfall in New Jersey at a time when

East Coast product inventories were already at lower than normal levels. Purely on account of this storm, the PADD 1 demand forecast for October has been curtailed by 230 kb/d. Earlier forecasts of demand for August and September have been adjusted significantly in other regions too, reflecting in part new or preliminary data for those months. Most notably, estimates of Chinese apparent demand for September have been revised upwards by more than 500 kb/d. All in all, global demand is now projected to grow by 670 kb/d (or 0.8%) in 2012 (to 89.6 mb/d) and 830 kb/d (or 0.9%) in 2013 (to 90.4 mb/d). Growth in 2012 has been reduced by 60 kb/d on last month's report. Anaemic economic growth, still assumed to average 3.3% in 2012 and 3.6% in 2013, will continue to act as a break on global oil consumption.





Preliminary estimates of global 4Q12 demand are 0.3 mb/d lower than in last month's report, to 90.1 mb/d, due to a combination of lower US demand in the wake of Hurricane Sandy and downward revisions to the forecast of European demand, extrapolating from recent trends. The 3Q12 demand estimate is essentially unchanged on last month's report, also at 90.1 mb/d, as a large upward revision to Chinese apparent demand in September is offset by reductions elsewhere. The fundamental exogenous factors that drive our short-term oil demand model i.e. the macroeconomic backdrop and the underlying futures price have seen little change.

Notable upside revisions to August data were seen in the US, Saudi Arabia, Turkey and Brazil, with respective additions of 275 kb/d, 155 kb/d, 135 kb/d and 90 kb/d made since last month's report. Preliminary data releases for September show some notable increases compared to last month's forecast, with the largest additions being China (+505 kb/d) and Japan (+105 kb/d). These upward adjustments were offset by downward revisions elsewhere. Prominent reductions were applied to the Canadian, German, Qatari and Kuwaiti August estimates, down by 220 kb/d, 100 kb/d, 65 kb/d and 60 kb/d, respectively. Significant September curtailments include the US (-150 kb/d), Russia (-115 kb/d), India (-110 kb/d), Italy (-105 kb/d), Spain (-100kb/d), Mexico (-90 kb/d) and France (-85 kb/d).

Strong non-OECD demand growth is forecast to continue, in contrast to the absolute declines envisaged in the OECD. Non-OECD oil demand is estimated to have grown by 1.4 mb/d, or 3.2%, year-on-year (y-o-y) in 3Q12 (to 43.9 mb/d). If confirmed, this non-OECD expansion would mark the region's fastest growth since 1Q11. Non-OECD demand is projected to keep growing at more than 1 mb/d through the forecast. For 2012 as a whole, it is forecast to average out at 1.2 mb/d (or 2.8%), to 43.5 mb/d, and 1.1 mb/d (2.6%) for 2013, to 44.7 mb/d. The risks to the non-OECD demand forecast are skewed to the upside, with a more rapid economic recovery potentially driving additional demand for products.

Having briefly returned to positive growth territory in the 2Q12 (lifted by heightened nuclear-replacement demand in Japan), the OECD returned in 3Q12 to its now entrenched pattern of long-term structural decline, with demand contracting by 0.8 mb/d (or 1.6%) to 46.2 mb/d. OECD demand is forecast to fall by an average of 0.5 mb/d (or 1.1%) in 2012, to 46.1 mb/d, and 0.3 mb/d (or 0.7%) in 2013, to 45.8 mb/d. The risks to the OECD forecast are skewed to the downside, as the economic

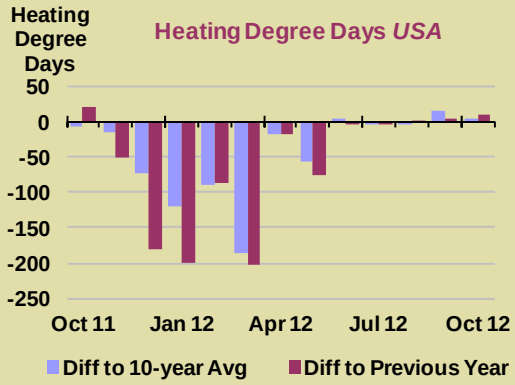
backdrop – an OECD recovery is currently assumed in 2013 – could quite conceivably deteriorate further. The so-called fiscal cliff looming in the US (which if not addressed by January will be equivalent to $600 billion worth of automatic tax rises and public expenditure cuts) and ongoing European debt concerns contribute to the downside risk that hangs over OECD demand projections.

Weak Economic Growth Leaves More Fuel for Heating

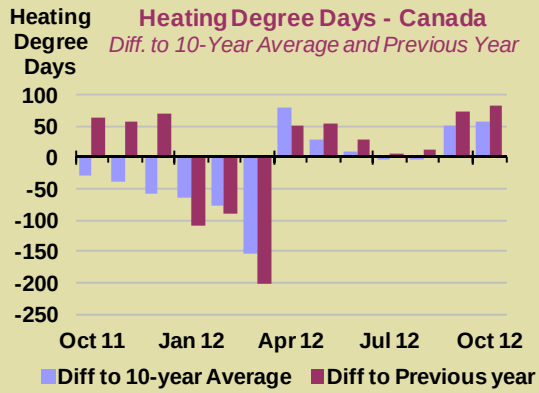
Shifts in demand patterns and changes in heating oil specifications are complicating the task of assessing the adequacy of heating oil inventories ahead of winter. OECD inventories of 'other gasoil', a proxy for heating oil, remain at historically low levels despite summer builds (see OECD Inventories, *Winter fuel inventories remain tight as peak demand season approaches*). In the past, these stocks would have been assessed against heating demand forecasts based on weather forecasts of winter temperatures and heating degree days (HDD). Expectations of lower winter temperatures this year than last would thus magnify concerns spurred by low inventory levels. As more stringent fuel quality standards are making heating oil and on- and off-road diesel increasingly similar, however, a relatively weak 4Q12 outlook for trucking demand may provide an offset, and heating oil inventories may not be as tight as might otherwise appear.

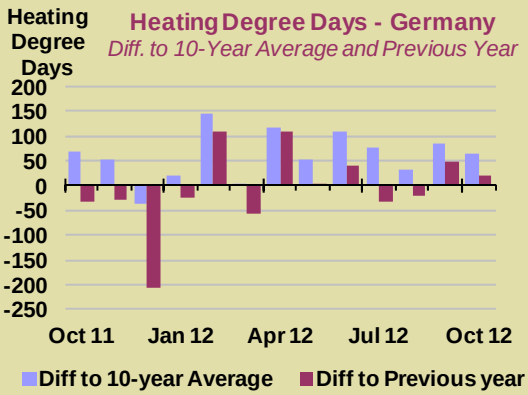
While notoriously difficult to predict, early indicators for this winter are pointing towards a return to generally colder weather patterns, with the US widely forecast to see sharply lower temperatures than the previous year, after an unusually warm winter in 2011. Lower temperatures are also forecast in most of Europe, with the notable exception of Germany. With all else being held equal, lower winter temperatures overall would equate to higher heating oil demand, or at least provide support to otherwise flailing gasoil consumption. Japan and South Korea are forecast to see warmer than year earlier conditions.

Leading the additional upside momentum this winter is the US outlook. The National Oceanic and Atmospheric Administration predicts that the US Northeast, Midwest and South will experience a 20%-to-27% colder winter this year (expressed in terms of HDD) than a year earlier. These temperatures, if confirmed, would provide a fillip to US demand estimates. The US was unusually warm last winter (between October 2011 and March 2012), substantially warmer than both the previous year and the 10-year average. Last winter saw 13.4% less HDD than the 10-year average and 18.0% less than the winter of 2010-2011. Heating oil demand in the US should accordingly post robust growth, although the full impact of additional cold-winter demand will be partly offset by continued fuel switching from oil to natural gas from residential and commercial space heating.



Similar, albeit somewhat weaker, support is envisaged in Canada and much of Europe (Germany excepted) this winter, as last year was unusually warm in these regions too. The UK, for example, had 3.6% less HDD last winter than the 10-year average, while Canada, Spain and France respectively had 12.0%, 3.9% and 8.0% less HDD. Simply assuming a return to normal winter weather patterns equates to lower temperatures in the countries, which all else being held equal means higher heating oil demand.





Weak Economic Growth Leaves More Fuel for Heating (continued)

The opposite impact is expected in South Korea, Japan and Germany; as last winter was unusually cold in these countries. Comparing last winter to 10-year averages, South Korea had 4.5% more HDD, Japan 7.3% and Germany 9.5% more HDD. To complicate matters still further, kerosene remains the leading home heating fuel in OECD Asia Oceania.

Simply extrapolating future weather patterns across to 'other gasoil' demand statistics, as a proxy for heating oil consumption is problematic. In many markets, fuel switching continues out of heating oil and into natural gas for space heating, partly offsetting the effect of a potential return to colder winter temperatures.

Also, large quantities of heating oil are reported as diesel, reflecting in part tightening sulphur specifications for heating fuels, hence the analysis needs to focus on the amalgamated gasoil demand number. While predictions of a colder winter should all things being equal prove supportive of total gasoil demand, in reality stronger gasoil demand for space heating may be offset by weaker demand for road transportation.

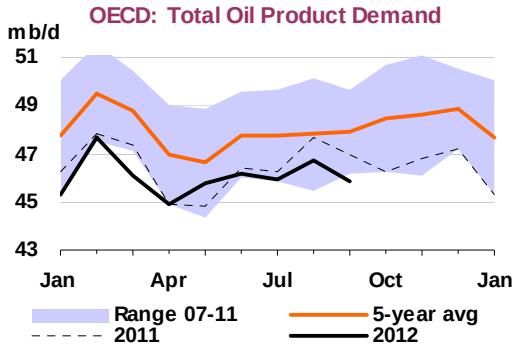
Gasoil outlook, year-on-year change (kb/d)

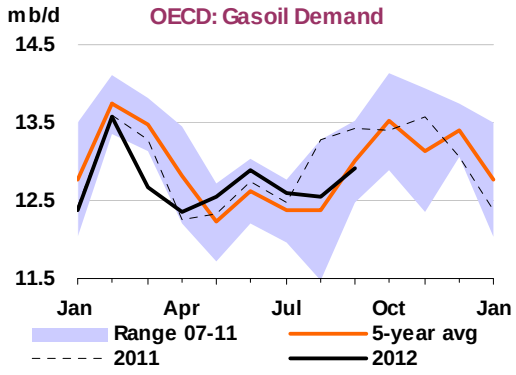
	previous 10-year average		Forecast	
	4Q	1Q	4Q12	1Q13
US	25	0	-90	155
Canada	10	0	35	55
France	-5	-6	-5	-10
Korea	0	0	-5	0
Germany	-15	-5	-95	-20

For example, the latest statistics on container traffic in Singapore, a global trade hub, show a 3.7% y-o-y decline in total trade in September and a 6.4% decline in exports. Container traffic has been shown to be a reliable proxy for road diesel demand, as trucking activity in major importing and exporting economies closely track the container volumes that go through import and export terminals. Low outbound container traffic through Singapore would thus be expected to imply correspondingly weak gasoil demand in both Asian manufacturing centres and major import markets in the US and Europe. As heating oil and road diesel markets increasingly converge into a single fuel market, a weak forecast of diesel demand would imply a slightly more comfortable heating fuel inventory cushion than meets the eye.

OECD

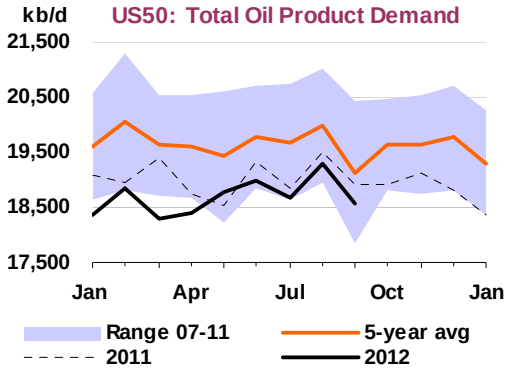
Falling absolute OECD oil demand remains very much the theme in the industrialised world. Exceptions exist but largely only on account of one-off factors, such as the additional fuel oil/crude oil that Japanese demand saw in the light of the 2011 tsunami. Early estimates of 3Q12 OECD demand point towards a 0.8 mb/d (or 1.6%) decline, to 46.2 mb/d, with the sharpest absolute declines seen in recessionary-hit Europe (down by 0.8 mb/d in the 3Q12 to 14.0 mb/d), followed by the Americas (down 0.3 mb/d to 23.9 mb/d). Asia Oceania bucked the overall declining OECD trend, rising by 0.3 mb/d (or 3.7%) in 3Q12 to 8.3 mb/d. To summarise, OECD demand conditions are continuing to deteriorate reflecting the general trend towards weak domestic demand, rising cost pressures and recently the additional downside influence of declining export sales almost everywhere. Even fast-growing non-OECD economies such as China have slowed recently, limiting the outlook for OECD exports and oil demand.

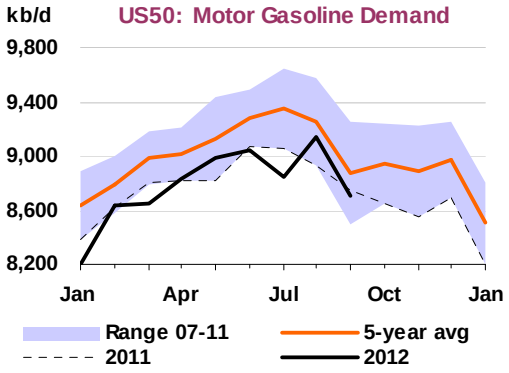




Americas

Estimates of **US** demand for October have been reduced by 230 kb/d on account of Hurricane Sandy (non-storm subtractions take the total change over last month's estimate to -245 kb/d). US demand is now estimated to have averaged 18.6 mb/d in October, a reduction of 290 kb/d (or 1.5%) y-o-y. In November, we estimate that US demand will average 18.7 mb/d, 405 kb/d (or 2.1%) less than a year earlier.

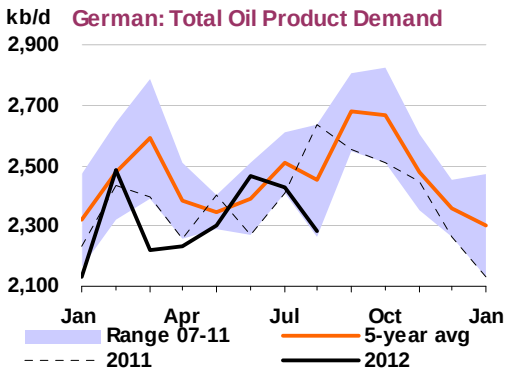


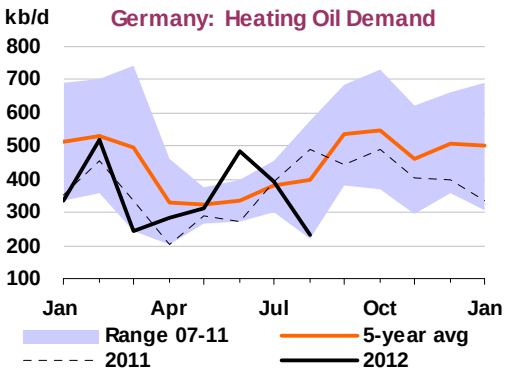


Preliminary estimates of US demand point towards a 1.9% contraction in September over the year earlier, with consumption in the US50 averaging 18.6 mb/d. Gasoil notably contracting, down nearly 4% to 3.9 mb/d, as the weakening industrial backdrop took away a key pillars of strength in the US numbers. Gasoil previously maintained a gently rising trend, up by an average of 0.5% in the 20-months to August 2012, despite the average 1.2% decline in total US consumption. Modest US growth is envisaged to return December-2012/January-2013, on account of predictions of colder climes (See Demand, '*Weak Economic Growth Leaves More Fuel for Heating*'). An anticipated average decline rate of 1.6% is assumed for 2012 as a whole (or 310 kb/d), to 18.7mb/d, a level of consumption that should be maintained in 2013.

Europe

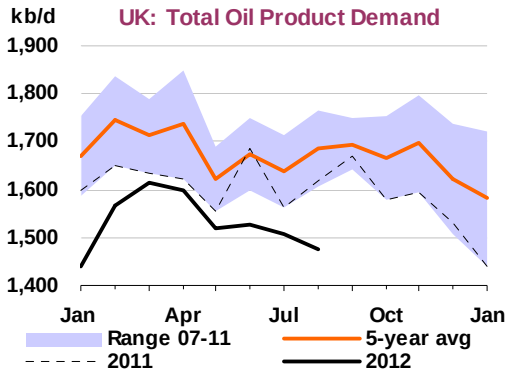
This month's forecast included notable revisions to projections of European data in August. These include Turkey (up 135 kb/d) and Germany (down 100 kb/d). Although complete September statistics have yet to be published, preliminary estimates reveal a high number of large downwards revisions, with France (down by 85 kb/d on the estimate assumed last month), Italy (-105 kb/d) and Spain (-100 kb/d) leading the way. Overall, the 3Q12 OECD European series is 150 kb/d lower than the estimate carried last month, as the already bleak outlook was with hindsight too optimistic, a sentiment that filters through the forecast. A European demand contraction of 0.5 mb/d (-3.7%) is envisaged for 2012, to 13.8 mb/d, and of -0.2 mb/d (-1.4%) in 2013, to 13.6 mb/d.

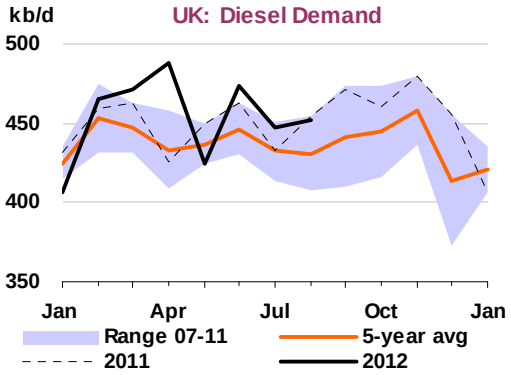




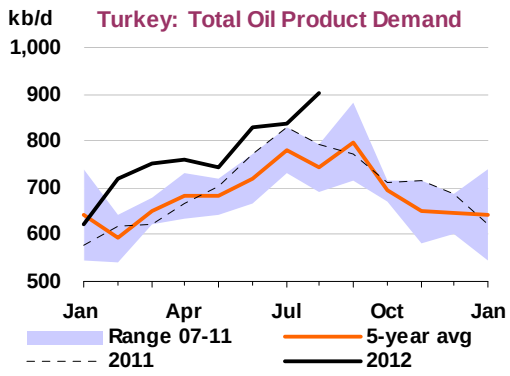
The outlook for **German** demand in 2012 has been curtailed, with a decline rate of 2.6% now assumed (previously -1.6%), to 2.3 mb/d, to reflect concerns about the domestic German economy, the sharp downside revision that was applied to August data and a reassessment of likely winter heating use. Revised August data implies a 355 kb/d (or 13.4%) drop over the year earlier, to 2.3 mb/d, 100 kb/d less than the level depicted by preliminary data reported last month. The forecast for 4Q12 German demand endures a 60 kb/d downside adjustment over last month's report, consequential on lower baseline data and reduced estimates of winter heating oil demand, as Germany was colder last year than its previous 10-year average.

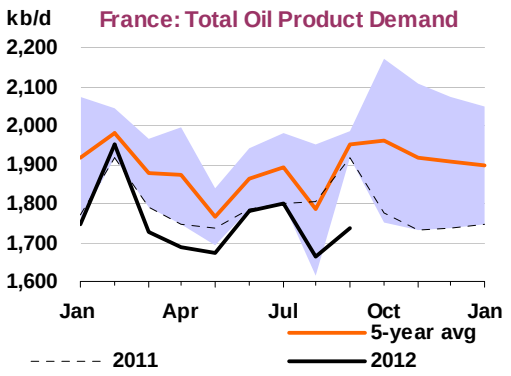
The already-falling **UK** demand trend deteriorated sharply in August, down 8.7% y-o-y to 1.5 mb/d, with all of the main product categories down. The official UK data amounts to a reduction of 110 kb/d on the previous forecast, which had expected a more modest 2% decline. The worsening UK numbers are particularly worrying given reports that the economy exited recession in 3Q12. Even diesel demand, which had previously held up relatively well, reversed its rising trend in August, down 0.4% to 450 kb/d. Further declines, albeit progressively less severe than seen in August, are forecast through to the end of the year, leaving an annual decline rate of 5.2%. A stronger economic backdrop in 2013 projected to support a further moderation, to -1.3% in 2013.





The revised **Turkish** demand data for August was 135 kb/d higher than last month's estimate, at 905 kb/d a massive 14.1% y-o-y gain, as the traditional September uptick in demand appeared to have come a month early (i.e. in August, likely weakening momentum in September). Improved manufacturing sentiment and an earlier Ramadan (split between July and August in 2012, as opposed to being wholly in August in 2011) provided supportive influences. The Turkish Manufacturing Purchasing Managers' Index (PMI) rose to 50 in August, the break-even point between contraction and expansion, up from 49.4 in July (it has since risen to 52.2 in September). Turkish demand should remain above year earlier levels throughout the remainder of the year, albeit not at the heady heights seen in August, as the obvious early-Ramadan effect wears off and the global economic backdrop remains clouded in uncertainty.

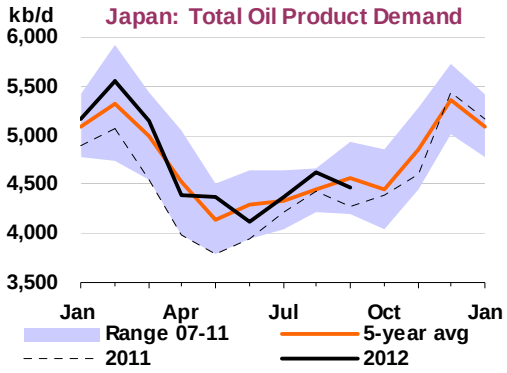


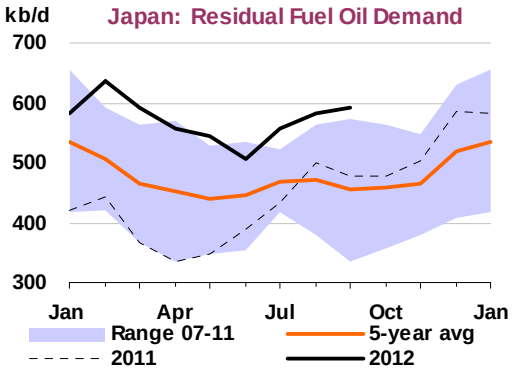


Preliminary September data for **France** reveals a worsening of the y-o-y trend, down 9.5% to 1.7 mb/d, its sharpest decline since December 2011. Heavy contractions seen across the main product categories, such as gasoline which fell by 11.9%, to 0.2 mb/d, down on account of crumbling consumer confidence. An average decline rate of around 3.2% is assumed for 2012 as a whole, to 1.7 mb/d, with a further albeit more modest decline of 1.8% assumed in 2013.

Asia Oceania

Japanese demand surprised on the upside in September, according to preliminary data showing a 4.3% increase over the year earlier, to 4.5 mb/d, supported by particularly strong gains in residual fuel oil and 'other products'. Growth in both of these product categories continues to thrive, as additional energy is needed to compensate for the post-tsunami nuclear disruptions (see *MTOMR* published October 2012). Expectations for a milder winter, in comparison to the year earlier, should narrow the pace of y-o-y growth in the 4Q12, with a decline of 2.4% envisaged to 4.7 mb/d, down dramatically on the average expansion of 7.3% seen in the previous four quarters. An absolute decline of around 170 kb/d (or -3.6%) is foreseen in 2013, to 4.5 mb/d, as the anticipated call on residual fuel oil and crude for direct burn eases as further tsunami-impacted nuclear/coal capacity slowly returns whilst additional gas capacity is also envisaged.





Non-OECD

Having risen by around 1.4 mb/d y-o-y (or 3.2%) in 3Q12, to 43.9 mb/d, non-OECD demand is forecast to continue leading global oil demand growth. Regional growth is projected to average 1.2 mb/d (2.8%) in 2012, to 43.5 mb/d, and 1.1 mb/d (2.6%) in 2013, to 44.7 mb/d.

Non-OECD: Demand by Product
(thousand barrels per day)

	Demand			Annual Chg (kb/d)		Annual Chg (%)	
	Jul-12	Aug-12	Sep-12	Aug-12	Sep-12	Aug-12	Sep-12
LPG & Ethane	4,724	4,692	4,732	120	107	2.6	2.3
Naphtha	2,712	2,696	2,761	53	116	2.0	4.4
Motor Gasoline	8,771	8,921	8,942	397	395	4.7	4.6
Jet Fuel & Kerosene	2,816	2,737	2,844	17	49	0.6	1.7
Gas/Diesel Oil	13,410	13,423	13,507	326	457	2.5	3.5
Residual Fuel Oil	5,387	5,271	5,597	22	402	0.4	7.7
Other Products	6,018	5,955	5,896	235	83	4.1	1.4
Total Products	**43,839**	**43,696**	**44,279**	**1,170**	**1,609**	**2.8**	**3.8**

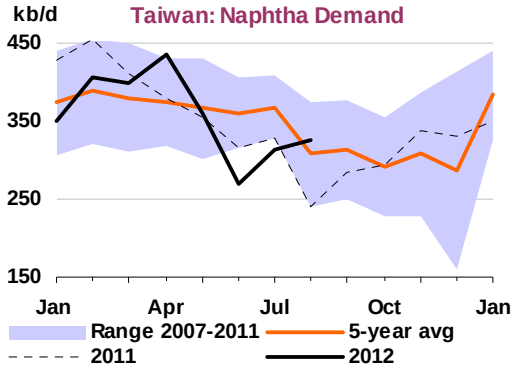
Recently released data revise non-OECD demand estimates upwards by 0.2 mb/d for 3Q12, led by China (+120 kb/d), Saudi Arabia (+80 kb/d), Brazil (+50 kb/d) and Iraq (+40 kb/d). A massive 505 kb/d revision in the Chinese demand estimate for September led the way (see *China*). Significant August amendments

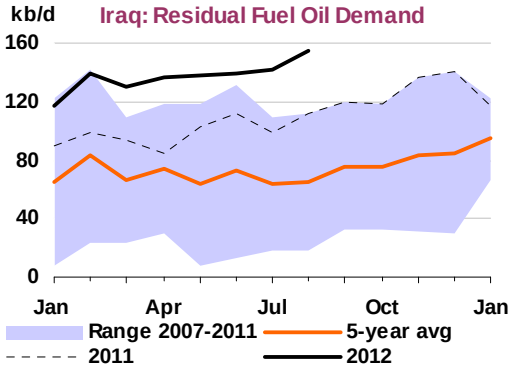
were also made, such as the Taiwanese number coming out 60 kb/d higher than the initial estimate, as an unseasonable spike in naphtha demand (which usually dips in August) accounted for almost all of the revision. Although we envisage weaker Taiwanese naphtha demand in September, to counter the stronger August consumption trend, the overall 2012 estimate will exceed last month's prediction by 10 kb/d. A similar amount was added to the Iraqi estimate (plus 60 kb/d), with large additions made to the residual fuel oil (40 kb/d) and 'other products' (15 kb/d). Roughly 40 kb/d of additional consumption was added to the Nigerian estimate for August, with 25 kb/d added to jet/kerosene and 20 kb/d to gasoline. Saudi Arabia led the upside in August demand revisions, with 155 kb/d added to the Saudi forecast, leaving growth of 11.6% y-o-y whereas a month earlier we had been forecasting a more modest 6.7% expansion. Heavy fuel oil (+75 kb/d), gasoil (+60 kb/d) and gasoline (+40 kb/d) dominated the Saudi revision, as the early Ramadan provided a surprisingly large fillip to August consumption (a support reflected, to greater or lesser degrees, in all Muslim countries). Nearly 90 kb/d was added to the Brazilian August estimate, as demand growth returned to a four-month peak of 4.0% y-o-y.

Non-OECD: Demand by Region

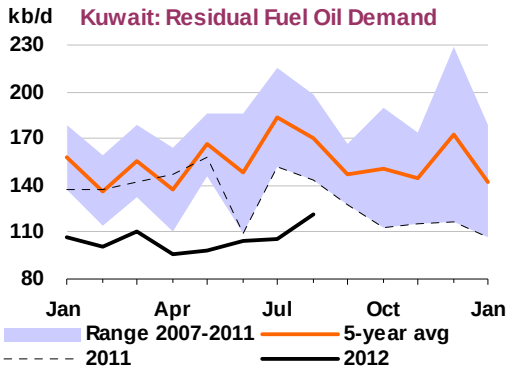
(thousand barrels per day)

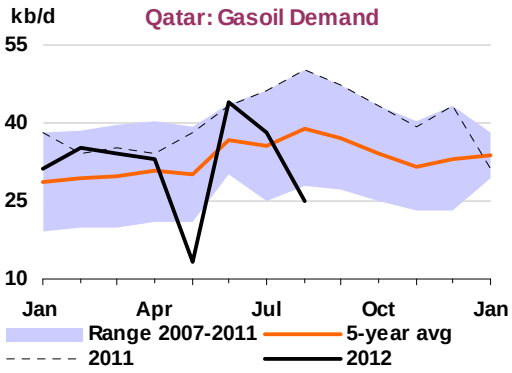
	Demand			Annual Chg (kb/d)		Annual Chg (%)	
	Jul-12	Aug-12	Sep-12	Aug-12	Sep-12	Aug-12	Sep-12
Africa	3,361	3,370	3,407	202	158	6.4	4.9
Asia	20,532	20,115	20,852	428	1,034	2.2	5.2
FSU	4,644	4,740	4,571	5	62	0.1	1.4
Latin America	6,573	6,710	6,729	200	191	3.1	2.9
Middle East	8,010	8,045	7,994	345	147	4.5	1.9
Non-OECD Europe	719	715	726	-11	17	-1.6	2.3
Total Products	**43,839**	**43,696**	**44,279**	**1,170**	**1,609**	**2.8**	**3.8**





Notable reductions have been made to the Qatari and Kuwaiti demand estimates, with assessments for August cut by 65 kb/d and 60 kb/d respectively since last month's report. Lower consumption figures for both 'other products' and fuel oil led the Kuwaiti revisions, with respective amendments of 70 kb/d and 25 kb/d, as the Kuwaiti power sector increasingly switches over to natural gas. The middle of the barrel saw notable reductions in Qatar, with 25 kb/d stripped from gasoil/diesel demand and 15 kb/d removed from the jet/kerosene estimate. Weak Qatari demand, down 22.8% y-o-y in August, arose as consumption of gasoil/diesel roughly halved on the year earlier. The full extent of the downgrade to the Qatari gasoil number has not been fully passed through the forecast, as gasoil demand is a notoriously volatile component of Qatari consumption (see chart) and we envisage at least a partial rebound towards the final stages of 2012. A number of preliminary estimates for non-OECD oil demand have also come out for September, showing notable baseline reductions since last month's report, with the Russian estimate 115 kb/d down and India curtailed by 110 kb/d.

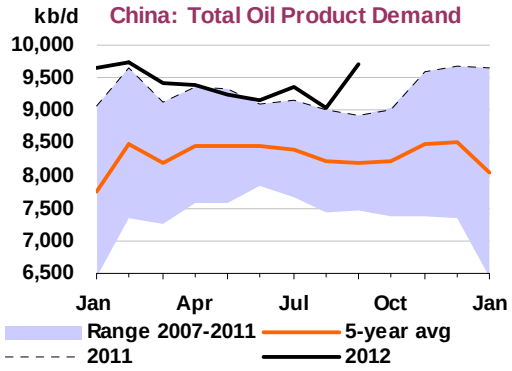


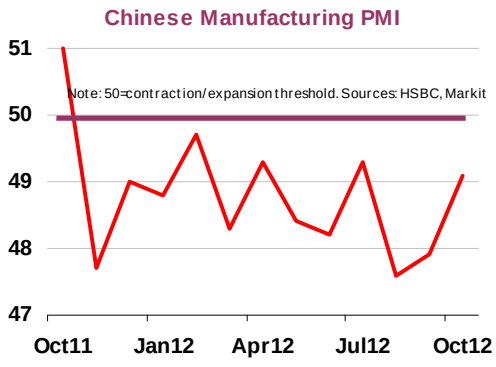


China

Preliminary estimates of Chinese apparent demand in September are 505 kb/d higher than assumed in October's *OMR*, as y-o-y growth of 8.8% is now assumed (whereas a slower, but more on-trend, 3.1% expansion had previously been envisaged). Surging refinery crude intake, following another increase in domestic fuel process and depleted product inventories saw apparent consumption rise to a seven-month high, of 9.7 mb/d. Industrially-important gasoil/diesel returned to positive growth territory for the first time since March, despite signs that China's broader economy continues to show signs of slowing down. HSBC estimates that China's manufacturing PMI rose to 49.1 in October from 47.9 in September and 46.7 in August, still below the key 50 threshold separating growth from contraction. The official Chinese manufacturing PMI is already above 50, as it rose to 50.2 in October, but this indicator is widely agreed to be less representative of small-and medium-sized private businesses (instead more closely tracking state-owned enterprises) than that developed by HSBC.

Until consistently robust Chinese growth holds for a number of months, we will remain sceptical as to whether September's expansionary pace of Chinese apparent demand can be maintained moving forward. Stronger growth was always foreseen in the second half of the year, but not at the dizzy near double-digit heights seen in September. Challenging macroeconomic conditions, coupled with inflationary concerns (albeit easing), will likely see demand growth moderate through to the end of the year. Growth of around 260 kb/d (2.8%) is projected for 2012 as a whole, to 9.5 mb/d. This expansion is 70 kb/d faster than previously assumed, reflecting recent data and the assumption of a modest feed through the forecast. A similarly flat trajectory is assumed in 2013, with growth of around 270 kb/d (2.9%) to 9.8 mb/d, as growth continues to be restrained by the exceedingly testing macroeconomics.

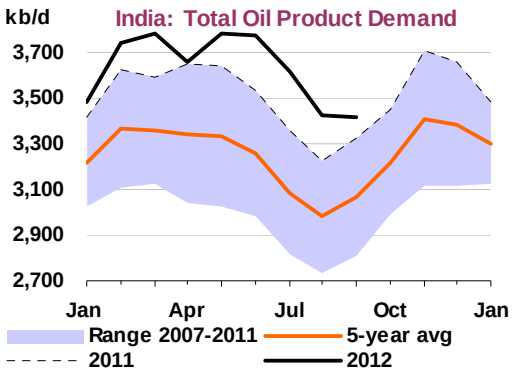


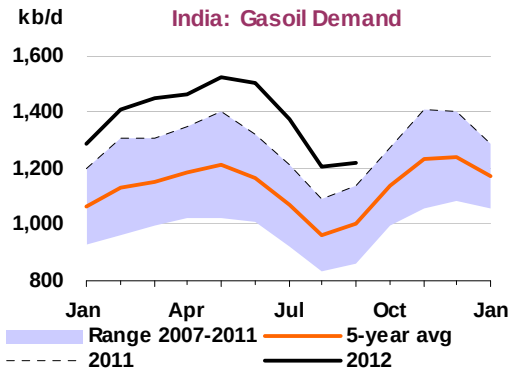


India

Preliminary data show Indian September demand rising at its slowest pace since April, as a combination of recovering monsoon rains and higher prices curbed growth. India consumed an average of 3.4 mb/d of

oil products in September, up 2.8% y-o-y, with decelerations seen across all of the main product categories. Gasoil/diesel gained the majority of the headlines, rising by 7.4% y-o-y to 1.2 mb/d, its slowest expansion since January 2012. The slowdown in diesel is attributable to subsidies being cut for the first time in 15 months – equivalent to a price hike of about 14% - while the resumption of more normal seasonal rains dampened agricultural demand.

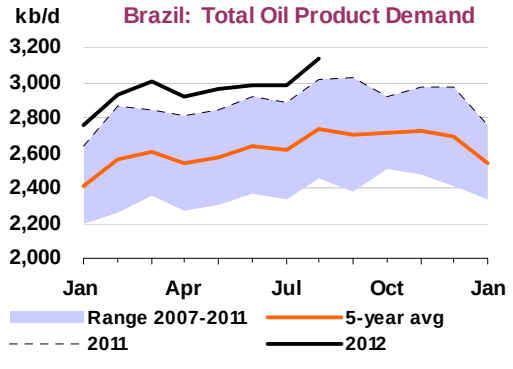


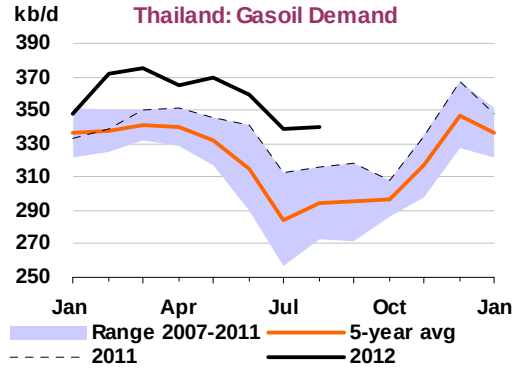


The September Indian update amounts to a 110 kb/d reduction over last month's forecast, largely attributable to a lower outcome for 'other products' (-50 kb/d), naphtha (-25 kb/d) and gasoline (down by 10 kb/d). The easing Indian economic backdrop largely culpable, with the PMI's for both the manufacturing and service sectors trending down since the beginning of the year. The Society of Indian Automobile Manufacturers, for example, lowered its sales forecast for the current fiscal year, citing higher interest rates and the weaker economic backdrop. We have accordingly trimmed our own Indian oil demand forecast, now envisaged to rise by 3.6% (or 125 kb/d) in 2012, to 3.6 mb/d, compared with 4.5% projected last month. The outlook for 2013 remains unchanged in percentage growth terms, at 2.6%, although total Indian demand is now forecast to reach a lower absolute number of 3.7 mb/d (3.8 mb/d in October's *OMR*).

Other Non-OECD

Robust demand growth returned in **Brazil**, in August, as the escalation in consumption climbed to a four-month high of 4.0% y-o-y, to an average of 3.1 mb/d. Leading the upside were particularly strong gains in the land-transport fuels, with gasoil/diesel up by 6.9% (to 1.1 mb/d) and gasoline up by 5.6% (to 0.9 mb/d). Gasoline's August expansion was a four-month high, while gasoil rose at its fastest pace since March.





Strong demand conditions remain in much of non-OECD Asia, with **Thailand** for example seeing y-o-y growth averaging out at around 3.5% in the six-months through August. The particularly sharp gains seen in industrially important LPG (up 5.2% over the six-month period) and gasoil/diesel (6.5%) have driven Thai growth. Thailand has announced that it intends to raise the compulsory blending ratio of palm methyl ester (PME) in gasoil to 5%, effective at the beginning of November.

SUPPLY

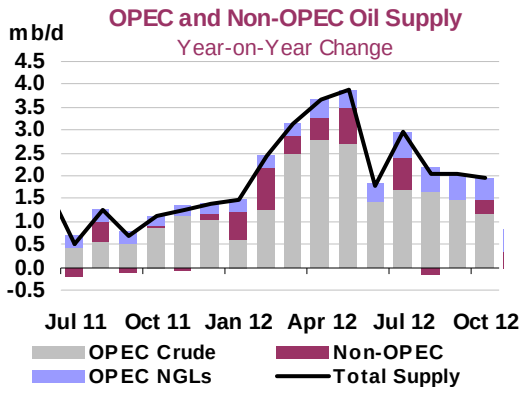
Summary

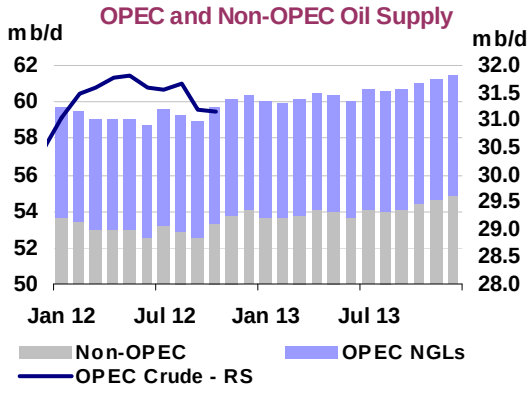
- **Global oil supply rose by 0.8 mb/d month on month to 90.9 mb/d in October, as rebounding supplies from the Americas and the North Sea** offset a slight decline in OPEC crude supplies. Compared to a year ago, global oil production stood 2.0 mb/d higher, with 80% of the increase coming from OPEC crude and NGLs.

- **Non-OPEC production rebounded strongly by 840 kb/d in October to 53.4 mb/d** after seasonal maintenance in the North Sea and Brazil as well as Hurricane Isaac in the US reduced output to 52.6 mb/d in September. Production is expected to increase by 560 kb/d in 4Q12 compared to 4Q11, roughly 190 kb/d higher than last month's assessment. For 2013, non-OPEC production is projected to rise by 860 kb/d to 54.1 mb/d, which is 150 kb/d higher than the previous forecast.

- **OPEC crude oil supply declined to the lowest level in nine months in October, down by 30 kb/d to 31.15 mb/d.** Severe weather-related supply disruptions in Nigeria, which saw output tumble to two and a half year lows, was largely behind the monthly decline. By contrast, output from Iran inched higher, reversing a seven-month downtrend.

- **The 'call on OPEC crude and stock change' for 4Q12 has been lowered by a sharp 500 kb/d, to 30 mb/d,** due to downward revisions to global demand growth and projected higher non-OPEC supply. OPEC's 'effective' spare capacity in October is estimated at 2.51 mb/d versus 2.56 mb/d in September.





All world oil supply figures for October discussed in this report are IEA estimates. Estimates for OPEC countries, Alaska, Indonesia and Russia are supported by preliminary October supply data.

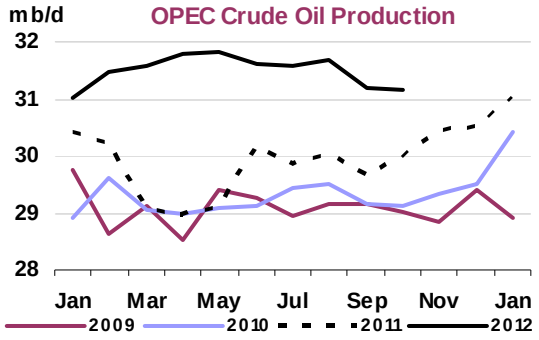
Note: Random events present downside risk to the non-OPEC production forecast contained in this report. These events can include accidents, unplanned or unannounced maintenance, technical problems, labour strikes, political unrest, guerrilla activity, wars and weather-related supply losses. Specific allowance has been made in the forecast for scheduled maintenance in all regions and for typical seasonal supply outages (including hurricane-related stoppages) in North America. In addition, from July 2007, a nationally allocated (but not field-specific) reliability adjustment has also been applied for the non-OPEC forecast to reflect a historical tendency for unexpected events to reduce actual supply compared with the initial forecast. After heavy outages seen in 2011 and 2012, this adjustment now totals –500 kb/d for non-OPEC as a whole, with most downward adjustments focused in the OECD.

OPEC Crude Oil Supply

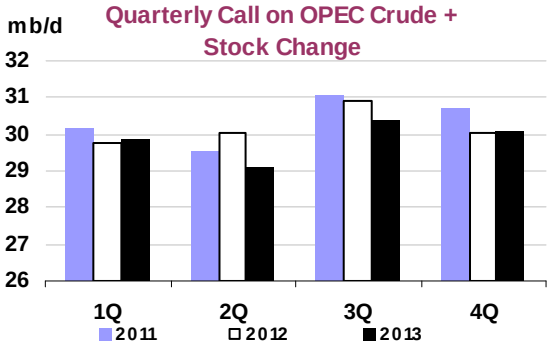
OPEC crude oil supply declined to the lowest level in nine months in October, down by 30 kb/d to 31.15 mb/d. Supply disruptions in Nigeria, which saw output tumble to two and a half year lows, was largely behind the monthly decline. By contrast, output from Iran increased marginally, partially reversing a seven-month downtrend.

The 'call on OPEC crude and stock change' for 4Q12 has been lowered by a sharp 500 kb/d, to 30 mb/d, due to downward revisions to global demand growth and projected higher non-OPEC supply. The 'call' on OPEC for 1Q13 is also reduced, by 100 kb/d to 29.8 mb/d.

OPEC's 'effective' spare capacity in October is estimated at 2.51 mb/d versus 2.56 mb/d in September. The group's current sustainable capacity of 35 mb/d is slated to rise by a net 320 kb/d, to 35.37 mb/d, in 1Q13. Increased capacity is expected from a steady ramp up in production from Iraq (+320 kb/d) as well as start-up of project expansions in the UAE (+220 kb/d). The next scheduled meeting of OPEC ministers to review the market outlook is on 12 December in Vienna. The group's current collective production target for all 12 members is 30 mb/d.

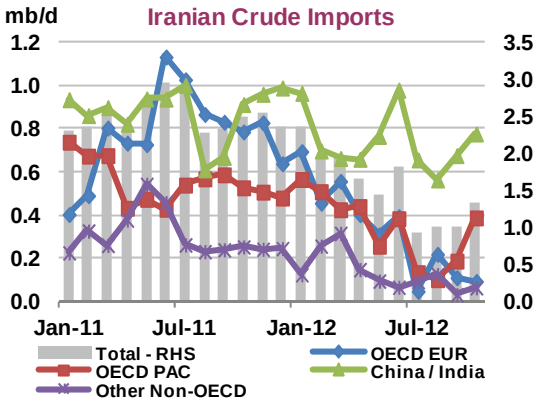


Entire series based on OPEC Composition as of January 2009 onwards (including Angola & Ecuador & excluding Indonesia)



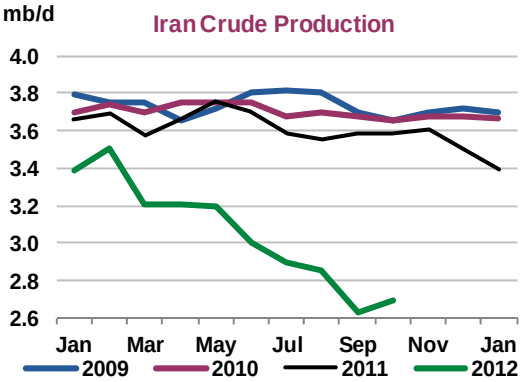
Entire series based on OPEC Composition as of January 2009 onwards (including Angola & Ecuador & excluding Indonesia)

Iranian crude output marginally reversed its downward course in October, rising by an estimated 70 kb/d to 2.7 mb/d. Preliminary data for OECD and non-OECD imports from Iran show a 300 kb/d increase in October, to 1.3 mb/d, compared with an average 1 mb/d in September and August. China and South Korea appear to account for the lion's share of the increase in Iranian imports. After suspending imports in August and September due to insurance-related shipping issues, South Korea imported around 250 kb/d in October, according to preliminary data. Chinese imports were up about 175 kb/d to 565 kb/d. Singapore, though not a regular buyer of Iranian crude, imported around 65 kb/d in October. By contrast, Japanese imports fell by 50 kb/d to 130 kb/d.

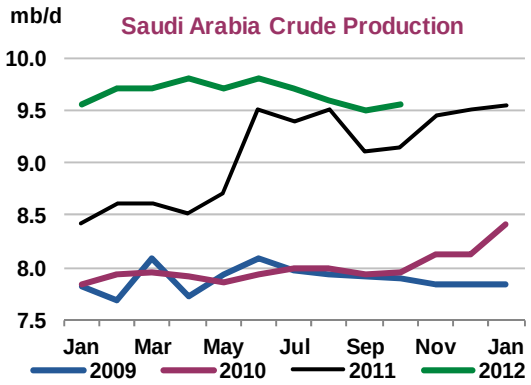


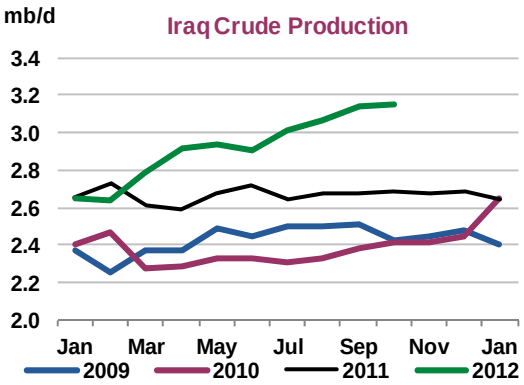
Assessing Iranian supply flows is fraught with obstacles, not least because the National Iranian Tanker Company (NITC) ordered its vessels to shut-off their communication beacons when operating in some regions last spring. Gibson Shipbrokers estimate current volumes of Iranian crude oil held in floating storage declined to 13 mb at end-October, off by 1 mb from September levels. However, these levels are still well below the high end-April estimates of 20-35 mb. Iran's state tanker company is increasingly using its own vessels to deliver crude to buyers unable to obtain shipping insurance, reducing the number of available ships for storage.

The 27-member governments of the EU significantly broadened sanctions against Iran's energy and banking industries on 16 October, in a bid to bring Iran back to the negotiating table over its nuclear enrichment expansion plans. The new measures target major Iranian oil and gas companies and broaden restrictions on the country's central bank. The EU plans to freeze assets of both the National Iranian Oil Co (NIOC) and NITC. With the bulk of Iranian crude now heading to Asia, however, the main impact of the new EU measures will likely be on the country's financial sector. However, new EU sanctions, which include Iran's natural gas industry, have sharply reduced liquefied petroleum gas (LPG) exports, further depriving Iran of revenue. LPG, mainly propane and butane, is a by-product of oil rather than natural gas, but the lack of clarity over product specifications in the latest sanctions has prompted shipping and insurance firms to curb coverage.



Saudi Arabia's production was marginally higher last month, up by 50 kb/d, to 9.85 mb/d. However, tanker data suggests crude exports rose in October by as much as 200-300 kb/d. The end of the peak power generating season, when demand for direct burn crude typically jumps, may have freed up more barrels for export. Going forward, however, increased crude requirements for Saudi Aramco's joint-venture refineries, both at home and overseas, may see production levels sustained in the 9.8-10 mb/d range. Saudi Aramco's 400 kb/d Jubail refinery, held in joint venture with Total, is preparing to launch and may start its first 200 kb/d crude unit by end-year. A new, 325 kb/d crude unit at Saudi joint venture Motiva's Port Arthur, Texas refinery is also expected to resume operations in early 2013 following an aborted start earlier this year (*see Refining section*).





Iraqi crude oil production in October rose by 20 kb/d, to 3.16 mb/d, with higher supplies from the northern region accounting for all of the increase. Crude exports rose by 30 kb/d, to 2.62 mb/d. Basrah exports averaged 2.17 mb/d, nearly unchanged from the previous month but well below scheduled volumes due to weather-related delays at the country's southern terminals. Exports of Kirkuk crude through the northern Turkish port of Ceyhan on the Mediterranean rose by 32 kb/d, to around 450 kb/d. The resumption of shipments from the Kurdish region, which feeds into the Kirkuk crude stream, was behind the rise. Shipments from fields in the Kurdish Regional Government's (KRG) jurisdiction were estimated to account for 150 kb/d of Kirkuk flows in October. Production from the region is expected to reach 200 kb/d by the end of the year.

Total Iraqi production is projected to rise by just over 300 kb/d in 1Q13, but state SOMO's efforts to lock in term contracts for next year are reportedly bogged down by quality issues and disagreements with potential buyers over prices. Iraq's term contract prices have been relatively expensive given ample

global supplies and increased volumes of Iraqi crude available on the spot market, traders report. CNPC and BP, the joint venture partners in the Rumaila field, regularly sell their equity crude on the spot market. Official selling prices for Basrah Light crude have been running anywhere from $0.10-0.50/bbl above spot prices for the grade. One issue is that the new production from Rumaila, which is being blended with Basrah Light, is relatively heavy and degrades the quality of the blend. Traders note that blending issues associated with the inclusion of new Kurdish production into the Kirkuk export stream is also a problem.

Meanwhile, after nearly a year of uncertainty, Baghdad has confirmed that ExxonMobil is seeking bidders for its 60% stake in the massive 2.8 mb/d West Qurna-1 project. ExxonMobil rattled government officials in Baghdad in November 2011 after it signed contracts to develop six blocks with the KRG. Baghdad objected to the move by ExxonMobil, the first international major to ink a deal with the KRG, given its ongoing dispute with the KRG over primacy for oil policy and contract awards. Since 2010 Exxon, along with partner Shell, has increased production at West Qurna-1 to 400 kb/d from the 244 kb/d baseline. The JV receives $1.90/bbl on output above the baseline, an amount some companies believe is not profitable enough given the high risks. The KRG is offering companies more attractive production sharing contracts. Chevron, Total and Gazprom have also signed contracts with the KRG this past year. Deputy Prime Minister Hussein Shahristani has said he expects a new stakeholder to be approved by the end of this year.

Elsewhere in the Gulf, **Kuwaiti** production inched up 40 kb/d to 2.82 mb/d while **UAE** output dipped 20 kb/d to 2.67 mb/d. **Qatar** also saw lower output, down 20 kb/d to 730 kb/d.

OPEC Crude Production

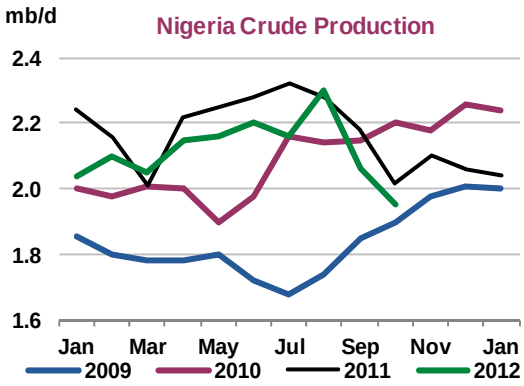
(million barrels per day)

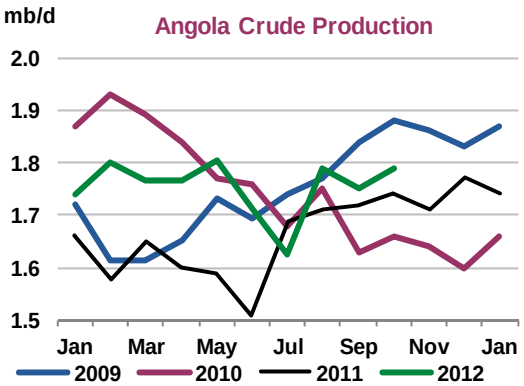
	Aug 2012 Supply	Sep 2012 Supply	Oct 2012 Supply	Sustainable Production Capacity[1]	Spare Capacity vs Oct 2012 Supply	1Q13 Production Capacity Versus Current Capacity
Algeria	1.18	1.17	1.15	1.20	0.05	0.01
Angola	1.79	1.75	1.79	1.85	0.06	0.04
Ecuador	0.50	0.50	0.48	0.54	0.06	(0.02)
Iran	2.85	2.63	2.70	3.20	0.50	(0.15)
Kuwait[2]	2.76	2.78	2.82	2.84	0.02	0.02
Libya	1.38	1.44	1.38	1.51	0.13	0.08
Nigeria[3]	2.30	2.06	1.95	2.57	0.62	(0.08)
Qatar	0.75	0.75	0.73	0.79	0.06	(0.02)
Saudi Arabia[2]	9.90	9.80	9.85	11.88	2.03	(0.13)
UAE	2.69	2.69	2.67	2.79	0.12	0.22
Venezuela[4]	2.51	2.48	2.48	2.60	0.12	0.03
OPEC-11	**28.61**	**28.05**	**28.00**	**31.75**	**3.75**	**(0.01)**
Iraq	3.07	3.14	3.16	3.29	0.14	0.32
Total OPEC	**31.68**	**31.18**	**31.16**	**35.05**	**3.89**	**0.32**
(excluding Iraq, Nigeria, Libya and Iran)					*2.51)*	

1 Capacity levels can be reached within 30 days and sustained for 90 days.
2 Includes half of Neutral Zone production.
3 Nigeria's current capacity estimate excludes some 200 kb/d of shut-in capacity.
4 Includes upgraded Orinoco extra-heavy oil assumed at 375 kb/d in October.

Nigerian production has been beset by weather-related problems in recent months, with officials reporting the worst flooding in some 50 years forcing the shut-in of around 500 kb/d during October. Output tumbled by an estimated 110 kb/d to 1.95 mb/d in October, the lowest level in around two and half years. The country's rainy season, which runs from April until October, has been severe, with the key southern Niger Delta oil producing region especially hard-hit. By early November production levels were recovering, with export schedules showing increased volumes for December. In addition to the floods, Shell declared force majeure on Bonny Light and Forcados production due to vandalism. On 1 November

Shell reported that 4Q12 output would be down about 20% after a series of sabotage and so-called 'bunkering' (i.e., pilfering) incidents during October damaged key pipelines, including the Bomu-Bonny, the Trans-Forcados and the Brass Creek trunklines. The company said it hoped to lift the *force majeure* by the end of November. Total also declared force majeure in mid-October on gas exports from the Bonny LNG plant. Crude flows to the country's two operating refineries were also disrupted. State-owned NNPC reported in October that there have been almost 775 breaks in its 5 100 km network of pipelines. Oil bunkering, or theft, costs the government an estimated $7 billion in lost revenue per year.



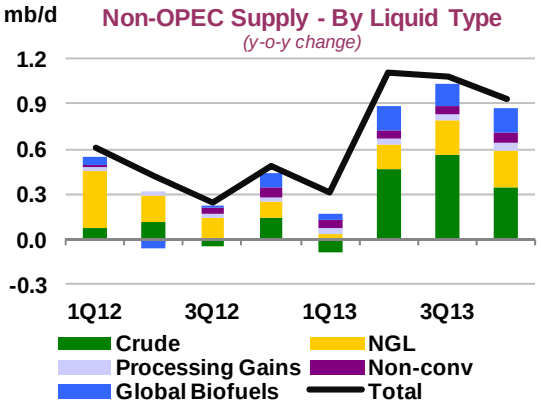


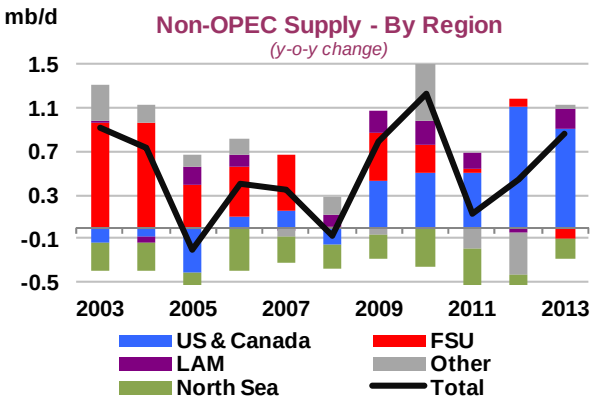
Angolan crude oil production in October rebounded by 40 kb/d, to 1.79 mb/d, following the completion of field maintenance work. Start-up of the BP-operated 150 kb/d PSVM fields is set for a late November, with the first cargo of the new Saturno crude expected to be lifted by the end of the year. Saturno, made up of output from the deep-water Plutao, Saturno, Venus and Marte fields in Block 31, is a heavy, sour grade with a projected API gravity of 24.9 and a sulphur content of 0.78%.

Libyan production was pegged at 1.38 mb/d in October, off 60 kb/d month-on-month. Officials report production reached 1.6 mb/d in mid-October but tanker data suggests volumes on average for the month were closer to 1.4 mb/d. Output continues to be constrained by both civil unrest and operational issues. When workers at the country's Zawiya refinery halted operations in early November, production at the 200 kb/d El Sharara field was shut-in due to lack of storage. Pipeline and other equipment issues are also capping production at a number of fields.

Non-OPEC Overview

Non-OPEC production rebounded strongly by 840 kb/d in October, to 53.4 mb/d, after seasonal maintenance in Brazil and the North Sea (including a protracted outage at the Buzzard field), and weather disruptions in the US reduced output to 52.6 mb/d in September. Planned and unplanned outages reduced average non-OPEC supplies for 3Q12 to 53.0 mb/d, still around 260 kb/d higher than the same quarter the prior year.





Output is now projected to rebound by 810 kb/d from 3Q12 to 4Q12. In addition to higher Brazilian and US production and the expected consistent contribution of output from the Buzzard field, 4Q12 output will benefit from the end of an unplanned outage at the 150-kb/d Peng Lai field in China. Production forecasts for Russia and Sudan have also been revised upwards. Year-on-year non-OPEC growth for 2012 is now forecast at 460 kb/d, slightly higher than previously estimated.

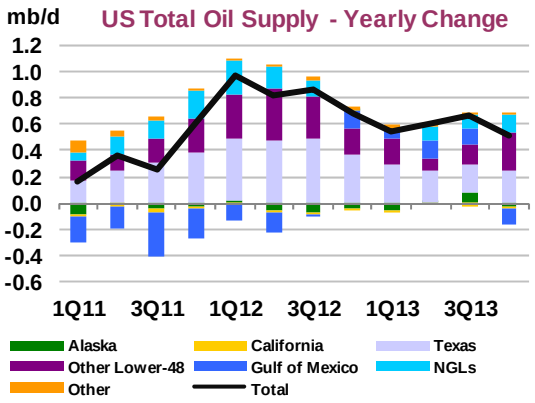
Likewise, supply projections for 2013 have been raised slightly due to rosier expectations in the Eagle Ford shale of the US and in South Sudan. Though less acute, there have also been downward adjustments in the North Sea and Brazil due to unplanned stoppages at the Ula and Frade fields, respectively, and a delayed restart to Total's Elgin and Franklin fields. On balance, production is expected to rise by 860 kb/d to 54.1 mb/d in 2013, roughly 150 kb/d higher than last month's assessment.

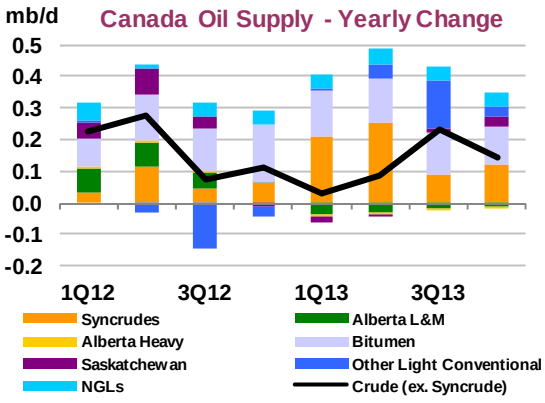
Since December 2011, US production in 2012 has exceeded expectations by 0.8 mb/d, while production elsewhere has been 1.3 mb/d lower than forecast. At this point, a higher contingency factor of -500 kb/d and expectations of growth of 600 kb/d from US oil are forecast to raise non-OPEC supplies to over 54 mb/d in 2013. In the US, maintenance, mature-field decline, weather disruptions and falling NGL prices are all factors that could curtail production.

OECD

Americas

US – October preliminary, Alaska and North Dakota actual, other states estimated: US crude oil production rose by 260 kb/d from September's levels with the completion of maintenance at fields in the Gulf of Mexico (GOM) and on pipelines in Alaska. Alaska's crude output fell to 400 kb/d in August, its lowest level in over two decades. Production is forecast to average 550 kb/d in 4Q12, around 40 kb/d lower than the prior year. Compounding the impact of maintenance at some BP-operated fields, Hurricane Isaac reduced GOM output to 1.05 mb/d in August, but production has gradually recovered and should reach an average of 1.4 mb/d by 4Q12, or 140 kb/d higher than a year ago. Production growth continues in tight oil plays in the US, with the fastest growth in the Eagle Ford and the Bakken plays. Production levels from the Eagle Ford, estimated at 600 kb/d in 3Q12, are quickly closing in on North Dakota's Bakken production levels of 630 kb/d in the same period. We expect that production levels from the Eagle Ford play could overtake Bakken's production levels by 1Q13. Rail routes are likely to handle the incremental volumes of Bakken crude, and the incremental $3-5/bbl cost (vs pipeline) will serve as a disincentive for producers to continue ramping up production. This will particularly apply to producers with assets both in the Bakken and in Texas plays that are closer to refining markets.





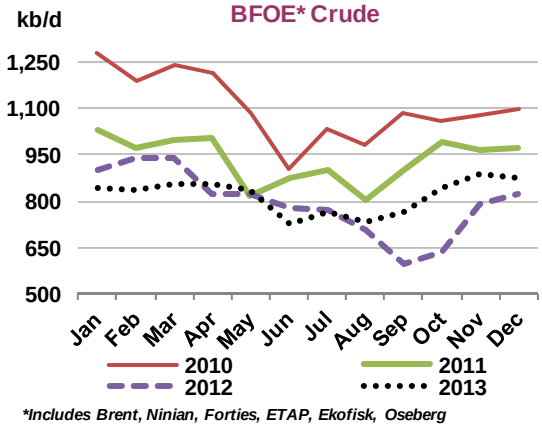
Baseline revisions to US crude and other liquids output, mostly in Colorado, from the EIA *Petroleum Supply Annual* result in a minor -10 kb/d downward revisions to US production estimates for 2011. Looking forward, an upward revision for Texas' Eagle Ford was offset by the incorporation of a 50-day turnaround at BP's Thunderhorse field in 2Q13 which reduces production estimates for that field by 20 kb/d for the

year. In sum, US oil production is expected to increase by 680 kb/d in 4Q12, to 9.3 mb/d, and by 570 kb/d to average 9.5 mb/d in 2013.

Canada – August preliminary: Canadian oil production reached around 3.7 mb/d in August based on preliminary government data and is expected to breach 4.0 mb/d by the end of the year. On the positive side, output from the third stage of Suncor's Firebag project continues apace, raising output at the complex to around 120 kb/d several months earlier than even the operator expected. Firebag's output is forecast to increase to 180 kb/d when the fourth stage is brought online in the next couple of months. But on the downside, maintenance proved heavier than initially expected in 3Q12 in Canada's East Coast, lowering output to only 60 kb/d in August or 200 kb/d less than the prior year. The planned maintenance at the Terra Nova, Hibernia, and White Rose fields involved removing the FPSOs, and these facilities are expected to be back in operation by December, which is a longer downtime than originally forecast.

To maintain consistency and to improve forecasts, more disaggregated data from the Alberta Energy Resources Conservation Board (ERCB) are now being used in place of Statistics Canada and National Energy Board data for January-August 2012. As a result, Alberta oil output is revised downwards by 20 kb/d in 2012 and by 30 kb/d in 2013. Synthetic crude oil output at the Horizon and Scotford upgraders also came in around 60 kb/d lower than expected in 3Q12, keeping output on par with the prior quarter at 3.7 mb/d and 160 kb/d higher than last year. On balance, Canadian oil output is now expected to grow by a still robust 340 kb/d in 2013 to 4.1 mb/d, roughly 20 kb/d lower than last month's estimate.

North Sea



North Sea liquids production fell precipitously in September to 2.4 mb/d on planned and unplanned maintenance in Denmark, the UK and Norway. Preliminary estimates indicate a recovery to 2.7 mb/d in October, and we expect production to return to levels of above 3 mb/d by year-end. The benchmark Brent Forties Oseberg Ekofisk (BFOE) blend reached record lows of around 600 kb/d in September, though crude output is expected to rebound to around 820 kb/d by December 2012. Major contributors to the reduced North Sea and BFOE output include eight weeks of maintenance at the UK's 200-kb/d Buzzard field, as well as planned maintenance at Norway's Troll field and Denmark's Syd Arne field. Norway's 10-kb/d Ula field was also taken offline due to a leak, and we do not expect a restart until 1Q13. Relief should come in the next couple months as fields undergoing maintenance return to service and new fields start. The Buzzard field reached normal levels at the beginning of November, only to suffer a brief weekend stoppage. The FPSO for the UK's Huntington field is on its way to the field and looks set to add around 20 kb/d in 2013. Likewise, in Norway, the Valhall and Hod fields were offline in August in preparation for a new production platform that should add around 40 kb/d.

Though the UK's Elgin and Franklin fields were widely expected to return to production in December 2012, this expectation is likely to have been too optimistic. Eni, one of the partners in the field now expects production to return sometime in 1Q13, and we have also delayed the restart in our estimates. These revisions lower output from the North Sea in 4Q12 by around 40 kb/d to 2.9 mb/d on average or 13% below prior-year levels.

Asia

Australia – August preliminary: Production in Australia rose to almost 600 kb/d in July and August, levels

not seen for two years, amid higher production from fields in the Carnarvon basin and from NGLs. Mature field decline is still expected to keep production in check in 2013 at around 440 kb/d, but the recent production results are encouraging and could lead to an upwards revision if results continue to exceed expectations and cyclones do not dent production in 1Q13 as they have in the past couple of years. The thrice-delayed Montara field is projected to come online in 1Q13, adding around 30 kb/d.

Non-OECD

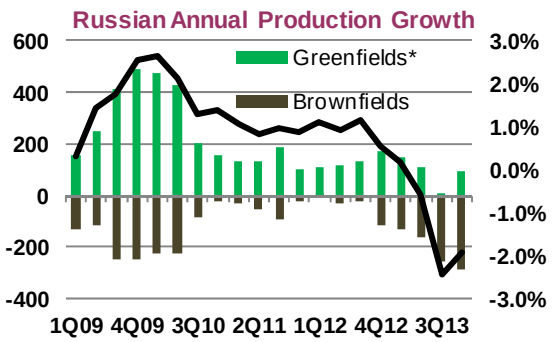
Middle East

Oman – August actual: Production reached a record level of almost 940 kb/d in August, around 50 kb/d higher than 1Q12 levels. The Mukhaizna steam-flood EOR project is currently producing 120 kb/d according to the trade press, and an additional 20-30 kb/d of output is expected. The increment from Mukhaizna is likely to be sufficient to offset mature field decline elsewhere for the remainder of 2012 and 2013. Output is expected to stay at 930 kb/d in 4Q12, and rise to 950 kb/d in 2013.

In **Yemen**, shipments from the 120-kb/d Marib pipeline restarted in August after an eight month closure. Shipments averaged only 60 kb/d in August and September and mostly served the refinery in Aden. The outlook for 4Q12, and 2013 remains broadly the same as new bombings of the Marib line were reported. Over the past month, Al-Qaeda linked militants targeted a natural gas pipeline associated with Total's Yemen's LNG plant and an oil pipeline that carries 8 kb/d of production from a KNOC-operated field.

Former Soviet Union

Russia – October preliminary: Russian oil production rose by 70 kb/d to a new post-Soviet record of 10.8 mb/d in October thanks to rising production from the new Vankor field in Eastern Siberia, and to a lesser extent from an expansion at Gazpromneft's assets. In contrast, brownfield production fell by 120 kb/d (-1.3%) in October compared to the year prior and stands to continue to decline in the remaining months of 4Q12. The forecast for 2012 of a 1.1% increase in crude output is 10 kb/d higher than last month because of higher than estimated output from Vankor. The 2013 forecast remains unchanged overall, with a decline by 90 kb/d to 10.6 mb/d.



*Greenfield production includes Sakhalin, Vankor, Verkhnechonskoye, Uvat, Salym, Caspian, and other major field additions of the last 3 years.

Relatedly, the planned Rosneft buyout of TNK-BP could impact ouptut in the short term. If the deal moves forward, Rosneft's share of Russia's crude output would increase from 26% to almost 40%. Rosneft's conference calls with investors indicated that synergies in East Siberia could reduce access costs to pipeline infrastructure. But as suggested in earlier reports when rumours of the deal first surfaced, TNK-BP's need to employ EOR technologies and increase greenfield production may be hindered if it cannot raise capital expenditures.

FSU net exports remained relatively stable at 9.5 mb/d in September after shipments had climbed by a significant 800 kb/d in August following surging product loadings. Despite a hike in Russian export duties, September crude shipments increased by a combined 200 kb/d as refinery maintenance limited domestic demand. Urals volumes shipped via Baltic ports rose by 200 kb/d after loadings at Primorsk and Ust Luga rose by 140 kb/d and 60 kb/d, respectively. Moreover, Ust Luga ramped up to 460 kb/d in September with plans in place for it to ship 600 kb/d in 2013. Elsewhere on the Transneft network, loadings from Novorossiysk plunged by 160 kb/d as more crude was directed towards the BPS-2 system. However, this decrease was offset by increased volumes (+70 kb/d) coming through the CPC system.

November export schedules indicate that 400 kb/d of crude is due to be loaded from Kozmino, the end

point of the ESPO system. This suggests that the ESPO-2 line from Skovorodino to Kozmino, which will transport currently railed volumes, will be starting up ahead of schedule. This line will add approximately 300 kb/d to the system's capacity, meaning that, including the Chinese spur, it will be able to ship approximately 1 mb/d. These developments together with the recently launched BPS-2 line have added almost 1 mb/d of additional export capacity and allowed exporters to re-orientate volumes away from less profitable outlets, firstly the Druzhba pipeline and more recently Black Sea ports. Recent low Druzhba flows, combined with other supply issues have hit eastern European refiners hard (*See Refining 'Pipeline Bottlenecks Create IEA Supply Disruptions'*).

Compared to last year, product exports were over 500 kb/d higher in September. Fuel oil loadings have risen by 300 kb/d which suggests that to a certain degree, the '60:66' tax reforms initiated 12 months ago have not had the immediate effect of incentivising the export of distillates at the expense of fuel oil. 'Other products' (including naphtha and gasoline) are also 50% above last year implying that Russia has managed to maintain refinery runs throughout the summer, thus avoiding the light product shortages experienced 12 months ago.

FSU Net Exports of Crude & Petroleum Products

(million barrels per day)

	2010	2011	4Q2011	1Q2012	2Q2012	3Q2012	Jul 12	Aug 12	Sep 12	Latest month vs. Aug 12	Latest month vs. Sep 11
Crude											
Black Sea	2.10	1.93	1.87	1.83	1.88	1.74	1.74	1.78	1.70	-0.08	-0.27
Baltic	1.60	1.50	1.37	1.48	1.75	1.78	1.64	1.75	1.94	0.20	0.49
Arctic/FarEast	0.74	0.67	0.65	0.62	0.62	0.64	0.62	0.61	0.69	0.08	0.05
BTC	0.77	0.70	0.69	0.73	0.68	0.64	0.67	0.63	0.61	-0.02	-0.07
Crude Seaborne	**5.22**	**4.80**	**4.58**	**4.66**	**4.93**	**4.80**	**4.67**	**4.77**	**4.95**	**0.18**	**0.19**
Druzhba Pipeline	1.13	1.17	1.18	1.24	1.11	0.98	0.94	1.01	1.01	0.00	-0.21
Other Routes	0.42	0.53	0.54	0.51	0.49	0.53	0.52	0.53	0.54	0.01	0.00
Total Crude Exports	**6.76**	**6.50**	**6.30**	**6.42**	**6.53**	**6.31**	**6.13**	**6.31**	**6.50**	**0.19**	**-0.01**
Of Which: Transneft[1]	4.00	4.18	4.09	4.18	4.35	4.24	4.04	4.31	4.36	0.04	0.13
Products											
Fuel oil[2]	1.54	1.58	1.59	1.50	1.61	1.80	1.57	1.98	1.84	-0.14	0.30
Gasoil	0.88	0.77	0.72	0.85	0.74	0.76	0.70	0.81	0.75	-0.06	0.08
Other Products	0.43	0.43	0.36	0.42	0.40	0.45	0.36	0.51	0.48	-0.03	0.16
Total Product	**2.85**	**2.77**	**2.66**	**2.78**	**2.75**	**3.00**	**2.64**	**3.30**	**3.07**	**-0.24**	**0.54**
Total Exports	**9.61**	**9.27**	**8.96**	**9.19**	**9.28**	**9.31**	**8.77**	**9.61**	**9.56**	**-0.05**	**0.52**
Imports	0.07	0.08	0.10	0.12	0.06	0.09	0.07	0.09	0.11	0.01	0.00
Net Exports	**9.54**	**9.19**	**8.86**	**9.07**	**9.22**	**9.22**	**8.70**	**9.52**	**9.46**	**-0.06**	**0.52**

Sources: Argus Media Ltd, IEA estimates

[1]Transneft data exclude Russian CPC volumes.

[2]Includes Vacuum Gas Oil

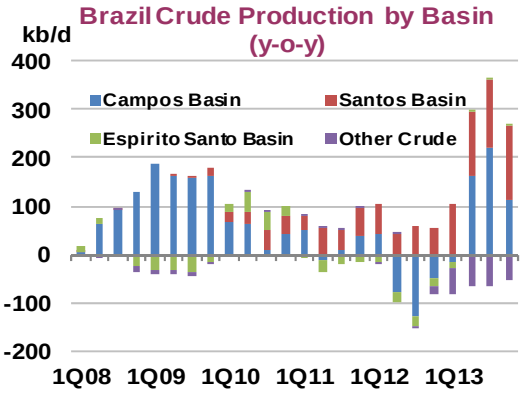
Africa

Sudan and South Sudan: Both parliaments ratified the 27 September comprehensive agreement on 15 October, which will pave the way for a restart of South Sudanese crude oil exports via pipeline routes to the north. South Sudan will pay an average of $9.70/barrel to the north as a transit fee, and will also pay Sudan a transitional financial arrangement (TFA) payment of $3.03 billion to cover the period between July 2011 and December 2014. At that point, the South Sudanese government is hopeful it could have other export alternatives. The TFA is based on production levels of 150 kb/d from South Sudan. These sums are not small, and the possibility of non-payment or disputes over the amount due could derail export flows. In addition, territorial disputes remain.

Production estimates have been revised upwards for 2012 in Sudan based on government statements of increased output and a 40 kb/d rebound in exports observed in 3Q12. We assess that production is currently averaging around 90 kb/d. Restarting South Sudan's output and exporting it will prove more challenging. GNPOC's processing facility in Sudan, which processes Nile blend crude from Blocks 1, 2, and 4 was damaged. South Sudanese government officials expect production from Petrodar's Blocks 3 and 7 to

return to around 180 kb/d within three months, around 50 kb/d less than pre-shut volumes. We have revised upwards our estimates for 2013 for Sudan and South Sudan by around 60 kb/d. All told, production from both countries is now expected to reach 280 kb/d by 4Q13 from current rates of around 90 kb/d.

Latin America

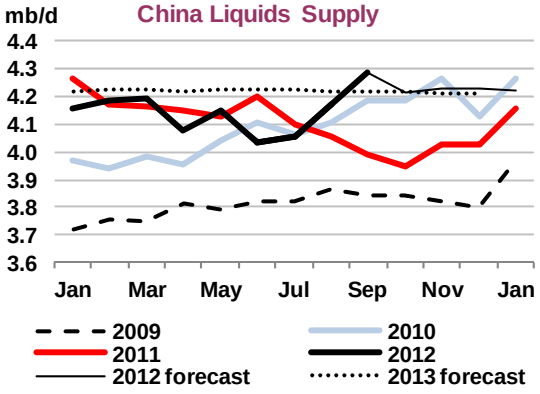


Brazil – September preliminary, August actual: Brazilian crude output slid to 1.92 mb/d in September, its lowest monthly level since July 2009. In the summer, maintenance took place at several of the largest fields in the Campos basin, but these fields did not rebound as forecast in August and September in part due to weather issues. Petrobras undertook a turnaround at the P-52 platform in the Roncador field in September, which produced around 130 kb/d in July-August.

On a year-on-year basis, 3Q12 Brazilian crude output stood 100 kb/d lower at 2.0 mb/d, but should rebound to 2.1 mb/d in 4Q12 as turnarounds are completed. Petrobras noted recently that it expects to reach output of 1.9 mb/d in October, a 100 kb/d increase month on month; and with the recent addition of the Baleia Azul field, the company will continue to increase output in the remainder of 2012. The lower-than-forecast output in 2H12 results in a 40 kb/d downward revision, which means that for the year as a whole, production stands to actually fall by 20 kb/d to average 2.1 mb/d for the year. Turning to 2013, Chevron recently announced it would try to reassign its drilling rig at the Frade field. Therefore, we estimate that any restart for the field is likely to be pushed back to end-2013, lowering the estimate for 2013 slightly. Still, production is expected to rebound by 190 kb/d to 2.3 mb/d in 2013.

Colombia – October preliminary: Production increased to 960 kb/d in October, a return to levels not seen since November 2011. Year-on-year growth has slowed to a halt during 2012, in stark contrast to 100+ kb/d levels seen during 2011, due to pipeline sabotage and labour-related stoppages. These issues have subsided for now, which explains most of the production rebound. Some small field additions are also behind the better performance, and additional wells at existing fields should raise Colombia's output by 50 kb/d to 990 kb/d in 2013.

Asia



China – September preliminary: Oil output rose to 4.3 mb/d in September after the restart of the 150-kb/d Peng Lai field. Peng Lai production was reported to be at around 90 kb/d at end-September. ConocoPhillips confirmed the restart of the Peng Lai field, which had been shut in since a drilling-fluid leak in the summer of 2011, leading the government to order the company to shut in production from all platforms at the field in September 2011. Uncertainty concerning new environmental restrictions was expected to delay the restart, previously expected sometime in 2013. Looking ahead, Chinese production in 4Q12 is expected to rise by 260 kb/d from the prior year to over 4.2 mb/d. Chinese output has been revised upwards by 90 kb/d for 2H12 and by 30 kb/d for 2013.

Elsewhere in Asia, **Thailand's** oil output has remained at around 390 kb/d in the past few quarters and no growth is expected in 2013 overall. **Vietnam** has also benefitted from increased output at the Te Giac Trang field from an additional platform which has raised output in 3Q12 to 350 kb/d, around 60 kb/d higher than the prior year. In 2013, output is expected to decline by 30 kb/d to 320 kb/d.

OECD STOCKS

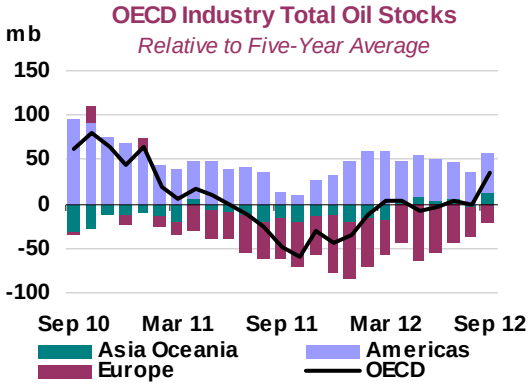
Summary

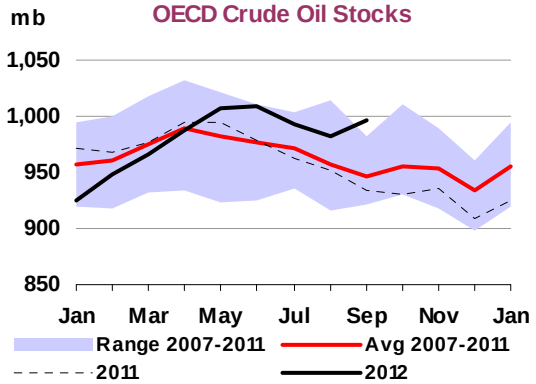
- **OECD total oil commercial inventories posted a steep, counter-seasonal 15.2 mb build to stand at 2 746 mb** by end-September. Revisions to preliminary data for August, which had initially shown a draw, now reveal that stocks built that month as well, making the September gain the seventh consecutive monthly increase in OECD oil inventories. The September increase also left OECD stocks significantly above five-year average levels for the first time in 2012.

- **OECD forward demand cover stood at 59.6 days at end-September,** level with end-August, which, following a more pessimistic OECD demand prognosis, was revised 0.8 days higher.

- **Hurricane Sandy wreaked havoc in the distribution system for refined products on the US East Coast, but its overall impact on US inventories appears relatively limited.** Disruptions in pipeline transportation from the US Gulf Coast (PADD 3) to the East Coast (PADD 1) resulted in mutually offsetting draws in PADD 1 and builds in PADD 3.

- **Chinese strategic stock building, after going strong in the first half of the year, appears to have ground to a halt in July.** The gap between implied Chinese demand for crude oil (reported refinery throughputs) and supply (production plus net imports) does not indicate any unreported stock build in August or September.





OECD Inventory Position at End-September and Revisions to Preliminary Data

OECD total oil commercial inventories moved significantly above five-year average levels in September for the first time in 2012, building by 15.2 mb to stand at 2 746 mb by end-month. Revisions to data for August now show that stocks, far from drawing that month as had initially been reported, actually built, making the September gain the seventh in a row. The September increase defied seasonal patterns of a five-year average stock draw of 21.2 mb. Stocks now cover 59.6 days of forward demand, level with end-August, which, following a more pessimistic OECD demand prognosis, was revised upwards by 0.8 days from last month's report. Crude oil led the increase in inventories, building by 14.0 mb, including builds of 9.9 mb and 9.2 mb in OECD Asia Oceania and OECD Americas, respectively. A significant portion of the steep Asian stock build reflected the transfer by Korea of inventories held in its bonded areas to national territory. In the Americas, a rebound in US inventories after hurricane disruptions in late August accounted for much of the build.

After trending close to the five-year average for most of the second and third quarters, OECD inventories jumped 34.9 mb above average in September, the first time levels have been significantly in positive

territory since January 2011. As in previous months, however, the geographical distribution of inventories remains unbalanced, with steep inventory surpluses in Asia and the Americas relative to the five-year average contrasting with deficits in Europe. Inventories in the OECD Americas region now stand 43.1 mb above average while those in OECD Asia Oceania exceed the average by 13.4 mb. In contrast, stocks in OECD Europe are 21.6 mb below the five-year mean. On average, OECD stocks built by a significant 510 kb/d over the third quarter, the third consecutive quarterly rise following builds of 410 kb/d and 430 kb/d in 1Q12 and 2Q12, respectively.

Preliminary Industry Stock Change in September 2012 and Third Quarter 2012

	September 2012 (preliminary) (million barrels)				September 2012 (preliminary) (million barrels per day)				Third Quarter 2012 (million barrels per day)			
	Am	Europe	As. Ocean	Total	Am	Europe	As. Ocean	Total	Am	Europe	As. Ocean	Total
Crude Oil	**9.2**	**-5.1**	**9.9**	**14.0**	**0.31**	**-0.17**	**0.33**	**0.47**	**-0.15**	**-0.05**	**0.05**	**-0.14**
Gasoline	-3.4	2.0	-0.1	-1.4	-0.11	0.07	0.00	-0.05	-0.09	0.05	0.02	-0.01
Middle Distillates	-2.9	-2.6	-1.8	-7.3	-0.10	-0.09	-0.06	-0.24	0.12	0.19	0.08	0.40
Residual Fuel Oil	1.9	1.1	-0.4	2.7	0.06	0.04	-0.01	0.09	-0.01	0.04	0.02	0.04
Other Products	-1.2	-1.1	5.3	2.9	-0.04	-0.04	0.18	0.10	0.16	-0.01	0.08	0.23
Total Products	**-5.5**	**-0.5**	**3.0**	**-3.0**	**-0.18**	**-0.02**	**0.10**	**-0.10**	**0.18**	**0.27**	**0.19**	**0.65**
Other Oils[1]	5.7	-1.5	0.1	4.2	0.19	-0.05	0.00	0.14	0.08	-0.04	-0.03	0.01
Total Oil	**9.4**	**-7.1**	**12.9**	**15.2**	**0.31**	**-0.24**	**0.43**	**0.51**	**0.10**	**0.19**	**0.22**	**0.51**

1 Other oils includes NGLs, feedstocks and other hydrocarbons.

More complete data for OECD countries indicate that August inventories were 12.7 mb higher at 2 730 mb than suggested by preliminary data presented in last month's report. Although this upward revision narrowed the deficit to the five-year average, total oil inventories still lagged the benchmark by 1.5 mb. Revisions were concentrated in OECD Americas and OECD Europe where crude holdings were adjusted higher by 7.5 mb and 6.3 mb, respectively. Total products were revised upwards by 1.8 mb with a 2.8 mb upward adjustment in OECD Europe offsetting a 1.0 mb downward revision in OECD Americas.

Revisions versus 12 October 2012 Oil Market Report

(million barrels)

	Americas		*Europe*		*Asia Oceania*		*OECD*	
	Jul-12	Aug-12	Jul-12	Aug-12	Jul-12	Aug-12	Jul-12	Aug-12
Crude Oil	**-1.2**	**7.5**	**0.3**	**6.3**	**0.1**	**-1.4**	**-0.8**	**12.4**
Gasoline	0.0	0.7	0.0	-0.2	0.0	0.2	0.0	0.7
Middle Distillates	0.0	-0.3	0.0	6.1	-0.1	-0.2	-0.2	5.6
Residual Fuel Oil	0.0	-0.9	0.0	0.2	0.0	-0.3	0.0	-1.0
Other Products	0.8	-0.6	0.0	-3.3	0.0	0.3	0.8	-3.5
Total Products	**0.8**	**-1.0**	**-0.1**	**2.8**	**-0.1**	**0.0**	**0.6**	**1.8**
Other Oils[1]	-1.2	0.0	0.0	-1.9	0.1	0.4	-1.1	-1.5
Total Oil	**-1.7**	**6.5**	**0.2**	**7.2**	**0.1**	**-1.0**	**-1.4**	**12.7**

1 Other oils includes NGLs, feedstocks and other hydrocarbons.

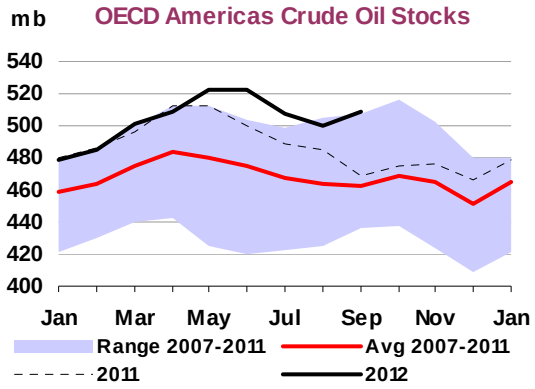
Preliminary data suggest that OECD inventories built for an eighth successive month in October posting a 5.5 mb increase. A strong counter-seasonal 10.5 mb build in OECD Europe offset smaller 2.7 mb and 2.4 mb declines in OECD Americas and OECD Asia Oceania, respectively. All product categories increased except 'other products' with motor gasoline and fuel oil rising by 6.5 mb and 4.9 mb, respectively. Elsewhere, OECD crude oil holdings posted a 5.1 mb build led by a 9.6 mb gain in the US.

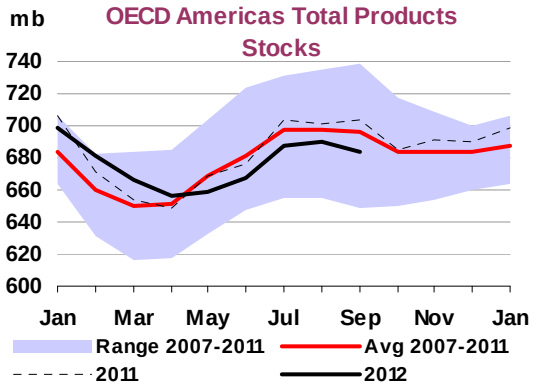
Analysis of Recent OECD Industry Stock Changes

OECD Americas

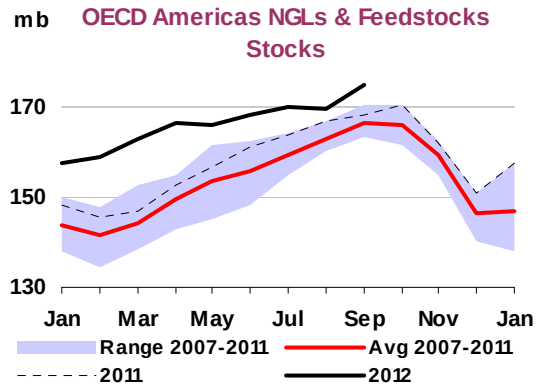
Inventories in OECD Americas rebounded by 9.4 mb in September, a steeper gain than the average 1.5 mb build of the last five years. The United States led the increase as crude stocks there, which had drawn by 8.4 mb in August due to Hurricane Isaac, bounced back by 7.4 mb, as crude unloading and production operations resumed faster than expected in the US Gulf. The regional crude build outweighed a 5.5 mb fall in product inventories led by a 3.4 mb decrease in motor gasoline, their second consecutive monthly decline. The seasonal turnover in stock ahead of the switch to winter gasoline grades likely

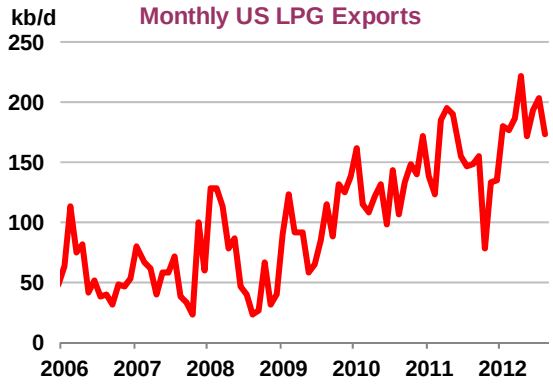
accounted for much of the decline. Middle distillates inventories drew by 2.9 mb.



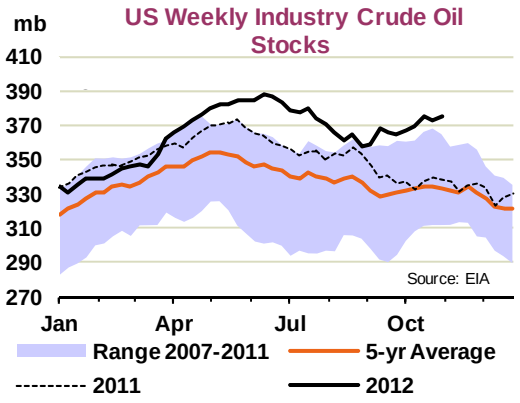


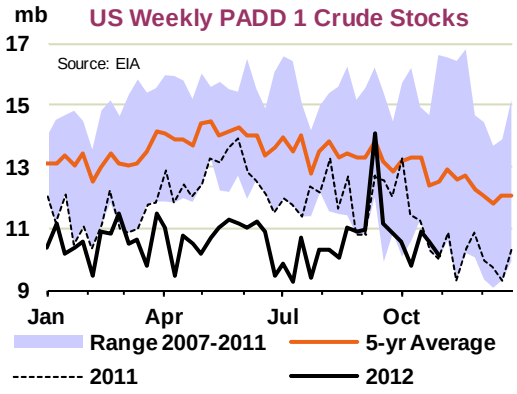
In contrast, a steep 5.7 mb build was reported for NGLs and other feedstocks in the US, undoubtedly a consequence of fast-rising tight liquids production. NGL stock builds are testing spare storage capacity at hubs such as Conway and Mt Belvieu and prices are coming under downward pressure. As discussed in the 2012 *MTOMR* (see '*Natural Gas Liquids: The Unsung Hero of Supply Forecasts*), low natural gas and NGL prices could constrain US production over the short-term. Despite the current stock overhang, one way that producers have managed to dispose of excess natural gas liquids is by processing them into LPG which is then exported to such destinations as Central and South America or to Canada for use as diluents for oil sands processing and transport.





Preliminary US EIA weekly data up to 2 November point to a shallow 2.7 mb draw in industry inventories in October. Although Hurricane Sandy, which made landfall in the eastern seaboard in the last week of the month, wreaked havoc in the local distribution system for refined products, shuttering refineries, pipelines, terminals and port facilities, its overall impact on primary US oil inventories appears relatively limited. A modest draw of 460 kb in East Coast (PADD 1) crude stocks in the last week of October was offset by builds elsewhere, so that total US crude holdings posted a modest gain. Similarly, US gasoline stocks rose by 2.9 mb in the last week of the month as a build in the Gulf Coast offset a draw in PADD 1. The full impact on US inventories will only be apparent in coming weeks and months, however, as more complete data are submitted.

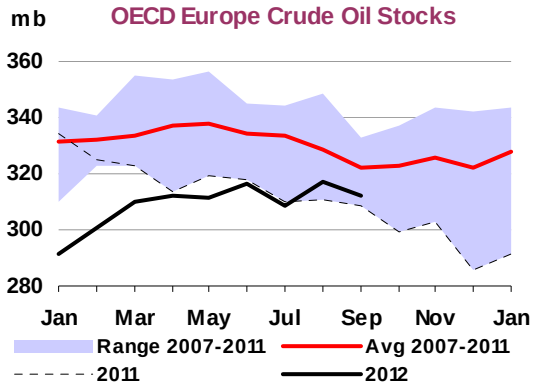


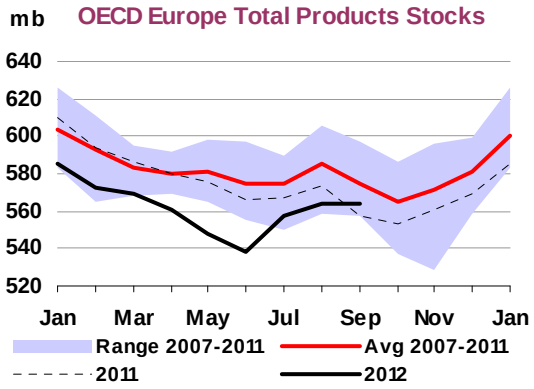


OECD Europe

OECD European commercial oil inventories were drawn by 7.1 mb to stand at 944.0 mb by end-September. This fall was shallower than the five-year average 19.3 mb draw and consequently reduced the region's deficit to five-year average levels to 21.6 mb from 33.8 mb at end-August. Total oil stocks have now remained under the five-year average levels since early-2011, but the deficit has narrowed considerably from the recent nadir of 63.1 mb reported at end-May.

Crude led the September draw with a 5.1 mb decline as record refinery margins helped to stimulate refinery throughputs, notably in Germany, France and Spain. Notwithstanding the recent draw, crude holdings are now back within the seasonal range and 26.2 mb above their end-2011 lows. Inventories benefited from strong regional imports over the summer as incremental supplies from Saudi Arabia, Iraq and Nigeria offset North Sea shut-ins and the loss of Iranian barrels.





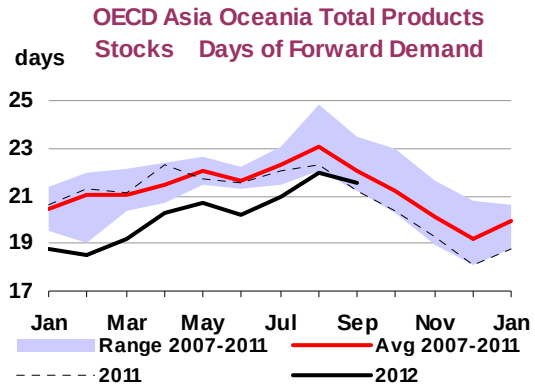
Despite high refinery runs, regional product stocks were drawn by a slight 0.5 mb. Refiners likely exported a significant portion of their output, as the backwardated price structure of European product markets did not favour stockholding. Since the draw was shallower than the seasonal average, product inventories moved back within the seasonal range. The September product decrease was concentrated in middle distillates (-2.6 mb) and 'other products' (-1.1 mb) which offset builds in motor gasoline (+2.1 mb) and fuel oil (+1.1 mb).

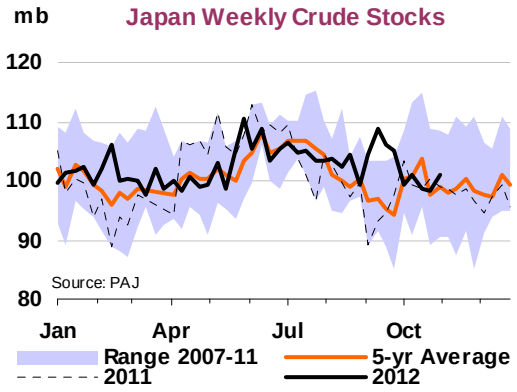
Preliminary data from Euroilstock indicate a strong, counter-seasonal 10.5 mb build in the EU-15 and Norway inventories in October. Both crude and product stocks rose with middle distillates posting an especially strong 6.0 mb gain. Fuel oil and motor gasoline rose by 2.2 mb and 1.4 mb, respectively. Elsewhere, crude inched up by 0.6 mb. Data pertaining to refined products held in independent storage in Northwest Europe indicate that stocks fell for the second consecutive month in October with all products except fuel oil drawing down over the month.

OECD Asia Oceania

Industry inventories in OECD Asia Oceania (excluding Israel) rose by 12.9 mb in September, led by a counter-seasonal 9.9 mb build in crude. A 7.1 mb build in Korea accounted for most of the regional gains, reflecting the transfer of crude previously held in bonded areas and owned by another state to its national territory. Japanese crude stocks built by 2.8 mb as maintenance cut refinery throughputs by 180 kb/d.

Recent builds have moved product inventories back towards normal levels on an absolute basis. However, since regional demand is expected to strengthen by 300 kb/d between the third and fourth quarters in line with seasonal trends, days of forward demand have fallen compared to August but still remain on a par with last year. 'Other products' led the monthly product uptick, adding 5.3 mb. Meanwhile, Korean middle distillates inventories drew by a strong 3.6 mb, offsetting a 1.8 mb build in Japan.



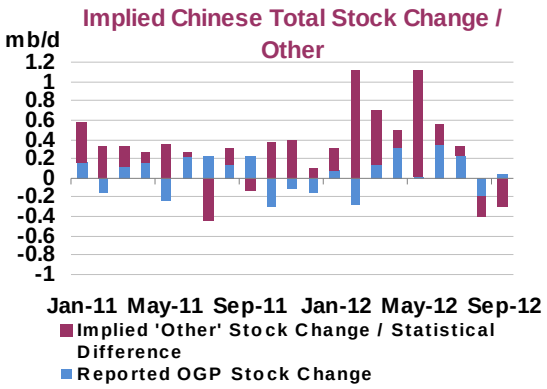


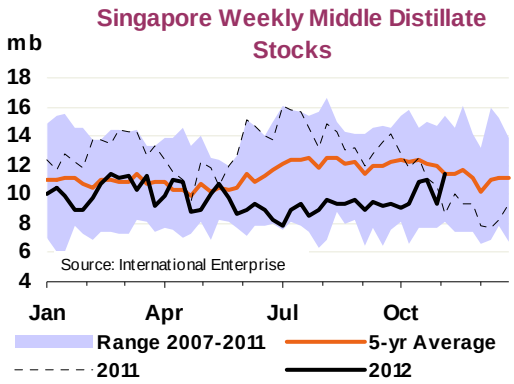
Preliminary weekly data from PAJ suggest a counter-seasonal 2.4 mb decline in Japanese industry stocks in October. Crude oil led the contraction, shrinking by 5.1 mb on the month, as refinery throughputs outpaced imports which, were seasonally low according to preliminary tanker data. Middle distillates, including kerosene, built by 2.0 mb, the fourth consecutive monthly rise, ahead of the peak winter heating season. Japanese middle distillates have been replenished by approximately 11.8 mb (30 %) since their 1Q12 low and now stand above last year's level for the first time since March.

Recent Developments in Singapore and China Stocks

According to *China Oil, Gas, and Petrochemicals (OGP)*, Chinese commercial oil inventories built by the equivalent of 2.6 mb in September (data are reported in terms of percentage stock change). Crude (excluding the government-controlled Strategic Petroleum Reserve) built by 0.6% (1.4 mb) after imports rose by over 500 kb/d. Products reversed August falls, building by a combined 1.2 mb with all categories posting increases, notably kerosene (+6.0% or 0.6 mb) and gasoline (+1% or 0.4 mb).

Evidence suggests that the filling of recently completed Chinese strategic storage capacity has ceased. Although other factors such as unreported crude use in the refinery or power generation sectors could be at play, data suggest that the gap between crude oil demand (as measured by reported refinery throughputs) and supply (production plus net imports)narrowed from 640 kb/d in 1Q12 to 510 kb/d in 2Q12 and and 100 kb/d in July. Data for August and September imply that filling has come to an end.

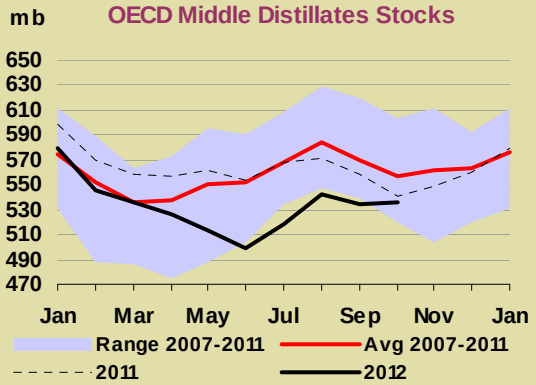


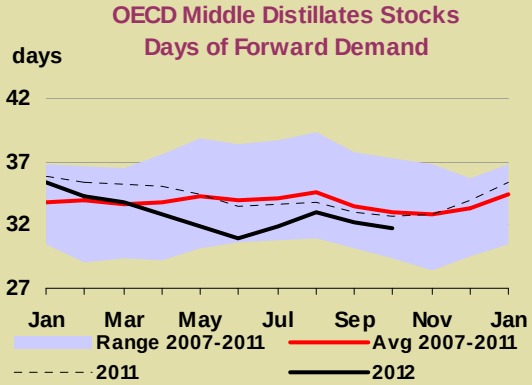


According to weekly data from *International Enterprise*, Singapore onshore oil inventories grew by 1.5 mb in October largely as a result of a 2.3 mb build in residual fuel oil after wide arbitrage to ship from the west. Ahead of the peak winter heating season, middle distillates rose by 160 kb barrels over the month to stand above last year and level with the five-year average by end-month. However, recent data indicate that by the second week of November these stocks had surged by a further 2 mb to an eight and a half month high.

Winter Fuel Inventories Remain Tight as Peak Demand Season Approaches

With winter fast approaching now is a pertinent time to take stock of how OECD inventories have replenished over the summer. OECD industry middle distillate inventories have replenished by 38 mb since this year's end-June low. However, On both an absolute and days of forward demand basis, these inventories remain significantly lower than last year by 5.3 mb and 0.9 days, respectively. With with a return to more normal colder temperatures forecast in North America and most European countries (see Demand '*Weak Economic Growth Leaves More Fuel for Heating*') likely to provide an upside to OECD heating fuels demand there is concern that low inventories could provide upward price momentum in the event of a demand surge. In examining the status of specific heating fuels in different regions the picture is complicated somewhat by the use of different fuels for heating in different regions, the convergence of specifications for diesel and heating oil and the associated problems in obtaining accurate data pertaining to these products.

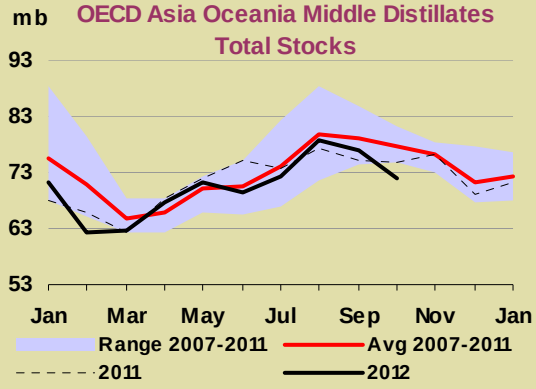


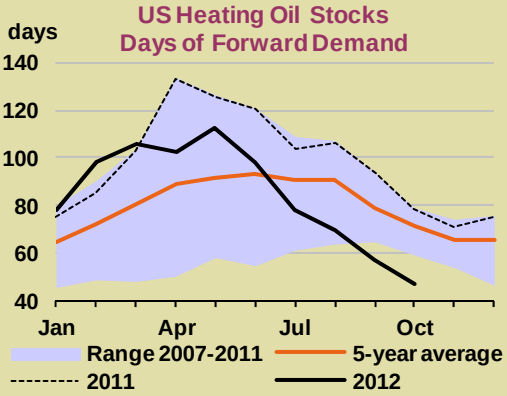


In OECD Americas, gasoil stocks continue to lag the five-year average, standing at 145 mb in October, 24 mb below 2011. Focusing on heating oil, the US has led this downward shift with end-October heating oil stocks standing approximately 9 mb (25%) lower than 12 months previously with inventories in PADD1, the world's largest heating oil market, remaining 11 mb (35 %) below 2011. However, as noted in previous reports the US heating oil demand has decreased steadily over the last decade as households have switched to cheaper natural gas and now stands 800 kb/d lower than in 2002. Following these underlying trends, the US Government cut the size of the Northeast Home Heating Oil Reserve by 50% to 1 mb when switching its stock to ultra-low sulphur distillate in 2011. With the loss of these stocks, compared to one-year ago, days of forward demand stand at 47 days, 31 days less than last year.

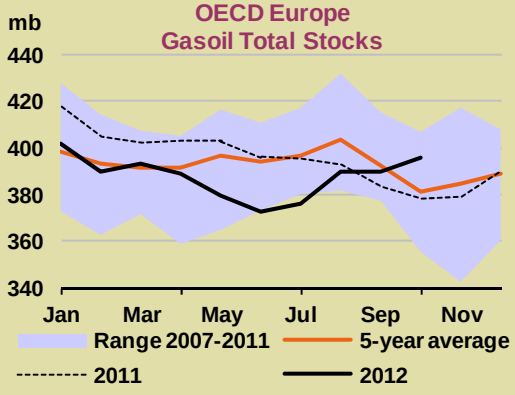
Winter Fuel Inventories Remain Tight as Peak Demand Season Approaches (continued)

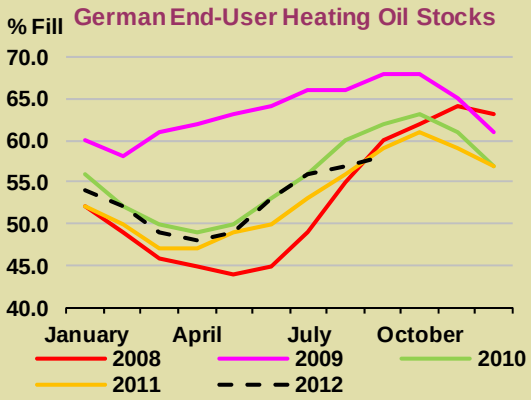
The picture in Asia Oceania is complicated somewhat by different fuels used for heating purposes. Korea and Japan favour kerosene while Australia and New Zealand use other gasoil. Considering this, it is most useful to examine middle distillate stocks while bearing in mind that other trends in diesel and jet kerosene can cloud the underlying picture. On this basis, total middle distillate inventories in the region stood at 70.9 mb at end-October, 3.9 mb below both last year and outside of the seasonal range. On a forward demand basis, stocks stand level slightly lower than a year earlier at approximately 25 days. Specifically, Japanese kerosene stocks stood at 20.4 mb at end-October, 1.3 mb below a year ago.





Total OECD European gasoil stocks stood at approximately 395 mb at end-October, including some 125 mb of government stocks while in all likelihood would be available in case of a demand surge but may take time to reach market. This level is 18 mb above 2011 and stands comfortably in surplus to the five-year average. On a forward demand basis, 66 days were covered at end-October, 4 days above twelve months ago. Nevertheless, it should be noted that going forward an exceptionally weak European demand prognosis is feeding through but if demand surprised to the upside following colder than expected weather, stock cover in these terms would be reduced. Additionally, German end-user heating oil stocks stood at 58% of capacity by end-September, one percent below 2011 levels. It is noteworthy that stock replenishment started earlier this year than last but its pace has tailed off since mid-summer and is continuing at a lacklustre pace not seen since 2009.

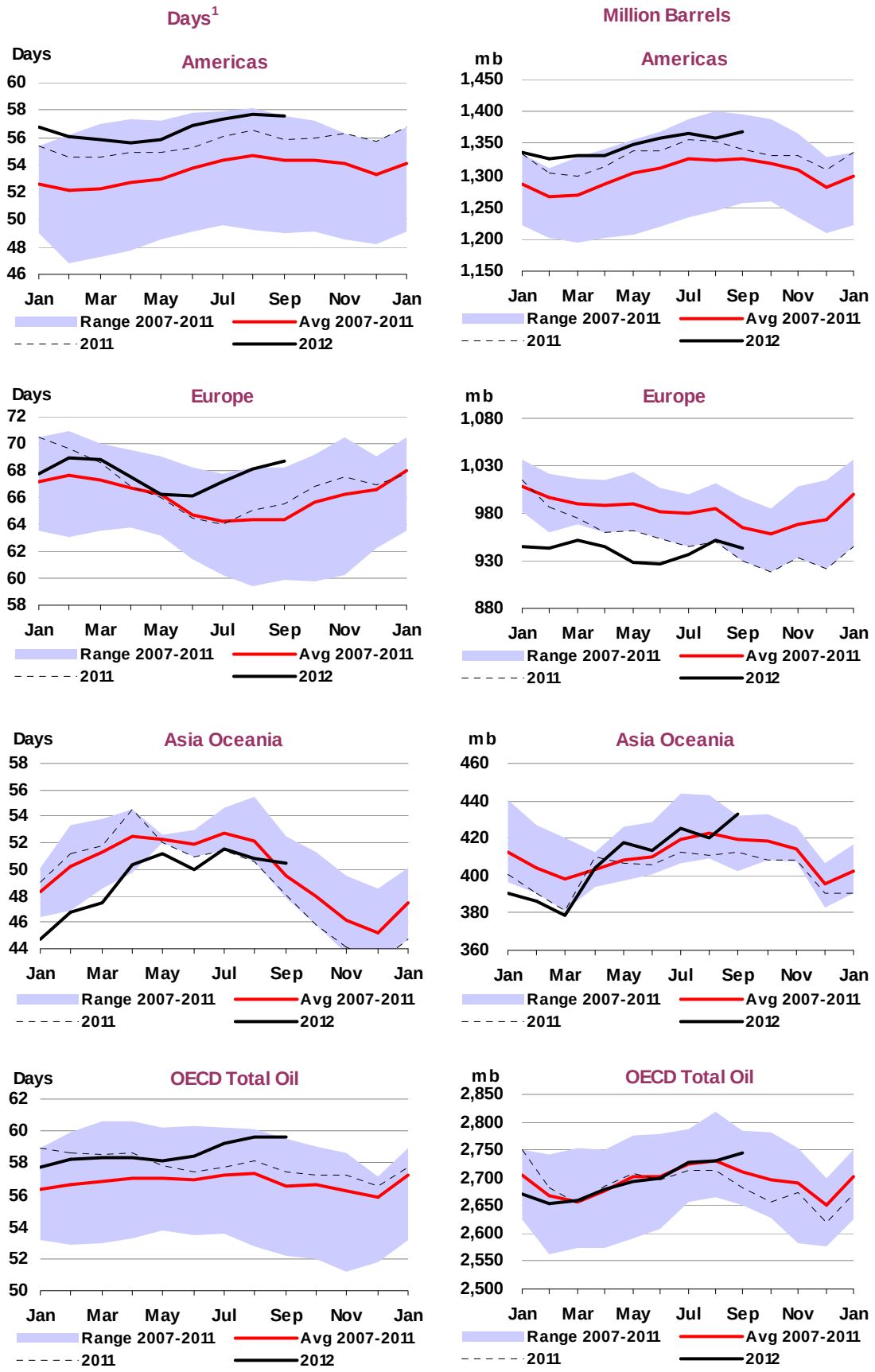




The evidence suggests that heating fuels stocks remain seasonally depleted with high prices and backwardated product markets not favouring strong commercial or consumer stock building over the summer months. Moreover, if this winter was to be unseasonably cold then markets could tighten considerably. However, both inventories and demand should be considered in terms of the fuel mix with low stocks in the, notably in the US, arising from the structural shirt towards cheaper natural gas.

Regional OECD End-of-Month Industry Stocks

(in days of forward demand and millions barrels of total oil)



1 Days of forward demand are based on average demand over the next three months

PRICES

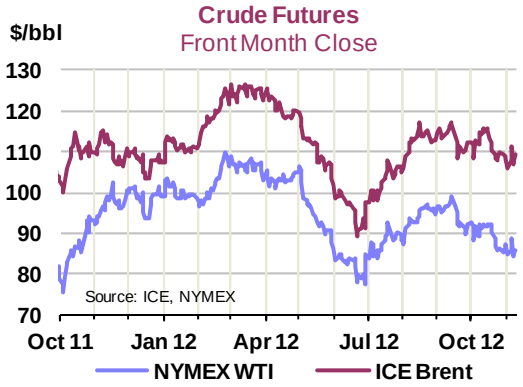
Summary

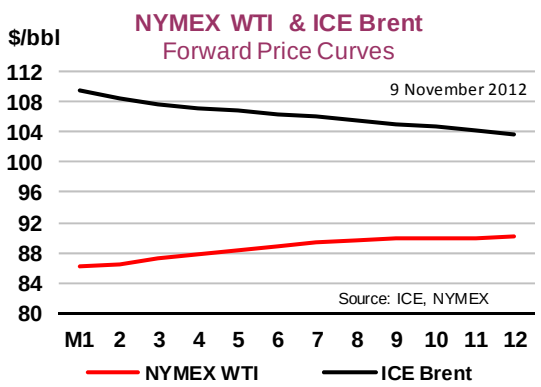
- **Oil futures were trading at four-month lows by early November amid mounting pessimism over the economic outlook for China and the euro zone and post-election worries over the looming US fiscal cliff come the New Year.** Underscoring the shift in market sentiment, money managers reduced their bullish bets on WTI contracts at the Chicago Mercantile Exchange (CME) to the lowest level in over two years. Prices for benchmark crudes were down $5-8/bbl in October and early November, with Brent last trading at $109.25/bbl and WTI at around $86/bbl.

- **Spot crude oil markets moved lower in October, with the downtrend continuing into November. Exceptionally high crude oil inventories in the US and Asia Pacific region,** combined with constrained buying by European refiners, tempered price moves despite the onset of the peak heating oil demand period.

- **Middle distillate markets outshone other products in October ahead of the peak winter demand season in the Northern Hemisphere**, continued demand for diesel and exceptionally low inventory levels in Europe and the US. Strong buying from Latin America is also supporting US distillate margins. In Asia, only Japan saw improved distillate cracks.

- **Contrasting fortunes in crude and product tanker markets have been evident over September and October as rates for crude carriers remained in the doldrums while those for product tankers firmed.** Following a similar pattern to 2011, crude tanker markets have remained extremely weak over autumn with only bunker fuel price rises providing any upward momentum.





Market Overview

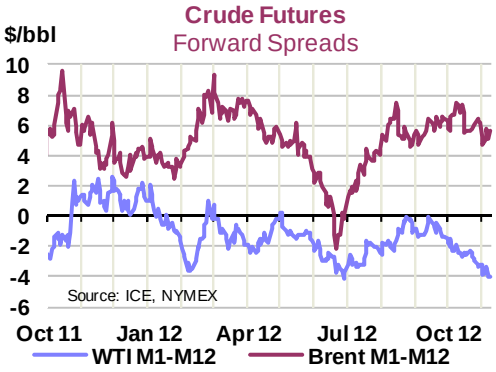
Oil futures prices were trading at four-month lows by late October and early November with mounting pessimism over the economic outlook for China and the euro zone and a weaker global oil demand picture pressuring markets. Futures prices fell further on post-election worries over the so-called US 'fiscal cliff' hanging over markets for the next few months.

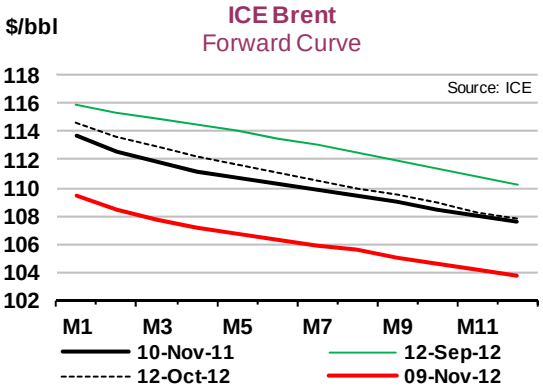
Futures prices for WTI posted the largest decline in October, off about $5/bbl to $89.57/bbl while Brent saw a smaller monthly drop of just $1.50/bbl, to around $115.50/bbl. Prices fell a further $3/bbl the second week of November. Oil prices posted a sharp downturn, in line with financial markets, following the US presidential election. Market worries shifted to the US fiscal cliff with the slated expiration of a number of laws, which will result in tax increases, spending cuts, and a corresponding reduction in the budget deficit at the start of the new year, and fears that Congressional gridlock may make it impossible to avert a crisis. Mounting concerns over an economic outlook increasingly perceived as precarious

translated into heightened risk aversion in global financial and commodity markets and triggered massive liquidation by investors in oil futures. Net long positions held by money managers in CME WTI contracts fell to the lowest level since early September 2010.

By far, the prospect of weaker-than-expected demand in the near term is adding the greatest pressure on markets. Estimates of global oil demand for 4Q12 have been revised down by 300 kb/d from last month's report, to 90.1 mb/d, bringing incremental revisions for the quarter since July to 800 kb/d. Exceptionally low inventories of middle distillates in the US and Europe, however, may yet support prices once winter weather sets in.

Despite the loss of some 1-1.2 mb/d of Iranian crude supplies in the first ten months of the year, oil markets are well supplied. Concerns over the loss of Iranian crude and fears of increased tensions between Iran and the international community appear to have eased in recent weeks, though no new talks have yet been scheduled and the European Union imposed even more stringent sanctions on Tehran in mid-October (*See OPEC Supply*).





Non-OPEC supplies are growing apace but continued unplanned outages and disruptions have kept Brent futures in backwardation. Prompt prices for Brent remain at a steep premium to forward prices, though the M1-M12 backwardation narrowed slightly on expectations of a recovery in North Sea supplies by end-month, to around $5.15/bbl in early November compared with $6.30/bbl in October. Signalling expectations of continued ample supplies in the US, WTI prices saw the WTI M1-M12 contract move deeper into contango, to around -$3.60/bbl in early November, compared with -$2.40/bbl in October and -$0.95/bbl in September.

Prompt Month Oil Futures Prices

(monthly and weekly averages, $/bbl)

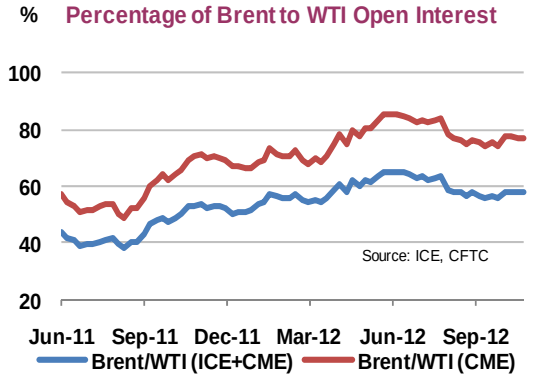
	Aug	Sep	Oct	Oct-Sep Avg Chg	% Chg	Week Commencing: 08 Oct	15 Oct	22 Oct	29 Oct	05 Nov
NYMEX										
Light Sweet Crude Oil	94.16	94.56	89.57	-4.99	-5.6	91.38	91.64	86.69	85.88	85.99
RBOB	127.25	125.84	117.86	-7.99	-6.8	123.14	116.92	111.14	113.02	111.00
No.2 Heating Oil	128.25	132.12	131.88	-0.24	-0.2	134.75	133.71	128.68	128.11	125.65
No.2 Heating Oil ($/mmbtu)	22.02	22.68	22.64	-0.04	-0.2	23.13	22.95	22.09	21.99	21.57
Henry Hub Natural Gas ($/mmbtu)	2.81	2.92	3.50	0.58	16.6	3.51	3.52	3.45	3.62	3.57
ICE										
Brent	112.68	113.03	111.52	-1.51	-1.4	114.20	113.33	108.72	108.21	108.45
Gasoil	130.02	132.54	130.90	-1.65	-1.3	134.29	132.61	127.71	127.14	124.95
Prompt Month Differentials										
NYMEX WTI - ICE Brent	-18.52	-18.48	-21.95	-3.47		-22.82	-21.69	-22.02	-22.33	-22.46
NYMEX No.2 Heating Oil - WTI	34.09	37.56	42.31	4.75		43.37	42.07	41.99	42.22	39.66
NYMEX RBOB - WTI	33.09	31.28	28.29	-3.00		31.76	25.28	24.45	27.14	25.01
NYMEX 3-2-1 Crack (RBOB)	33.42	33.38	32.96	-0.42		35.63	30.87	30.30	32.17	29.89
NYMEX No.2 - Natural Gas ($/mmbt	19.21	19.76	19.14	-0.62		19.62	19.44	18.64	18.37	18.00
ICE Gasoil - ICE Brent	17.34	19.51	19.38	-0.13		20.09	19.28	18.99	18.93	16.49

Source: ICE, NYMEX

Futures Markets

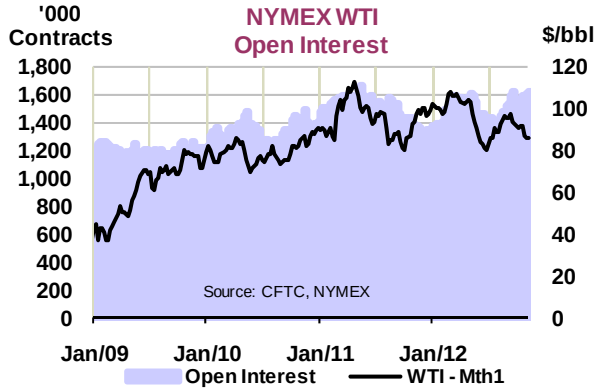
Activity Levels

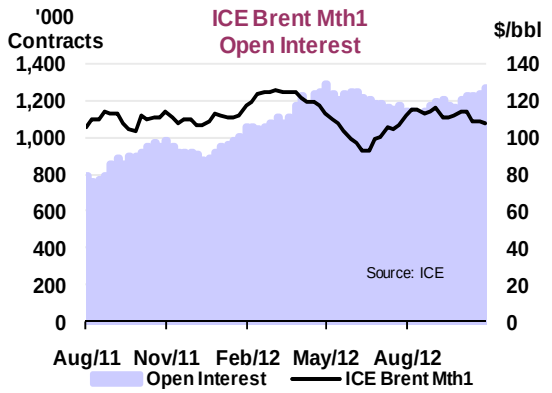
Reversing the trend seen in August and September, market activity on oil futures exchanges in October saw futures positions in the Brent contract rebound relative to those in WTI. Data on open interest show the ratio of Brent futures on the London ICE to New York and London WTI oil positions increased more than 2.8 percentage points to 59.1% between 2 October and 6 November, driven by more than a 6.5% rise in ICE Brent open interest. Stripping out ICE WTI contracts, the ratio of Brent to WTI open interest rose even faster, by 3.9% to 78.2%.



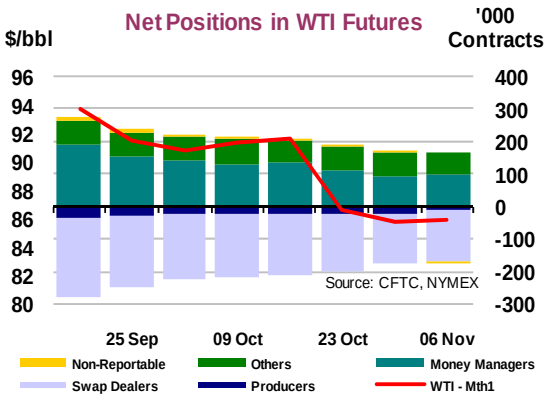
Similar trends are observed in volume comparison. Total trade volumes in CME WTI contracts fell 21% in October 2012 y-o-y and by 20% year-to-date, to 11.7 million contracts and 121 million contracts, respectively. In contrast, Brent monthly volume increased by 5.8% to 13.2 million contracts last month from 12.5 million in October 2011. Year to-date Brent volume jumped by 14% to 127 million contracts, exceeding the volume in CME WTI contracts by almost 6 million contracts.

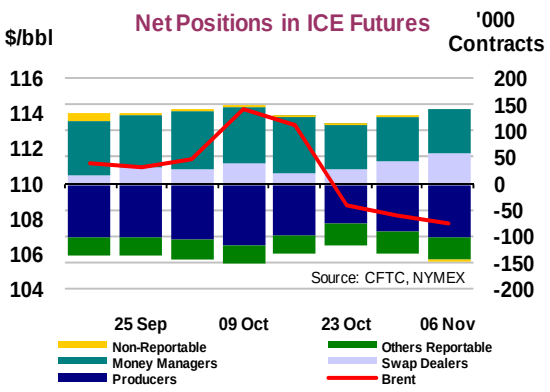
Open interest increased in all major oil contracts in October. At CME, combined open interest in WTI futures and options increased by 1.2%, to 2.56 million, while open interest in futures-only contracts increased by 3.7% to 1.61 million. Over the same period, open interest at the London ICE rose to 0.52 million for WTI futures-only contracts and increased by 7.2% in futures and options, to 0.66 million contracts. Meanwhile, open interest in ICE Brent futures contracts increased by 9.1% to 1.26 million contracts, while ICE Brent futures and options contracts rose by 5.4% to 1.58 million contracts from 2 October to 6 November 2012.





Money managers reduced their bullish bets on CME WTI contracts to the lowest level since September 2010 in response to the fall in WTI prices to a four-month low at the end of October. They cut their net long futures positions by 30% between 2 October and 6 November, to 98 840 contracts, the lowest level since the week ending 21 September 2010. The shift in money managers positions seen in September extended into October. Since their bullish bets on CME WTI contracts reached a recent peak in the week ending 18 September at 192 474, money managers liquidated their long positions in five weeks out of seven, reflecting concerns about rising inventories and weak demand and fears of political gridlock in the aftermath of the US presidential election. In the last two weeks of October alone, money managers cut their long positions by more than 30%, partly due to expectations of Hurricane Sandy's impact on refinery runs and crude inventories. Money managers in London ICE Brent contracts followed a similar pattern and reduced their bullish wagers by 23%, reaching the lowest level since July 2012, at 83 007.





Producers accounted for 19.3% of the short positions and 18.7% of the long positions in CME WTI futures-only contracts on 6 November, reducing their net short positions by 42.8% to 10 464 contracts, the lowest net short position ever recorded since the disaggregated report was made available in 2006. Swap dealers, who accounted for 24% and 33.5% of the open interest on the long side and short side, respectively, reduced their bets on falling prices by 25.3% to 153 429 contracts, the lowest net futures short positions since August 2012. Producers' and swap dealers' trading activity in the London ICE Brent contracts followed an opposite pattern from CME WTI contracts. Producers in London ICE Brent contracts reduced their net short positions from 104 778 to 100 560 contracts. Similarly, swap dealers increased their net long positions from 29 958 to 58 184 contracts.

Positions on Light Sweet Crude Oil (WTI) Futures

Thousand Contracts

06 November 2012	Long	Short	Net	Long/Short	Δ Net from Prev. Week	Δ Net Vs Last Month
Producers' Positions	301.9	312.4	-10.5	*Short*	↑ 6.9	↑ 8.1
Swap Dealers' Positions	388.3	541.8	-153.4	*Short*	↑ 4.1	↑ 45.0
Money Managers' Positions	428.9	330.1	98.8	*Long*	↑ 0.9	↓ -36.2
Others' Positions	422.2	355.2	67.0	*Long*	↓ -4.6	↓ -11.6
Non-Reportable Positions	73.5	75.4	-2.0	*Short*	↓ -7.2	↓ -5.4
Open Interest			**1614.9**		↑ 17.4	↑ 72.0

Source: CFTC

Positions on ICE Brent Crude Futures

Thousand Contracts

06 November 2012	Long	Short	Net	Long/Short	Δ Net from Prev. Week	Δ Net Vs Last Month
Producers' Positions	565.2	665.7	-100.6	*Short*	↓ -10.8	↑ 15.2
Swap Dealers' Positions	363.4	305.2	58.2	*Long*	↑ 15.4	↑ 17.9
Money Managers' Positions	203.8	120.8	83.0	*Long*	↓ -3.5	↓ -23.0
Others' Positions	90.5	131.1	-40.6	*Short*	↑ 0.8	↓ -4.6
Non-Reportable Positions	40.5	40.6	0.0	*Short*	↓ -2.0	↓ -5.5
Open Interest			**1263.5**		↑ 31.1	↑ 60.6

Source: ICE

NYMEX RBOB futures and combined open interest declined by more than 4.1% to 265 501 and 278 929, respectively, over the same period. Open interest in NYMEX heating oil futures contracts was down by 4.5% to 307 659 contracts while open interest in natural gas futures market increased by 2.4% to 1.18 million contracts.

Index investors' long exposure in commodities in September 2012 increased by $7 billion to $294.7 billion, after edging up by $6.7 billion in August. The notional value of long exposures in both on-

and off-WTI Light Sweet Crude Oil futures contracts declined by $1.9 billion in September. The number of long futures equivalent contracts increased by 2 000 to 529 000, equivalent to $49.0 billion in notional value.

Market Regulation

After more than two years of rulemaking, the implementation of some of the swaps rules adopted by the US CFTC finally took effect in the US on 12 October 2012. This is the effective date of the swap definition rule, which triggered the compliance dates for several other Commission rules, including swap dealers' (SD) and major swap participants' (MSP) registration, SD and MSP swap data reporting and record-keeping, real-time reporting of swap transaction and pricing data, and internal and external business conduct standards. However, just before the effective date, the US CFTC issued several interpretive letters and other guidance regarding rules issued under the Dodd-Frank Act. The US CFTC granted energy firms until the end of the year to convert swaps to futures contracts, thereby relieving them from costly new regulations faced by swap dealers who trade more than $8 billion of swaps in a 12-month period. Energy firms trading more than $25 million in swaps with public utilities were also given more time to comply with the swap-dealer registration requirement.

On 31 October 2012, The Financial Stability Board (FSB) published its fourth progress report on implementation of over-the-counter (OTC) derivatives market reforms. The FSB reported that although significant progress had been made in building the infrastructure mandated by the G20, such as central clearing house and swap depositories, regulatory differences among regions, including in the cross-border application of rules, will likely delay the full and timely implementation of the G20 requirements for OTC markets regulations. The objective of achieving global swaps rules is thus unlikely to be achieved by the end of 2012.

On 7 November 2012, the US, European and Asian regulators met in Washington, DC to discuss the implications of cross-border reach of the US swap rules, which was heavily criticised by European and Asian regulators and other market participants. The latter had raised their concerns about the unintended consequences of the cross-border application of swaps rules, including potential market disruption or fragmentation resulting in increased systemic risks and reduced market liquidity, as well as the issue of non-US persons facing overlapping compliance requirements in the US and in their home country, where regulations can be mutually conflicting.

A New Era in Swaps Markets?

US CFTC Chairman Gary Gensler declared last month that a new era for the swaps marketplace would start on 12 October 2012, the effective date of the new US swap definition rule. This marked the beginning of the process of swap dealer registration and swap data reporting. Mandatory clearing by swap dealers and major swap participants is expected to follow in February. The new rules are intended to bring transparency to the swaps markets and lower their risks. While the 12 October date may indeed be remembered as a milestone, a close look at the new rules suggests that lingering difficulties remain and that the process of regulatory swaps market reform may still be undergoing teething pains.

Those difficulties should not come as a surprise. There is an inherent tension between, on the one hand, the political clarity of the perceived need for, and urgency of, financial-market transparency and regulatory reform and, on the other hand, the very complexity of those market's financial instruments, and hence the great difficulty of regulatory adjustments. When G20 leaders set the broad reform agenda to be implemented by the end of 2012 to reduce systemic risk and increase transparency in the OTC derivatives markets, they might not have fully appreciated the complex nature of the instruments they were dealing with. They might also have held exaggerated hopes that new rules could easily achieve consistency across nations and win consensual international support. Instead, regulators in different countries followed their

A New Era in Swaps Markets? (continued)

own paths in designing the rules that were supposed to govern global swaps markets, without engaging into much-needed cooperation among themselves.

As indicated in the latest FSB progress report on OTC market reforms, it now appears that regulatory differences among regions, including in the cross-border application of rules, will likely delay the full and timely implementation of the G20 requirements for OTC markets regulations. The FSB urged regulators for more international coordination to provide clarity on how the rules will apply to transactions and entities for more consistent and effective oversight in OTC markets.

Although the US CFTC is still working on the final guidance on the cross-border application of Dodd-Frank swaps market reform, interpretive guidance issued in June was heavily criticised by European and Asian regulators as well as other market participants when they met in Washington, DC on 7 November 2012. They have raised their concerns about the unintended consequences of cross-border application of swaps rules, including potential market disruption or fragmentation resulting in increased systemic risks and reduced market liquidity.

Clearing requirements for standardised swaps through an intermediary company with sufficient capital, such as clearing houses or central counterparties (CCPs), a measure introduced to eliminate counterparty risk, have also become a target of criticism. Proponents of the requirement argue that central clearing has worked in the futures markets for over a century. Critics counter that the present regulatory reform and regulations may not remove the systemic risk from OTC derivatives but rather shift it from counterparties to central clearing parties. A recent IMF paper concluded that the current proposed central clearing system, far from reducing systemic risk, actually increases it.

Some observers argue that the CFTC has rushed to meet arbitrary deadlines without providing proper analysis of the costs and benefits of the new rules for swaps markets. The CFTC's last minute issuance of a series of no-action and interpretive letters and other guidance just before the 12 October deadline was interpreted as proof that the Commission had failed to develop clear and cost-effective rules, as noted by one of its Commissioners.

Market participants are already searching for ways to escape from costly and complex regulations of the swaps market. Aside from cross-border disputes, in the presence of regulatory arbitrage, there are concerns that market participants may increasingly seek out jurisdictions with less strict regulations, thereby shifting the risk rather than mitigating it, and eventually increasing the opaqueness of swaps markets rather than bringing more transparency to them.

Moving to less heavily regulated jurisdictions would be a form a physical or geographical migration of the swaps market. Another form of market migration entails converting swap positions into equivalent futures positions, resulting in what could be called the 'futurisation' of swaps. Neither the physical migration nor the futurisation of the swaps market would likely have been the market response intended by regulators.

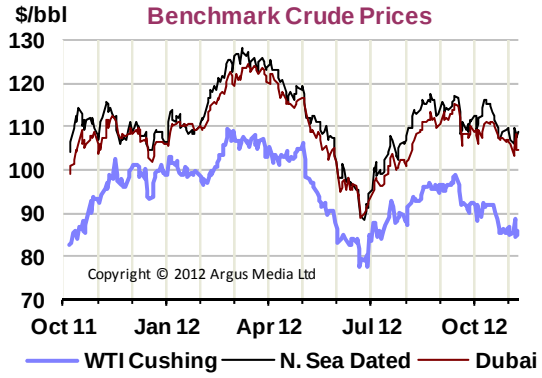
In order to reduce their clients' exposure to compliance costs associated with the new rules imposed on swap transactions and to avoid dealing with the increased complexity facing swaps market participants (compared to futures market participants for example), the Intercontinental Exchange (ICE) has already converted all existing over-the-counter (OTC) cleared energy swaps and option products, including crude and refined oil, natural gas, electric power, and natural gas liquids, into economically-equivalent futures and option products on 15 October 2012, which corresponded to the compliance date for several new swaps rules. ICE further argued that already tested futures market regulations give market participants more certainty than the untested regulation in swaps markets. Similarly, Chicago Mercantile Exchange (CME) also announced the launch of a deliverable interest rate swap futures contract on 3 December 2012, which will convert or be delivered into an OTC swap that is cleared by the CME upon expiry.

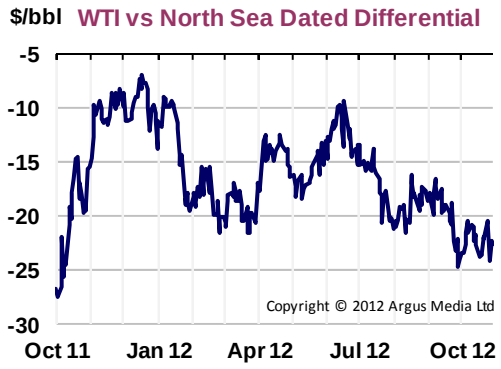
Exchanges are introducing these swap-like futures contracts to avoid complexity, cost and the lack of regulatory certainty. Of course, the success of these new products is still to be tested. Sufficient market liquidity and trader confidence are essential to the survival of these new products. If successful, a new era may indeed beging for swaps markets, though not quite in the sense intended by regulators.

Spot Crude Oil Prices

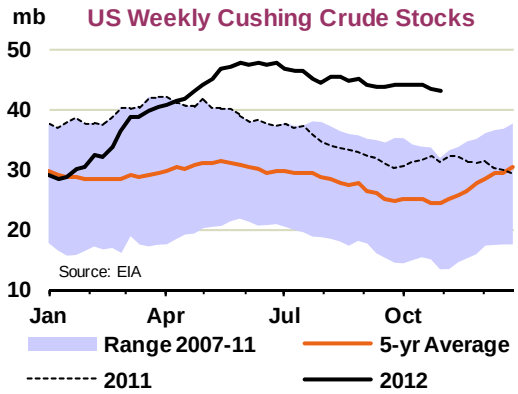
Spot crude oil markets fell to four-month lows in October, with the downtrend continuing into November. Exceptionally high crude oil inventories in the US and Asia Pacific region, combined with reduced buying by European refiners as margins in the region started to decline from their recent highs, put downward pressure on prices despite the onset of the peak heating oil demand period. Spot prices for regional benchmark crudes were down in a relatively narrow range of -$0.65 to -$2.35/bbl in October, with US WTI the exception. WTI was down a steeper $5/bbl, to an average$89.52/bbl. By early November, spot crude prices tumbled a further $3-5/bbl amid post-election worries over the looming US fiscal cliff and mounting pessimism over the economic outlook for China and the euro zone. However, the onset of winter heating oil demand may yet revive prices for distillate-rich crudes.

Spot prices for North Sea Dated were off month-on-month by around $1.50/bbl to an average $116.60/bbl in October and by the second week of November were down a further $2.50/bbl to around $108/bbl. After months of supply delays, North Sea volumes are expected to recover by end month, which is adding downward pressure on prices. Dubai crude was off about $2.35/bbl to an average $108.79/bbl in October and down a further $3.50/bbl in November on ample supplies of Middle East crudes on offer and as demand for heavier grades receded.





WTI's discount to North Sea Brent widened again in October, to around $22.10/bbl on average compared with $18.45/bbl in September. WTI's relative weakness partly reflected the continued high crude oil inventories at the Cushing, Oklahoma storage depot. Total US crude oil inventories have been well above the five-year average since last April. Adding to supply, imports from Canada increased following the restart of the 590 kb/d Keystone pipeline while increased supplies of Bakken crude fell relative to WTI.

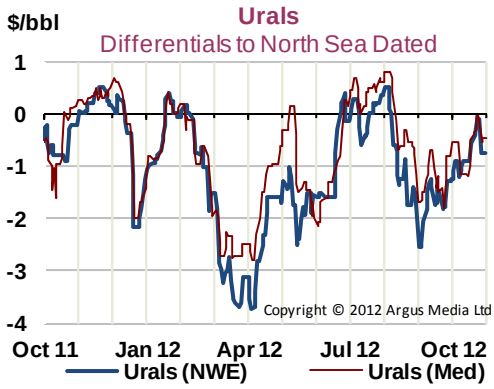


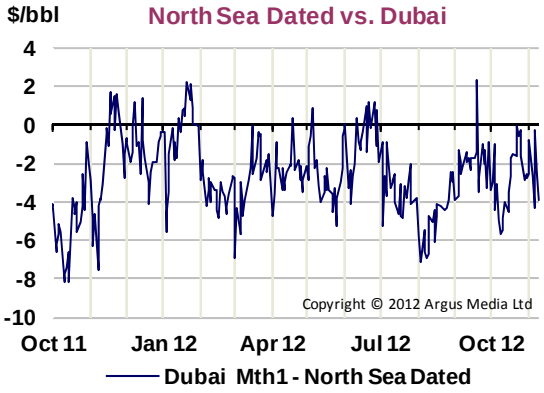
While Hurricane Sandy wreaked havoc on the US East Coast oil infrastructure, the storm also halted crude and product flows from the US Gulf Coast, adding further pressure on crude prices (*see Refining,*

'*Sandy Causes Havoc to US East Coast Supply Network*'). The end of the US gasoline season also muted East Coast refiner demand for West African grades.

European spot crude markets were under pressure from reduced demand for higher-priced prompt barrels. Smaller European refiners have been hard hit by steep financing costs, opting to keep working inventories at minimal levels.

However, Urals prices strengthened to near parity with Dated Brent in early November, in part due to reduced exports as domestic demand increased after Russian refiners returned from maintenance. A shift away from exports to the Mediterranean to the more lucrative ESPO pipeline to Asia as well as the BPS-2 to the Baltic region also propped up Urals prices in Europe. Urals was trading just below Brent by around -$0.05/bbl in early November compared to a monthly average of -$0.92/bbl in October and -$1.15/bbl in September. Russian seaborne cargoes exported via Ust Luga are ramping up to their 600 kb/d capacity, which will is likely to pressure the Urals-Dated Brent differential.





In Asia, ample supplies of Middle East grades weighed on markets in October as demand for fuel-oil rich crudes weakened. Moreover, increased imports of Iranian crude by both China and South Korea, at an estimated 500 kb/d, muted demand for alternative crudes. Spot Dubai's discount to Brent deepened to around -$2.80/bbl in October compared with around $1.85/bbl in September. The end of the bitumen season has partly eroded the seasonal premium for asphalt-rich crudes. The steeper Brent/Dubai spread, a barometer of demand for light sweet grades versus heavier sour supplies, may yet encourage refiners to buy more Dubai linked crudes in coming months versus higher priced African grades pegged to Brent.

Spot Crude Oil Prices and Differentials

(monthly and weekly averages, $/bbl)

	Aug	Sep	Oct	Oct-Sep Avg Chg	%	Week Commencing: 08 Oct	15 Oct	22 Oct	29 Oct	05 Nov
Crudes										
North Sea Dated	113.36	112.95	111.60	-1.35	-1.2	114.83	113.51	108.16	108.83	108.01
Brent (Asia) Mth 1	113.04	113.81	112.29	-1.51	-1.3	113.72	114.57	109.97	109.66	107.55
WTI (Cushing) Mth 1	94.12	94.51	89.52	-4.98	-5.3	91.38	91.64	86.47	85.88	85.99
Urals (Mediterranean)	113.57	111.81	110.68	-1.13	-1.0	114.23	112.51	107.16	108.60	107.54
Dubai	108.62	111.13	108.79	-2.34	-2.1	109.84	110.69	107.35	106.52	105.25
Tapis (Dated)	116.41	116.75	116.12	-0.64	-0.5	118.93	117.83	112.76	113.81	113.01
Differential to North Sea Dated										
WTI (Cushing)	-19.24	-18.45	-22.08	-3.63		-23.45	-21.87	-21.69	-22.94	-22.02
Urals (Mediterranean)	0.21	-1.15	-0.92	0.23		-0.60	-1.00	-1.00	-0.23	-0.47
Dubai	-4.74	-1.83	-2.81	-0.98		-4.99	-2.82	-0.81	-2.30	-2.75
Tapis (Dated)	3.05	3.80	4.52	0.72		4.10	4.32	4.60	4.98	5.00
Prompt Month Differential										
Forward Cash Brent Mth1-Mth2	1.20	0.55	0.81	0.26		0.96	0.76	0.78	0.85	0.82
Forward WTI Cushing Mth1-Mth2	-0.29	-0.35	-0.40	-0.05		-0.41	-0.44	-0.31	-0.51	-0.47
Forward Dubai Mth1-Mth2	0.34	0.83	0.47	-0.36		0.48	0.28	0.92	0.51	1.30

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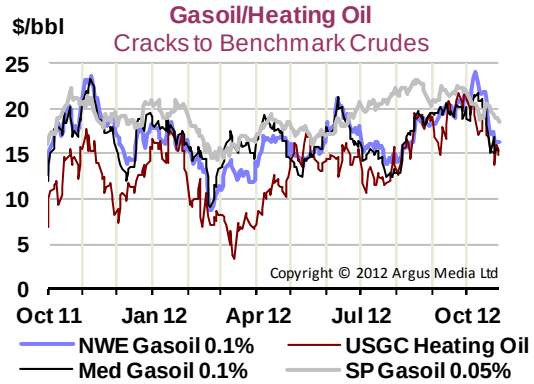
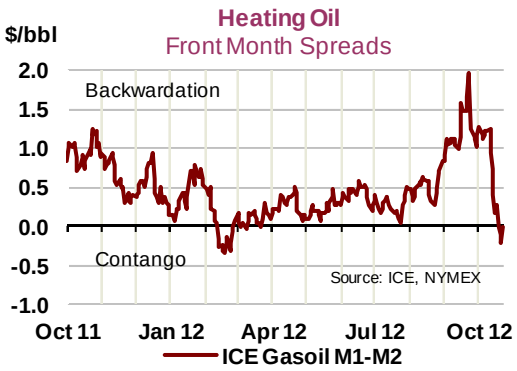
Spot Product Prices

Middle distillate markets outshone other products in October ahead of the peak winter heating season in the Northern Hemisphere, continued demand for diesel and exceptionally low inventory levels in Europe and the US. Strong demand from Latin America is also supporting US distillate margins. In Asia, only Japan saw improved distillate cracks.

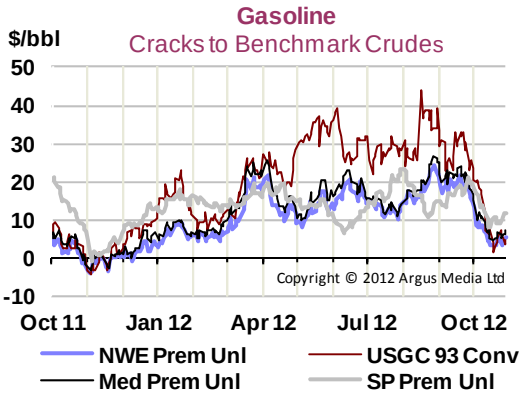
Gasoil crack spreads in Atlantic basin markets rose by $0.50-2.00/bbl on average in October from already robust levels but much of the increase came early in the month, with growing pessimistic sentiment about demand growth pressuring cracks in the second half of the month.

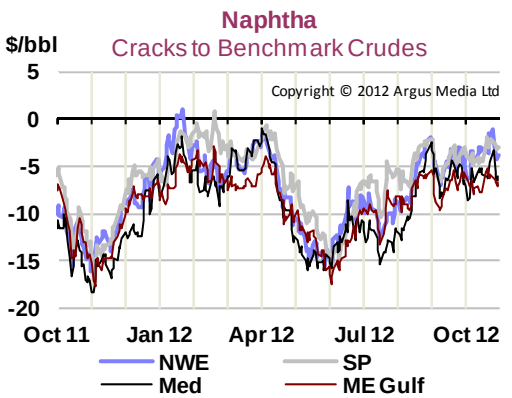
In the US, heating oil crack spreads in New York were a steep $42.40/bbl on average in October while ULSD at the US Gulf Coast was running above $22/bbl in October. However, exceptionally low heating stocks in the East Coast region is a major prop under crack spreads. Heating oil inventories in PADD1 were down 35% below the five-year average by early November. The relentless demand from Latin American for distillate supplies continues to provide significant support to US crack spreads, with exports to the region now topping 1 mb/d. In the US Gulf Coast heating oil crack spreads to Mars increased by around $1.85/bbl in October to $26/bbl.





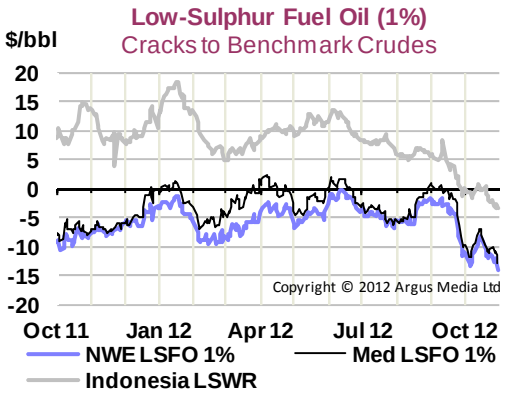
European gasoil cracks in October averaged between $20-$21/bbl in both Rotterdam and the Mediterranean. The sudden shift of gasoil futures to contango in October may discourage stockbuilding ahead of winter, leaving markets excepting tight. ICE gasoil The onset of early winter weather in Germany at a time when refineries were in turnaround also supported gasoil prices. Diesel cracks were supported by strong demand from Germany, France and the UK. In Central Europe, crude pipeline bottlenecks reduced refinery output, in both Germany and the Czech Republic *(see Refining, 'Pipeline Bottlenecks Create IEA Supply Disruptions').*

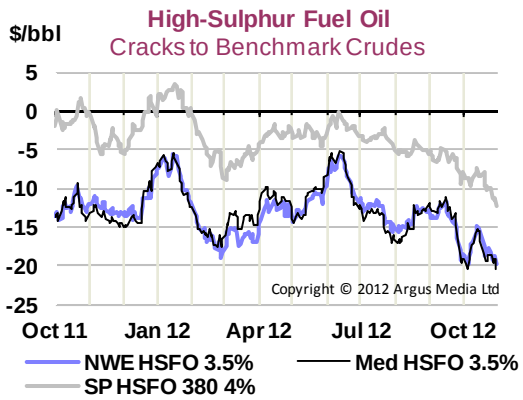




Gasoline markets in the Atlantic basin markets, on the other hand, continued to weaken in October after the end of the driving season, with monthly crack spreads falling $9.50-$12.40/bbl in the US and Europe. By contrast, premium gasoline cracks in Singapore were slightly firmer, up by just under $0.78/bbl to $15.33/bbl for premium unleaded. Naphtha cracks in Singapore also firmed month on month, by around $0.35/bbl but were still in negative territory at an average -$3.77/bbl in October.

Fuel oil markets were weaker across all regions in October on higher inventories in both Europe and Asia. However, in Europe increased bunker demand supported crack spreads in early November. In Asia, with the exception of South Korea, reduced demand from utilities for high-sulphur fuel and increased offerings from Middle East refiners depressed crack spreads further.





Spot Product Prices

(monthly and weekly averages, $/bbl)

	Aug	Sep	Oct	Oct-Sep		Week Commencing:					Aug	Sep	Oct
				Chg	%	08 Oct	15 Oct	22 Oct	29 Oct	05 Nov			
Rotterdam, Barges FOB											**Differential to Dated Brent**		
Premium Unl 10 ppm	128.12	133.45	122.63	-10.82	-8.1	130.52	121.92	113.35	112.64	112.58	14.76	20.49	11.03
Naphtha	105.03	108.63	107.57	-1.06	-1.0	110.08	109.13	104.90	106.09	104.70	-8.33	-4.32	-4.03
Jet/Kerosene	131.97	135.19	132.76	-2.43	-1.8	136.40	135.28	128.78	127.65	125.56	18.61	22.23	21.16
ULSD 10ppm	133.78	137.29	137.99	0.70	0.5	141.19	138.96	135.56	134.35	132.71	20.42	24.34	26.39
Gasoil 0.1%	128.98	132.06	132.83	0.77	0.6	135.84	135.88	130.29	128.09	124.45	15.62	19.11	21.24
LSFO 1%	108.11	110.43	101.84	-8.59	-7.8	103.74	101.25	99.24	97.35	95.38	-5.25	-2.52	-9.75
HSFO 3.5%	98.95	100.03	94.63	-5.40	-5.4	96.18	95.33	92.85	90.72	89.09	-14.41	-12.93	-16.97
Mediterranean, FOB Cargoes											**Differential to Urals**		
Premium Unl 10 ppm	129.43	134.68	123.83	-10.85	-8.1	131.77	123.19	114.56	113.82	113.75	15.86	22.87	13.15
Naphtha	102.73	106.21	104.62	-1.59	-1.5	107.34	106.11	101.61	103.05	101.95	-10.84	-5.60	-6.06
Jet Aviation fuel	130.74	133.93	130.91	-3.03	-2.3	134.77	133.27	126.48	125.67	123.91	17.17	22.13	20.23
ULSD 10ppm	133.07	136.40	134.74	-1.65	-1.2	138.41	136.76	130.74	128.81	126.81	19.50	24.59	24.06
Gasoil 0.1%	128.76	131.26	130.62	-0.64	-0.5	133.73	132.97	128.05	125.72	123.13	15.19	19.45	19.94
LSFO 1%	108.93	111.52	102.54	-8.98	-8.0	104.53	101.81	99.68	98.07	96.34	-4.64	-0.29	-8.14
HSFO 3.5%	98.12	99.33	93.45	-5.88	-5.9	95.11	94.00	91.42	89.55	88.17	-15.45	-12.48	-17.23
US Gulf, FOB Pipeline											**Differential to LLS**		
Super Unleaded	142.34	143.54	128.28	-15.26	-10.6	135.99	130.69	115.96	110.39	112.04	30.58	30.39	18.02
Unleaded	128.59	127.73	116.49	-11.24	-8.8	126.52	114.86	105.50	103.47	105.18	16.83	14.58	6.23
Jet/Kerosene	132.50	133.72	130.37	-3.35	-2.5	134.32	132.12	125.87	123.71	122.37	20.74	20.57	20.11
ULSD 10ppm	132.15	133.95	132.53	-1.43	-1.1	136.49	133.67	128.19	126.37	123.94	20.39	20.80	22.26
No. 6 3%*	99.54	100.88	96.16	-4.72	-4.7	97.54	97.06	94.91	92.41	92.17	-12.22	-12.27	-14.11
Singapore, FOB Cargoes											**Differential to Dubai**		
Premium Unleaded	127.34	125.78	124.12	-1.66	-1.3	129.48	126.15	117.68	116.40	116.11	18.72	14.65	15.33
Naphtha	103.17	106.99	105.02	-1.98	-1.8	106.43	106.37	102.99	104.14	102.41	-5.44	-4.13	-3.77
Jet/Kerosene	129.55	132.58	130.10	-2.48	-1.9	132.29	131.96	127.26	126.78	123.80	20.93	21.46	21.31
Gasoil 0.05%	130.61	132.61	129.81	-2.80	-2.1	131.91	131.39	126.59	126.82	124.16	21.99	21.49	21.03
LSWR Cracked	115.16	116.66	108.93	-7.72	-6.6	109.34	109.80	107.70	105.28	102.38	6.54	5.53	0.14
HSFO 180 CST	106.04	107.86	102.45	-5.41	-5.0	102.95	103.49	101.24	98.59	95.51	-2.58	-3.27	-6.34
HSFO 380 CST 4%	103.99	105.56	100.67	-4.89	-4.6	101.32	101.58	99.38	96.98	93.99	-4.63	-5.57	-8.12

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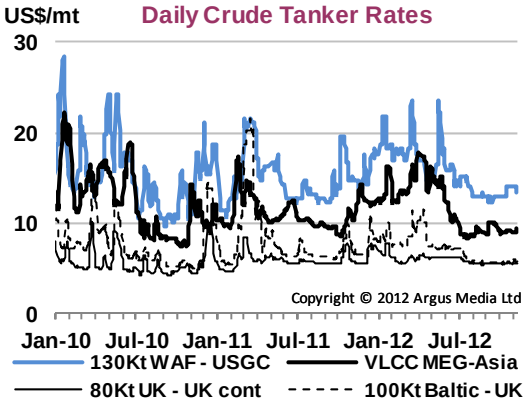
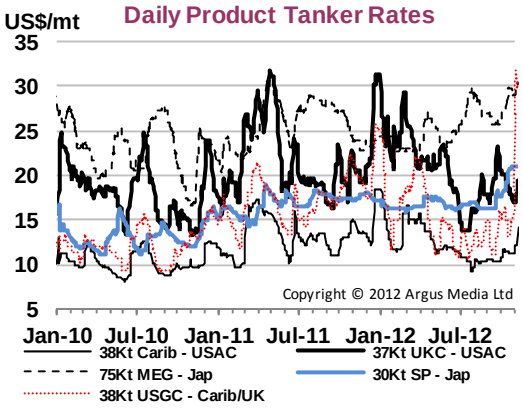
Freight

Contrasting fortunes in crude and product tanker markets have been evident over September and October as rates for crude carriers remained in the doldrums while those for product tanker rates firmed. Following a similar pattern to 2011, crude tanker markets have remained extremely weak over the autumn with only bunker fuel price rises providing any upward momentum. On many routes, these rates have translated into negative earnings but as in 2011 there is still little appetite for either scrappage or the laying up of vessels due to carriers being required to maintain their approvals with exporters.





Middle Eastern oil in transit has fallen steadily from mid-summer onwards in tandem with the glut of available vessels rates on trades out of the region have been pressured. The benchmark Middle East Gulf – Asia route remained below $10/mt from early-August until late October, with these dour rates translating into negligible or even negative TCE's. A similar overhang of vessels in the Baltic also prevented healthy exports from Primorsk and Ust Luga from providing any upward momentum.

Product tanker markets have experienced a resurgence recently with healthy demand in Asia helping to boost rates. In the East, rates on the Middle East Gulf – Japan route have increased steadily over the past couple of weeks breaching $30/mt, a level not seen since April-2011, in the second week of November. Additionally, strong, recent intra-regional trade centred around flows in and out of Singapore has propelled the Singapore – Japan rate to above $21/mt in early November, a level not reached since end-2008. In the Atlantic Basin, rates on the benchmark UK – US Atlantic coast trade fell from their September highs as demand was not sustained although indications are that they are receiving a small boost in the wake of Hurricane Sandy, firming to over $19/mt at the time of writing.

The effect of Hurricane Sandy, which hit the US Eastern Seaboard on 29 October, was immediately felt in clean product tanker markets. Since shuttering a significant portion of refining capacity, PADD 1 markets have become ever more reliant on product deliveries from Gulf Coast refiners via the Colonial pipeline. As of the first week of November, the pipeline was closed North of Linden along with a number of fuel distribution terminals and the 240 kb/d Bayway and 70 kb/d Port Reading refineries, which prompted the US Department of Homeland Security to issue a temporary Jones Act waiver. This permits foreign-flagged ships to perform US coastal trade and thus transport product north from the Gulf Coast region. Available vessels rapidly became scarce prompting rates on the USGC – Caribbean route to double to over $30/mt in four days.

REFINING

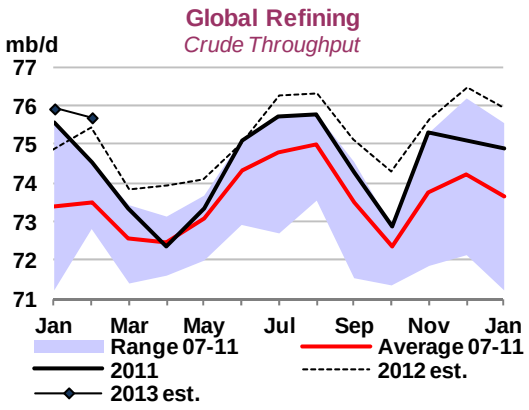
Summary

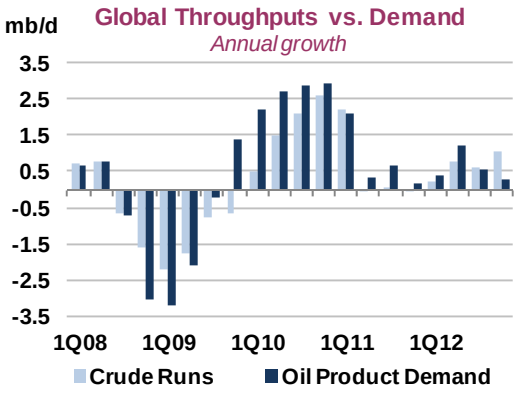
- **Record-high Chinese refinery runs in September lifted average 3Q12 global throughput estimates to 75.9 mb/d**. Chinese throughputs rebounded in September and October after seven months of subdued growth due to improved refinery profitability and low product inventories. Third-quarter runs were also supported by strong OECD margins, especially in Europe, while US refinery operations were curtailed by Hurricane outages in September. A seasonal dip is expected to leave 4Q12 runs at 75.5 mb/d, 1.1 mb/d above last year, compared with y-o-y growth of 0.6 mb/d in 3Q12.

- **OECD crude runs fell by 1.2 mb/d in September, to 36.8 mb/d, mostly on lower runs in the Americas.** Hurricane shutdowns on the Gulf Coast and outages in California and the Midwest - both scheduled and unscheduled - curbed runs in the United States, as did seasonal maintenance in Japan and Europe. Surging refinery margins nevertheless provided partial support, in particular to European runs. OECD runs likely fell in October, as margins declined and seasonal maintenance increased.

- **US East Coast product supplies were severely disrupted in late October, as Hurricane Sandy wreaked havoc to regional distribution and logistical networks.** The storm, which made landfall in New Jersey on 29 October, forced several refineries to shut or reduce rates, and led to widespread fuel shortages as pipeline flows, tanker traffic, terminal operations and retail stations were disrupted by flooding and power outages.

- **Refinery margins fell sharply in October as product prices retreated faster than benchmark crude prices**. Despite a $3.50/bbl average decline, European cracking margins remained robust compared with recent historical trends, at around $9/bbl. Gulf Coast margins fell by a similar amount. Builds in product inventories in the face of continued demand weakness saw margins fall back from recent highs and by end-month simple margins had fallen back into the red after several months of healthier returns.





Global Refinery Overview

Global refinery runs have been revised up by 60 kb/d for 3Q12, due to record-high Chinese September throughputs as well as slightly stronger readings for the Middle East. Global refinery runs are now estimated at 75.9 mb/d for the quarter, 635 kb/d higher than the same period in 2011. Annual growth continues to be centred in non-OECD countries, in particular in Asia, but was also strong in Europe, where refinery runs increased by 300 kb/d in the quarter, their strongest annual increase since the rebound of 2010. Surging refinery margins, following recent capacity rationalisation and depleted inventories, enticed European refiners to increase discretionary throughputs.

Global Refinery Crude Throughput[1 2]

(million barrels per day)

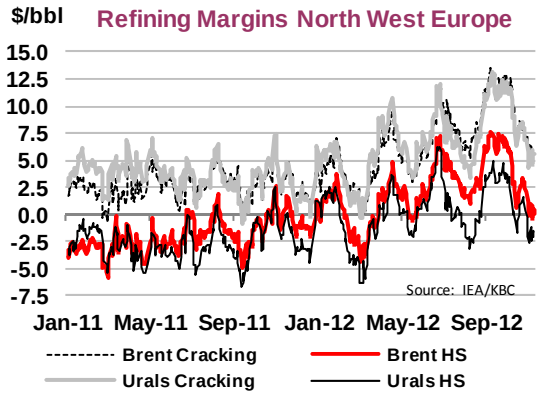
	2Q2012	Jul 12	Aug 12	Sep 12	3Q2012	Oct 12	Nov 12	Dec 12	4Q2012	Jan 13	Feb 13
Americas	**18.2**	18.8	18.4	17.6	**18.3**	18.0	18.1	18.3	**18.1**	17.6	17.8
Europe	**11.9**	12.8	12.8	12.5	**12.7**	12.1	12.2	12.4	**12.2**	12.2	11.8
Asia Oceania	**6.6**	6.7	6.8	6.7	**6.8**	6.4	6.6	6.9	**6.6**	7.0	7.0
Total OECD	**36.7**	**38.3**	**38.0**	**36.8**	**37.7**	**36.4**	**36.9**	**37.5**	**37.0**	**36.8**	**36.6**
FSU	**6.4**	6.7	6.7	6.5	**6.6**	6.3	6.7	6.7	**6.6**	6.6	6.5
Non-OECD Europe	**0.5**	0.5	0.5	0.5	**0.5**	0.5	0.5	0.5	**0.5**	0.5	0.5
China	**9.0**	8.9	8.9	9.4	**9.1**	9.4	9.4	9.6	**9.5**	9.7	9.7
Other Asia	**9.3**	9.3	9.3	9.3	**9.3**	9.3	9.4	9.5	**9.4**	9.6	9.9
Latin America	**4.7**	4.7	4.7	4.5	**4.6**	4.5	4.6	4.7	**4.6**	4.6	4.5
Middle East	**5.8**	6.0	6.2	6.0	**6.0**	5.9	5.9	5.9	**5.9**	6.0	5.8
Africa	**2.2**	2.0	2.0	2.1	**2.0**	2.1	2.1	2.1	**2.1**	2.2	2.2
Total Non-OECD	**37.7**	**38.0**	**38.3**	**38.3**	**38.2**	**37.9**	**38.7**	**38.9**	**38.5**	**39.1**	**39.1**
Total	**74.4**	**76.3**	**76.3**	**75.1**	**75.9**	**74.3**	**75.6**	**76.5**	**75.5**	**75.9**	**75.7**

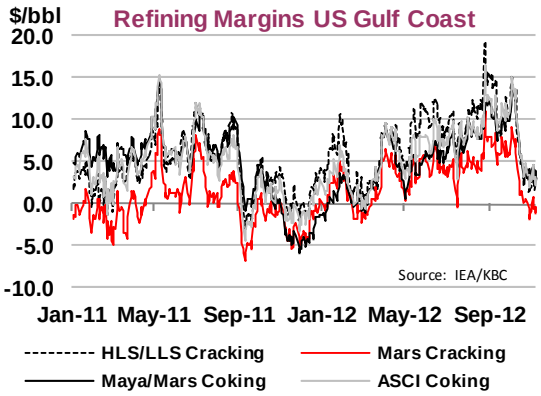
1 Preliminary and estimated runs based on capacity, known outages, economic run cuts and global demand forecast

2 From the report dated 10 August, 2012 OECD Americas include Chile and OECD Asia Oceania includes Israel.

For 4Q12, the estimate of global throughput is unchanged from last month's report, at 75.5 mb/d. Higher-than-expected US and Chinese runs in October offset lower forecasts for Latin America, where problems continue to plague Venezuelan refineries. Weaker African estimates, reflecting problems in Libya, maintenance in South Africa and lower reported data for Nigeria and Egypt in August also contributed. On average, y-o-y growth is expected to pick up momentum to 1.1 mb/d in 4Q12, almost entirely accounted for by non-OECD Asia. New capacity commissioned in India earlier this year and new units coming on line in China at the end of 2012 support the recovery. First-quarter 2013 throughputs could be further boosted as Saudi Arabia's 400 kb/d Jubail refinery starts trial runs and Motiva's 325 kb/d expansion on the US Gulf Coast and Chevron's Richmond refinery in California come back on line after extended outages.

Refinery margins were a mixed bag in September but generally moved lower in October. In Europe, margins rose by an average of $4.40/bbl in September, to around $12/bbl for cracking configurations, and to $3.15/bbl-$8.75/bbl for simple refineries. European margins in September were the highest recorded since 2008, and in some cases even higher. US Gulf Coast margins were mixed, while Midwest refineries recorded declines of up to $7.90/bbl. Despite the drops, Midwest refineries remained among the world's most profitable, thanks to discounted crude and natural gas supplies. Singapore also saw diverging trends in September, with Dubai margins falling and Tapis improving month-on-month.





In October, margins plummeted across the board, as declines in product prices exceeded those in spot crude prices. Margins in both Europe and the US Gulf Coast shed more than $3/bbl. In the US Midcontinent coking margins declined by a steep $6.25/bbl for WTI, but inched up marginally by $0.60/bbl for a 30% Western Canadian Select/70% Bakken blend. In Singapore, Dubai hydrocraking margins improved marginally, while other benchmarks declined. Yet despite this significant deterioration in netbacks, margins remained above recent historical trends. European margins averaged almost $9/bbl for cracking refineries, far above regional trends, compared to a range of $2.8/bbl - $8.60/bbl on the Gulf Coast. In comparison, US Midcontinent refiners profited a gross $27 for each barrel refined.

IEA/KBC Global Indicator Refining Margins[1]

($/bbl)

	Monthly Average					Change	Average for week ending:				
	Jul 12	Aug 12	Sep 12	Oct 12		Oct 12-Sep 12	12 Oct	19 Oct	26 Oct	02 Nov	09 Nov
NW Europe											
Brent (Cracking)	7.97	7.83	12.31	9.03	↓	-3.28	9.94	7.77	7.85	6.16	5.77
Urals (Cracking)	6.65	6.40	11.83	8.64	↓	-3.19	9.08	7.51	7.93	5.52	5.51
Brent (Hydroskimming)	3.62	2.94	6.83	3.16	↓	-3.67	3.16	1.66	2.95	0.92	0.29
Urals (Hydroskimming)	0.28	-0.74	3.79	0.79	↓	-3.00	0.27	-0.23	1.18	-1.58	-1.77
Mediterranean											
Es Sider (Cracking)	10.72	9.88	13.64	9.86	↓	-3.79	10.67	8.80	8.53	6.55	5.94
Urals (Cracking)	7.42	6.78	11.92	9.34	↓	-2.58	9.48	8.76	8.69	5.92	5.33
Es Sider (Hydroskimming)	6.57	5.27	8.76	3.82	↓	-4.94	4.17	2.30	2.90	0.81	0.21
Urals (Hydroskimming)	0.07	-1.33	3.16	-0.08	↓	-3.24	-0.58	-0.92	-0.05	-2.98	-3.47
US Gulf Coast											
50/50 HLS/LLS (Cracking)	8.48	12.28	11.36	7.40	↓	-3.96	11.86	5.59	2.87	2.20	2.63
Mars (Cracking)	3.71	5.68	6.74	3.31	↓	-3.43	6.48	1.70	0.26	-0.96	-0.34
ASCI (Cracking)	3.32	5.17	6.18	2.81	↓	-3.37	5.91	1.25	-0.11	-1.52	-0.84
50/50 HLS/LLS (Coking)	9.64	13.37	12.55	8.61	↓	-3.93	13.55	6.78	3.50	2.99	3.39
50/50 Maya/Mars (Coking)	6.63	9.36	9.89	7.73	↓	-2.16	11.69	6.07	3.77	3.61	3.99
ASCI (Coking)	7.51	9.98	10.93	8.00	↓	-2.93	12.17	6.27	3.85	2.82	3.21
US Midcon											
WTI (Cracking)	26.99	34.42	32.51	26.48	↓	-6.03	30.21	19.49	24.05	25.02	25.63
30/70 WCS/Bakken (Cracking)	29.73	32.84	26.18	26.66	↑	0.47	30.68	17.71	27.50	33.24	33.70
Bakken (Cracking)	31.58	36.93	29.09	26.87	↓	-2.22	28.68	17.99	27.18	33.28	33.86
WTI (Coking)	28.58	36.16	34.13	27.89	↓	-6.24	32.02	20.56	25.03	26.34	26.94
30/70 WCS/Bakken (Coking)	32.40	36.23	29.14	29.83	↑	0.69	34.53	20.48	30.05	36.30	36.60
Bakken (Coking)	31.96	37.34	29.45	27.12	↓	-2.34	29.13	18.03	27.20	33.48	34.08
Singapore											
Dubai (Hydroskimming)	1.35	1.81	1.22	0.46	↓	-0.75	1.10	-0.12	-0.51	-0.84	-1.97
Tapis (Hydroskimming)	2.54	2.53	4.03	1.42	↓	-2.61	0.77	1.24	1.80	-0.07	-1.41
Dubai (Hydrocracking)	6.04	7.68	7.13	7.18	↑	0.05	8.48	6.83	5.46	5.60	4.85
Tapis (Hydrocracking)	4.01	5.22	6.88	5.54	↓	-1.34	5.50	5.55	5.28	3.76	2.75

1 Global Indicator Refining Margins are calculated for various complexity configurations, each optimised for processing the specific crude(s) in a specific refining centre. Margins include energy cost, but exclude other variable costs, depreciation and amortisation. Consequently, reported margins should be taken as an indication, or proxy, of changes in profitability for a given refining centre. No attempt is made to model or otherwise comment upon the relative economics of specific refineries running individual crude slates and producing custom product sales, nor are these calculations intended to infer the marginal values of crude for pricing purposes.

Source: IEA, KBC Advanced Technologies (KBC)

Chinese refiners also reported improved refining economics in September. The National Development and Reform Commission (NDRC) adjusted retail product prices for the seventh time this year. Retail gasoline prices were raised 6.1%, to 0.41 yuan/litre, while diesel prices were raised 6.5% to 0.46 yuan/litre. As a result, Sinopec's refining margin reportedly returned to positive levels for the first time since 4Q10. Sinopec's refining segment reported third quarter earnings of 3 billion yuan versus a loss of 9.3 billion yuan in 2Q12. PetroChina on the other hand reported continued operational losses in 3Q12, though its situation also improved from the same period last year and for 2Q12.

OECD Refinery Throughput

OECD crude throughputs fell by 1.2 mb/d in September versus August, with most of the decline in the Americas. US crude intake fell 0.6 mb/d m-o-m, to 14.7 mb/d, as Gulf Coast refineries affected by Hurricane Isaac in late August remained offline or at reduced rates for part of September. This also represented a 0.6 mb/d decline y-o-y. Canadian and Mexican throughputs also fell, taking the regional total 940 kb/d below year-earlier levels. European crude runs fell by 300 kb/d m-o-m, in line with previous estimates, as the start of autumn maintenance was only partly offset by increased discretionary runs fuelled by surging margins. Refinery throughputs in Asia Oceania fell seasonally as maintenance picked up in Japan. Overall, the September preliminary data was 150 kb/d below our previous forecast, while July and August data were largely in line with preliminary estimates overall.

Refinery Crude Throughput and Utilisation in OECD Countries
(million barrels per day)

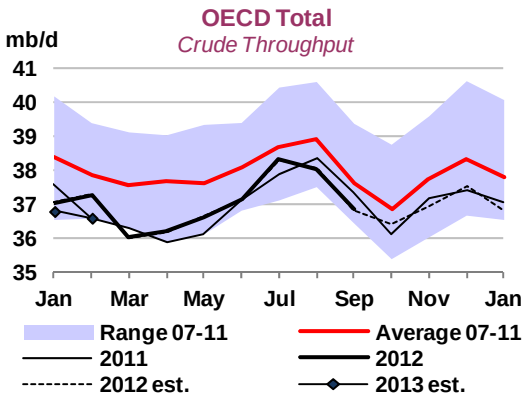
							Change from		Utilisation rate[1]	
	Apr 12	May 12	Jun 12	Jul 12	Aug 12	Sep 12	*Aug 12*	*Sep 11*	Sep 12	Sep 11
US[2]	14.61	15.18	15.63	15.66	15.26	14.70	-0.56	-0.58	83.1%	87.5%
US Virgin Islands	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.30	0.0%	84.9%
Canada	1.65	1.59	1.64	1.76	1.80	1.68	-0.12	-0.06	91.4%	94.6%
Chile	0.15	0.17	0.17	0.16	0.12	0.16	0.04	-0.02	69.8%	79.4%
Mexico	1.22	1.27	1.25	1.23	1.21	1.12	-0.09	0.01	67.7%	66.9%
OECD Americas	**17.63**	**18.21**	**18.69**	**18.80**	**18.39**	**17.65**	**-0.74**	**-0.94**	**82.5%**	**87.8%**
France	1.04	1.03	1.24	1.38	1.36	1.12	-0.25	-0.22	71.6%	80.1%
Germany	1.91	1.88	1.81	1.96	1.98	2.04	0.05	0.12	95.5%	89.8%
Italy	1.33	1.49	1.44	1.60	1.63	1.57	-0.06	-0.01	74.9%	72.1%
Netherlands	1.07	1.09	1.06	1.04	1.03	1.06	0.03	0.02	82.2%	80.6%
Spain	1.05	1.01	1.10	1.32	1.25	1.25	0.00	0.16	82.6%	77.3%
United Kingdom	1.52	1.44	1.43	1.44	1.41	1.31	-0.09	-0.16	63.0%	63.8%
Other OECD Europe	3.90	3.92	4.00	4.02	4.15	4.16	0.02	0.40	84.6%	76.2%
OECD Europe	**11.81**	**11.86**	**12.08**	**12.76**	**12.81**	**12.51**	**-0.30**	**0.33**	**80.2%**	**76.5%**
Japan	3.31	3.00	2.82	3.15	3.29	3.11	-0.18	-0.03	67.7%	68.4%
South Korea	2.48	2.63	2.59	2.63	2.62	2.60	-0.02	0.10	95.0%	91.3%
Other Asia Oceania	0.96	0.93	0.95	0.97	0.93	0.97	0.04	0.00	79.0%	79.1%
OECD Asia Oceania	**6.75**	**6.56**	**6.36**	**6.75**	**6.84**	**6.68**	**-0.16**	**0.07**	**78.0%**	**77.3%**
OECD Total	**36.20**	**36.63**	**37.13**	**38.31**	**38.04**	**36.84**	**-1.20**	**-0.54**	**80.9%**	**81.3%**

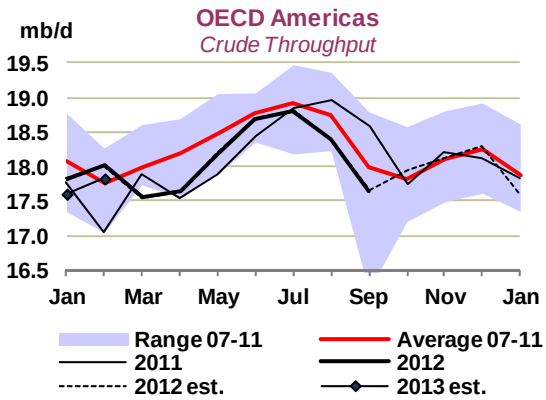
1 Expressed as a percentage, based on crude throughput and current operable refining capacity

2 US50

3 OECD Americas includes Chile and OECD Asia Oceania includes Israel. OECD Europe includes Slovenia and Estonia, though neither country has a refinery

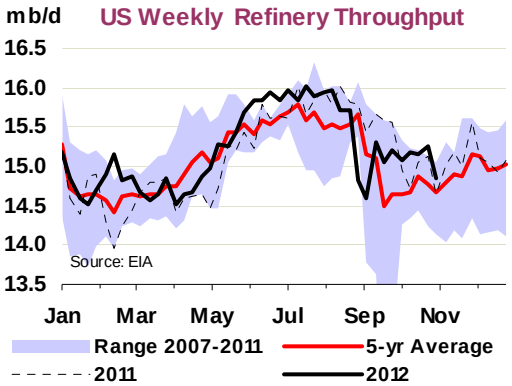
Preliminary indications suggest that runs continued to decline in October, but by somewhat less than the previous year and earlier expectations. US throughputs, in particular, recovered faster than expected in October from hurricane disruptions in August and September, and actually increased counter-seasonally month-on-month. In contrast, European runs appear to have fallen steeply, due to heavy maintenance and a sharp deterioration of margins throughout the month. Simple Urals margins plunged back into negative territory, which may have led some refiners to trim operating rates. Despite the reduction in refining activity, European October runs are expected to retain year-on-year growth of over 200 kb/d, averaging 12.1 mb/d. In OECD Asia Oceania, refinery throughputs also seem to have fallen steeply amid higher Japanese plant maintenance. In all, OECD runs are forecast to fall to 36.4 mb/d, some 410 kb/d less than in September, but 300 kb/d above the same month in 2011. 4Q12 OECD throughputs have been raised 120 kb/d since last month's report, to 37.0 mb/d, compared with 37.7 mb/d in 3Q12.

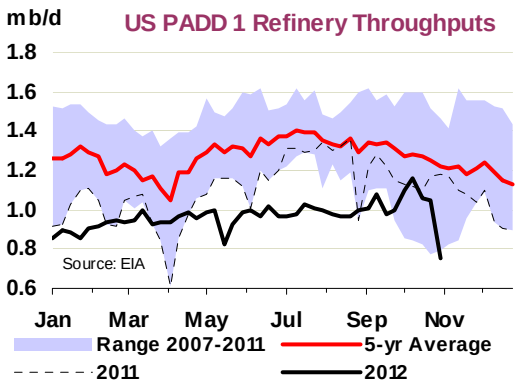




Refinery crude intake in the **OECD Americas** fell 740 kb/d in September, to 17.6 mb/d, almost 1 mb/d lower than a year earlier. US crude runs led the decline, both on a monthly and annual basis. The shutdown of Hovensa's 350 kb/d St. Croix refinery earlier this year was a contributing factor. While the US decline spanned all regions, the US Gulf Coast was hit hardest in late August and early September as Hurricane Isaac forced precautionary shutdowns of significant refining capacity in the storm's path. On a monthly basis, Gulf Coast runs fell 280 kb/d to 7.4 mb/d in September. Throughputs also fell in the Midcontinent (-160 kb/d) and on the West Coast (-95 kb/d) due to scheduled and unscheduled outages.

In October, both Gulf Coast and US runs recovered, lifting the average for the OECD Americas by an estimated 300 kb/d from September. Runs were again curbed at end-October, however, as Hurricane Sandy hit the Atlantic Coast on 29 October, forcing several East Coast refineries to shut down or reduce rates. Severe flooding and power outages caused widespread disruptions to product supplies to the region, though the damage on the refinery industry itself appears more limited. At the time of writing, only Phillips66's 238 kb/d Bayway and Hess' 70 kb/d Port Reading refineries in New Jersey remained shut, and was expected to resume runs within a few weeks. Prior to the storm shutdowns, US East coast refinery crude intake had reached 1.1 mb/d, the highest since November 2011, as Delta's 185 kb/d Trainer refinery (formerly owned by Sunoco) resumed operations after a year-long shutdown (See '*Sandy Wreaks Havoc on US East Coast Supply Network*').





In the Midcontinent, the reconfiguration of BP's Whiting, Indiana refinery could cut runs by around 250 kb/d for up to six months, as the company shut the plant's largest crude unit. The upgrade will enable the plant to process more heavy Canadian oil, replacing mostly light sweet US crude processed currently. In October, Phillips 66 and Cenovus' 360-kb/d joint-venture Wood River refinery also started maintenance, further curbing crude demand in the Midwest. Chevron's 245-kb/d Richmond refinery in California remains offline, as does a new 315-kb/d crude unit at Motiva's expanded Port Arthur refinery on the Gulf Coast. Both are expected to resume operations in early 2013.

Sandy Wreaks Havoc on US East Coast Supply Network

US East Coast product supplies were severely disrupted in late October and November, as Hurricane Sandy wreaked havoc on regional distribution and logistical networks. The storm, which made landfall in New Jersey on 29 October, forced several refineries to shut or reduce rates and led to widespread fuel shortages as pipeline flows, tanker traffic, terminal operations and retail stations were disrupted due to flooding or power outages. Initially, the supply disruptions were offset by a slump in demand as flights were cancelled and traffic slowed, though a rebound is expected as secondary and tertiary storage tanks are refilled once deliveries normalise.

Sandy forced two refineries in the East Coast region known as PADD 1 – Hess' 70 kb/d Port Reading refinery and Phillip 66's 238 kb/d Bayway, Linden refinery, both in New Jersey – to shut. Both plants remain closed at the time of writing, with no firm restart date annouced. Expectations are that the plants will remain offline for several weeks, but 'jumper' pipelines have been put in place around the Bayway plant to allow pipeline access to critical terminals associated with the refinery and ensure eventual product deliveries to East Coast customers. Philadelphia Energy Solution's 335 kb/d Philadelphia refinery (formerly owned by Sunoco) was reportedly operating at reduced rates due to crude supply delays until 7 November, while PBF's Delaware and Paulsboro refineries and Monroe Energy's Trainer refinery resumed normal operations within days of the storm passing after having reduced runs as a precaution.

While the damage to refineries appeared relatively limited, East Coast product supplies were severly disrupted as key pipeline flows, import terminals and retail outlets lost power or sustained flood damage from the storm. The Colonial Pipeline, a key supplier of refined oil products from Gulf Coast refiners to the East Coast, shut down its mainline serving the Philadelphia, New Jersey and New York Harbour markets for several days but has since resumed operations. Also a Buckeye pipeline supplying the three New York area airports with jet fuel resumed normal operations within days of the storm's passing.

Aggravating the situation, most of the region's tanker traffic and oil product terminals were shut ahead of the storm and remained closed for days, curtailing imports. Federal energy officials reported that seven of 57 petroleum terminals affected by the storm remained shut on 12 November. Of those, five were located in New Jersey, one in Long Island and one in Brooklyn. Tanker traffic access to New York Harbour, a major point of entry for the nearly 1 mb/d of refined products imported into the US East Coast, reopened gradually, though not until 7 November was all vessel traffic allowed.

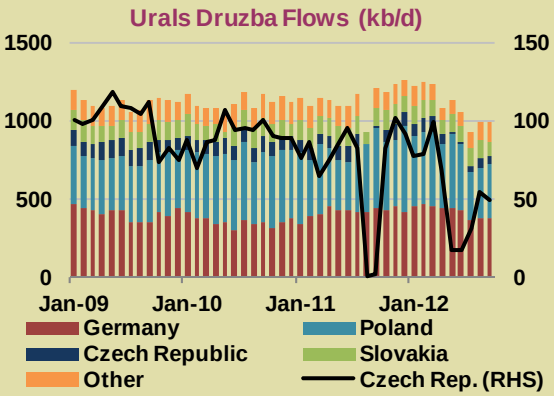
East Coast retail markets were severely disrupted due to widespread power failures at New York and New Jersey gasoline stations and supply delivery difficulties. On 9 November, as many as 28% of gas stations in the New York metropolitan area still did not have gasoline for sale, causing long lines of customers at working stations. Oil companies were scrambling to resupply working stations in their networks, but access to the region's terminals was restricted. To alleviate product shortages, the a i temporary Jones Act waiver was issued, permitting foreign-flagged ships to perform US coastal trade and thus transport product north from the Gulf Coast region.

In an attempt to ease the supply crunch, New York City, Nassau and Suffolk Counties followed New Jersey's example and started gasoline rationing on 9 November, for the first time since 1970. New Jersey had already put in place a rationing system a week earlier. Earlier, the US Environmental Protection Agency, in consultation with the US Department of Energy, had already issued emergency waivers of reformulated gasoline (RFG) and Ultra Low Sulphur Diesel (ULSD) fuel requirements for mobile non-road diesel engines for a number of states to improve fuel availability. Both waivers will remain in effect through 20 November.

Hurricane Sandy is expected to have a significant impact on East Coast oil product demand. Last October, the US East coast – PADD 1 – consumed 5.3 mb/d of oil products, compared to total US demand of 18.8 mb/d, according to data from the US Energy Information Administration. If the experience of Hurricane Irene in 2011 and other storms is any guide, product deliveries will show substantial drops for October and November. The scope of demand suppression may vary product by product, with jet fuel likely leading the losses following the shutdown of several major East Coast airport hubs for several days followed by continued disruptions in local air traffic. Gasoline deliveries will also be reduced due to power losses at service stations, reduced driving demand, pipeline disruptions, etc. However, a dip in demand in late October and early November may have been preceded by a spike in deliveries ahead of the storm as consumers anticipated the disruptions and stockpiled, and followed by a rebound in deliveries to rebuild secondary and tertiary inventories once logistical operations return to normal.

Pipeline Bottlenecks Create IEA Supply Disruptions

Not only the US East Coast experienced supply disruptions in October; some central European refiners were also forced to halt operations due to pipeline bottlenecks. In particular, the Czech Republic's Kralupy refinery (-64 kb/d) was forced to suspend runs in October due to lack of crude supplies, with neighbouring Litvinov (100 kb/d) rumoured to be close to following suit. Germany's Karlsruhe refinery (320 kb/d) equally had to shut down due to an interruption in pipeline flows, further raising concerns over infrastructure adequacy and supply security in the region.



The supply disruptions in central Europe relates to two factors. Firstly, Russian Urals flows through the Druzhba pipeline have been severely curtailed recently, as oil is being diverted to more profitable export outlets. The latest data available show total Druzhba flows hovering around 1 mb/d over the last three months, down from 1.2 mb/d over the same period last year. Supplies to the Czech Republic fell from around 100 kb/d to less than 50 kb/d in the last five months.

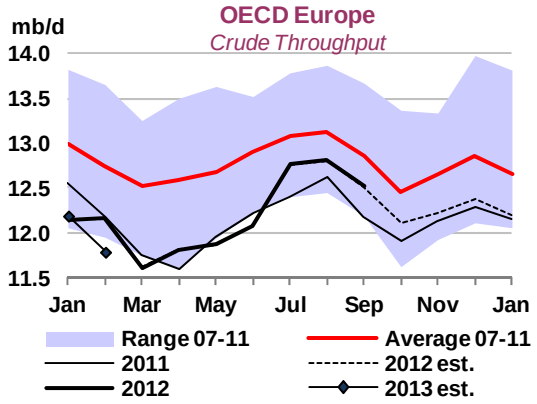
The lower shipments through the Druzhba pipeline are partly related to alternative export capacity starting up within Russia. Most notably, the commissioning of the Ust-Luga terminal on the Baltic Sea in March of this year was diverting as much as 460 kb/d of FSU crude supplies away from regular outlets in September. The ESPO pipeline, which is in the process of raising its capacity with the commissioning of the phase 2 spur, together with the recently launched BPS-2 line have added almost 1 mb/d of additional export routes to the east, allowing exporters to re-orientate volumes to the most profitable outlets. As a result, not only Druzhba pipeline flows but also Black Sea exports have fallen sharply.

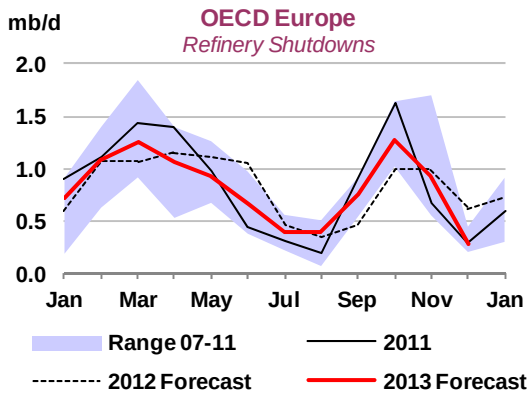
Most refiners in Central Europe have alternative feedstock supply routes available, however. The 850 kb/d Transalpine pipeline (TAL) running from Trieste in Italy to the Ingolstadt, Vohburg, Neustadt and Karlsruhe refineries in Germany, as well as Austria's Schwechat refinery is a favoured supply source. Some of the German plants normally also source crude from the 700 kb/d SPSE pipeline running from Fos-sur-Mer. Coinciding with the reduced flows on the Druzhba line, however, several German customers have favoured taking feedstock from the TAL pipeline rather than the SPSE, due to lower tariffs. As a result, the TAL line has had no spare capacity available to fulfil requests from Czech refineries or others for increased flows to offset lower Druzhba volumes.

As Russia continues to diversify its export options, the situation is not likely to improve for refiners in the short-term. Both suppliers and consumers will always choose the most economical option, unless long-term contracts or shareholder agreements are in place. Pricing differentials on Russian export routes as well as alternative supply routes will have to converge, or alternative infrastructure is developed. If not, Central European refiners could see the current situation repeat itself in coming months and years.

This map is without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

European refinery crude intake fell by 300 kb/d in September despite exceptionally strong refinery margins. European cracking margins averaged around $12/bbl in the month, up from $7.70/bbl in August and $2.50/bbl a year earlier. Regional runs averaged 12.5 mb/d, still an impressive 330 kb/d above the same month in 2011, and in line with our previous estimate. The decline was led by a 250 kb/d drop in French throughputs, as Total's Gonfreville refinery in Normandy shut for turnarounds. UK refinery runs fell by close to 100 kb/d, as maintenance at Ineos' Grangemouth and Essar's Stanlow refineries commenced, while smaller declines were recorded for Norway and Italy. In Italy, ERG had announced earlier this year that it would convert its Rome refinery, which it owns together with Total, into an oil product terminal by the end of 3Q12. Higher German, Belgian, Polish and Swedish runs provided a partial offset.



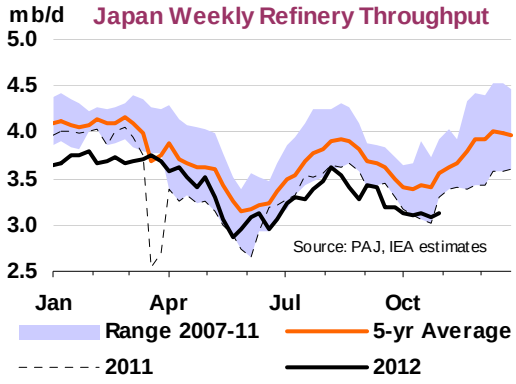


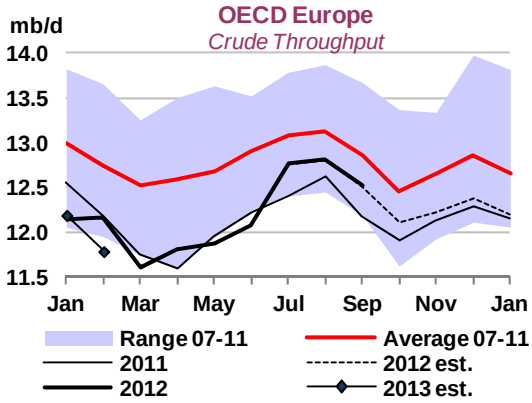
European refinery runs are expected to have fallen further in October, as maintenance activity hit its seasonal peak. Planned shutdowns included Gunvor's newly acquired Antwerp refinery for five weeks from end-September, Tamoil's 80 kb/d Swiss refinery and partial shutdowns of the Pernis and Vlissingen plants in the Netherlands. In the UK, Valero shut its 210 kb/d Pembroke refinery for eight weeks at end-September, while the Stanlow and Grangemouth plants remained shut. In addition, runs were halted for five days at GALP's Sines refinery in Portugal, while Czech's Kralupy and Germany's Karlsruhe refineries had to halt operations due to lack of crude (See '*Pipeline Bottlenecks Create IEA Supply Disruption*'). Some maintenance work was delayed due to the strong margins, however, including Cepsa's Gibraltar refinery which will now shut units in March 2013 instead of November this year.

In **France**, the fate of Petroplus' Petit Couronne refinery remains uncertain. A 5 November deadline to submit bids for the plant was again extended. The 162 kb/d refinery has been operating since June under a processing deal with Shell, after it had closed in January when Petroplus filed for insolvency. Six letters of intent were received, but all parties asked for more time to prepare their bids. A local court will meet again on 13 November to set the new deadline for submitting bids. The deadline for takeover set by the French commercial court is expiring on December 16, the day after the current tolling agreement with Shell is set to expire. If Petit Couronne were forced to close, the reduction in French refining capacity since 2010 would reach 585 kb/d, following the idling of Total's Dunkirk refinery in 2010, Petroplus' Reichstett plant in 2011, Lyondell Basell's Berre l'Etang facility in 2012 and a capacity reduction at Total's Gonfreville refinery.

In **OECD Asia Oceania**, weekly data from the Petroleum Association of Japan, show that the country's crude intake fell to a seasonal low point of 2.9 mb/d in October, from 3.1 mb/d in September. Refinery maintenance cut runs at JX Energy's 270 kb/d Negishi refinery in September and October, while the company's Mizushima B plant remained shut since July and Cosmo had yet to restart its 220 kb/d Chiba refinery. The latter has been shut since May. The latest news reports indicate the plant will only resume operations in January, with both crude units online by April.

JX Energy's Muroran plant, was shut unexpectedly for four days in September. The company recently announced it will permanently shut the 180 kb/d refinery in 2014, to comply with government rules on upgrading ratios.

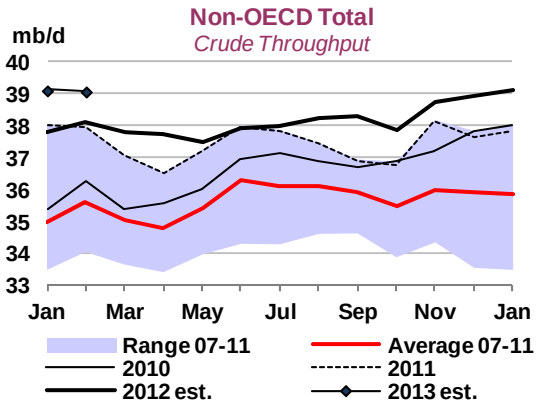


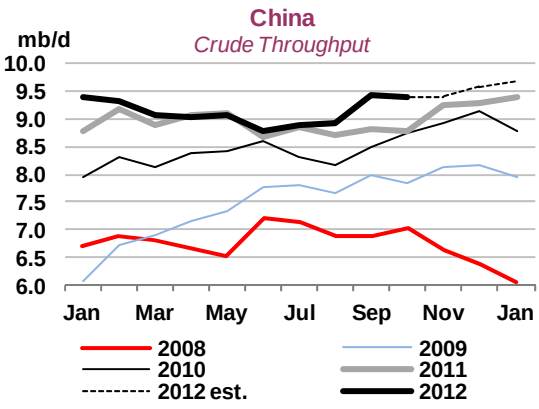


Meanwhile, **Korean** refiners continue to process high volumes, averaging 2.6 mb/d in September, or more than 100 kb/d higher than a year earlier. In all, Asia Oceania throughput estimates are largely unchanged from previous reports, averaging 6.7 mb/d in September, and a preliminary 6.4 mb/d in October. Regional runs are set to rise seasonally from November onwards, as scheduled maintenance is completed and refiners strive to meet winter heating demand for kerosene and replenish depleted inventories.

Non-OECD Refinery Throughput

Non-OECD refinery throughputs were slightly higher in 3Q12 than previously forecast, averaging 38.2 mb/d. Record-high Chinese throughputs in September, after subdued growth in the previous six months, was the main contributor to a 115 kb/d quarterly revision. The increase in Chinese runs was expected for the tail end of this year, as new capacity is starting, and product inventories have been depleted in recent months. It was likely the recovery in refining margins after two retail price increases that is behind the sudden jump in runs, however. In contrast, 4Q12 non-OECD throughputs have been revised slightly lower due mostly to prolonged outages in Venezuela. Some refinery shutdowns in Africa not counted previously also curb runs compared to earlier forecasts, though overall non-OECD runs are still set rise to 38.5 mb/d, 990 kb/d above a year earlier.





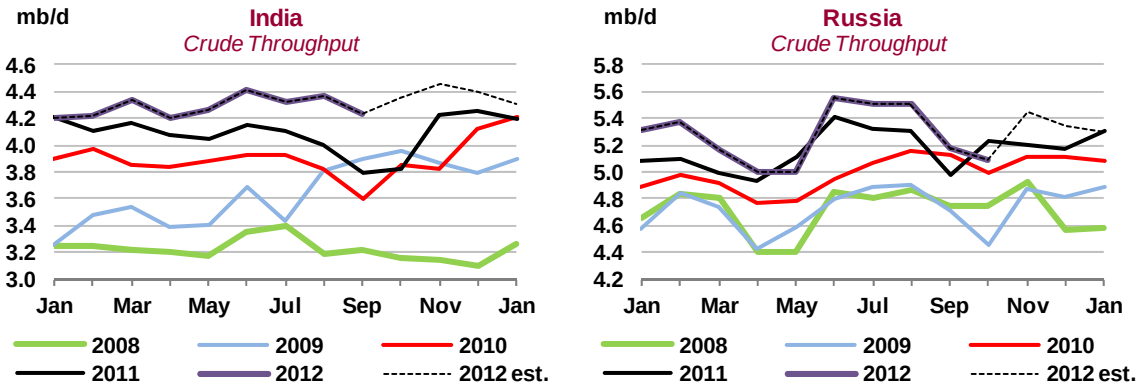
Chinese refinery crude runs surged to record levels in September, of 9.43 mb/d, some 500 kb/d higher than a month earlier and 620 kb/d above 2011-levels. Refinery runs rose despite increased maintenance, as margins improved and refiners had to replenish depleted product inventories. The NDRC raised retail fuel prices by 6% in September, the seventh adjustment in fuel prices and fourth increase so far this year.

Retail gasoline prices were raised 6.1%, to 0.41 Yuan/litre, while diesel prices were raised 6.5% to 0.46 Yuan/litre. As a result, Sinopec's refining margin reportedly returned to positive levels for the first time since 4Q10. So-called 'teapot' refineries also increased runs in September due to the fuel price increases, while fuel oil imports surged to 520 kb/d, 56.6% above the previous year and 82.2% higher than August. These smaller plants typically import fuel oil and process it into gasoline and gasoil, as they do not have the license to import crude oil.

Refinery throughputs remained high in October, at 9.4 mb/d, or 640 kb/d above the year earlier, as some maintenance shutdowns were completed and economics remained favourable. In late October, Sinopec restarted the 100 kb/d crude units at its Guangzhou and Dongxing refineries, after it was forced to shut the two units earlier in the month following alleged pollution of the Pearl River. Also in October, PetroChina started a new 120-kb/d crude unit at its Daqing refinery, while scrapping an older 60-kb/d unit. Sinopec has reportedly completed the expansion of its Maoming refinery, by 200 kb/d, and will start operations in late November. Secondary units will only be completed by mid-2013, capping runs for the time being.

In **'Other Asia', Indian** refinery runs averaged an estimated 4.2 mb/d in September, up 11.6% y-o-y, but slightly lower than in August. The newly commissioned Bina refinery saw its throughputs decline to only 25 kb/d, from 142 kb/d a month earlier due to power supply problems. IOC's Panipat refinery runs also declined by 70 kb/d, due to maintenance. We have slightly revised down our historical data for India going back to April 2012, following a report that HPCL's Bathinda refinery was only producing 30 kb/d of gasoil in September, suggesting that overall runs might have been closer to 100 kb/d, rather than 150 kb/d as assumed earlier. Runs are expected to reach full capacity by end-year. Refinery throughput data of the newly commissioned plant has yet to be included in Ministry Data. Private refiners Reliance and Essar exported a record 1.24 mb/d of oil products in September, up 51.3% on the same month a year earlier. Gasoil exports averaged 560 kb/d and jet fuel 69 kb/d, gasoline 390 kb/d according to *Platts*.

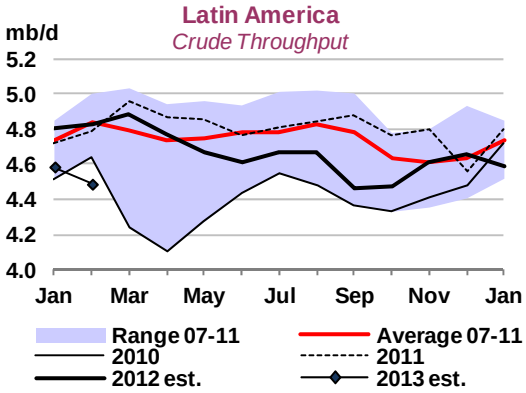
Elsewhere in the region, Sri Lanka was forced to shut its only refinery in October, the 50 kb/d Ceypetco plant, due to problems replacing Iranian crude supplies. The refinery is expected to resume operations as alternative supplies were secured. Indonesia was expected to import record amounts of gasoline in October, due to high demand and refinery maintenance at Pertamina's Balongan plant in October and a possible turnaround of Cilacap in November. The operator of Vietnam's sole refinery dismissed reports that Dung Quat had halted runs in October, due to a malfunction.

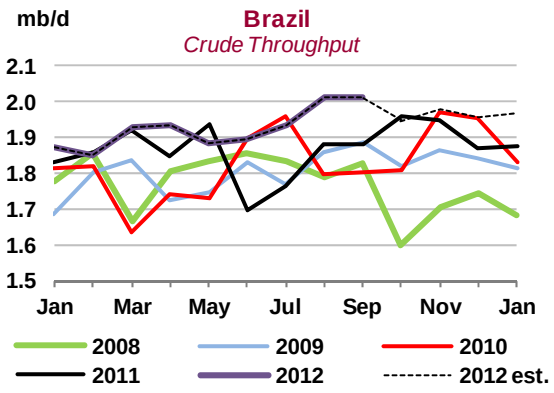


Russian crude runs averaged 5.1 mb/d in October, slightly lower than September and below the previous year for the first time since May. Throughputs had already been curbed sharply in September, from record levels of around 5.5 mb/d seen over the summer months. Runs are expected to rise in November as most maintenance is completed. **Kazakhstan's** refinery crude intake rose by 100 kb/d in August, to 310 kb/d, as the Pavlodar plant completed a scheduled overhaul. In non-OECD Europe, the Serbian oil

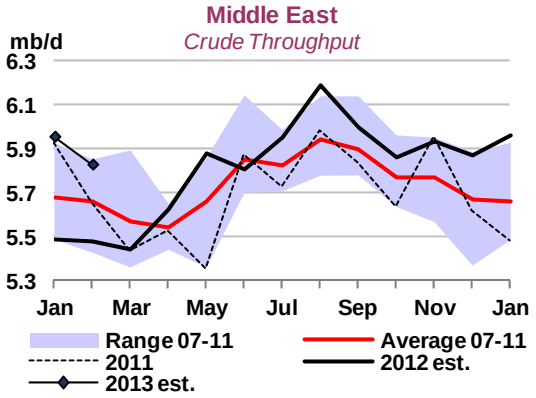
company NIS restarted its Pancevo refinery in early November, after a two-year upgrade. The refinery added a hydrocracker and hydrotreating complex. Overall refining capacity remained unchanged at around 100 kb/d. Also Macedonia's sole refinery was set to resume operations after a 7-month hiatus in early November, according to owner Hellenic petroleum.

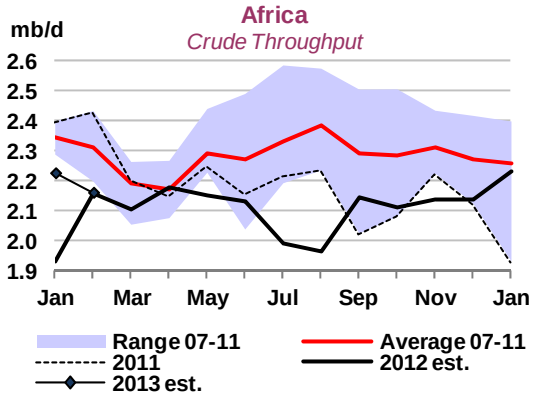
In **Latin America**, record-high **Brazilian** throughputs in August and September were masked by continued outages at **Venezuela**'s largest refinery. The explosion at the 645 kb/d Amuay refinery at the end of August, killed 41 people and caused severe damage to several key units, including a 180 kb/d crude unit which remained offline in early November. Also the 310 kb/d Cardon refinery was running well below capacity according to some sources, further denting the country's product supplies and raising gasoline import requirements. The latest data show Venezuela importing 83 kb/d of refined products from the US in August, compared to an average of 32 kb/d in 2011. These are expected to have risen sharply in September and October due to the refinery outages. In contrast, Brazil's crude throughputs averaged 2 mb/d for a second month running, up 130 kb/d year-on-year.





Monthly data for the **Middle East**, reported to JODI, show Saudi Arabian runs surging almost 200 kb/d in August to 1.97 mb/d, the highest in nine months. The 400 kb/d Saudi Aramco Total JV refinery in Jubail has started preparations for production start-up and will likely start the first 200 kb/d crude unit before the end of the year. Oman's Mina Al Fahal refinery was shut for about three weeks in October due to a fire, but resumed operations in early November.





African crude runs have been revised lower for 3Q12, to 2 mb/d, on the account of weaker-than-expected Egyptian and Nigerian throughputs. Maintenance in South Africa over October and November, as well as a brief disruption to Libya's refinery runs in Zawiya cut runs in 4Q12. A refinery worker protest forced the 120-kb/d plant to shut for two days in early November. In Nigeria, operations at two state-run refineries in the Niger Delta were also disrupted in early November after pipeline attacks cut off crude supplies to the plants. The latest data from the Nigerian National Petroleum Corporation show Nigerian crude runs averaging only 49 kb/d in August, compared with a nameplate capacity of around 445 kb/d.

Table 1
WORLD OIL SUPPLY AND DEMAND

(million barrels per day)

	2009	2010	1Q11	2Q11	3Q11	4Q11	2011	1Q12	2Q12	3Q12	4Q12	2012	1Q13	2Q13	3Q13	4Q13	2013
OECD DEMAND																	
Americas[1]	23.7	24.1	24.2	23.8	24.2	24.0	24.1	23.5	23.8	23.9	23.8	23.7	23.6	23.6	24.0	24.0	23.8
Europe[2]	14.7	14.7	14.3	14.2	14.8	14.2	14.4	13.8	13.8	14.0	13.7	13.8	13.4	13.4	14.0	13.8	13.6
Asia Oceania[3]	8.0	8.1	8.6	7.4	8.0	8.6	8.1	9.1	8.0	8.3	8.6	8.5	9.1	7.8	8.0	8.4	8.3
Total OECD	46.3	46.9	47.1	45.4	47.0	46.7	46.6	46.4	45.6	46.2	46.1	46.1	46.1	44.8	46.0	46.1	45.8
NON-OECD DEMAND																	
FSU	4.0	4.2	4.2	4.4	4.6	4.6	4.4	4.4	4.5	4.7	4.6	4.5	4.6	4.6	4.8	4.9	4.7
Europe	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
China	7.9	8.8	9.3	9.3	9.0	9.4	9.2	9.6	9.3	9.4	9.8	9.5	9.8	9.7	9.6	10.0	9.8
Other Asia	10.3	10.9	11.1	11.1	10.8	11.2	11.0	11.3	11.4	11.1	11.5	11.3	11.6	11.6	11.3	11.7	11.6
Latin America	5.7	6.0	6.1	6.3	6.5	6.4	6.3	6.3	6.4	6.7	6.5	6.5	6.4	6.6	6.8	6.7	6.6
Middle East	7.1	7.3	6.9	7.4	7.8	7.3	7.4	7.1	7.7	8.0	7.4	7.6	7.3	7.8	8.2	7.7	7.8
Africa	3.4	3.3	3.3	3.3	3.2	3.3	3.3	3.4	3.4	3.4	3.4	3.4	3.5	3.5	3.5	3.5	3.5
Total Non-OECD	39.1	41.1	41.6	42.3	42.6	43.0	42.4	42.8	43.3	43.9	44.0	43.5	43.8	44.6	45.0	45.2	44.7
Total Demand[4]	85.4	88.1	88.7	87.7	89.5	89.7	88.9	89.2	89.0	90.1	90.1	89.6	89.9	89.4	91.0	91.3	90.4
OECD SUPPLY																	
Americas[1,7]	13.6	14.1	14.3	14.3	14.5	15.2	14.6	15.6	15.5	15.5	16.1	15.7	16.3	16.3	16.4	16.8	16.5
Europe[2]	4.5	4.1	4.0	3.7	3.5	3.7	3.8	3.8	3.6	3.1	3.3	3.5	3.4	3.2	3.1	3.3	3.3
Asia Oceania[3]	0.6	0.7	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.6	0.5	0.6	0.5	0.5	0.5	0.5	0.5
Total OECD	18.8	18.9	18.9	18.6	18.6	19.6	18.9	19.9	19.6	19.3	20.0	19.7	20.2	20.1	20.1	20.6	20.2
NON-OECD SUPPLY																	
FSU	13.3	13.5	13.6	13.6	13.5	13.6	13.6	13.7	13.6	13.6	13.7	13.7	13.7	13.6	13.3	13.6	13.6
Europe	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
China	3.8	4.1	4.2	4.2	4.0	4.0	4.1	4.2	4.1	4.2	4.3	4.2	4.3	4.2	4.2	4.2	4.2
Other Asia[5]	3.6	3.7	3.7	3.5	3.6	3.6	3.6	3.6	3.5	3.5	3.5	3.6	3.5	3.5	3.4	3.4	3.5
Latin America[5,7]	3.9	4.1	4.2	4.2	4.2	4.3	4.2	4.3	4.1	4.1	4.2	4.2	4.3	4.3	4.4	4.5	4.4
Middle East	1.7	1.7	1.8	1.7	1.7	1.5	1.6	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Africa[5]	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.4	2.3	2.3	2.3	2.3	2.4	2.4	2.4	2.5	2.4
Total Non-OECD	29.0	29.8	30.2	29.8	29.8	29.7	29.9	29.8	29.2	29.3	29.7	29.5	29.7	29.7	29.4	29.8	29.6
Processing Gains[6]	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.2	2.2	2.2	2.2	2.2
Global Biofuels[7]	1.6	1.8	1.5	1.9	2.2	1.8	1.9	1.6	1.9	2.1	1.9	1.9	1.6	2.0	2.4	2.1	2.0
Total Non-OPEC[5]	51.4	52.6	52.8	52.4	52.7	53.2	52.8	53.4	52.8	52.9	53.8	53.2	53.7	53.9	54.1	54.7	54.1
OPEC																	
Crude[8]	29.1	29.2	29.9	29.4	29.9	30.3	29.9	31.4	31.7	31.5							
NGLs	4.9	5.4	5.8	5.7	5.8	5.9	5.8	6.0	6.1	6.3	6.3	6.2	6.3	6.4	6.6	6.6	6.5
Total OPEC[5]	34.0	34.6	35.7	35.1	35.6	36.2	35.7	37.4	37.8	37.8							
Total Supply[9]	85.4	87.3	88.4	87.6	88.3	89.4	88.4	90.8	90.7	90.7							
STOCK CHANGES AND MISCELLANEOUS																	
Reported OECD																	
Industry	-0.1	0.1	-0.4	0.5	-0.1	-0.7	-0.2	0.4	0.4	0.5							
Government	0.1	0.0	0.0	0.0	-0.4	0.1	-0.1	0.0	0.0	0.0							
Total	0.0	0.1	-0.5	0.5	-0.5	-0.6	-0.3	0.4	0.5	0.5							
Floating Storage/Oil in Transit	0.3	-0.2	0.2	-0.2	-0.2	0.0	-0.1	-0.4	0.2	-0.1							
Miscellaneous to balance[10]	-0.3	-0.7	0.0	-0.4	-0.4	0.3	-0.1	1.5	1.1	0.2							
Total Stock Ch. & Misc	0.0	-0.8	-0.3	-0.1	-1.2	-0.4	-0.5	1.6	1.7	0.6							
Memo items:																	
Call on OPEC crude + Stock ch.[11]	29.1	30.0	30.2	29.6	31.1	30.7	30.4	29.8	30.0	30.9	30.0	30.2	29.8	29.1	30.4	30.1	29.8
Adjusted Call on OPEC + Stock ch.[12]	28.8	29.3	30.2	29.1	30.6	30.9	30.2	31.3	31.1	31.1	30.2	30.9	30.1	29.3	30.6	30.3	30.1

1 As of August 2012 OMR, OECD Americas includes Chile.
2 As of August 2012 OMR, OECD Europe includes Estonia and Slovenia.
3 As of August 2012 OMR, OECD Asia Oceania includes Israel.
4 Measured as deliveries from refineries and primary stocks, comprises inland deliveries, international marine bunkers, refinery fuel, crude for direct burning, oil from non-conventional sources and other sources of supply.
5 Other Asia includes Indonesia throughout. Latin America excludes Ecuador throughout. Africa excludes Angola throughout.
Total Non-OPEC excludes all countries that were members of OPEC at 1 January 2009.
Total OPEC comprises all countries which were OPEC members at 1 January 2009.
6 Net volumetric gains and losses in the refining process and marine transportation losses.
7 As of the July 2010 OMR, Global Biofuels comprise all world biofuel production including fuel ethanol from the US and Brazil.
8 As of the March 2006 OMR, Venezuelan Orinoco heavy crude production is included within Venezuelan crude estimates. Orimulsion fuel remains within the OPEC NGL and non-conventional category, but Orimulsion production reportedly ceased from January 2007.
9 Comprises crude oil, condensates, NGLs, oil from non-conventional sources and other sources of supply.
10 Includes changes in non-reported stocks in OECD and non-OECD areas.
11 Equals the arithmetic difference between total demand minus total non-OPEC supply minus OPEC NGLs.
12 Equals the "Call on OPEC + Stock Ch." with "Miscellaneous to balance" added for historical periods and with an average of "Miscellaneous to balance" for the most recent 8 quarters added for forecast periods.

Table 1A
WORLD OIL SUPPLY AND DEMAND: CHANGES FROM LAST MONTH'S TABLE 1
(million barrels per day)

	2009	2010	1Q11	2Q11	3Q11	4Q11	2011	1Q12	2Q12	3Q12	4Q12	2012	1Q13	2Q13	3Q13	4Q13	2013
OECD DEMAND																	
Americas	-	-	-	-	-	-	-	-	-	-0.1	-0.2	-0.1	-	-	-0.1	-0.1	-0.1
Europe	-	-	-	-	-	-	-	-	-	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1	-	-0.1
Asia Oceania	-	-	-	-	-	-	-	-	-	0.1	-	-	-	-	-	-	-
Total OECD	-	-	-	-	-	-	-	-	-	-0.1	-0.4	-0.1	-0.1	-0.1	-0.2	-0.1	-0.1
NON-OECD DEMAND																	
FSU	-	-	-	-	-	-	-	-	-	-	-0.1	-	-	-	-	-	-
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	0.1	0.2	0.1	0.1	0.1	0.1	-	0.1
Other Asia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Latin America	-	-	-	-	-	-	-	-	-	0.1	-	-	-	-	-	-	-
Middle East	-	-	-	-	-	-	-	-	-	0.1	-	-	-	-	-	-	-
Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Non-OECD	-	-	-	-	-	-	-	-	-	0.2	0.1	-	0.1	0.1	0.1	-	0.1
Total Demand	-	-	-	-	-	-	-	-	-	-	-0.3	-0.1	-	-	-0.1	-0.1	-0.1
OECD SUPPLY																	
Americas	-	-	-	-	-	-	-	-	-	-0.2	-	-0.1	0.1	-	0.1	-	0.1
Europe	-	-	-	-	-	-	-	-	-	-0.1	-0.1	-	-	-0.1	-	-	-
Asia Oceania	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total OECD	-	-	-	-	-	-	-	-	-	-0.2	-0.1	-0.1	-	-	0.1	-	-
NON-OECD SUPPLY																	
FSU	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	0.1	0.1	-	0.1	-	-	-	-
Other Asia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Latin America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Middle East	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Africa	-	-	-	-	-	-	-	-	-	-	-	-	0.1	0.1	0.1	0.1	0.1
Total Non-OECD	-	-	-	-	-	-	-	-	-	0.1	0.3	0.1	0.2	0.1	0.1	0.1	0.1
Processing Gains	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Global Biofuels	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Non-OPEC	-	-	-	-	-	-	-	-	-	-0.1	0.2	-	0.2	0.1	0.1	0.1	0.1
OPEC																	
Crude	-	-	-	-	-	-	-	-	-	-							
NGLs	-	-	-	-	-	-	-	-	-	-	-	-	-	-0.1	-	-	-
Total OPEC	-	-	-	-	-	-	-	-	-	-							
Total Supply	-	-	-	-	-	-	-	-	-	-0.1							
STOCK CHANGES AND MISCELLANEOUS																	
REPORTED OECD																	
Industry	-	-	-	-	-	-	-	-	-0.1	0.5							
Government	-	-	-	-	-	-	-	-	-	-							
Total	-	-	-	-	-	-	-	-	-0.1	0.5							
Floating Storage/Oil in Transit	-	-	-	-	-	-	-	-	-	-0.1							
Miscellaneous to balance	-	-	-	-	-	-	-	-	-	0.2							
Total Stock Ch. & Misc	-	-	-	-	-	-	-	-	-	-0.2							
Memo items:																	
Call on OPEC crude + Stock ch.	-	-	-	-	-	-	-	-	-	0.2	-0.5	-0.1	-0.1	-0.1	-0.2	-0.3	-0.2
Adjusted Call on OPEC + Stock ch.	-	-	-	-	-	-	-	-	0.1	0.2	-0.3	-	-	-	-0.1	-0.1	-0.1

When submitting their monthly oil statistics, OECD Member countries periodically update data for prior periods. Similar updates to non-OECD data can occur.

Table 2

SUMMARY OF GLOBAL OIL DEMAND

	2010	1Q11	2Q11	3Q11	4Q11	2011	1Q12	2Q12	3Q12	4Q12	2012	1Q13	2Q13	3Q13	4Q13	2013
Demand (mb/d)																
Americas[1]	24.14	24.24	23.81	24.21	23.99	24.06	23.49	23.82	23.91	23.78	23.75	23.58	23.56	23.99	24.00	23.79
Europe[2]	14.70	14.30	14.20	14.78	14.18	14.37	13.78	13.83	14.02	13.73	13.84	13.42	13.42	13.98	13.76	13.65
Asia Oceania[3]	8.10	8.60	7.36	7.98	8.58	8.13	9.08	7.97	8.27	8.57	8.47	9.07	7.82	8.03	8.39	8.32
Total OECD	46.93	47.14	45.38	46.97	46.75	46.56	46.35	45.62	46.20	46.08	46.06	46.06	44.80	46.01	46.15	45.75
Asia	19.65	20.36	20.32	19.80	20.65	20.28	20.89	20.64	20.50	21.28	20.83	21.38	21.32	20.92	21.70	21.33
Middle East	7.32	6.92	7.38	7.82	7.34	7.37	7.12	7.70	8.02	7.45	7.57	7.33	7.83	8.21	7.68	7.77
Latin America	6.04	6.05	6.26	6.47	6.38	6.29	6.25	6.44	6.67	6.53	6.48	6.40	6.60	6.84	6.68	6.63
FSU	4.15	4.22	4.36	4.58	4.57	4.43	4.45	4.47	4.65	4.62	4.55	4.56	4.63	4.81	4.86	4.72
Africa	3.30	3.34	3.31	3.20	3.34	3.30	3.42	3.37	3.38	3.41	3.39	3.47	3.50	3.48	3.54	3.50
Europe	0.68	0.66	0.68	0.71	0.72	0.69	0.68	0.73	0.73	0.72	0.71	0.69	0.73	0.75	0.73	0.72
Total Non-OECD	41.14	41.55	42.31	42.56	43.00	42.36	42.80	43.35	43.94	44.01	43.53	43.84	44.61	45.00	45.19	44.66
World	88.07	88.69	87.69	89.53	89.75	88.92	89.15	88.97	90.14	90.09	89.59	89.90	89.41	91.00	91.33	90.42
of which: US50	19.18	19.15	18.86	19.08	18.94	19.01	18.49	18.72	18.84	18.73	18.70	18.51	18.55	18.89	18.90	18.72
Europe 5*	8.92	8.68	8.52	8.85	8.50	8.64	8.26	8.20	8.27	8.10	8.21	8.06	7.88	8.23	8.12	8.07
China	8.80	9.27	9.26	9.03	9.42	9.24	9.59	9.26	9.36	9.81	9.51	9.81	9.68	9.63	9.99	9.78
Japan	4.44	4.83	3.91	4.31	4.81	4.46	5.28	4.30	4.49	4.70	4.69	5.24	4.12	4.24	4.50	4.52
India	3.37	3.54	3.61	3.30	3.60	3.51	3.67	3.74	3.49	3.66	3.64	3.72	3.83	3.57	3.82	3.73
Russia	2.98	3.00	3.20	3.42	3.39	3.25	3.21	3.29	3.49	3.42	3.35	3.33	3.44	3.64	3.62	3.51
Brazil	2.77	2.78	2.86	2.98	2.95	2.89	2.90	2.96	3.08	3.03	2.99	2.97	3.05	3.16	3.11	3.07
Saudi Arabia	2.76	2.56	2.94	3.18	2.81	2.87	2.66	3.09	3.41	2.95	3.03	2.81	3.23	3.50	3.09	3.16
Canada	2.26	2.32	2.22	2.36	2.25	2.29	2.22	2.33	2.33	2.31	2.30	2.28	2.26	2.37	2.32	2.31
Korea	2.27	2.36	2.05	2.21	2.30	2.23	2.31	2.19	2.23	2.33	2.27	2.30	2.20	2.24	2.33	2.27
Mexico	2.08	2.11	2.12	2.14	2.16	2.13	2.11	2.14	2.11	2.10	2.12	2.14	2.13	2.10	2.13	2.12
Iran	1.84	1.84	1.79	1.78	1.78	1.80	1.83	1.86	1.72	1.71	1.78	1.80	1.77	1.72	1.73	1.75
Total	61.66	62.44	61.32	62.65	62.92	62.34	62.53	62.09	62.81	62.86	62.58	62.96	62.13	63.28	63.66	63.01
% of World	70.0%	70.4%	69.9%	70.0%	70.1%	70.1%	70.1%	69.8%	69.7%	69.8%	69.8%	70.0%	69.5%	69.5%	69.7%	69.7%
Annual Change (% per annum)																
Americas[1]	2.0	2.0	-1.2	-1.0	-1.0	-0.3	-3.1	0.0	-1.2	-0.9	-1.3	0.4	-1.1	0.4	0.9	0.2
Europe[2]	-0.3	-1.0	-1.2	-1.7	-5.1	-2.3	-3.6	-2.6	-5.1	-3.1	-3.7	-2.6	-3.0	-0.3	0.2	-1.4
Asia Oceania[3]	1.8	0.7	-3.3	0.9	3.0	0.4	5.6	8.2	3.7	-0.1	4.2	-0.2	-1.8	-2.9	-2.2	-1.8
Total OECD	1.3	0.9	-1.5	-0.9	-1.6	-0.8	-1.7	0.5	-1.6	-1.4	-1.1	-0.6	-1.8	-0.4	0.1	-0.7
Asia	7.9	6.5	2.7	2.8	1.1	3.2	2.6	1.5	3.5	3.1	2.7	2.4	3.3	2.1	2.0	2.4
Middle East	2.8	0.4	0.5	0.3	1.5	0.7	2.9	4.2	2.6	1.5	2.8	3.0	1.8	2.4	3.1	2.6
Latin America	6.1	4.6	3.8	4.6	3.9	4.2	3.3	3.0	3.1	2.3	2.9	2.4	2.4	2.5	2.2	2.4
FSU	3.2	3.5	8.5	7.6	7.4	6.8	5.4	2.6	1.7	1.0	2.6	2.6	3.7	3.3	5.2	3.7
Africa	-1.9	2.2	-1.9	-2.2	1.7	-0.1	2.2	1.8	5.7	2.2	3.0	1.6	3.9	3.0	3.7	3.0
Europe	-1.4	-1.7	0.4	3.8	2.6	1.3	2.9	7.2	2.7	-0.5	3.0	1.5	-0.5	2.7	2.4	1.5
Total Non-OECD	5.2	4.4	2.6	2.7	2.3	3.0	3.0	2.4	3.2	2.3	2.8	2.4	2.9	2.4	2.7	2.6
World	3.1	2.5	0.4	0.8	0.2	1.0	0.5	1.5	0.7	0.4	0.8	0.8	0.5	1.0	1.4	0.9
Annual Change (mb/d)																
Americas[1]	0.48	0.49	-0.28	-0.25	-0.24	-0.07	-0.75	0.01	-0.30	-0.22	-0.31	0.09	-0.26	0.09	0.22	0.04
Europe[2]	-0.04	-0.15	-0.17	-0.25	-0.76	-0.34	-0.52	-0.37	-0.76	-0.44	-0.53	-0.36	-0.41	-0.04	0.03	-0.19
Asia Oceania[3]	0.14	0.06	-0.25	0.07	0.25	0.03	0.49	0.60	0.29	-0.01	0.34	-0.02	-0.14	-0.24	-0.19	-0.15
Total OECD	0.59	0.40	-0.71	-0.43	-0.76	-0.38	-0.78	0.24	-0.77	-0.67	-0.50	-0.29	-0.82	-0.19	0.07	-0.31
Asia	1.44	1.24	0.53	0.53	0.23	0.63	0.53	0.31	0.70	0.64	0.54	0.49	0.68	0.42	0.42	0.50
Middle East	0.20	0.03	0.04	0.02	0.11	0.05	0.20	0.31	0.20	0.11	0.20	0.21	0.14	0.19	0.23	0.19
Latin America	0.35	0.26	0.23	0.29	0.24	0.26	0.20	0.19	0.20	0.15	0.18	0.15	0.15	0.17	0.15	0.15
FSU	0.13	0.14	0.34	0.32	0.32	0.28	0.23	0.11	0.08	0.04	0.11	0.12	0.16	0.15	0.24	0.17
Africa	-0.06	0.07	-0.06	-0.07	0.06	0.00	0.07	0.06	0.18	0.07	0.10	0.05	0.13	0.10	0.13	0.10
Europe	-0.01	-0.01	0.00	0.03	0.02	0.01	0.02	0.05	0.02	0.00	0.02	0.01	0.00	0.02	0.02	0.01
Total Non-OECD	2.04	1.74	1.08	1.11	0.97	1.22	1.25	1.04	1.38	1.01	1.17	1.03	1.26	1.06	1.18	1.13
World	2.63	2.14	0.37	0.68	0.21	0.85	0.46	1.27	0.61	0.34	0.67	0.75	0.44	0.87	1.25	0.83
Revisions to Oil Demand from Last Month's Report (mb/d)																
Americas[1]	0.00	0.00	0.00	0.00	-0.01	0.00	0.00	0.01	-0.06	-0.22	-0.07	0.03	-0.04	-0.10	-0.11	-0.05
Europe[2]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.15	-0.16	-0.08	-0.07	-0.10	-0.09	-0.05	-0.08
Asia Oceania[3]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	0.08	0.02	0.02	-0.02	0.03	0.04	0.01	0.01
Total OECD	0.00	0.00	0.00	0.00	-0.01	0.00	0.00	0.00	-0.14	-0.36	-0.13	-0.06	-0.11	-0.16	-0.14	-0.12
Asia	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.12	0.14	0.07	0.10	0.08	0.07	0.03	0.07
Middle East	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	0.00	0.05	-0.01	0.01	0.03	0.01	-0.01	0.01	0.01
Latin America	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.03	0.02	0.02	0.02	0.04	0.03	0.03
FSU	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	-0.04	-0.08	-0.03	-0.03	-0.04	-0.05	-0.05	-0.04
Africa	0.00	-0.02	-0.02	-0.02	-0.02	-0.02	-0.03	-0.03	0.01	-0.01	-0.02	-0.03	-0.01	0.00	-0.01	-0.01
Europe	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Non-OECD	0.00	-0.02	-0.02	-0.01	-0.02	-0.02	-0.04	-0.03	0.18	0.08	0.05	0.08	0.06	0.06	0.01	0.05
World	0.00	-0.02	-0.02	-0.02	-0.03	-0.02	-0.04	-0.03	0.04	-0.29	-0.08	0.02	-0.05	-0.10	-0.13	-0.07
Revisions to Oil Demand Growth from Last Month's Report (mb/d)																
World	0.00	-0.02	-0.02	-0.02	-0.03	-0.02	-0.02	-0.01	0.06	-0.26	-0.06	0.06	-0.02	-0.14	0.16	0.01

1 As of the August 2012 OMR, includes Chile.

2 As of the August 2012 OMR, includes Estonia and Slovenia.

3 As of the August 2012 OMR, includes Israel.

* France, Germany, Italy, Spain and UK

Table 2a

OECD REGIONAL OIL DEMAND[1]

(million barrels per day)

	2010	2011	3Q11	4Q11	1Q12	2Q12	Jun 12	Jul 12	Aug 12 [2]	Latest month vs. Jul 12	Latest month vs. Aug 11
Americas[3]											
LPG&Ethane	2.98	3.11	2.87	3.27	3.17	2.88	2.81	2.93	2.98	0.05	0.05
Naphtha	0.35	0.36	0.33	0.34	0.35	0.35	0.33	0.31	0.35	0.04	0.00
Motor Gasoline	10.66	10.43	10.61	10.31	10.17	10.69	10.78	10.57	10.92	0.34	0.23
Jet/Kerosene	1.67	1.67	1.74	1.62	1.61	1.68	1.80	1.74	1.73	-0.02	-0.10
Gasoil/Diesel Oil	4.98	5.15	5.10	5.26	5.09	5.01	5.01	4.79	5.00	0.21	-0.31
Residual Fuel Oil	0.96	0.89	0.83	0.87	0.82	0.75	0.77	0.80	0.82	0.02	-0.02
Other Products	2.53	2.45	2.72	2.33	2.28	2.47	2.62	2.64	2.71	0.07	-0.14
Total	24.14	24.06	24.21	23.99	23.49	23.82	24.12	23.79	24.51	0.72	-0.29
Europe[4]											
LPG&Ethane	0.96	0.96	0.93	0.95	1.00	0.93	0.91	0.91	0.90	-0.02	-0.04
Naphtha	1.27	1.17	1.13	1.08	1.27	1.11	1.04	1.08	1.14	0.06	-0.02
Motor Gasoline	2.21	2.11	2.20	2.05	1.91	2.03	2.09	2.07	2.08	0.01	-0.15
Jet/Kerosene	1.23	1.24	1.34	1.18	1.08	1.22	1.25	1.31	1.27	-0.04	-0.05
Gasoil/Diesel Oil	6.20	6.14	6.28	6.29	5.97	5.91	6.17	6.06	5.79	-0.28	-0.53
Residual Fuel Oil	1.31	1.26	1.27	1.22	1.21	1.10	1.10	1.10	1.10	-0.01	-0.14
Other Products	1.51	1.49	1.63	1.40	1.34	1.52	1.60	1.54	1.51	-0.02	-0.07
Total	14.70	14.37	14.78	14.18	13.78	13.83	14.16	14.07	13.79	-0.28	-1.01
Asia Oceania[5]											
LPG&Ethane	0.86	0.85	0.80	0.88	0.99	0.81	0.79	0.85	0.82	-0.03	0.00
Naphtha	1.71	1.71	1.75	1.73	1.78	1.68	1.77	1.72	1.77	0.04	-0.04
Motor Gasoline	1.63	1.61	1.69	1.64	1.59	1.56	1.55	1.67	1.76	0.09	0.00
Jet/Kerosene	0.90	0.88	0.66	0.99	1.19	0.65	0.62	0.63	0.65	0.02	-0.01
Gasoil/Diesel Oil	1.69	1.70	1.68	1.79	1.80	1.68	1.70	1.75	1.76	0.01	0.12
Residual Fuel Oil	0.79	0.79	0.79	0.86	1.00	0.90	0.87	0.91	0.92	0.00	0.10
Other Products	0.51	0.59	0.60	0.70	0.73	0.70	0.62	0.56	0.75	0.19	0.17
Total	8.10	8.13	7.98	8.58	9.08	7.97	7.90	8.10	8.43	0.33	0.33
OECD											
LPG&Ethane	4.81	4.91	4.60	5.09	5.17	4.62	4.51	4.69	4.69	0.00	0.01
Naphtha	3.33	3.24	3.22	3.16	3.40	3.14	3.14	3.11	3.26	0.14	-0.06
Motor Gasoline	14.49	14.16	14.50	14.00	13.67	14.28	14.42	14.31	14.76	0.45	0.08
Jet/Kerosene	3.81	3.79	3.75	3.79	3.88	3.54	3.66	3.68	3.65	-0.03	-0.16
Gasoil/Diesel Oil	12.88	12.98	13.06	13.34	12.86	12.60	12.88	12.61	12.56	-0.05	-0.72
Residual Fuel Oil	3.07	2.94	2.90	2.94	3.02	2.75	2.73	2.82	2.84	0.01	-0.06
Other Products	4.55	4.54	4.95	4.42	4.35	4.70	4.84	4.74	4.98	0.24	-0.05
Total	46.93	46.56	46.97	46.75	46.35	45.62	46.18	45.96	46.73	0.77	-0.97

1 Demand, measured as deliveries from refineries and primary stocks, comprises inland deliveries, international bunkers and refinery fuel. It includes crude for direct b non-conventional sources and other sources of supply. Jet/kerosene comprises jet kerosene and non-aviation kerosene. Gasoil comprises diesel, light heating oil North America comprises US 50 states, US territories, Mexico and Canada.
2 Latest official OECD submissions (MOS).
3 As of the August 2012 OMR, includes Chile.
4 As of the August 2012 OMR, includes Estonia and Slovenia.
5 As of the August 2012 OMR, includes Israel.

Table 2b

OIL DEMAND IN SELECTED OECD COUNTRIES[1]

(million barrels per day)

										Latest month vs.	
	2010	2011	3Q11	4Q11	1Q12	2Q12	Jun 12	Jul 12	Aug 12 [2]	Jul 12	Aug 11
United States[3]											
LPG	2.17	2.28	2.07	2.42	2.38	2.11	2.09	2.13	2.20	0.07	0.09
Naphtha	0.26	0.26	0.25	0.26	0.26	0.25	0.24	0.21	0.24	0.03	0.00
Motor Gasoline	8.99	8.76	8.91	8.63	8.49	8.96	9.04	8.84	9.15	0.31	0.21
Jet/Kerosene	1.45	1.44	1.50	1.40	1.36	1.45	1.56	1.47	1.48	0.01	-0.09
Gasoil	3.80	3.90	3.84	3.99	3.83	3.73	3.73	3.55	3.75	0.19	-0.27
Residual Fuel Oil	0.54	0.46	0.38	0.44	0.42	0.35	0.37	0.41	0.35	-0.06	0.01
Other Products	1.97	1.90	2.13	1.80	1.75	1.88	1.96	2.04	2.13	0.09	-0.13
Total	19.18	19.01	19.08	18.94	18.49	18.72	18.99	18.66	19.30	0.64	-0.19
Japan											
LPG	0.48	0.50	0.45	0.52	0.63	0.50	0.47	0.53	0.47	-0.06	0.01
Naphtha	0.78	0.73	0.75	0.72	0.73	0.66	0.65	0.68	0.73	0.05	-0.07
Motor Gasoline	1.00	0.98	1.04	1.00	0.96	0.93	0.93	1.01	1.10	0.09	0.00
Jet/Kerosene	0.55	0.53	0.34	0.62	0.83	0.35	0.31	0.33	0.35	0.02	0.01
Diesel	0.44	0.44	0.44	0.47	0.45	0.43	0.44	0.46	0.46	0.00	0.03
Other Gasoil	0.40	0.37	0.33	0.39	0.45	0.32	0.32	0.33	0.33	-0.01	0.02
Residual Fuel Oil	0.39	0.44	0.47	0.52	0.60	0.54	0.51	0.56	0.58	0.03	0.08
Other Products	0.39	0.47	0.49	0.58	0.64	0.57	0.50	0.47	0.60	0.13	0.12
Total	4.44	4.46	4.31	4.81	5.28	4.30	4.13	4.37	4.63	0.26	0.20
Germany											
LPG	0.11	0.10	0.11	0.09	0.10	0.10	0.11	0.12	0.11	-0.01	0.00
Naphtha	0.39	0.37	0.36	0.33	0.39	0.35	0.33	0.36	0.37	0.01	-0.01
Motor Gasoline	0.45	0.45	0.46	0.45	0.42	0.44	0.44	0.43	0.44	0.01	-0.04
Jet/Kerosene	0.18	0.18	0.19	0.17	0.16	0.18	0.19	0.19	0.19	0.00	0.01
Diesel	0.64	0.67	0.71	0.68	0.64	0.67	0.68	0.69	0.71	0.03	-0.02
Other Gasoil	0.45	0.38	0.44	0.43	0.36	0.36	0.48	0.39	0.23	-0.16	-0.26
Residual Fuel Oil	0.15	0.14	0.14	0.14	0.14	0.13	0.13	0.13	0.12	-0.01	-0.02
Other Products	0.09	0.10	0.12	0.11	0.06	0.10	0.11	0.11	0.10	-0.01	-0.01
Total	2.47	2.40	2.53	2.41	2.27	2.33	2.47	2.42	2.29	-0.14	-0.35
Italy											
LPG	0.11	0.10	0.08	0.11	0.12	0.08	0.08	0.09	0.08	0.00	0.01
Naphtha	0.10	0.08	0.07	0.07	0.07	0.08	0.09	0.07	0.04	-0.02	-0.03
Motor Gasoline	0.24	0.23	0.23	0.22	0.18	0.21	0.23	0.22	0.21	-0.02	-0.03
Jet/Kerosene	0.09	0.09	0.11	0.08	0.07	0.08	0.08	0.10	0.10	0.01	0.00
Diesel	0.49	0.50	0.51	0.50	0.43	0.47	0.49	0.49	0.43	-0.06	-0.04
Other Gasoil	0.12	0.11	0.10	0.13	0.11	0.09	0.10	0.10	0.09	-0.01	0.00
Residual Fuel Oil	0.14	0.13	0.15	0.12	0.13	0.11	0.11	0.12	0.14	0.02	-0.01
Other Products	0.24	0.22	0.21	0.20	0.18	0.20	0.19	0.20	0.23	0.03	0.04
Total	1.54	1.45	1.47	1.43	1.30	1.32	1.37	1.38	1.33	-0.05	-0.07
France											
LPG	0.12	0.10	0.08	0.11	0.13	0.09	0.08	0.08	0.08	0.00	0.00
Naphtha	0.14	0.14	0.14	0.13	0.15	0.15	0.15	0.15	0.15	0.00	0.00
Motor Gasoline	0.18	0.18	0.19	0.17	0.15	0.17	0.18	0.19	0.18	0.00	-0.01
Jet/Kerosene	0.15	0.15	0.16	0.15	0.14	0.15	0.16	0.16	0.16	0.00	0.00
Diesel	0.68	0.69	0.70	0.69	0.67	0.70	0.73	0.73	0.67	-0.05	-0.01
Other Gasoil	0.30	0.27	0.28	0.27	0.33	0.23	0.25	0.29	0.21	-0.08	-0.08
Residual Fuel Oil	0.09	0.08	0.08	0.09	0.09	0.07	0.07	0.06	0.07	0.00	-0.02
Other Products	0.17	0.17	0.20	0.16	0.14	0.16	0.16	0.15	0.14	-0.01	-0.02
Total	1.83	1.79	1.84	1.75	1.80	1.71	1.78	1.80	1.66	-0.14	-0.14
United Kingdom											
LPG	0.14	0.13	0.13	0.12	0.13	0.12	0.11	0.12	0.09	-0.03	-0.04
Naphtha	0.03	0.03	0.02	0.02	0.03	0.02	0.03	0.02	0.02	0.00	0.00
Motor Gasoline	0.36	0.34	0.33	0.33	0.33	0.33	0.33	0.31	0.32	0.01	-0.02
Jet/Kerosene	0.33	0.32	0.33	0.32	0.30	0.31	0.29	0.30	0.29	-0.01	-0.03
Diesel	0.45	0.45	0.45	0.47	0.45	0.46	0.47	0.45	0.45	0.01	0.00
Other Gasoil	0.12	0.12	0.13	0.11	0.11	0.11	0.11	0.12	0.14	0.01	0.00
Residual Fuel Oil	0.07	0.06	0.06	0.06	0.05	0.05	0.05	0.05	0.05	0.00	-0.01
Other Products	0.15	0.15	0.16	0.14	0.15	0.14	0.13	0.14	0.13	-0.01	-0.02
Total	1.63	1.61	1.62	1.57	1.54	1.55	1.53	1.51	1.48	-0.03	-0.14
Canada											
LPG	0.34	0.37	0.35	0.38	0.32	0.33	0.26	0.36	0.33	-0.03	-0.05
Naphtha	0.08	0.08	0.07	0.06	0.09	0.10	0.09	0.10	0.10	0.01	0.01
Motor Gasoline	0.75	0.76	0.80	0.75	0.77	0.82	0.81	0.84	0.86	0.02	0.03
Jet/Kerosene	0.11	0.12	0.13	0.12	0.13	0.12	0.13	0.15	0.12	-0.03	-0.01
Diesel	0.24	0.30	0.30	0.30	0.30	0.30	0.31	0.29	0.29	0.01	-0.02
Other Gasoil	0.31	0.27	0.29	0.27	0.26	0.26	0.24	0.26	0.25	-0.01	-0.03
Residual Fuel Oil	0.10	0.09	0.08	0.09	0.09	0.08	0.09	0.08	0.08	0.00	-0.01
Other Products	0.32	0.31	0.35	0.29	0.27	0.34	0.40	0.33	0.33	0.00	-0.01
Total	2.26	2.29	2.36	2.25	2.22	2.33	2.34	2.40	2.36	-0.04	-0.10

1 Demand, measured as deliveries from refineries and primary stocks, comprises inland deliveries, international bunkers and refinery fuel. It includes crude for direct burning, oil from non-conventional sources and other sources of supply. Jet/kerosene comprises jet kerosene and non-aviation kerosene. Gasoil comprises diesel, light heating oil and other gasoils.
2 Latest official OECD submissions (MOS).
3 US figures exclude US territories.

Table 3
WORLD OIL PRODUCTION
(million barrels per day)

	2011	2012	2013	2Q12	3Q12	4Q12	1Q13	2Q13	Aug 12	Sep 12	Oct 12
OPEC											
Crude Oil											
Saudi Arabia	9.04			9.77	9.60				9.60	9.50	9.55
Iran	3.62			3.14	2.80				2.85	2.63	2.70
Iraq	2.67			2.92	3.07				3.07	3.14	3.16
UAE	2.50			2.65	2.69				2.69	2.69	2.67
Kuwait	2.24			2.45	2.47				2.46	2.48	2.52
Neutral Zone	0.59			0.60	0.60				0.60	0.60	0.60
Qatar	0.74			0.74	0.75				0.75	0.75	0.73
Angola	1.66			1.76	1.72				1.79	1.75	1.79
Nigeria	2.18			2.17	2.17				2.30	2.06	1.95
Libya	0.46			1.40	1.42				1.38	1.44	1.38
Algeria	1.18			1.16	1.18				1.18	1.17	1.15
Ecuador	0.50			0.48	0.49				0.50	0.50	0.48
Venezuela	2.50			2.50	2.52				2.51	2.48	2.48
Total Crude Oil[6]	29.88			31.73	31.48				31.68	31.18	31.16
Total NGLs[1,6]	5.78	6.20	6.48	6.11	6.31	6.33	6.34	6.36	6.31	6.31	6.33
Total OPEC[6]	35.65			37.85	37.79				37.99	37.50	37.49
OPEC: Historical Composition[6]	35.65			37.85	37.79				37.99	37.50	37.49
NON-OPEC[2]											
OECD											
Americas[7]	14.58	15.67	16.46	15.46	15.53	16.13	16.32	16.31	15.45	15.62	16.07
United States[5]	8.12	8.96	9.53	8.85	8.89	9.27	9.37	9.44	8.80	8.95	9.30
Mexico	2.94	2.92	2.79	2.93	2.92	2.90	2.83	2.80	2.94	2.91	2.92
Canada	3.51	3.78	4.12	3.67	3.71	3.94	4.11	4.05	3.70	3.74	3.84
Chile	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.01
Europe[8]	3.77	3.46	3.27	3.60	3.14	3.30	3.42	3.25	3.21	2.75	3.05
UK	1.11	0.96	0.91	1.02	0.83	0.92	1.00	0.91	0.80	0.68	0.75
Norway	2.04	1.90	1.80	1.98	1.74	1.80	1.85	1.78	1.83	1.51	1.71
Others	0.61	0.59	0.56	0.61	0.57	0.59	0.58	0.56	0.58	0.56	0.59
Asia Oceania[9]	0.57	0.56	0.52	0.54	0.64	0.55	0.47	0.53	0.66	0.58	0.55
Australia	0.48	0.47	0.44	0.45	0.55	0.46	0.39	0.45	0.57	0.49	0.47
Others	0.09	0.09	0.08	0.09	0.09	0.09	0.09	0.08	0.09	0.09	0.08
Total OECD	18.92	19.69	20.25	19.60	19.31	19.98	20.22	20.09	19.32	18.95	19.67
NON-OECD											
Former USSR	13.58	13.66	13.56	13.62	13.56	13.75	13.73	13.61	13.49	13.54	13.74
Russia	10.60	10.72	10.62	10.68	10.70	10.77	10.75	10.65	10.71	10.74	10.81
Others	2.98	2.95	2.94	2.94	2.86	2.97	2.99	2.96	2.78	2.81	2.93
Asia	7.68	7.73	7.70	7.60	7.71	7.81	7.77	7.71	7.70	7.86	7.82
China	4.10	4.17	4.23	4.09	4.17	4.26	4.25	4.24	4.17	4.28	4.25
Malaysia	0.65	0.66	0.65	0.64	0.65	0.65	0.65	0.64	0.66	0.65	0.65
India	0.91	0.91	0.90	0.90	0.91	0.93	0.92	0.91	0.89	0.94	0.94
Indonesia	0.93	0.87	0.82	0.88	0.85	0.85	0.85	0.83	0.85	0.85	0.84
Others	1.09	1.11	1.09	1.09	1.13	1.11	1.09	1.09	1.13	1.13	1.13
Europe	0.14	0.14	0.13	0.15	0.14	0.13	0.13	0.13	0.14	0.14	0.14
Latin America	4.23	4.19	4.36	4.14	4.10	4.25	4.26	4.35	4.11	4.06	4.24
Brazil[5]	2.19	2.17	2.37	2.12	2.07	2.23	2.28	2.36	2.09	2.01	2.19
Argentina	0.69	0.67	0.62	0.67	0.68	0.66	0.63	0.62	0.69	0.69	0.66
Colombia	0.92	0.94	0.99	0.95	0.94	0.94	0.96	0.98	0.92	0.96	0.96
Others	0.43	0.41	0.39	0.40	0.41	0.41	0.39	0.38	0.41	0.41	0.42
Middle East[3]	1.65	1.46	1.46	1.46	1.50	1.49	1.46	1.46	1.50	1.50	1.49
Oman	0.89	0.92	0.95	0.91	0.94	0.93	0.92	0.94	0.94	0.94	0.93
Syria	0.33	0.16	0.14	0.16	0.16	0.16	0.15	0.14	0.16	0.16	0.16
Yemen	0.23	0.18	0.18	0.18	0.21	0.21	0.21	0.19	0.20	0.20	0.21
Others	0.20	0.19	0.19	0.20	0.19	0.19	0.19	0.19	0.19	0.19	0.19
Africa	2.60	2.33	2.42	2.28	2.29	2.31	2.35	2.41	2.27	2.30	2.31
Egypt	0.74	0.73	0.72	0.74	0.73	0.73	0.73	0.73	0.73	0.73	0.73
Gabon	0.25	0.26	0.26	0.25	0.26	0.26	0.26	0.26	0.26	0.26	0.26
Others	1.61	1.34	1.45	1.29	1.30	1.32	1.36	1.43	1.29	1.31	1.32
Total Non-OECD	29.88	29.51	29.64	29.24	29.30	29.73	29.71	29.66	29.21	29.40	29.74
Processing Gains[4]	2.11	2.14	2.18	2.11	2.16	2.13	2.18	2.16	2.17	2.13	2.09
Global Biofuels[5]	1.87	1.88	2.03	1.87	2.14	1.94	1.61	2.03	2.20	2.12	1.94
TOTAL NON-OPEC[6]	52.77	53.22	54.09	52.83	52.91	53.78	53.72	53.94	52.90	52.60	53.43
Non-OPEC: Historical Composition[6]	52.77	53.22	54.09	52.83	52.91	53.78	53.72	53.94	52.90	52.60	53.43
TOTAL SUPPLY	88.43			90.68	90.70				90.89	90.10	90.92

1 Includes condensates reported by OPEC countries, oil from non-conventional sources, e.g. Venezuelan Orimulsion (but not Orinoco extra-heavy oil), and non-oil inputs to Saudi Arabian MTBE. Orimulsion production reportedly ceased from January 2007.
2 Comprises crude oil, condensates, NGLs and oil from non-conventional sources
3 Includes small amounts of production from Jordan and Bahrain.
4 Net volumetric gains and losses in refining and marine transportation losses.
5 As of the July 2010 OMR, Global Biofuels comprise all world biofuel production including fuel ethanol from the US and Brazil.
6 Total OPEC comprises all countries which were OPEC members at 1 January 2009. OPEC Historical Composition comprises countries which were OPEC members at that point in time. Total Non-OPEC excludes all countries that were OPEC members at 1 January 2009. Non-OPEC Historical Composition excludes countries that were OPEC members at that point in time.
7 As of the August 2012 OMR, includes Chile.
8 As of the August 2012 OMR, includes Estonia and Slovenia.
9 As of the August 2012 OMR, includes Israel.

Table 4

OECD INDUSTRY STOCKS[1] AND QUARTERLY STOCK CHANGES

	RECENT MONTHLY STOCKS[2] in Million Barrels					PRIOR YEARS' STOCKS[2] in Million Barrels			STOCK CHANGES in mb/d			
	May2012	Jun2012	Jul2012	Aug2012	Sep2012*	Sep2009	Sep2010	Sep2011	4Q2011	1Q2012	2Q2012	3Q2012
OECD Americas												
Crude	523.1	523.1	507.7	499.8	509.0	463.9	507.1	468.9	-0.02	0.38	0.24	-0.15
Motor Gasoline	241.0	240.9	243.1	236.4	233.0	244.3	251.3	250.6	0.09	-0.03	-0.17	-0.09
Middle Distillate	193.0	188.1	197.4	202.3	199.4	252.6	246.3	230.2	-0.04	-0.22	-0.21	0.12
Residual Fuel Oil	42.8	46.1	45.7	42.9	44.8	44.6	49.4	43.3	-0.02	0.02	0.03	-0.01
Total Products[3]	658.9	667.8	687.9	689.8	684.3	738.7	725.1	703.3	-0.14	-0.27	0.02	0.18
Total[4]	1348.4	1359.3	1365.9	1359.2	1368.6	1369.0	1395.6	1340.7	-0.35	0.24	0.32	0.10
OECD Europe												
Crude	311.2	316.3	308.4	317.2	312.1	330.1	319.0	308.3	-0.24	0.26	0.07	-0.05
Motor Gasoline	91.0	88.7	93.5	91.5	93.5	96.9	95.2	89.3	0.07	-0.01	-0.06	0.05
Middle Distillate	257.2	248.8	256.3	269.2	266.6	294.1	280.0	259.8	0.13	0.03	-0.28	0.19
Residual Fuel Oil	79.9	81.8	85.5	84.1	85.2	92.7	99.3	87.2	-0.04	-0.01	-0.01	0.04
Total Products[3]	547.4	538.6	557.9	564.4	563.9	596.8	585.8	557.1	0.13	0.00	-0.34	0.27
Total[4]	927.5	926.5	936.7	951.2	944.0	996.7	970.5	929.8	-0.08	0.32	-0.27	0.19
OECD Asia Oceania												
Crude	172.4	170.3	176.8	165.5	175.4	165.9	155.6	157.6	-0.02	0.00	0.16	0.06
Motor Gasoline	27.2	26.4	27.3	28.1	28.0	25.1	23.9	24.8	-0.03	0.04	0.01	0.02
Middle Distillate	63.3	61.5	64.5	70.7	68.9	72.4	66.4	68.1	-0.08	-0.07	0.07	0.08
Residual Fuel Oil	20.4	19.8	21.0	21.8	21.4	21.4	21.9	20.2	-0.01	0.01	0.00	0.02
Total Products[3]	168.5	167.3	173.0	182.0	185.0	185.1	177.7	181.7	-0.19	-0.12	0.16	0.19
Total[4]	417.3	413.1	424.9	420.0	432.9	419.2	402.5	412.8	-0.25	-0.13	0.38	0.22
Total OECD												
Crude	1006.7	1009.7	992.8	982.5	996.5	959.9	981.7	934.8	-0.28	0.63	0.48	-0.14
Motor Gasoline	359.1	355.9	363.9	355.9	354.5	366.3	370.3	364.7	0.13	-0.01	-0.22	-0.01
Middle Distillate	513.6	498.4	518.3	542.2	534.8	619.1	592.7	558.1	0.01	-0.25	-0.42	0.40
Residual Fuel Oil	143.1	147.8	152.1	148.7	151.4	158.6	170.6	150.7	-0.07	0.02	0.02	0.04
Total Products[3]	1374.8	1373.7	1418.8	1436.2	1433.2	1520.6	1488.6	1442.1	-0.19	-0.39	-0.16	0.65
Total[4]	2693.1	2698.8	2727.5	2730.3	2745.5	2784.9	2768.6	2683.3	-0.68	0.43	0.43	0.51

OECD GOVERNMENT-CONTROLLED STOCKS[5] AND QUARTERLY STOCK CHANGES

	RECENT MONTHLY STOCKS[2] in Million Barrels					PRIOR YEARS' STOCKS[2] in Million Barrels			STOCK CHANGES in mb/d			
	May2012	Jun2012	Jul2012	Aug2012	Sep2012*	Sep2009	Sep2010	Sep2011	4Q2011	1Q2012	2Q2012	3Q2012
OECD Americas												
Crude	696.0	696.0	696.0	696.0	695.1	725.1	726.5	696.0	0.00	0.00	0.00	-0.01
Products	1.0	1.0	1.0	1.0	1.0	2.0	2.0	0.0	0.01	0.00	0.00	0.00
OECD Europe												
Crude	188.7	192.6	194.2	194.8	194.8	186.3	182.0	183.0	0.04	0.03	0.04	0.02
Products	235.2	234.6	233.8	234.6	234.6	245.2	239.3	240.0	-0.02	-0.04	0.00	0.00
OECD Asia Oceania												
Crude	393.5	393.5	393.4	393.4	393.4	388.4	381.9	390.7	0.03	0.00	0.00	0.00
Products	20.0	20.0	20.0	20.0	20.0	19.2	20.0	18.7	0.01	0.00	0.00	0.00
Total OECD												
Crude	1278.1	1282.1	1283.6	1284.2	1283.3	1299.7	1290.5	1269.6	0.07	0.03	0.04	0.01
Products	256.2	255.7	254.8	255.6	255.6	266.4	261.3	258.7	0.00	-0.03	0.00	0.00
Total[4]	1535.6	1539.0	1539.7	1541.1	1540.2	1567.9	1553.2	1529.7	0.07	-0.01	0.04	0.01

* estimated

1 Stocks are primary national territory stocks on land (excluding utility stocks and including pipeline and entrepot stocks where known) and include stocks held by industry to meet IEA, EU and national emergency reserve commitments and are subject to government control in emergencies.

2 Closing stock levels.

3 Total products includes gasoline, middle distillates, fuel oil and other products.

4 Total includes NGLs, refinery feedstocks, additives/oxygenates and other hydrocarbons.

5 Includes government-owned stocks and stock holding organisation stocks held for emergency purposes.

Table 5

TOTAL STOCKS ON LAND IN OECD COUNTRIES[1]

('millions of barrels' and 'days')

	End September 2011		End December 2011		End March 2012		End June 2012		End September 2012 [3]	
	Stock Level	Days Fwd[2] Demand	Stock Level	Days Fwd Demand	Stock Level	Days Fwd Demand	Stock Level	Days Fwd Demand	Stock Level	Days Fwd Demand
OECD Americas										
Canada	176.0	78	177.9	80	171.2	75	169.2	-	-	-
Chile	11.5	35	9.9	29	10.5	30	10.3	-	-	-
Mexico	46.1	21	44.4	21	44.8	21	45.3	-	-	-
United States[4]	1780.9	94	1750.7	95	1778.8	95	1809.4	-	-	-
Total[4]	2036.7	85	2005.0	86	2027.4	86	2056.2	86	2064.7	87
OECD Asia Ocenia										
Australia	38.8	37	40.1	39	39.5	38	40.5	-	-	-
Israel	-	-	-	-	-	-	-	-	-	-
Japan	601.1	125	588.5	111	579.5	135	601.3	-	-	-
Korea	173.6	75	166.8	72	164.0	75	176.7	-	-	-
New Zealand	8.7	56	8.3	52	9.0	61	8.0	-	-	-
Total	822.2	96	803.7	88	792.0	99	826.6	100	846.3	99
OECD Europe[5]										
Austria	21.3	81	22.6	91	22.1	86	21.1	-	-	-
Belgium	36.7	58	36.4	56	34.8	57	38.6	-	-	-
Czech Republic	20.1	105	20.7	114	20.2	101	18.6	-	-	-
Denmark	22.4	138	22.4	142	21.4	133	19.5	-	-	-
Estonia	1.2	47	1.3	48	1.2	42	1.1	-	-	-
Finland	26.4	130	29.2	149	29.9	159	28.0	-	-	-
France	160.0	92	165.0	92	164.7	96	163.7	-	-	-
Germany	276.9	115	278.6	123	281.2	121	280.2	-	-	-
Greece	30.9	93	27.9	79	29.1	94	28.9	-	-	-
Hungary	16.2	112	15.4	125	17.2	143	15.9	-	-	-
Ireland	11.3	77	10.7	84	11.7	91	10.5	-	-	-
Italy	147.6	103	145.7	113	147.9	112	145.2	-	-	-
Luxembourg	0.7	11	0.6	10	0.5	8	0.6	-	-	-
Netherlands	115.9	116	103.0	104	121.1	117	112.6	-	-	-
Norway	24.5	92	25.9	106	29.1	115	27.4	-	-	-
Poland	65.2	110	64.5	126	64.5	118	62.7	-	-	-
Portugal	21.9	90	21.9	90	20.9	88	20.4	-	-	-
Slovak Republic	8.3	99	8.5	110	9.0	124	9.0	-	-	-
Slovenia	4.7	82	4.4	79	4.7	87	4.6	-	-	-
Spain	131.2	97	132.8	99	134.3	104	132.8	-	-	-
Sweden	32.6	108	31.5	109	29.6	98	29.0	-	-	-
Switzerland	37.0	140	35.7	137	35.3	142	35.2	-	-	-
Turkey	56.4	80	55.8	80	57.4	74	60.7	-	-	-
United Kingdom	84.7	54	87.8	57	88.6	57	88.7	-	-	-
Total	1354.1	95	1348.3	98	1376.4	100	1355.0	97	1374.7	100
Total OECD	4212.9	90	4157.0	90	4195.9	92	4237.8	92	4285.7	93
DAYS OF IEA Net Imports[6]	-	144	-	143	-	144	-	150	-	-

1 Total Stocks are industry and government-controlled stocks (see breakdown in table below). Stocks are primary national territory stocks on land (excluding utility stocks and including pipeline and entrepot stocks where known) they include stocks held by industry to meet IEA, EU and national emergency reserves commitments and are subject to government control in emergencies.
2 Note that days of forward demand represent the stock level divided by the forward quarter average daily demand and is very different from the days of net imports used for the calculation of IEA Emergency Reserves.
3 End September 2012 forward demand figures are IEA Secretariat forecasts.
4 US figures exclude US territories. Total includes US territories.
5 Data not available for Iceland.
6 Reflects stock levels and prior calendar year's net imports adjusted according to IEA emergency reserve definitions (see www.iea.org/netimports.asp). Net exporting IEA countries are excluded.

TOTAL OECD STOCKS

CLOSING STOCKS	Total	Government[1] controlled	Industry	Total	Government[1] controlled	Industry
	Millions of Barrels			*Days of Fwd. Demand*[2]		
3Q2009	4353	1568	2785	93	34	60
4Q2009	4232	1568	2664	91	34	57
1Q2010	4270	1571	2699	93	34	59
2Q2010	4345	1566	2779	92	33	59
3Q2010	4322	1553	2769	91	33	58
4Q2010	4257	1565	2693	90	33	57
1Q2011	4216	1562	2654	93	34	59
2Q2011	4262	1565	2697	91	33	57
3Q2011	4213	1530	2683	90	33	57
4Q2011	4157	1536	2621	90	33	57
1Q2012	4196	1536	2660	92	34	58
2Q2012	4238	1539	2699	92	33	58
3Q2012	4286	1540	2746	93	33	60

1 Includes government-owned stocks and stock holding organisation stocks held for emergency purposes.
2 Days of forward demand calculated using actual demand except in 3Q2012 (when latest forecasts are used).

Table 6

IEA MEMBER COUNTRY DESTINATIONS OF SELECTED CRUDE STREAMS[1]

(million barrels per day)

	2009	2010	2011	3Q11	4Q11	1Q12	2Q12	Jun 12	Jul 12	Aug 12	Year Earlier Aug 11	Year Earlier change
Saudi Light & Extra Light												
Americas	0.52	0.69	0.69	0.47	0.85	0.84	0.88	0.93	0.68	0.73	0.55	0.18
Europe	0.59	0.66	0.83	0.93	0.88	0.76	0.91	1.11	0.96	1.05	1.00	0.06
Asia Oceania	1.28	1.21	1.24	1.21	1.27	1.37	1.21	1.15	1.25	1.16	1.12	0.04
Saudi Medium												
Americas	0.40	0.36	0.37	0.40	0.40	0.47	0.44	0.37	0.41	0.43	0.33	0.11
Europe	0.02	0.00	0.02	0.05	0.01	0.05	0.07	0.05	0.06	0.01	0.07	-0.05
Asia Oceania	0.34	0.34	0.40	0.43	0.40	0.46	0.42	0.37	0.46	0.49	0.47	0.03
Saudi Heavy												
Americas	0.03	0.02	0.02	0.03	0.01	-	0.15	0.11	0.03	0.03	-	-
Europe	0.02	0.00	0.01	0.03	0.03	0.04	0.12	0.13	0.16	0.26	0.02	0.24
Asia Oceania	0.15	0.22	0.20	0.23	0.18	0.21	0.18	0.17	0.20	0.19	0.19	-0.01
Iraqi Basrah Light[2]												
Americas	0.40	0.36	0.29	0.31	0.21	0.39	0.55	0.61	0.41	0.57	0.47	0.11
Europe	0.12	0.09	0.11	0.19	0.11	0.14	0.18	0.41	0.50	0.40	0.21	0.19
Asia Oceania	0.24	0.29	0.34	0.38	0.32	0.26	0.34	0.46	0.41	0.31	0.39	-0.08
Iraqi Kirkuk												
Americas	0.06	0.03	0.07	0.05	0.06	0.06	0.08	0.12	0.04	0.04	0.15	-0.11
Europe	0.31	0.27	0.27	0.32	0.26	0.20	0.23	0.24	0.18	0.20	0.29	-0.08
Asia Oceania	-	-	-	-	-	-	-	-	-	-	-	-
Iranian Light												
Americas	-	-	-	-	-	-	-	-	-	-	-	-
Europe	0.15	0.24	0.23	0.20	0.21	0.25	0.16	0.21	0.00	0.10	0.20	-0.10
Asia Oceania	0.07	0.04	0.04	0.04	0.03	0.03	0.02	0.01	-	0.02	0.07	-0.05
Iranian Heavy[3]												
Americas	-	-	-	-	-	-	-	-	-	-	-	-
Europe	0.40	0.49	0.55	0.73	0.54	0.33	0.21	0.19	0.04	0.12	0.68	-0.56
Asia Oceania	0.57	0.52	0.51	0.51	0.49	0.48	0.38	0.50	0.01	0.08	0.49	-0.41
Venezuelan Light & Medium												
Americas	0.39	0.14	0.18	0.24	0.13	0.07	0.15	-	0.19	0.08	0.31	-0.22
Europe	0.07	0.02	0.02	0.02	0.02	0.01	-	-	0.02	0.02	0.01	0.01
Asia Oceania	-	-	-	-	-	0.01	0.01	0.02	-	-	-	-
Venezuelan 22 API and heavier												
Americas	0.75	0.86	0.76	0.70	0.69	0.68	0.58	0.50	0.71	0.78	0.77	0.01
Europe	0.07	0.06	0.05	0.06	0.05	0.08	0.09	0.10	0.12	0.08	0.07	0.01
Asia Oceania	-	-	-	-	-	-	-	-	-	-	-	-
Mexican Maya												
Americas	0.93	0.91	0.82	0.84	0.84	0.72	0.69	0.63	0.76	0.77	0.93	-0.17
Europe	0.10	0.11	0.12	0.12	0.12	0.12	0.14	0.14	0.11	0.10	0.09	0.02
Asia Oceania	-	-	-	-	-	-	-	-	-	-	-	-
Mexican Isthmus												
Americas	0.01	0.04	0.07	0.06	0.07	0.04	0.03	0.01	0.09	0.07	0.06	0.01
Europe	0.01	0.02	0.01	0.00	0.01	0.02	0.05	0.02	0.05	-	-	-
Asia Oceania	-	-	-	-	-	-	-	-	-	-	-	-
Russian Urals												
Americas	0.15	0.08	0.01	-	0.02	-	0.01	-	0.02	-	-	-
Europe	1.72	1.80	1.69	1.51	1.61	1.75	1.76	1.69	1.97	2.01	1.34	0.67
Asia Oceania	-	-	-	-	-	-	-	-	-	-	-	-
Nigerian Light[4]												
Americas	0.54	0.60	0.53	0.43	0.46	0.25	0.31	0.41	0.22	0.28	0.48	-0.21
Europe	0.32	0.34	0.45	0.54	0.48	0.51	0.52	0.56	0.62	0.70	0.62	0.08
Asia Oceania	0.00	-	0.05	0.06	0.05	0.03	0.06	0.00	-	0.05	0.05	-0.01
Nigerian Medium												
Americas	0.21	0.25	0.18	0.18	0.14	0.04	0.07	-	0.16	0.15	0.17	-0.02
Europe	0.13	0.09	0.14	0.11	0.13	0.26	0.25	0.21	0.31	0.22	0.14	0.08
Asia Oceania	-	-	-	-	-	-	-	-	-	0.01	-	-

1 Data based on monthly submissions from IEA countries to the crude oil import register (in '000 bbl), subject to availability. May differ from Table 8 of the Report.
IEA Americas includes United States and Canada.
IEA Europe includes all countries in OECD Europe except Estonia, Hungary and Slovenia.
IEA Asia Oceania includes Australia, New Zealand, Korea and Japan.

2 Iraqi Total minus Kirkuk.

3 Iranian Total minus Iranian Light.

4 33° API and lighter (e.g., Bonny Light, Escravos, Qua Iboe and Oso Condensate).

Table 7
REGIONAL OECD IMPORTS[1,2]
(thousand barrels per day)

	2009	2010	2011	3Q11	4Q11	1Q12	2Q12	Jun-12	Jul-12	Aug-12	Year Earlier Aug-11	Year Earlier % change
Crude Oil												
Americas	7541	7496	6870	6960	6668	6151	6495	6688	6201	6112	6944	-12%
Europe	8893	9072	8985	9331	8903	9119	9176	9463	9786	10039	9541	5%
Asia Oceania	6311	6472	6609	6498	6730	6994	6727	6315	6778	6525	6482	1%
Total OECD	22746	23039	22464	22789	22301	22264	22398	22466	22765	22677	22967	-1%
LPG												
Americas	43	34	33	35	20	20	28	33	35	33	43	-22%
Europe	261	285	309	305	328	300	281	284	256	256	298	-14%
Asia Oceania	537	565	568	587	553	658	603	580	536	616	531	16%
Total OECD	840	884	909	927	902	978	911	897	827	905	872	4%
Naphtha												
Americas	22	36	42	43	38	15	34	42	10	26	45	-42%
Europe	336	399	272	266	238	399	363	344	341	240	193	24%
Asia Oceania	849	907	884	914	861	839	878	993	816	899	936	-4%
Total OECD	1207	1343	1198	1223	1137	1253	1275	1379	1167	1164	1173	-1%
Gasoline[3]												
Americas	884	801	762	714	655	679	772	816	798	932	771	21%
Europe	206	187	222	220	213	280	180	204	275	169	235	-28%
Asia Oceania	111	84	94	91	113	95	92	59	65	68	107	-37%
Total OECD	1200	1073	1078	1026	981	1054	1044	1078	1138	1169	1113	5%
Jet & Kerosene												
Americas	62	76	77	83	67	42	61	59	45	134	75	78%
Europe	449	418	396	449	449	290	375	451	486	455	448	1%
Asia Oceania	60	46	56	51	61	77	38	41	61	54	45	18%
Total OECD	571	539	530	584	577	408	474	551	593	642	569	13%
Gasoil/Diesel												
Americas	91	100	72	67	58	71	45	59	43	45	43	6%
Europe	1063	1071	1042	981	1101	1026	859	1044	994	979	838	17%
Asia Oceania	92	104	147	154	171	170	176	190	222	221	144	53%
Total OECD	1246	1275	1261	1202	1329	1268	1080	1293	1259	1245	1025	21%
Heavy Fuel Oil												
Americas	271	277	268	196	228	220	217	254	207	195	206	-5%
Europe	489	464	536	624	550	631	534	584	533	465	634	-27%
Asia Oceania	116	118	153	170	182	221	203	223	223	225	182	24%
Total OECD	876	860	957	990	961	1072	954	1061	963	885	1022	-13%
Other Products												
Americas	877	807	871	900	828	751	840	896	880	777	832	-7%
Europe	747	692	690	712	619	590	664	590	664	580	820	-29%
Asia Oceania	353	375	373	390	375	389	369	375	339	363	365	0%
Total OECD	1977	1874	1934	2002	1822	1730	1873	1861	1883	1720	2017	-15%
Total Products												
Americas	2250	2132	2124	2038	1893	1797	1996	2159	2018	2142	2015	6%
Europe	3551	3516	3467	3557	3498	3516	3256	3500	3549	3143	3467	-9%
Asia Oceania	2117	2199	2277	2357	2316	2450	2360	2460	2261	2445	2310	6%
Total OECD	7918	7847	7868	7953	7707	7763	7612	8120	7829	7730	7792	-1%
Total Oil												
Americas	9791	9627	8995	8999	8562	7949	8491	8847	8219	8255	8959	-8%
Europe	12445	12588	12452	12888	12401	12635	12432	12963	13335	13183	13007	1%
Asia Oceania	8428	8671	8886	8855	9047	9443	9087	8776	9039	8970	8792	2%
Total OECD	30664	30886	30332	30742	30009	30027	30010	30586	30594	30407	30759	-1%

1 Based on Monthly Oil Questionnaire data submitted by OECD countries in tonnes and converted to barrels.
2 Excludes intra-regional trade.
3 Includes additives.

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User's Guide and Glossary to the IEA *Oil Market Report*

For information on the data sources, definitions, technical terms and general approach used in preparing the *Oil Market Report (OMR)*, *Medium-Term Oil and Gas Markets (MTOGM)* and *Annual Statistical Supplement* (current issue of the Statistical Supplement dated 10 August 2012), readers are referred to the *Users' Guide* at www.oilmarketreport.org/glossary.asp. It should be noted that the spot crude and product price assessments are based on daily Argus prices, converted when appropriate to US$ per barrel according to the Argus specification of products (Copyright © 2012 Argus Media Limited - all rights reserved).

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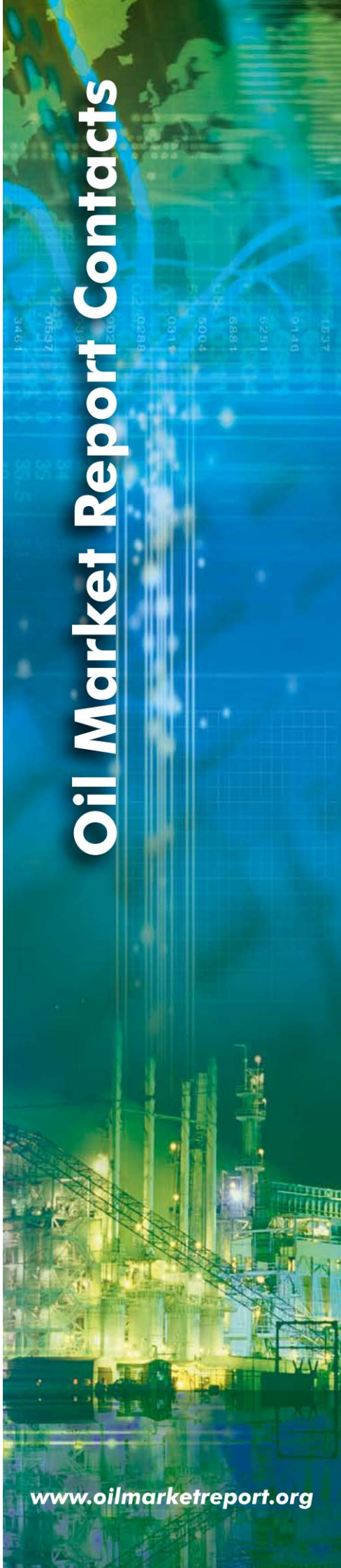

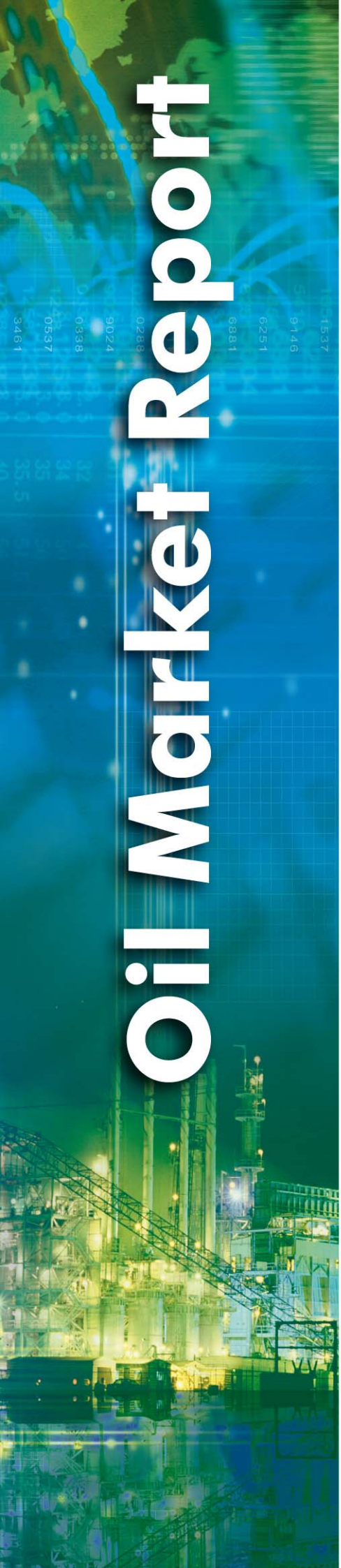

International Energy Agency

12 December 2012

HIGHLIGHTS

- **Oil futures extended earlier declines in November**, as persistent concerns about the economy and the looming US fiscal cliff appeared to eclipse those about political risks in Israel, Gaza, Syria and Iran. Benchmark crudes inched further down in early December, with WTI last trading at $85.90/bbl and Brent at $107.85/bbl.

- **Global oil demand is projected at around 90.5 mb/d in 4Q12, 435 kb/d more than forecast last month**, following stronger-than-expected October preliminary demand data and signs of improving Chinese sentiment. Relatively sluggish demand growth is forecast through 2013, as global economic expansion remains tepid.

- **Non-OPEC production bounced back by 0.7 mb/d in November** on the month, to 54 mb/d, after fields in the North Sea and Brazil returned from maintenance. US output also rose steeply and will contribute to an aggregate non-OPEC increase of 0.9 mb/d to 54.2 mb/d in 2013, the highest growth rate since 2010.

- **OPEC crude oil supply inched up by 75 kb/d to 31.22 mb/d in November**, led by higher output from Saudi Arabia, Angola, Algeria and Libya. Nigerian output remained constrained by severe flooding and sabotage. Iranian production edged lower under the weight of shipping constraints and stepped-up sanctions.

- **OECD commercial oil inventories drew by a seasonal 16.2 mb to stand at 2 722 mb in October,** bringing to a halt seven consecutive months of stock building. Forward cover remains at 59.1 days, unchanged from a downwardly-revised September level. Preliminary data indicate a further draw in November.

- **Global refinery runs have been revised lower by 140 kb/d for 4Q12 to average 75.3 mb/d**. Growth is nevertheless expected at 950 kb/d year-on-year, driven by non-OECD Asia. Refinery margins extended earlier declines in November, led by decreases in gasoline and fuel oil cracks.

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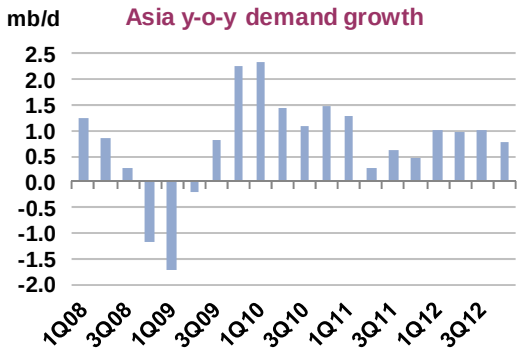
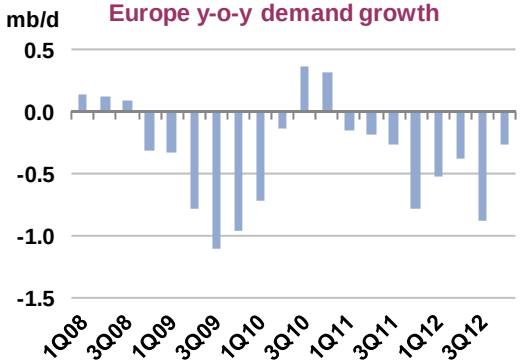
A MARKET IN TRANSITION

On the surface, the oil market appears calm. With so much in the world seemingly on the brink, crude price trends look as close to a flat EKG as they have in months. Prices have been easing, but gently, within a relatively narrow band, in stark contrast with the wild roller coaster ride of earlier this year. On closer examination, market fundamentals tell another story.

Recent data have helped to show two key areas of almost violent structural change in sharp relief. The first has to do with an apparent acceleration in the eastward shift of global oil demand growth. Latest data show European oil demand underwent the steepest contraction y-o-y in 3Q12 since the 2008-2009 financial crisis, even as Asian oil demand remained remarkably robust.





While there clearly are similarities between Europe's situation now and then, the differences are even more striking. The last time European oil demand nosedived as it did this summer, international oil prices had been in freefall. Not only are crude prices holding up, but European consumer prices hovered near record highs this summer, buoyed in part by a weakening currency. This was likely part of the reason for the dip in demand.

Three years ago, Europe was broadly in sync with Asia and the rest of the world. Today, there is a clear contrast not only in oil demand trends, but also in economic growth between Europe and Asia. North America falls somewhere in the middle. Everywhere, uncertainty prevails. China is sending out mixed economic signals. Meanwhile, whether the recent plunge in European oil demand is part of a trend or just a one-off is unclear. Early data show demand bouncing back in October, but may be revised.

While Asia and Europe are going their opposite ways, the refining industry – and that is the second trend highlighted in recent data – is coming together. Product specifications are converging. Long-haul product trade is on the rise. End-user markets are globalising. No longer is refining a local industry. Exports are what's driving throughputs in Europe and the US in the face of local demand contraction. Until recently the largest product importer, the US has become the world's second largest exporter after Russia, which recently hit record-high runs. India, another product exporter, is also on the rise.

Crude and product markets are moving at different speeds. While the former seems quiet, refining margins have been more volatile. High in Europe this summer amid weak regional demand, they plunged just when demand seemed to rebound. It is tempting to draw a link between those swings and rising long-haul product trade. As refiners extend their reach, adjustment to market changes may be abrupt.

Further muddling the picture, crude exporters, faced with surging demand, are expanding downstream. Saudi Aramco is leading the way with the start-up of new capacity both at home and abroad. Among the many reasons why OPEC producers might find market management an even more elusive goal than in the past, the least may not be these deep, complex and challenging shifts in market structure.

DEMAND

Summary

- **Global oil demand is projected to grow to around 90.5 mb/d in 4Q12 – roughly 435 kb/d more than estimated in last month's report – after having risen to an average 90 mb/d in 3Q12.** Leading the upward revision for 4Q12 were higher-than-expected October product deliveries in Mexico (+150 kb/d, 4Q12), signs of stronger implied demand in China (+115 kb/d) and surprisingly robust data for Germany (+105 kb/d). The revised 4Q12 estimate brings the assessment of year-on-year global demand growth for 2012 to around 850 kb/d or 0.9%, a 70 kb/d increase from last month's forecast. Fourth-quarter upward adjustments were partly offset by a 140 kb/d downward revision to 3Q12 estimates, led by cuts in the US (-115 kb/d), Turkey (-95 kb/d) and Germany (-55 kb/d).

- **OECD European oil demand plummeted by 895 kb/d y-o-y in 3Q12, to 13.8 mb/d. This was the steepest contraction in OECD European demand since the onset of the 2008-2009 financial crisis, and apparently resulted from the combination of near-record product prices and a weak economy.** Contraction in European demand is expected to slow through our forecast, however, as underlying macroeconomic conditions improve, albeit slowly. Exceptionally weak European demand in 3Q12 was partly offset by comparatively robust demand growth in Asia, including both OECD and non-OECD economies.

- **Global demand growth is expected to stay relatively sluggish through 2013, based on the continued assumption of tepid global economic expansion – notwithstanding signs that Chinese sentiment has turned mildly positive – and despite stronger-than-expected preliminary demand data for October.** Global oil demand growth for 2013 is now forecast at 865 kb/d, taking consumption up to an average of 90.5 mb/d (110 kb/d more than projected last month). We continue to assume global economic growth of 3.3% for 2012 and 3.6% for 2013, in line with International Monetary Fund forecasts.

- **Five of the world's top-10 oil consumers are now non-OECD countries.** Improved data quality from many non-OECD countries make it possible to look at monthly demand rankings and patterns in the world's top oil consumers regardless of OECD affiliation. While the US continued to lead the group as of September by a wide margin, with demand of 18.2 mb/d, the so-called BRIC countries and Saudi Arabia together took five of the next six spots. China is ranked second with demand of 9.8 mb/d, followed by Japan (4.4 mb/d). India, Russia and Saudi Arabia came next, with demand of around 3.4 mb/d each, followed by Brazil (3 mb/d). The top-10 consumers as a whole account for roughly 60% of total global demand in September, thus exceeding OECD's 50% share.

Global Oil Demand (2011-2013)

(million barrels per day)

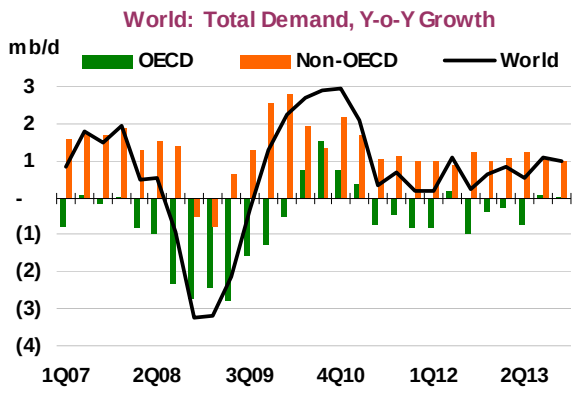
	1Q11	2Q11	3Q11	4Q11	2011	1Q12	2Q12	3Q12	4Q12	2012	1Q13	2Q13	3Q13	4Q13	2013
Africa	3.3	3.3	3.2	3.3	3.3	3.4	3.4	3.4	3.4	3.4	3.5	3.5	3.5	3.5	3.5
Americas	30.3	30.1	30.7	30.4	30.4	29.8	30.3	30.6	30.4	30.3	30.0	30.2	30.8	30.7	30.4
Asia/Pacific	29.0	27.7	27.8	29.2	28.4	30.0	28.7	28.8	30.0	29.4	30.5	29.3	29.0	30.2	29.8
Europe	14.9	14.8	15.4	14.8	15.0	14.4	14.5	14.6	14.6	14.5	14.1	14.1	14.6	14.5	14.3
FSU	4.2	4.4	4.6	4.6	4.4	4.5	4.5	4.7	4.6	4.6	4.6	4.6	4.8	4.9	4.7
Middle East	6.9	7.4	7.8	7.3	7.4	7.1	7.7	8.0	7.5	7.6	7.3	7.8	8.2	7.7	7.8
World	**88.7**	**87.6**	**89.4**	**89.7**	**88.9**	**89.1**	**89.0**	**90.0**	**90.5**	**89.7**	**90.0**	**89.5**	**91.1**	**91.6**	**90.5**
Annual Chg (%)	2.5	0.4	0.8	0.2	0.9	0.5	1.5	0.6	0.9	0.9	0.9	0.6	1.2	1.1	1.0
Annual Chg (mb/d)	2.1	0.4	0.7	0.2	0.8	0.5	1.3	0.6	0.8	0.8	0.8	0.5	1.1	1.0	0.9
Changes from last OMR (mb/d)	-0.03	-0.05	-0.09	-0.07	-0.06	-0.02	0.00	-0.14	0.44	0.07	0.06	0.09	0.05	0.23	0.11

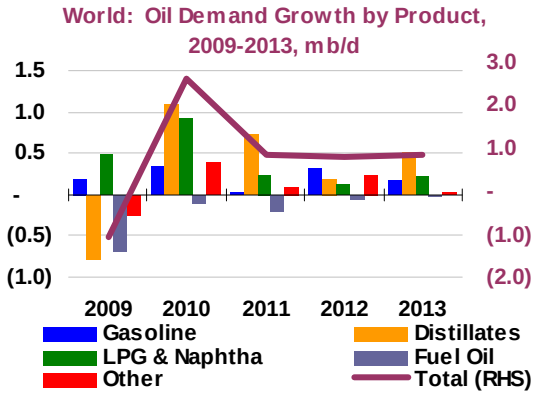
Global Overview

Although 2012 is already drawing to a close, it will take several more months for OECD oil data for the year to come through, and longer still for most non-OECD economies. Based on currently available

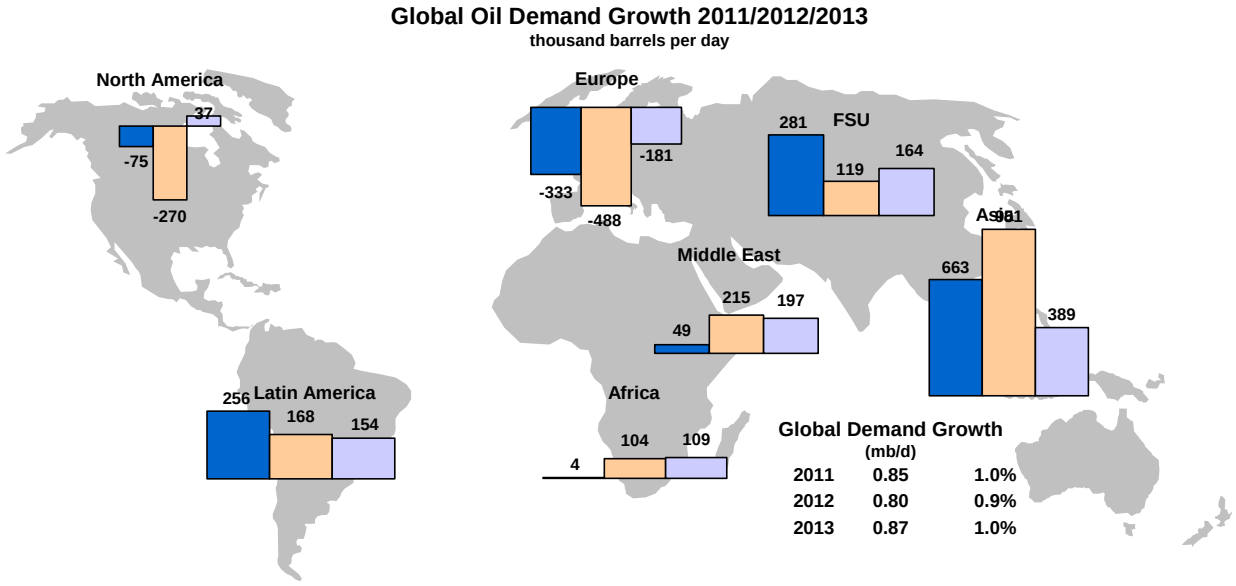
information, however, global oil demand for 2012 is now projected at around 89.7 mb/d, 0.8 mb/d (or 0.9%) more than in 2011, a growth forecast roughly on a par with the projections we have carried since the beginning of the year. Nevertheless this relatively steady headline figure conceals a multitude of mutually offsetting revisions for specific regions and quarters. This month alone is seeing 140 kb/d of oil product demand stripped from the 3Q12 estimate and 435 kb/d added to the 4Q12 forecast. The latest revisions reflect various unpredictable factors, including one-off incidents such as a fire at a Mexican natural-gas facility, broad statistical revisions in Turkey and weather disruptions in the US.

Leading the adjustments to 4Q12 demand forecasts were large upward revisions to preliminary October inland delivery statistics for Mexico (275 kb/d), France (140 kb/d), India (125 kb/d) and China (110 kb/d). October also had its share of downward revisions, however, particularly in the US and Korea, whose demand estimates were trimmed by 65 kb/d and 35 kb/d, respectively, from last month's assessments.





Revisions to September data resulted in an aggregate downward adjustment to the 3Q12 global demand estimate of 140 kb/d, to 90.0 mb/d. The US led the September cuts with a 350 kb/d reduction since last month's report, followed by Turkey (-110 kb/d), Brazil (-100 kb/d), Israel (-60 kb/d) and the Netherlands (-45 kb/d). In Turkey, the cut is part of a larger downward reassessment of historical data (see *OECD Europe*). Notable upward adjustments for September include China, Canada, Iraq and Egypt, up by 135 kb/d, 110 kb/d, 40 kb/d and 30 kb/d, respectively.



A modest acceleration in growth is foreseen in 2013, to 0.9 mb/d (or 1.0%), as global oil product demand averages 90.5 mb/d for the year as a whole. This reflects the assumption of slightly improved macroeconomic conditions, consistent with the IMF forecast of an acceleration in GDP growth to 3.6% in 2013 from 3.3% in 2012 – with emerging markets continuing to dominate growth. Asia, especially non-OECD Asia, leads the upside, followed by the resource rich economies of the Middle East, the FSU and Latin America. The middle-of-the-barrel will continue to dominate demand growth through the forecast, with distillates projected to account for nearly 60% of total global oil demand growth in 2013, light products accounting for the majority of the remainder.

Top-10 Consumers

As the balance of global oil demand growth shifts away from the world's mature economies to faster-growing emerging and newly-industrialised economies, the traditional division of the oil-consuming world between OECD and non-OECD economies is becoming an increasingly blunt analytical instrument. For a long time, while monthly oil data were provided for all OECD economies, non-OECD demand trends could only be assessed on a quarterly basis, if not an annual one. Today, however, many non-OECD economies, including some of the largest and fastest-growing ones, report oil data monthly – albeit with varying degrees of detail, timeliness and regularity. Persistent data-quality issues notwithstanding, it is becoming possible to assess oil demand patterns in the world's leading oil economies with far more granularity and timeliness than provided in the traditional quarterly and annual global forecasts.

The IEA is inaugurating in this report a monthly look at demand patterns across the world's top 10 oil consumers, regardless of OECD affiliation or geographical location. We start with the ranking of the top 10 leaders for September, the most recent month for which comprehensive data are available. Not surprisingly, the US, long the world's largest consumer, holds the top spot by a wide margin. China comes in second, followed by Japan, India and Russia. The so-called BRIC countries – Brazil, Russia, India and China – and Saudi Arabia together occupy five of the top-seven slots. While those top rankings are unlikely to change from month to month, at the bottom end of the group more variation may be expected as many countries come close to each other in demand levels. Thus Mexico, though it failed to make the top 10 cut for September, may leapfrog Korea in October thanks to a spike that month in oil demand for power generation. It could fall back again in November if that spike proves short-lived.

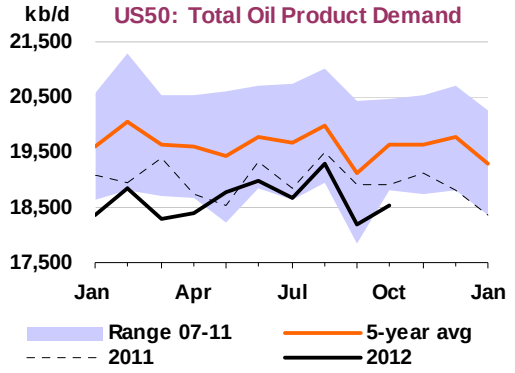
Top-10 Oil Consumers
(thousand barrels per day)

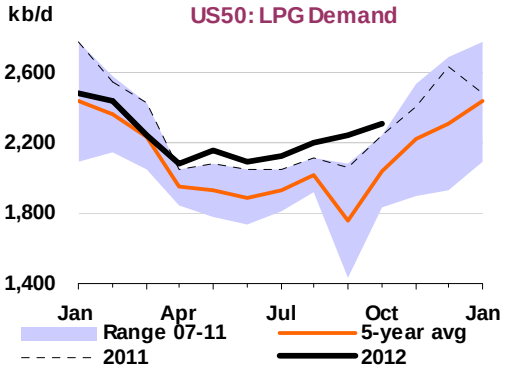
	Demand			Annual Chg (kb/d)			Annual Chg (%)		
	Sep-12	2012	2013	Sep-12	2012	2013	Sep-12	2012	2013
US50	18,202	18,657	18,681	-716	-352	24	-3.8	-1.9	0.1
China	9,833	9,545	9,848	917	301	303	10.3	3.3	3.2
Japan	4,443	4,697	4,526	165	233	-171	3.9	5.2	-3.6
Russia	3,411	3,357	3,507	60	105	150	1.8	3.2	4.5
India	3,410	3,662	3,757	77	148	95	2.3	4.2	2.6
Saudi Arabia	3,387	3,032	3,162	184	158	130	5.7	5.5	4.3
Brazil	3,031	2,977	3,056	2	83	79	0.1	2.9	2.7
Canada	2,471	2,343	2,345	169	54	2	7.3	2.3	0.1
Germany	2,339	2,350	2,346	-211	-50	-4	-8.3	-2.1	-0.2
Korea	2,265	2,262	2,265	24	32	3	1.1	1.4	0.1
% global demand	59%	59%	59%						

US

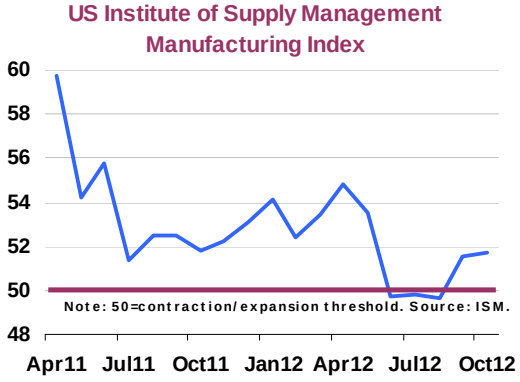
US demand averaged 18.2 mb/d in September, roughly double estimates for second-placed China. Whereas Chinese demand has been expanding, US demand has been on a structural decline since late 2005. Year-on-year contraction for September reached 3.8%, the steepest annual decline since March

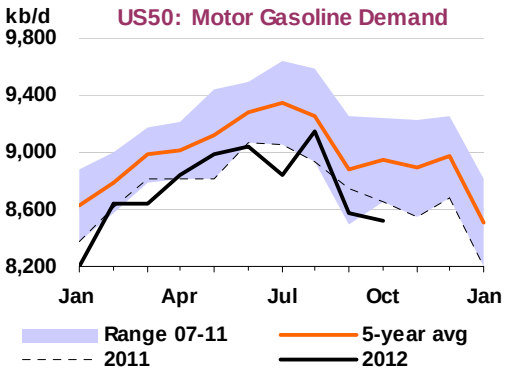
this year, and 350 kb/d below our month-earlier projection of a 1.9% decline. Demand for residual fuel oil led the decline (-39.7% to 285 kb/d), followed by demand for 'other products' (-10.4% to 1.8 mb/d) and naphtha (-10.0% to 210 kb/d). Absolute declines were seen across all key product categories except LPG, demand for which surged by 8.4%, to 2.2 mb/d, buoyed by the resurgent US petrochemical industry. Fuel switching from naphtha to LPG for ethylene manufacturing likely explained the contrasting trends in demand for those two products.





Recently, US demand has come under additional pressure as Hurricane Sandy impeded late-October/early-November deliveries, compounding the effect of a weak economy and uncertainty about the looming "fiscal cliff". Preliminary estimates for October imply average consumption of 18.5 mb/d, down by 1.9% y-o-y and 65 kb/d less than our month earlier forecast. In relative terms, consumer fuels, such as gasoline, fared worse, reflecting persistently high unemployment and weak consumer sentiment. Industrial fuels, such as distillates, held up better, as manufacturing indicators such as the Institute for Supply Management's Purchasing Managers' Index (PMI) have shown some improvement. The PMI remained in growth mode in October for the second month in a row, reversing the previous contraction, though at 51.7 the uptrend remains limited.

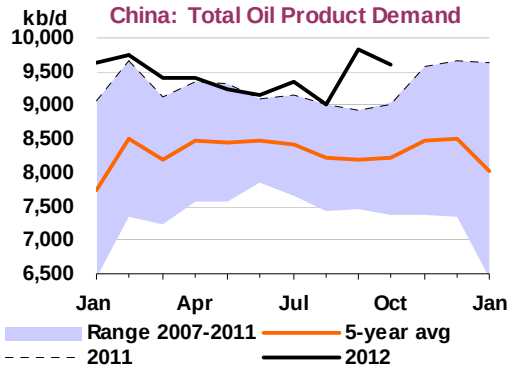




China

Markets have grown somewhat more optimistic about the Chinese economy as confidence indicators recently turned expansionary after a long period in the doldrums. Reversing months of contraction indicated by a reading below 50, HSBC's seasonally-adjusted Chinese Manufacturing PMI broke into expansionary-territory in November. Monthly readings had improved steadily since August. This trend seems consistent with signs of a return to more robust Chinese oil demand growth in the last two months, following uncharacteristically sluggish expansion earlier this year. Chinese apparent oil demand surged by +10.3% in September and 6.5% in October (both y-o-y), raising our 4Q12 Chinese demand forecast to 9.9 mb/d, 115 kb/d higher than projected in last month's report. The upward revision brings the projection of 4Q12 annual demand growth to 500 kb/d, or 5.3%. Higher apparent demand came along with a step change in refining activity. Chinese refineries ran at 9.4 mb/d in October, near the

record high posted in September. Demand forecasts for both November and December have been adjusted upwards – with more than 100 kb/d added to both projections – to more than 10 mb/d.



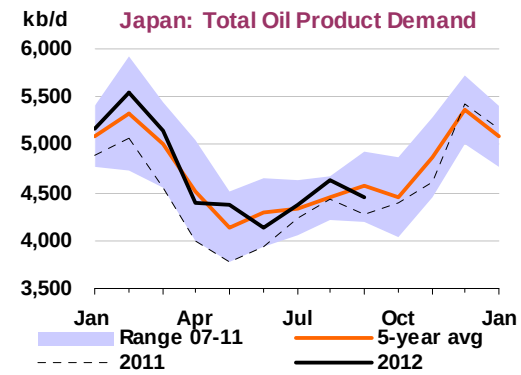
A 3% reduction in Chinese retail gasoline and diesel prices as of mid-November contributes to this slightly more bullish demand outlook. On the flip side, however, lower retail prices might cut refining margins and thus refinery runs, resulting in lower apparent demand readings. Chinese demand is estimated at 9.5 mb/d for 2012 as a whole, up by 300 kb/d (3.3%) on 2011. Similar growth is foreseen in 2013, with demand forecast to average 9.8 mb/d, as economic growth is expected to remain below its recent lofty heights.

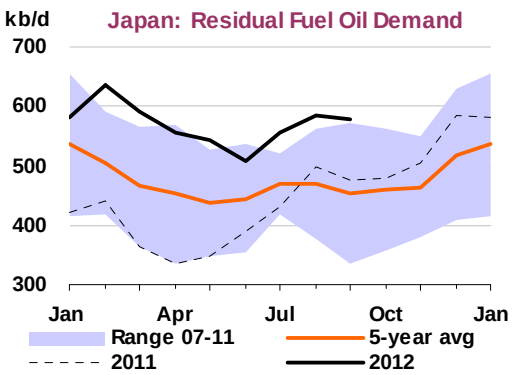
China: Demand by Product
(thousand barrels per day)

	Demand			Annual Chg (kb/d)		Annual Chg (%)	
	2011	2012	2013	2012	2013	2012	2013
LPG & Ethane	720	734	745	14	11	2.0	1.5
Naphtha	1,113	1,110	1,169	-3	59	-0.2	5.3
Motor Gasoline	1,754	1,910	1,973	156	63	8.9	3.3
Jet Fuel & Kerosene	419	436	450	18	13	4.2	3.1
Gas/Diesel Oil	3,193	3,230	3,340	37	110	1.2	3.4
Residual Fuel Oil	507	522	531	14	10	2.8	1.8
Other Products	1,538	1,603	1,641	64	38	4.2	2.4
Total Products	**9,243**	**9,545**	**9,848**	**301**	**303**	**3.3**	**3.2**

Japan

Japanese oil demand rose 3.9% y-o-y to 4.4 mb/d in September, led by residual fuel oil (+21.1% to 575 kb/d) and 'other products' (+13.4% to 600 kb/d). B--oth of these fuels continue to post exponential growth on the back of additional replacement demand from the power sector, shorn of nuclear capacity since the Great East Japan Earthquake and tsunami of March 2011. Even the previously ailing gasoline market returned to growth territory in September, up 1.2% y-o-y to 995 kb/d, having endured an average decline rate of 1.3% through the preceding three months.



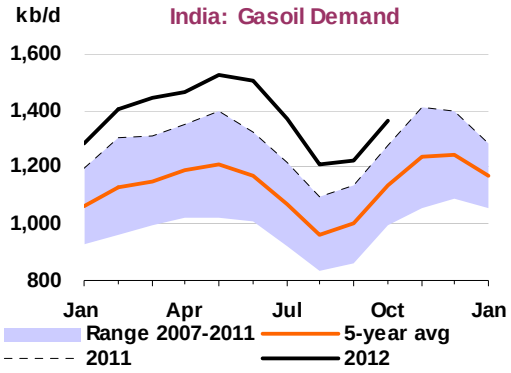


Russia

Having expanded by an average of over 4% in the previous nine months, Russian demand growth came to a halt in October as sharp declines in transportation fuels offset advances for heavier products. All told, Russia consumed 3.4 mb/d of oil products in October (and September), reporting in line with expectations and unchanged from the corresponding month in 2011. Assuming a modest uptick in momentum towards the end of the year, demand should average 3.4 mb/d in 2012, up by 105 kb/d (or 3.2%) on 2011.

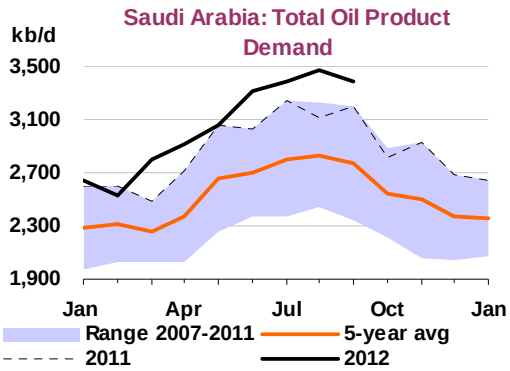
India

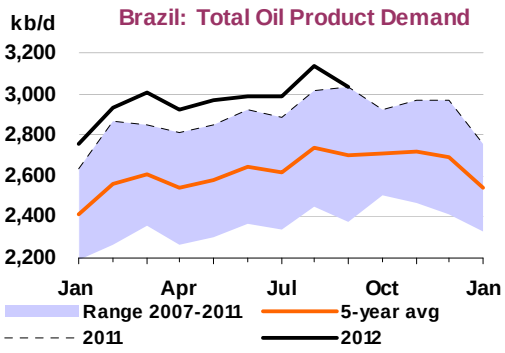
Preliminary estimates of Indian demand average 3.7 mb/d in October, 6.4% more than the year earlier and a return to the robust growth trend seen prior to September. Roughly 3.4 mb/d was consumed in September, up 2.3% y-o-y, whereas the trend for the preceding four-month period was 6.2%. Gasoil led October's acceleration, with demand up 6.7% to 1.4 mb/d. The preliminary October series came out 125 kb/d above last month's projection, as we had expected that September's subsidy-reduction (equivalent to a 14% increase in diesel prices) would dampen demand. The resilient domestic economy – demonstrated by HSBC's seasonally adjusted manufacturing PMI well above 50 – has, however, continued to support vigorous oil consumption growth. Stronger October demand has led us to revise our forecast up for the year as a whole, by 20 kb/d, to 3.7 mb/d (4.2% higher than 2011).



Saudi Arabia

Saudi Arabia, which broke into the top-10 group in 2007, has been experiencing strong demand growth, spurred by demographic expansion, the economic stimulus provided by high oil export revenues and deeply subsidised energy prices. Seasonal cycles are pronounced as demand rises steeply during the summer months, when power generation demand for air conditioning peaks. Not surprisingly, the strong recent demand trend abated somewhat in September, as consumption eased to 3.4 mb/d from a high of 3.5 mb/d in August. In terms of y-o-y growth too, demand eased somewhat, albeit from exceptionally high levels. Annual demand growth reached into the double digits in August, at 11.6%, as the early onset of Ramadan this year likely hiked consumption compared to September, when growth slowed to a still robust 5.7%. The early commissioning of the 1.8 billion cubic feet per day Karan gas field this year had been intended to stem growth of oil consumption in the power sector; however incremental gas-fired generation goes only so far in curbing consumption as electricity demand keeps rising.





Brazil

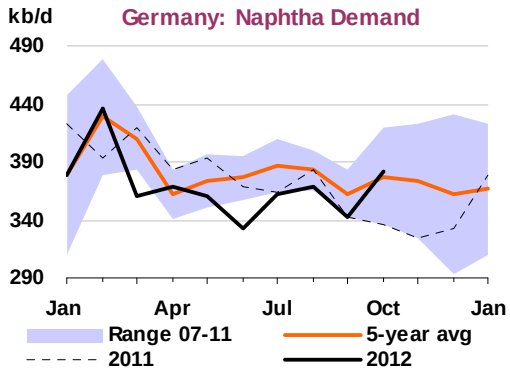
The latest statistics for Brazil depict a flattening in the y-o-y demand trend, with a 0.1% gain evident in September to 3.0 mb/d, having risen by an average of 3.8% in the preceding eight months. The September estimate is 100 kb/d below the projection carried last month, with lower gasoil accounting for the majority of the correction (-75 kb/d). Prospects dimmed as HSBC's Manufacturing PMI came in at 49.8 in September, indicating contraction. The index has since rebounded to 50.2 in October, providing modest support for the forecast next month, +1.6%. Growth of around 3% is assumed for the year as a whole, to an average of around 3.0 mb/d in 2012.

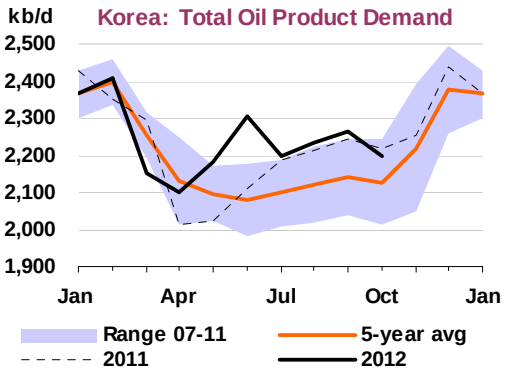
Canada

Official statistics for oil demand came out at 2.5 mb/d in September, 110 kb/d ahead of our month earlier projection. The surprisingly robust Canadian data saw the y-o-y growth rate accelerate to 7.3%, well over the preceding year-to-date average, of 1.2%, and against RBC's Manufacturing PMI which fell to a seven-month low of 52.4 in September. LPG and naphtha provided the majority of the demand support, accounting for 69.7% of total demand growth, thanks in part to strong petrochemical activity and continued development of the highly energy-intensive Canadian oil sands. Consumption growth is forecast to moderate in the coming months, however, as manufacturing sentiment deteriorates, (PMI fell to 50.4 in November).

Germany

Heightened volatility has surrounded German demand in recent months, with downwardly revised September data indicating an 8.3% y-o-y decline (to 2.3 mb/d) followed by a 1.6% gain in October, based on preliminary data (to 2.5 mb/d). Official monthly oil statistics for September were a steep 170 kb/d weaker than preliminary data had suggested. Demand for heating oil, residual fuel oil and gasoline was particularly weak in September, with declines of 20.2% (to 355 kb/d), 15.5% (to 110 kb/d) and 11.0% (to 420 kb/d), respectively. Naphtha led October's upside, up 18.6% to 380 kb/d, as the petrochemical sector (benefiting from two additional working days in October 2012 compared to 2011) remains supportive despite choppy export markets.





Korea

Signs of slower South Korean demand have emerged as forecast, with y-o-y demand contracting by 15 kb/d (or 0.7%) in October, following the average expansion of nearly 4% seen in the preceding six months. Government efforts to curb consumption seem to be having an impact (see 13 June 2012 *OMR*). Diesel demand fell by 0.8% on a y-o-y basis in October (to 290 kb/d), having contracted by an average 2.6% y-o-y in the four-months through October, compared to growth of 5.8% in the previous six-months. Compounding the effect of a slowing economy (GDP growth fell to 0.2% in 3Q12, down from 0.9% as recently as 1Q12), the government last May announced stringent measures to cut oil demand (including limits on car use and incentives to promote natural gas and biofuels). October's drop comes on the back of September's modest 1.1% gain, to 2.3 mb/d.

OECD

The sharp recent OECD demand contraction slowed to 0.6% y-o-y in October (-3.5% in September), taking total OECD demand to 46 mb/d, according to preliminary data. Strongly divergent patterns remain apparent, with steep declines in Europe contrasting with more modest drops in the Americas and growth in Asia Oceania. At both ends of the spectrum, however, the trends have become less pronounced. Overall, heavier products provided OECD demand the most support, as incremental power generation demand in both Mexico and Japan helped lift total OECD fuel oil demand by 1.8% y-o-y, to 2.9 mb/d. Colder weather and two additional working days compared to last year also supported October demand.

OECD Demand based on Adjusted Preliminary Submissions - October 2012
(million barrels per day)

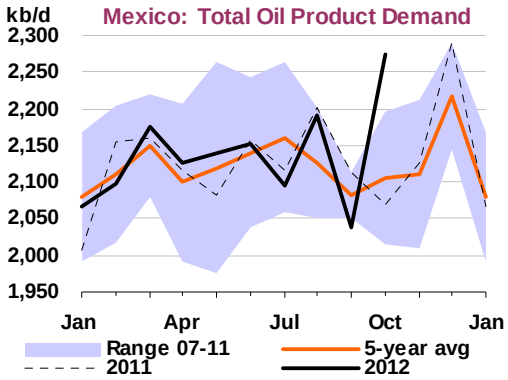
	Gasoline		Jet/Kerosene		Diesel		Other Gasoil		RFO		Other		Total Products	
	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa
OECD Americas*	**10.19**	**-1.0**	**1.57**	**-2.9**	**4.39**	**-1.2**	**0.77**	**-6.3**	**0.92**	**12.6**	**5.97**	**2.24**	**23.81**	**-0.1**
US50	8.52	-1.5	1.35	-3.2	3.52	-3.0	0.30	-21.1	0.38	-5.4	4.48	0.6	18.55	-1.9
Canada	0.74	-1.3	0.11	-5.4	0.31	6.7	0.29	8.4	0.07	-8.4	0.79	14.4	2.31	5.4
Mexico	0.79	4.3	0.05	4.9	0.35	8.4	0.15	8.4	0.35	63.1	0.58	-0.4	2.28	10.0
OECD Europe	**1.99**	**-4.4**	**1.25**	**-1.0**	**4.45**	**-0.7**	**1.85**	**-1.6**	**1.14**	**-7.8**	**3.42**	**-0.2**	**14.10**	**-1.9**
Germany	0.45	-4.5	0.20	9.3	0.71	3.0	0.45	-8.9	0.16	11.9	0.59	9.6	2.55	1.6
United Kingdom	0.32	-3.6	0.31	-4.0	0.45	-1.3	0.11	1.5	0.05	-24.0	0.25	-11.2	1.50	-4.8
France	0.17	-3.6	0.15	-3.1	0.74	6.3	0.33	6.5	0.06	-24.0	0.36	-2.0	1.80	1.4
Italy	0.21	-8.2	0.09	-9.2	0.48	-6.3	0.12	-6.3	0.13	-10.3	0.32	-9.6	1.35	-8.0
Spain	0.11	-7.8	0.12	-1.5	0.43	-4.3	0.17	-0.7	0.18	-4.7	0.26	-8.0	1.27	-4.8
OECD Asia & Oceania	**1.60**	**2.0**	**0.76**	**-7.1**	**1.27**	**8.2**	**0.44**	**-17.3**	**0.83**	**5.8**	**3.13**	**0.4**	**8.04**	**0.4**
Japan	0.97	1.4	0.42	-10.9	0.46	1.2	0.32	-8.1	0.53	11.7	1.69	0.8	4.40	0.2
Korea	0.20	7.9	0.16	-5.4	0.29	-0.8	0.12	-6.6	0.23	-6.0	1.20	0.3	2.20	-0.7
Australia	0.32	2.3	0.13	4.0	0.39	3.4	0.00	0.0	0.02	-27.6	0.16	-1.0	1.02	1.7
OECD Total	**13.78**	**-1.2**	**3.58**	**-3.2**	**10.11**	**0.1**	**3.06**	**-5.4**	**2.90**	**1.8**	**12.52**	**1.1**	**45.95**	**-0.6**

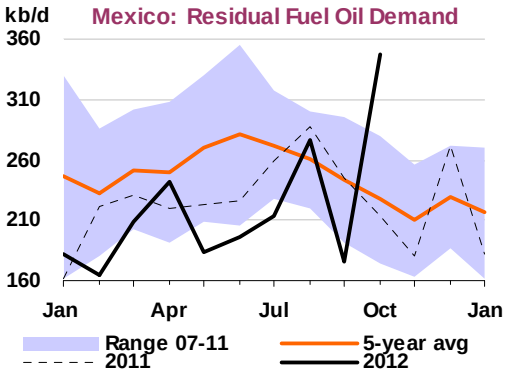
* Including US territories

Americas

Preliminary data for October show consumption essentially unchanged on a y-o-y basis, averaging 23.8 mb/d. Broken down by country, however, the picture is more contrasted, with declines in the US and gains elsewhere. In terms of products, residual fuel oil (up 12.6%) led the way, supported by an upsurge in Mexican use.

An explosion at Pemex's Reynosa gas processing plant in September accounts for the bulk of the growth – through substitution – in **Mexican** oil demand. Mexican demand averaged 2 mb/d in September, leaving it just below the top-10 consumers, but surged to 2.3 mb/d in October, a gain of 10% y-o-y. This was the fastest annual gain in nearly eight years, and 275 kb/d above forecast. The Reynosa explosion essentially took 900 million cubic feet per day of natural gas off the Mexican market, or roughly 200 kb/d of oil products on an energy-equivalent basis. Natural gas is, however, a more efficient generator of electricity in Mexico. Utilising a ratio of efficiency of 1.5 between gas-powered electricity plants and oil, the lost gas is equivalent to around 300 kb/d of additional oil products.





Fuel oil is the main alternative feedstock to natural gas in the Mexican electricity sector. The latest official statistics depict 350 kb/d of fuel oil being consumed in October, equivalent to growth of 63.1% y-o-y or 185 kb/d over last month's estimate. The 'other' oil products category also exhibited strong demand growth in October (up 15.8% to 185 kb/d), while gasoil consumption grew by 8.45% to 495 kb/d and jet/kerosene by 4.9%, to 55 kb/d. The closure of the Reynosa facility was not alone in supporting oil product demand. Economic sentiment is also strengthening, as shown by HSBC's Manufacturing PMI rising to 55.5 in October (54.4 in September). Due to the short-lived nature of the fuel switching demand to replace lost natural gas supply (the Reynosa facility is back in operation), the Mexican forecast has been little changed, with only 40 kb/d added to the 2012 estimate, to 2.2 mb/d.

Europe

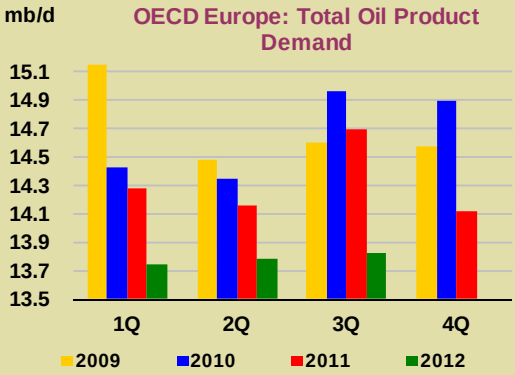
Consumption in OECD Europe of around 13.8 mb/d was seen in 3Q12, 205 kb/d less than last month's report on account of the large number of September revisions. The main September curtailments included Germany, Turkey, the Netherlands and the UK, respectively below month earlier forecasts by 170 kb/d, 110 kb/d, 45 kb/d and 35 kb/d. The **UK** reduction was largely driven by lower LPG demand, which contracted as ExxonMobil's Fife petrochemical plant closed for maintenance. Preliminary estimates for 4Q12 saw a surprisingly large upside revision of 120 kb/d (over last month's *OMR*), to 13.9 mb/d. The most notable October additions include Germany (+150 kb/d) and France (+140 kb/d). Big curtailments in the forecast for Turkey (-70 kb/d) and the Netherlands (-30 kb/d) dampened the upside momentum somewhat.

One of the main historical changes to the European picture this year comes from **Turkey**, where an average of 55 kb/d has been stripped from the 2012 series (i.e. January-through-August, compared to last month's report). Lower gasoil numbers accounted for almost all of this post-hoc revision, attributable to double-counting of international marine fuels. The official August estimate was reduced by 125 kb/d (110 kb/d gasoil), explaining why our previous September projection was 110 kb/d higher than the revised data, at 755 kb/d.

Preliminary October data, available for only a few European countries, surprised to the upside, although the additional two working days over the previous October were accountable. **France**, for example, came out 140 kb/d ahead of prior expectations, at 1.8 mb/d. Stronger than expected gasoil demand accounted for the majority of the revision, at 1.1 mb/d, 120 kb/d more than predicted and 6.3% higher than the year earlier (the previous three-month trend being -2.3%). The demand spike could reflect a stronger-than expected response to a three-month 6-euro-cent/litre tax cut implemented last summer as a form of temporary price control. Gasoline, a less important transport fuel in France, remained in negative y-o-y growth territory, down 3.6% to 165 kb/d. The **German** data, as alluded to in the *Top-10 Consumers* section, was also revised higher, for October, by 150 kb/d over last month's estimate, to 2.5 mb/d.

European Demand Hit the Buffers in 3Q12

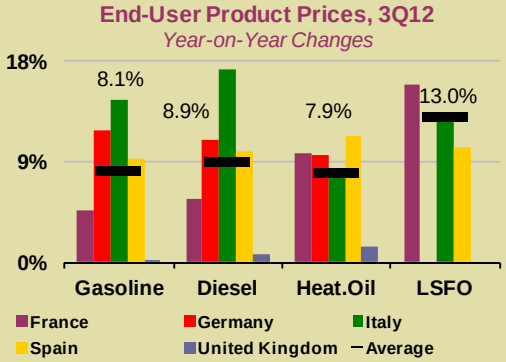
Oil demand in OECD Europe plummeted by 895 kb/d (-6.0% y-o-y) in 3Q12 to 13.8 mb/d, the steepest quarterly average drop in nearly three years, or since the onset of the 2008-2009 financial crisis. This steep decline in demand came as near-record retail product prices coincided with recessionary economic conditions.



Remarkably, the previous north-south European split, which had seen demand growth in northern Europe outperform that in the south, abated somewhat as European oil product demand in general hit the rocks. The sharpest 3Q12 declines were seen in Portugal (-12.8%), closely followed by Poland (-10.6%), Italy (-8.9%), Ireland (down 8.8%), Greece (-8.6%), Spain (-7.8%) and Germany (-7.2%). Only the Czech Republic, Denmark and Norway bucked the trend, rising by 2.7%, 1.0% and 0.9%, respectively.

As in 2009, when such a strong plunge was last seen, macroeconomic issues were likely a major factor behind the contraction. The near three-year record drop in oil demand coincided with the euro area's return to outright technical recession in 3Q12, as GDP fell by 0.1% quarter-on-quarter for a second consecutive quarter, following contraction of -0.2% in 2Q12. The economies of the Netherlands (-1.1% q-o-q), Portugal (-0.8%), Cyprus (-0.5%), Spain (-0.3%) and Italy (-0.2%) suffered the sharpest 3Q12 declines, with only Finland (+0.3%), France (+0.2%) and Germany (+0.2%) enjoying modest advances.

With retail prices at, or near, all-time highs across much of Europe, cash-strapped consumers were further incentivised to reduce consumption. Price pressures have been particularly pronounced in Europe, as the weakening euro made euro-denominated retail product prices, which are largely driven by dollar-denominated crude prices, all the more expensive. Diesel prices in Italy, for example, in 3Q12 were 17% up on the year earlier, at a time of contracting economic momentum (-2.4% y-o-y, -0.2% q-o-q). Not surprisingly, Italian diesel consumption declined by 10.8% in 3Q12 to 455 kb/d. In contrast, the downside sentiment was less severe in France, where diesel prices rose by a more benign 5.6% thanks in part to a government tax cut of 6 euro-cent per litre in September, while the economy essentially flat-lined. Reported French kilometres travelled dipped 1.1% y-o-y in 3Q12, according to government statistics, closely matching the 0.8% contraction in diesel demand, to 695 kb/d.



Demand for industrially important products, such as gasoil (-5%), fuel oil (-14%) and LPG (-6%), particularly suffered in 3Q12, as manufacturing indicators have implied contracting sentiment. Markit's Manufacturing PMI for the euro zone fell to 46.1 in September, a 14th successive month below the key 50-threshold that signals contraction (16th by November). Unemployment above 10% also kept transportation fuel demand under wraps, with gasoline down 7% and both diesel and jet/kerosene 3% lower.

Looking forward, European demand is forecast to decline further over the next year but at a lessened pace than in 3Q12. Significant downside risks remain, however, due to the heightened economic uncertainties that prevail.

Asia Oceania

The strongest OECD growth, indeed the only consistent gains, have been reserved for Asia Oceania recently, as the region has seen y-o-y demand rise since 2Q11. This growth reflects the lasting impact of the Great East Japan Earthquake and tsunami, which closed substantial swathes of nuclear capacity and in turn required big quantities of replacement demand from fuel oil and crude oil (tracked in our 'other'

products category). Having peaked in 2Q12, at 0.6 mb/d (or 8.2%), growth has since decelerated to 0.3 mb/d (3.2%) in 3Q12, as post-tsunami replacement demand has now fed through an entire year hence diminishing y-o-y gains.

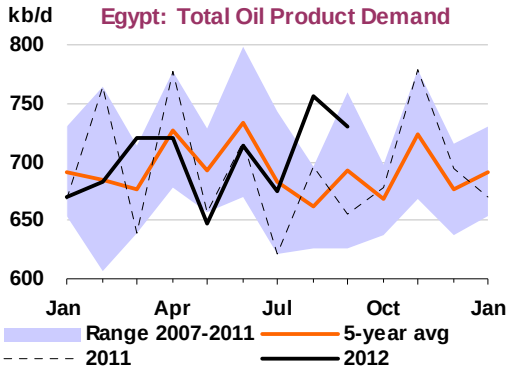
Other non-OECD

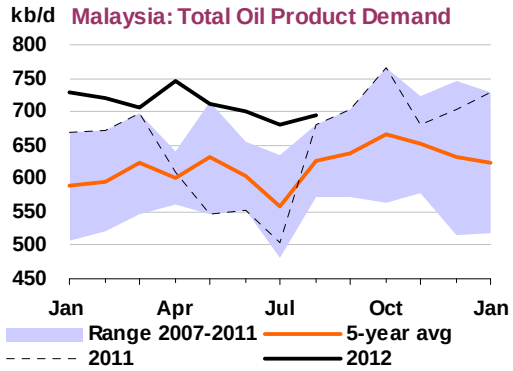
Emerging markets continue to dominate growth, a trend that has become deep-rooted having commenced around the turn of the millennium. The five largest non-OECD countries are discussed in detail in the new *Top-10 Consumers* section. The total non-OECD slowdown, that began early in 2011 and has run through to the present day, has even shown signs of abating recently, largely driven by recuperating conditions in China and India. Having risen by an average of 5.4% y-o-y in the six quarters through 1Q11, non-OECD demand growth eased back considerably, 2Q11-2Q12, to an average of 2.6%. Recent evidence led us to revise up our 3Q12 non-OECD demand estimate by 75 kb/d, as September data releases in several key countries exceeded earlier projections. The largest September additions were China, Iraq and Egypt, with reported numbers respectively higher than last month's report by 135 kb/d, 40 kb/d and 30 kb/d. Growth is now seen rebounding in 3Q12, to 3.4% (or 1.5 mb/d), taking total non-OECD demand up to an average of 44.0 mb/d.

Non-OECD: Demand by Product
(thousand barrels per day)

	Demand			Annual Chg (kb/d)		Annual Chg (%)	
	Aug-12	Sep-12	Oct-12	Sep-12	Oct-12	Sep-12	Oct-12
LPG & Ethane	4,683	4,650	4,643	25	74	0.5	1.6
Naphtha	2,694	2,722	2,877	76	143	2.9	5.2
Motor Gasoline	8,976	8,926	8,830	379	343	4.4	4.0
Jet Fuel & Kerosene	2,741	2,872	2,792	75	30	2.7	1.1
Gas/Diesel Oil	13,405	13,511	13,483	462	332	3.5	2.5
Residual Fuel Oil	5,255	5,456	5,403	255	86	4.9	1.6
Other Products	5,978	6,230	5,699	415	376	7.1	7.1
Total Products	**43,732**	**44,365**	**43,728**	**1,688**	**1,383**	**4.0**	**3.3**

The **Egyptian** numbers have been revised to reflect stronger than anticipated September data. Egypt consumed 730 kb/d of oil products in September, 30 kb/d more than we predicted last month, taking the y-o-y growth up to a ten-month high of 11.5%. We had anticipated a gain of 7.1%, more closely in-line with recent history. Of the main product categories, gasoline and residual fuel oil led September's momentum, rising by 8.4% (to 155 kb/d) and 22.3% (to 130 kb/d) respectively. The 3Q12 rally has led us to revise up our 2012 forecast, to 710 kb/d (previously 700 kb/d), equivalent to y-o-y growth of 2.0%.





Other notable non-OECD data revisions include **Malaysia**, where the official data only runs through August but has seen substantial additions over last month's projections. Roughly 60 kb/d was added to the estimate of Malaysian 2Q12 demand, to 720 kb/d, while 40 kb/d was added to 3Q12 demand, to

695 kb/d. These higher demand estimates respectively result in robust y-o-y expansions of 26.1% and 10.8%, as opposed to 15.3% and 4.1% as previously foreseen. Consumption for the year as a whole is set to average around 720 kb/d in 2012, equating to growth of around 11%, 25 kb/d more than assumed in *November's OMR*.

Non-OECD: Demand by Region

(thousand barrels per day)

	Demand			Annual Chg (kb/d)		Annual Chg (%)	
	Aug-12	**Sep-12**	**Oct-12**	**Sep-12**	**Oct-12**	**Sep-12**	**Oct-12**
Africa	3,361	3,435	3,389	191	96	5.9	2.9
Asia	20,141	20,953	21,028	1,125	951	5.7	4.7
FSU	4,741	4,578	4,613	69	17	1.5	0.4
Latin America	6,713	6,615	6,447	76	128	1.2	2.0
Middle East	8,045	8,043	7,529	195	194	2.5	2.6
Non-OECD Europe	730	741	721	32	-3	4.5	-0.4
Total Products	**43,732**	**44,365**	**43,728**	**1,688**	**1,383**	**4.0**	**3.3**

SUPPLY

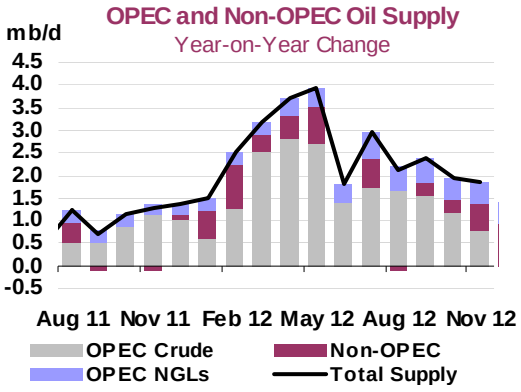
Summary

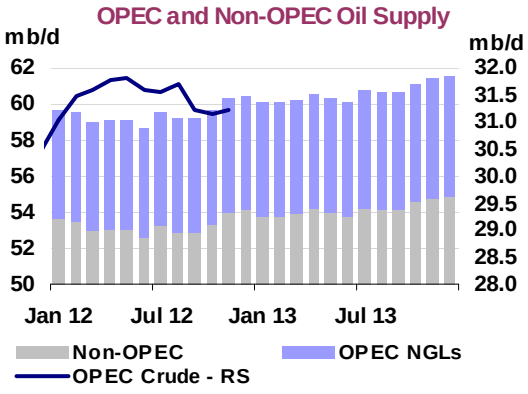
- **Global oil supply rose by 730 kb/d between October and November to 91.6 mb/d, with non-OPEC output increases, especially from the Americas and the North Sea, once again overshadowing marginal contribution from OPEC.** Compared to a year ago, global oil production stood 1.9 mb/d higher, with 70% of the increase coming from OPEC crude and NGLs.

- **Non-OPEC production rebounded strongly by 650 kb/d in November from the prior month to 54.0 mb/d** after seasonal maintenance in the North Sea and Brazil reduced output to 52.9 mb/d in September. Production is expected to increase by 600 kb/d in 4Q12 compared to 4Q11, roughly 30 kb/d higher than last month's assessment. For 2013, non-OPEC production is projected to rise by 890 kb/d to 54.2 mb/d, the highest growth rate since 2010 and 70 kb/d higher than the previous forecast.

- **OPEC crude oil supply in November rose a marginal 75 kb/d to 31.22 mb/d in November, led higher by increased output from Saudi Arabia, Angola, Algeria and Libya.** Nigerian output remained constrained by severe flooding and sabotage. Iranian supplies edged lower under the weight of shipping constraints and stepped-up sanctions.

- **The 'call on OPEC crude and stock change' for 2012 and 2013 is left unchanged this month, at 30.2 mb/d and 29.9 mb/d, respectively.** The call for 4Q12 has been revised up by 400 kb/d, to 30.4 mb/d, reflecting upward revisions to global demand growth. This was partly offset by downwards retrospective revisions for earlier quarters. OPEC's 'effective' spare capacity in November is estimated at 2.49 mb/d versus 2.51 mb/d in October.





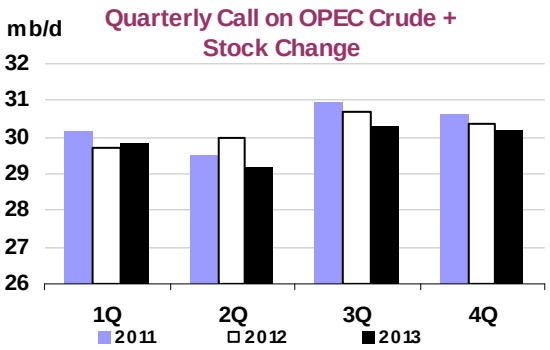
All world oil supply figures for November discussed in this report are IEA estimates. Estimates for OPEC countries, Alaska, Indonesia and Russia are supported by preliminary November supply data.

Note: Random events present downside risk to the non-OPEC production forecast contained in this report. These events can include accidents, unplanned or unannounced maintenance, technical problems, labour strikes, political unrest, guerrilla activity, wars and weather-related supply losses. Specific allowance has been made in the forecast for scheduled maintenance in all regions and for typical seasonal supply outages (including hurricane-related stoppages) in North America. In addition, from July 2007, a nationally allocated (but not field-specific) reliability adjustment has also been applied for the non-OPEC forecast to reflect a historical tendency for unexpected events to reduce actual supply compared with the initial forecast. After heavy outages seen in 2011 and 2012, this adjustment now totals –500 kb/d for non-OPEC as a whole, with most downward adjustments focused in the OECD.

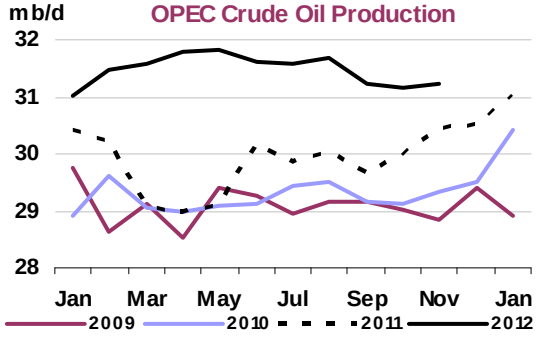
OPEC Crude Oil Supply

OPEC crude oil supply rose by a marginal 75 kb/d to 31.22 mb/d in November, led by increased output from Saudi Arabia, Angola, Algeria and Libya. Nigerian production continued to be constrained by severe flooding and sabotage through most of the month but volumes are expected to trend higher with the end of the rainy season. By contrast, the November downturn in Iranian output is expected to continue in December due to shipping constraints and stepped-up sanctions, preliminary crude export data indicate.

The 'call on OPEC crude and stock change' for 2012 and 2013 is left unchanged this month, at 30.2 mb/d and 29.9 mb/d, respectively. The call for 4Q12 has been revised up by 400 kb/d, to 30.4 mb/d, reflecting upward revisions to global demand growth. OPEC's 'effective' spare capacity in November is estimated at 2.49 mb/d versus 2.51 mb/d in October.



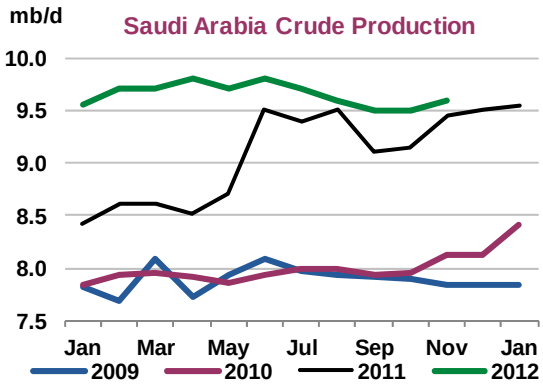
Entire series based on OPEC Composition as of January 2009 onwards (including Angola & Ecuador & excluding Indonesia)



Entire series based on OPEC Composition as of January 2009 onwards (including Angola & Ecuador & excluding Indonesia)

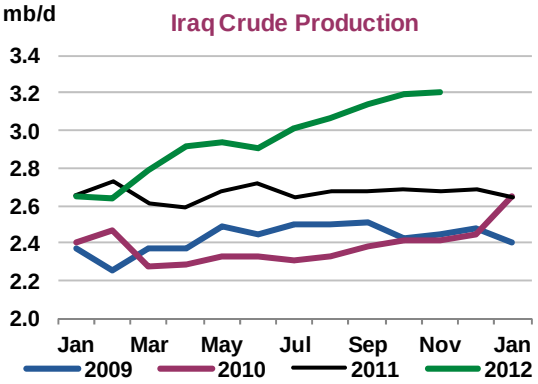
OPEC ministers meet in Vienna to review the market outlook on 12 December, OMR's release date, and were widely expected to roll over the current 30 mb/d target given relatively robust prices and balanced markets. Leading up to the gathering, the majority of ministers have signalled the status quo will be maintained despite production this year averaging 1.5 mb/d above the current target. Indeed, Brent futures prices are on track to surpass 2011 record levels this year, buoyed by heightened political risks in key producing countries, both in OPEC and Non-OPEC countries.

Saudi Arabia's output edged higher in November, by 100 kb/d to 9.9 mb/d. A surge in crude exports during October, especially to China, is not likely to be repeated in coming months. Saudi Aramco is expecting increased demand for crude supplies at its domestic and international refinery operations with the start-up of significant new capacity. Overseas, Aramco is currently preparing to ramp up its new 325 kb/d crude unit at its Motiva refinery in Port Arthur, Texas. This joint venture with Shell failed to start earlier this year. At home, the commissioning of the 400 kb/d Jubail refinery is underway, with approximately half of nameplate capacity expected online by end-year.



Iraqi crude oil production inched marginally higher by 10 kb/d in November, to 3.21 mb/d, with increased supplies from the south offsetting lower volumes from the northern region. Crude exports were off by a marginal 5 kb/d, to 2.62 mb/d. Basrah exports rose by just over 20 kb/d to 2.19 mb/d. Basrah crude exports would have been higher but weather-related delays continued to disrupt loadings in November and forced state SOMO to put volumes into storage tanks. Exports of Kirkuk crude through the northern Turkish port of Ceyhan on the Mediterranean fell by 26 kb/d to 416 kb/d. A further 10 kb/d

of Kirkuk was trucked to Jordan. Shipments from the Kurdish region, which feeds into the Kirkuk crude stream, fell to 120 kb/d from 145 kb/d. Crude oil exports from the Kurdish region have ebbed and flowed in recent months in tandem with payment disputes between the central government in Baghdad and the Kurdistan Regional Government in Ebril. Baghdad has stalled payments to the KRG after exports from the Kurdistan region fell well short of the promised 200 kb/d, which officials say is due to pipeline and cash flow issues. The current agreement between Baghdad and Erbil calls for 250 kb/d of northern crude to be shipped via Ceyhan in 2013 but analysts caution volumes may be lower given the history of disputes between the two sides.



By contrast, other Gulf producers **Kuwait** and the **UAE** posted small declines in November. Kuwait output was down by 40 kb/d to 2.78 mb/d while the UAE fell by a smaller 20 kb/d to 2.65 mb/d. **Qatari** production was unchanged at 730 kb/d.

OPEC Crude Production

(million barrels per day)

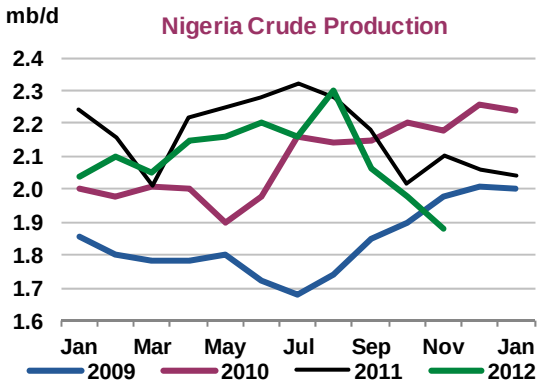
	Sep 2012 Supply	Oct 2012 Supply	Nov 2012 Supply	Sustainable Production Capacity[1]	Spare Capacity vs Nov 2012 Supply	1Q13 Production Capacity Versus Current Capacity
Algeria	1.17	1.12	1.18	1.20	0.02	0.01
Angola	1.75	1.73	1.80	1.85	0.05	0.04
Ecuador	0.50	0.48	0.48	0.54	0.06	(0.02)
Iran	2.68	2.72	2.70	3.20	0.50	(0.15)
Kuwait[2]	2.78	2.82	2.78	2.84	0.06	0.02
Libya	1.44	1.42	1.45	1.51	0.06	0.08
Nigeria[3]	2.06	1.98	1.88	2.57	0.69	(0.08)
Qatar	0.75	0.73	0.73	0.79	0.06	(0.02)
Saudi Arabia[2]	9.80	9.80	9.90	11.88	1.98	(0.08)
UAE	2.69	2.67	2.65	2.79	0.14	0.22
Venezuela[4]	2.48	2.48	2.47	2.60	0.14	0.03
OPEC-11	**28.10**	**27.95**	**28.01**	**31.75**	**3.74**	**0.05**
Iraq	3.14	3.20	3.21	3.29	0.09	0.43
Total OPEC	**31.23**	**31.15**	**31.22**	**35.05**	**3.83**	**0.48**
(excluding Iraq, Nigeria, Libya and Iran)					*2.49)*	

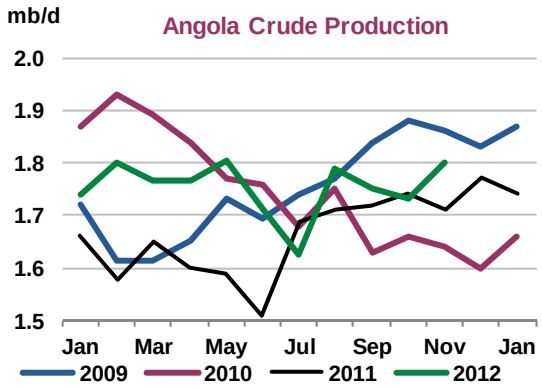
1 Capacity levels can be reached within 30 days and sustained for 90 days.
2 Includes half of Neutral Zone production.
3 Nigeria's current capacity estimate excludes some 200 kb/d of shut-in capacity.
4 Includes upgraded Orinoco extra-heavy oil assumed at 375 kb/d in November.

Nigerian production continued to be hampered by severe flooding in November, with output down 100 kb/d to 1.88 mb/d, the lowest level in more than three years. For most of November the country's main crude oil streams—Bonny Light, Qua Iboe, Brass River and Forcados—were disrupted. However, by the end of the month and early December *force majeure* was lifted on Bonny and Forcados. Preliminary loading data shows volumes are expected to recover fully by January.

Crude oil production in **Angola** recovered in November, up by 70 kb/d to 1.8 mb/d, despite technical issues and maintenance work at several small fields for part of the month. Output during the first week of the month was down to just 1.5 mb/d due to technical problems on Block 18, which forced the shut-in of production from Greater Plutonio field, but volumes recovered by the second week. Sonangol expects first oil from the BP-operated 150 kb/d PSVM operation to start at around 35 kb/d in mid-December, with the first cargo of the new heavy, sour Saturno crude expected to be lifted in January compared with

end-year previously. Meanwhile, **Libyan** production rose by 30 kb/d to 1.45 mb/d in November from an upwardly revised 1.42 mb/d in October while **Algerian** output rebounded to 1.18 mb/d, up 60 kb/d over October levels.

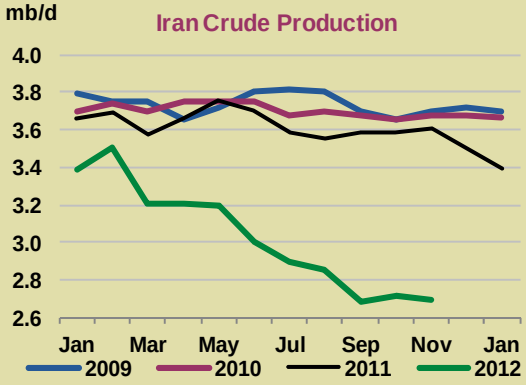




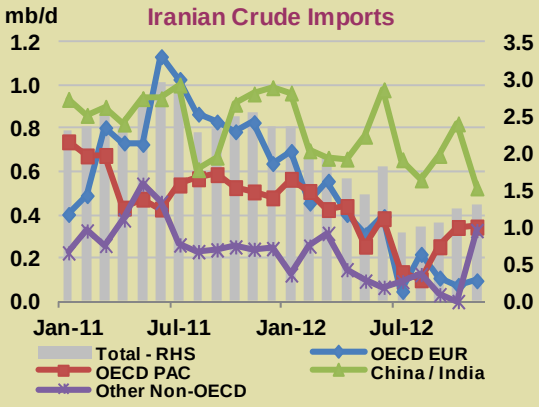
Sanctions Further Reduce Iranian Crude Production

Iranian production edged lower in November, down 20 kb/d to 2.70 mb/d and preliminary shipping data indicate volumes may fall further in December. Iranian crude exports are expected to turn lower next month and into the New Year—reaching a level closer to 1 mb/d—as EU and Asian countries reduce further their crude imports from Iran in order to secure continued access to the US financial system. Indeed, even Iranian government officials have confirmed the impact of sanctions on the country's oil sector, announcing in early December that next year's budget, starting 1 March, would be based on exports of around 1 mb/d.

The US granted waivers for another 180 days on 7 December to eight countries – China, India, Malaysia, South Africa, South Korea, Sri Lanka, Turkey and Taiwan. China has cut imports from Iran by over 20% in the first 11 months of the year. Japan, along with 10 EU countries, were given a further exemption in September. US officials have made clear that a country seeking a further 180-day exemption from financial sanctions must show continued reductions in its purchases of Iranian crude oil.



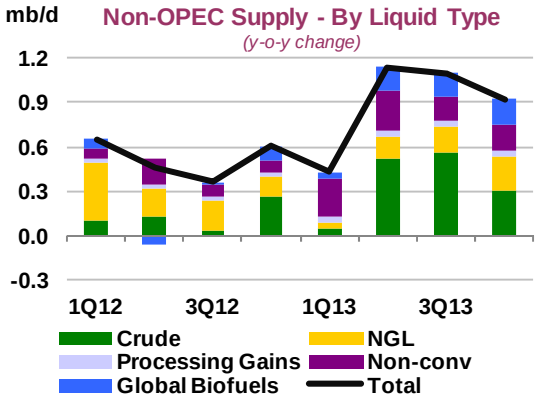
The US passed additional financial sanctions on Iran, which take effect in February 2013. The new sanctions prohibit Iran from repatriating earnings from export trade, forcing the country to use any money owed on goods within the importing country, and thus severely reducing cash flows to Tehran's accounts. The new law also prohibits the flow of gold from Turkey to Iran for payments. Meanwhile, the economic impact of sanctions already in place continues to mount, with the country's exports now 50% below year ago levels. The riyal continues to decline against the US dollar and other international currencies. In addition to the EU embargo on oil and natural gas, the ban on EU-linked insurance coverage for any ship carrying Iranian oil has had a significant impact on Asian buyers and has served to severely curb imports.

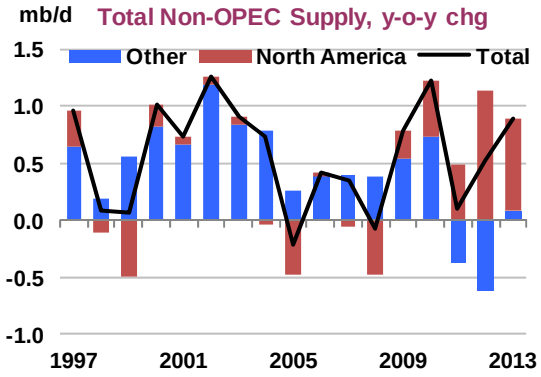


Sanctions-related shipping problems continue to curb exports. Imports of Iranian crude, based on arrival data, were estimated close to 1.3 mb/d in November compared with 1.24 mb/d in October and 1.07 mb/d in September. Reduced crude oil buying from China and India has been offset by increased crude oil purchases from Malaysia, Taiwan and the UAE. Iranian crude exports are poised to fall back in December, however, judging by the higher level of idle ships owned by National Iranian Tanker Company (NITC). EU sanctions bar around 95% of the global tanker fleet from lifting oil from Iranian ports.

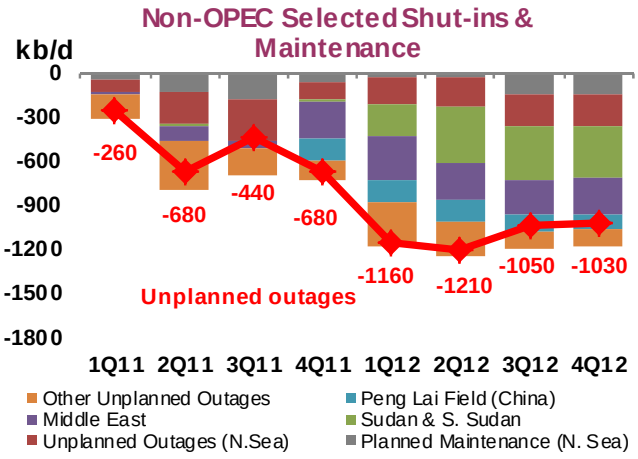
Non-OPEC Overview

Non-OPEC production rose by 660 kb/d in November from October and by 600 kb/d year-on-year (y-o-y) to 54.0 mb/d. In November, output is almost 1.0 mb/d higher in North America on an annual basis. On a quarterly basis, non-OPEC supplies stand at around 53.8 mb/d in 4Q12, 0.6 mb/d higher than 4Q11 and a sharp 0.8 mb/d higher than the previous maintenance-affected quarter. Upwards revisions to US supply more than offset downwards revisions in the North Sea due to field start-up slippage, lifting the non-OPEC outlook for 4Q12 and 2013 by 30 kb/d and 70 kb/d, respectively.





Outages in non-OPEC countries fell back somewhat in the second half of this year to around 1 mb/d from their highs of 1.2 mb/d in 2Q12. Yet South Sudanese crude remains shut in, sabotage on the Marib pipeline in Yemen only briefly abated in late summer, and Syrian production remains offline due to sabotage and sanctions. Of the 1.0 mb/d offline in 4Q12, unplanned outages in the North Sea exceeded 200 kb/d in 4Q12 due to the unexpected delayed restart of the Buzzard field, the continued stoppage at Total's Elgin/Franklin field, and other outages.



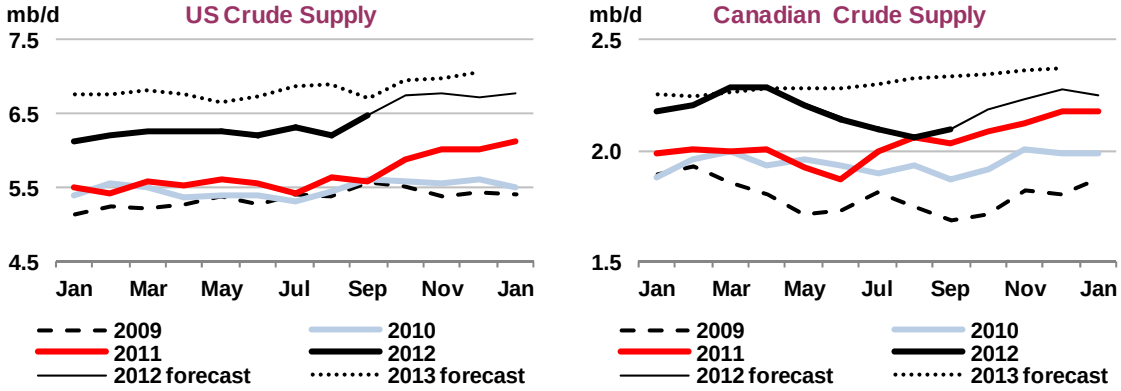
Looking ahead to 2013, the assumed steady resumption of oil flows from South Sudan, new oil output from Brazil, and rising light tight oil supplies should raise output by 890 kb/d to 54.2 mb/d. If confirmed, this would be the fourth largest annual growth for non-OPEC supplies in the last decade, based on the current composition of OPEC. In fact, growth could exceed expectations in the US if prices remain high and if producers of light tight oil are able to find economic transport options for their incremental barrels of supply. If the US Energy Information Administration's (EIA) 25-kb/d upwards revision for Texas in 2012 is any indication, output levels may exceed expectations for measurement and reporting reasons in addition to economic reasons. On the other hand, production outside of US, especially in the North Sea has had the potential to disappoint, which is why we continue to include a -0.5 mb/d contingency factor for such events.

OECD

Americas

US – November preliminary, Alaska and North Dakota actual, other states estimated: US crude oil production grew by around 780 kb/d y-o-y in November to 6.8 mb/d, as Texas production exceeded 2 mb/d again, back to August levels but previously not seen since June 1988. NGL supplies also rose to over 2.4 mb/d in September, a record level, but are expected to have fallen back towards 2.3 mb/d in

4Q12 on weak LPG prices. Based on the latest data from the US Energy Information Administration, Oklahoma production rose exceptionally quickly in September, up by 20 kb/d on the month to 250 kb/d, yet another record level. EIA baseline revisions to Texas and a faster-than-forecast production growth rate for Oklahoma are the prime reasons for the increase in the 2013 forecast. Liquids production is expected to grow from 9.0 mb/d to 9.6 mb/d in 2013, around 80 kb/d higher than last month's estimate.

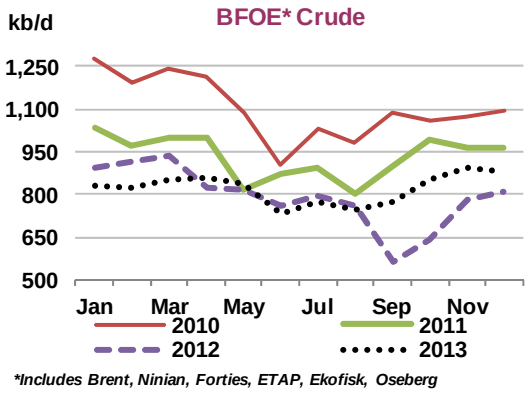


Canada – September preliminary: Canadian oil production reached around 3.6 mb/d in September, based on preliminary government data, and is expected to breach 4.0 mb/d by the end of the year after offshore production at the Hibernia, Terra Nova, and White Rose fields returns. Output stood at 260 kb/d in April 2012 before maintenance began but fell to 60 kb/d in August, and has only partially returned to levels of around 200 kb/d in November. Production should return to normal levels in January 2013 with the return of the 60-kb/d Terra Nova FPSO in December. Synthetic crude oil production fell back to 910 kb/d in September after Long Lake began a planned turnaround, and Millenium's output fell back from near record highs by 80 kb/d to 250 kb/d. Syncrude Canada Ltd reduced forecast production slightly in December due to the impact of cold weather on equipment. Suncor reported that its Firebag facility was producing around 130 kb/d at the end of November, which should help increase 4Q12 Canadian bitumen output by 170 kb/d annually. Next year, the outlook remains largely unchanged. Canadian oil output is now expected to grow by a still-robust 350 kb/d in 2013 to 4.1 mb/d, roughly 10 kb/d lower than last month's estimate.

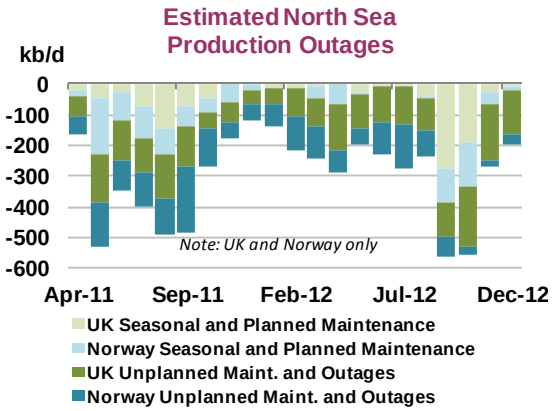
North Sea

North Sea liquids production rose to 2.7 mb/d in October from record lows in September of 2.3 mb/d. In the UK, output continued to increase in November with the return of the Buzzard field, which remained offline over three weeks longer than operator Nexen expected. A gas leak at the North Cormorant field shut in around 20 kb/d of production since the 4-kb/d field is also connected to the Tern and Eider fields. Overall output increased in **Norway** as seasonal maintenance concluded and the Visund South satellite field started. Troll C had been producing around 120 kb/d before it was closed unexpectedly for several days after Statoil found corrosion in the gas treatment facility. The Troll C facility is also used for production from the Fram field, which normally produces around 40 kb/d.

Seen with the benefit of field level information for 3Q12, planned maintenance was more concentrated and slightly more severe in 2H12 than in 2H11. Unplanned outages in the North Sea in 2H12 averaged around 200 kb/d, similar to last year, but they were centred more in the UK. In the UK, the outlook for 2013 has been adjusted downward by 20 kb/d due to field startup delays at the Gryphon, Jasmine, and Huntington fields. Maersk's Gryphon FPSO had been expected to return to the Gryphon and Tullich fields in 4Q12, but weather aggravated labour-sourcing problems and has delayed start up to 1Q13. ConocoPhilips' Jasmine field is now expected to come online in 2H12. The outlook for Norway is also reduced by 10 kb/d in 2013 from baseline revisions to 2012. In sum, declines of 6% in the UK, 5% in Norway, and 8% in Denmark reduce 2013 North Sea output 180 kb/d to 2.9 mb/d in 2013.



*Includes Brent, Ninian, Forties, ETAP, Ekofisk, Oseberg

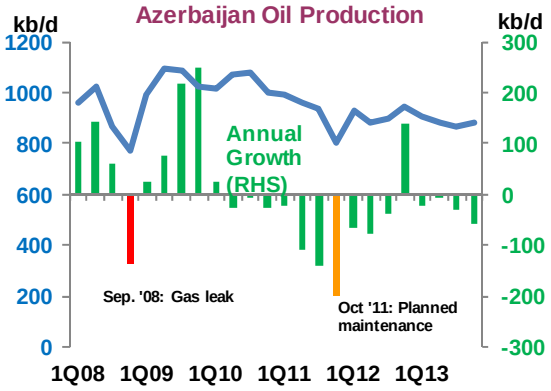


Non-OECD

Former Soviet Union

Russia – November preliminary: Russian oil production rose by another 60 kb/d to a new post-Soviet record of 10.9 mb/d in November thanks to rising production from private companies, Gazprom, and PSAs. Gazpromneft continues to show strong growth on an annual basis of around 5% in 2H12 due to expansion of its assets in the Orenburg region. All other major companies either decreased output on a monthly basis or maintained it nearly unchanged. Lukoil's declining output is notable as in November it returned to July levels of under 1.7 mb/d, a decline of 1.1% annually. At TNK-BP, mature assets at Orenburg and Samotlor (which account for a combined 700 kb/d) showed accelerated declines in November compared to better performance in 3Q12, and greenfield production growth failed to sustain the company's overall output level at 1.3 mb/d.

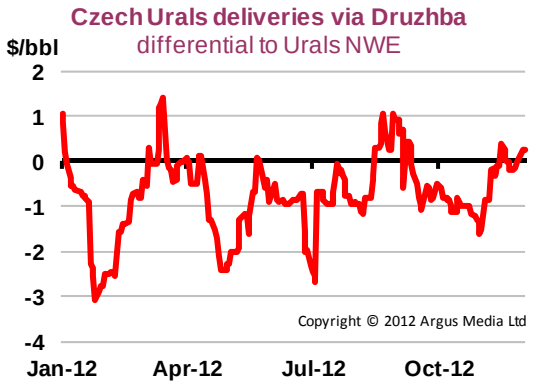
Azerbaijan: Production from Azerbaijan fell by 40 kb/d on an annual basis to 900 kb/d in 3Q12, based on the latest data available. Production from the Azeri Chirag Guneshli (ACG) field totaled around 660 kb/d, slightly higher than expected in previous reports. Current (4Q12) output at ACG should have improved to an estimated 720 kb/d, accounting for around 75% of the country's output. President Ilham Aliyev has recently threatened "severe measures" for BP's performance at the 900-kb/d capacity ACG field. As the majority shareholder and operator, BP has pledged to keep output at around 660-680 kb/d through 2020 in response. Estimates published in the October MTOMR suggested that output at ACG might continue to decline to around 570 kb/d in 2014 until the 120-kb/d West Chirag field comes online to raise output back to BP's target rate.



FSU net exports plummeted by 500 kb/d to 8.9 mb/d in October, after a seasonal but steep drop in product shipments of 410 kb/d, their steepest fall in eleven months. Crude volumes fell by 110 kb/d with declines spanning all regions except the Black Sea. Cargoes sent via Baltic ports fell by 70 kb/d as a 60 kb/d hike at Ust Luga to 520 kb/d failed to offset a 120 kb/d drop at Primorsk. In the east, Kozmino flows remained close to 300 kb/d but outflows are expected to ramp up steadily over the coming months following the November commissioning of the ESPO-2. Shippers are scheduled to lift 18 cargoes in January, only three of which will be railed to the port. Additionally, Transneft recently stated that it expects to ship 440 kb/d of crude via Kozmino in 2013, less than the 600 kb/d design capacity, mainly due to delays in linking eastern Siberian fields to the ESPO network. Despite record production,

November exports are likely to remain lower than October as domestic crude throughputs rise sharply as refineries come back from maintenance.

As noted in last month's report, flows through the Druzhba pipeline have remained constrained over recent months as exporters maximise shipments via more profitable outlets. This has led to supply disruption for refiners in the Czech Republic. To solve this, the Czech government recently acquired a 5% stake in the TAL pipeline to secure alternative supplies delivered via the Adriatic coast. The country's refiners have also reportedly secured increased supplies via the Druzhba for the remainder of the year, although this is likely a function of Druzhba deliveries trading at a premium to seaborne Urals in November.



The fall in product exports was driven by lower fuel oil shipments which dropped by 290 kb/d m-o-m in response to an oversupplied market and sluggish demand in Asia. Meanwhile, gasoil and 'other products', here including light distillates, fell after maintenance reduced regional refinery runs by 180 kb/d, and producers preferred to supply the domestic market.

FSU Net Exports of Crude & Petroleum Products

(million barrels per day)

	2010	2011	4Q2011	1Q2012	2Q2012	3Q2012	Aug 12	Sep 12	Oct 12	Latest month vs. Sep 12	Latest month vs. Oct 11
Crude											
Black Sea	2.10	1.93	1.87	1.83	1.88	1.74	1.78	1.70	1.76	0.06	-0.09
Baltic	1.60	1.50	1.37	1.48	1.75	1.78	1.75	1.94	1.87	-0.07	0.35
Arctic/FarEast	0.74	0.67	0.65	0.62	0.62	0.64	0.61	0.69	0.65	-0.05	-0.07
BTC	0.77	0.70	0.69	0.73	0.68	0.64	0.63	0.61	0.57	-0.04	-0.10
Crude Seaborne	**5.22**	**4.80**	**4.58**	**4.66**	**4.93**	**4.80**	**4.77**	**4.95**	**4.85**	**-0.10**	**0.08**
Druzhba Pipeline	1.13	1.17	1.18	1.24	1.11	0.98	1.01	1.01	1.00	-0.01	-0.20
Other Routes	0.42	0.53	0.54	0.51	0.49	0.53	0.53	0.54	0.54	0.00	0.06
Total Crude Exports	**6.76**	**6.50**	**6.30**	**6.42**	**6.53**	**6.31**	**6.31**	**6.50**	**6.39**	**-0.11**	**-0.06**
Of Which: Transneft[1]	4.00	4.18	4.09	4.18	4.35	4.24	4.31	4.36	4.29	-0.07	0.07
Products											
Fuel oil[2]	1.54	1.58	1.59	1.61	1.81	1.83	1.95	1.78	1.49	-0.29	0.04
Gasoil	0.88	0.77	0.72	0.88	0.75	0.76	0.81	0.75	0.66	-0.09	-0.04
Other Products	0.43	0.43	0.36	0.43	0.41	0.45	0.51	0.48	0.45	-0.03	0.09
Total Product	**2.85**	**2.77**	**2.66**	**2.92**	**2.97**	**3.04**	**3.27**	**3.01**	**2.60**	**-0.41**	**0.10**
Total Exports	**9.61**	**9.27**	**8.96**	**9.33**	**9.50**	**9.35**	**9.57**	**9.51**	**8.99**	**-0.52**	**0.03**
Imports	0.07	0.08	0.10	0.12	0.06	0.08	0.09	0.08	0.07	-0.01	0.00
Net Exports	**9.54**	**9.19**	**8.86**	**9.21**	**9.44**	**9.27**	**9.48**	**9.43**	**8.92**	**-0.50**	**0.03**

Sources: Argus Media Ltd, IEA estimates

[1]Transneft data exclude Russian CPC volumes.

[2]Includes Vacuum Gas Oil

Middle East

In **Syria**, opposition forces have over-run several oilfields in the Deir-ez-Zor area according to press reports. Production is estimated at only around 160 kb/d, less than half of the more than 380 kb/d that Syria produced in 2011 before sanctions were enacted on its oil exports.

In **Yemen**, news reports indicated that the Marib pipeline had been damaged for the third time this year after a nine-month closure ended in July. Three new attacks in November damaged the line in two places and has compromised more than 100 kb/d of production from OMV (Block S2), Hunt (Block 5), and Safer

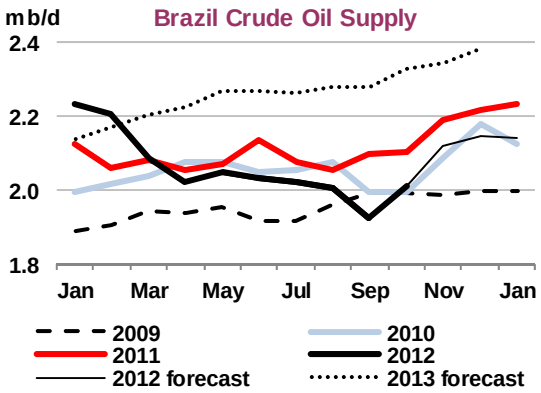
(Block 18). According to press reports, Safer sent a letter to the Ministry of Oil and Minerals criticizing the government for not dealing with the saboteurs, noting that the country is losing 100 kb/d or $310 million each month. The pipeline also supplies the 150-kb/d Aden refinery, and officials worry that a fuel shortage is looming. We assume no major improvement of the overall output situation in 2013, compared to 2012, with output staying at around 190 kb/d (including NGLs).

Africa

Sudan and South Sudan: Sudan and South Sudan have yet to agree to a border security zone, a precondition to the export agreement that the states ratified on 27 September. The Sudanese government is insisting that it is South Sudan's responsibility to disarm the Sudanese People's Liberation Movement- North (SPLM-N) rebel group, which is engaged in an insurgency against the government of Sudan. South Sudan dismisses this as an impossible request. Despite this issue, we maintain that the desire by both sides to see revenue will compel some oil exports to start by early 2013. Oil companies have been requested to start production, and South Sudan said on 2 December that negotiations have gone well and that exports could resume in two to three weeks. Therefore, we continue to assume a January restart of South Sudanese production, unchanged from last month's estimate of 130 kb/d of production from Sudan and South Sudan in 1Q13. Without a resolution of the security zone and the status of the Abyei area, potential for further conflict and delays to the resumption of exports remains.

Uganda: Tullow is developing two projects in the Lake Albert basin: an Early Commercialization Project to tap gas from the Nzizi field and oil from the Mputa and Waraga fields as well as a large-scale Basin Wide Development plan. The company said in July that it would be possible to produce oil at low rates by trucking before completion of its Basin Wide Development plan, which had been set to begin in 2014. Tullow recently indicated, however, that it was still waiting on government approvals for these smaller scale shipments and said that this could take place sometime "within the next 24 months". We had initially expected no more than 5 kb/d in 2013, centred in the second half of 2013, but we now do not expect this output until 2015 or late 2014 at best.

Latin America

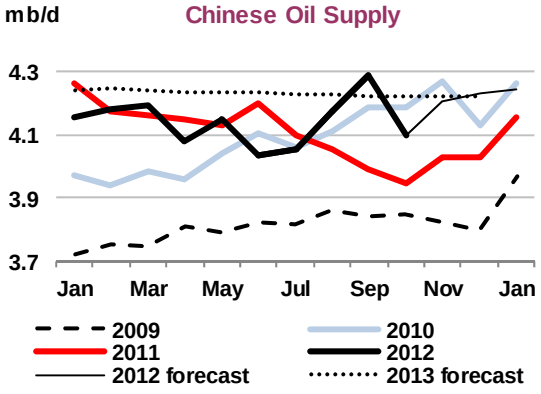


Brazil – October preliminary, September actual: Brazilian crude output is expected to decline in 2012 for the first time since 2004, but is forecast to rebound next year. In October, Brazilian crude output bounced back to 2.01 mb/d, on par with levels seen in 2Q12, after maintenance reduced output to 1.98 mb/d in 3Q12. The addition of the FPSO Cidade de Anchieta (nameplate 100 kb/d capacity) at the Parque das Baleias group of fields should also add to output in 4Q12 and in 2013. Production is expected to continue to rebound in November and December, but this is not expected to be sufficient to keep Brazilian crude production from declining by 35 kb/d for the entire year. Production in the Campos basin is expected to have declined by 3% to 1.7 mb/d in 2012, in contrast to gains for the last seven years. The connection of the Baúna field's FPSO late this year, the start of production from Sapinhoá in 1Q13, and Roncador's P-55 platform should raise Brazilian crude production by 190 kb/d to 2.26 mb/d in 2013 on the assumption that the Frade field will not restart until 2H13.

Chevron is said to be making plans to restart production from the Frade field after a court dismissed an injunction that barred the oil company and contractor Transocean Ltd from operating in the country. The regulator, ANP, could not move forward with restart plans until the injunction had been overturned. The pace and timing of the restart remains unclear, though there could be upside risk if production at the 70-kb/d field is restarted sooner in 2013.

Asia

Malaysia—August preliminary: State statistics indicate that liquids production in Malaysia totalled 660 kb/d in August on par with last year's levels. This level is expected to increase to over 700 kb/d in 1Q13 after news that production at the Gumusut-Kakap field started on 18 November. Production from the deepwater field is tied back to the existing Kikeh FPSO, and has reportedly raised production by 30 kb/d to 100 kb/d according to trade press. The blended stream is expected to yield more middle distillates and less lighter products such as LPG and naphtha. After the initial phase, the field is expected to increase from 30 kb/d to 120 kb/d by 2015.



China – October preliminary: Oil output fell back by 190 kb/d unexpectedly to 4.1 mb/d in October due to lower offshore production. Though unconfirmed, we suppose that there are continued problems with the restart of the 150-kb/d Peng Lai field. ConocoPhillips had reported that the field was producing at around 90 kb/d at the end of September in its quarterly update. The unexpected monthly decline will dent 4Q12 output by 80 kb/d to 4.2 mb/d, which is around 180 kb/d higher than the year prior.

OECD STOCKS

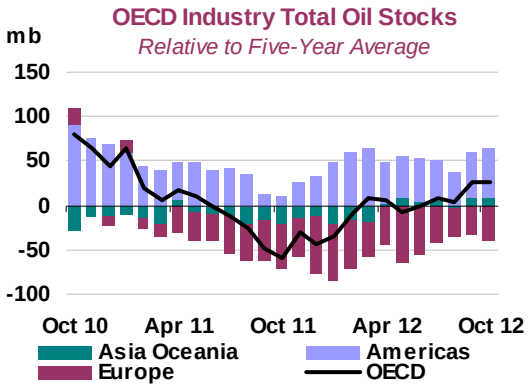
Summary

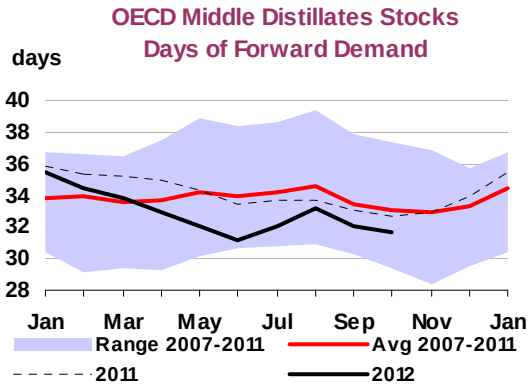
- **OECD commercial total oil inventories drew by a seasonal 16.2 mb to stand at 2 722 mb in October, bringing to a halt seven consecutive months of stock building**. The 'other products' category led the draw with a steep 13.1 mb decline, twice the seasonal average. Middle distillates drew by a further 10.2 mb. Inventories fell across all regions, notably in OECD Europe which declined by an exceptionally steep 13.0 mb.

- **On a forward demand basis, total inventories stood at 59.1 days at end-October, unchanged from downwardly revised end-September levels**. Stripping out crude oil, refined product inventories covered 30.8 days of forward demand, a fall of 0.2 days compared to the previous month.

- **Recent data from the US EIA indicate that crude inventories at Cushing have soared over recent weeks to stand close to record levels**. However, due to recent capacity expansions at the hub these still remain 18.7 mb below working capacity.

- **Preliminary data for November point to a further, sharp 19.1 mb fall in OECD commercial total oil stocks** split across all regions with middle distillates drawing by a strong counter-seasonal 14.9 mb.





OECD Inventory Position at End-October and Revisions to Preliminary Data

OECD total commercial oil inventories fell by a seasonal 16.2 mb to 2 722 mb in October, bringing to a halt seven consecutive months of stock building. All regions reported draws, with those in the Americas and Asia Oceania being shallower than the seasonal average. In contrast, in OECD Europe the declines were exceptionally steep.

Since the aggregate OECD stock draw for October was in line with the seasonal average, surplus to the five-year average level remained at a comfortable 26 mb, but this concealed strong regional differences. While in OECD Americas and Asia Oceania, the surplus widened to 56 mb and 9 mb, respectively, in OECD Europe the deficit deepened to 39 mb. On a forward demand basis, total inventories stood at 59.1 days at end-October, flat from downwardly revised end-September levels. Total products inventories covered 30.8 days of forward demand, a fall of 0.2 days compared to the previous month.

Product inventories drove the draw in total oil stocks, with the 'other products' category showing a steep 13.1 mb decline, twice the seasonal average. That decrease was centred in the OECD Americas region, where relatively lower prices spurred US consumers to refill propane tanks ahead of winter. Middle distillates drew by a further 10.2 mb, in-line with the seasonal average, with draws in OECD Europe and

Americas of 6.3 mb each, more than offsetting a small counter-seasonal build in Asia Oceania. Middle distillate markets remain tight following lacklustre summer builds, leaving OECD holdings below both last year's levels and the five-year average in absolute terms and when measured in days of forward demand.

Preliminary estimates of OECD inventories for September were revised downwards. While stocks still show a counter-seasonal increase for that month, the build is now estimated at 2 mb, far shallower than the initial assessment of a 15.2 mb build in last month's report after the September downward revision combined with a 5.4 mb upward adjustment for August. Revised September data came in 7.8 mb lower than early estimates. Downward adjustments were concentrated in crude, including a 6.3 mb reduction for OECD Europe. Product holdings in Europe were also revised downwards, by another 6.4 mb. In contrast, inventories in OECD Americas were adjusted higher by 9.1 mb, led by revisions of +3.2 mb to middle distillates and +3.0 mb to gasoline.

Revisions versus 13 November 2012 Oil Market Report

(million barrels)

	Americas		*Europe*		*Asia Oceania*		*OECD*	
	Aug-12	Sep-12	Aug-12	Sep-12	Aug-12	Sep-12	Aug-12	Sep-12
Crude Oil	**2.3**	**0.1**	**0.7**	**-6.3**	**0.0**	**-3.7**	**3.0**	**-9.8**
Gasoline	-0.2	3.0	0.0	1.7	0.0	0.2	-0.2	4.8
Middle Distillates	0.5	3.2	0.5	-6.5	0.0	0.1	0.9	-3.2
Residual Fuel Oil	0.1	-0.2	0.9	-0.1	0.0	0.2	1.0	0.0
Other Products	0.3	1.5	0.0	-1.5	0.0	-1.8	0.3	-1.8
Total Products	**0.7**	**7.5**	**1.4**	**-6.4**	**0.0**	**-1.2**	**2.0**	**-0.1**
Other Oils[1]	0.3	1.5	0.1	1.3	0.0	-0.6	0.4	2.2
Total Oil	**3.2**	**9.1**	**2.2**	**-11.4**	**0.0**	**-5.5**	**5.4**	**-7.8**

1 Other oils includes NGLs, feedstocks and other hydrocarbons.

Preliminary data for November point to a further, sharp 19.1 mb fall in OECD commercial total oil inventories split across all regions. OECD Americas and OECD Asia Oceania drew by 6.2 and 7.3 mb, respectively, broadly in line with seasonal trends. In contrast OECD European holdings dropped by a further 5.6 mb, in contrast to the 9.3 mb average build. Data also suggest that middle distillates drew by a sharp counter-seasonal 14.9 mb over the month.

Preliminary Industry Stock Change in October 2012 and Third Quarter 2012

	October 2012 (preliminary) *(million barrels)*				*(million barrels per day)*				Third Quarter 2012 *(million barrels per day)*			
	Am	Europe	As. Ocean	Total	Am	Europe	As. Ocean	Total	Am	Europe	As. Ocean	Total
Crude Oil	**8.7**	**-5.4**	**-5.8**	**-2.6**	**0.28**	**-0.18**	**-0.19**	**-0.08**	**-0.17**	**-0.12**	**0.02**	**-0.28**
Gasoline	6.5	0.5	0.1	7.0	0.21	0.01	0.00	0.23	-0.05	0.07	0.02	0.04
Middle Distillates	-6.3	-6.3	2.3	-10.2	-0.20	-0.20	0.07	-0.33	0.15	0.13	0.08	0.37
Residual Fuel Oil	2.4	0.6	-0.9	2.0	0.08	0.02	-0.03	0.07	-0.02	0.03	0.02	0.04
Other Products	-13.1	-2.2	2.3	-13.1	-0.42	-0.07	0.07	-0.42	0.17	-0.03	0.06	0.21
Total Products	**-10.6**	**-7.5**	**3.8**	**-14.3**	**-0.34**	**-0.24**	**0.12**	**-0.46**	**0.26**	**0.21**	**0.18**	**0.65**
Other Oils[1]	-1.0	-0.1	1.8	0.7	-0.03	0.00	0.06	0.02	0.09	-0.02	-0.04	0.03
Total Oil	**-2.9**	**-13.0**	**-0.2**	**-16.2**	**-0.10**	**-0.42**	**-0.01**	**-0.52**	**0.18**	**0.07**	**0.16**	**0.40**

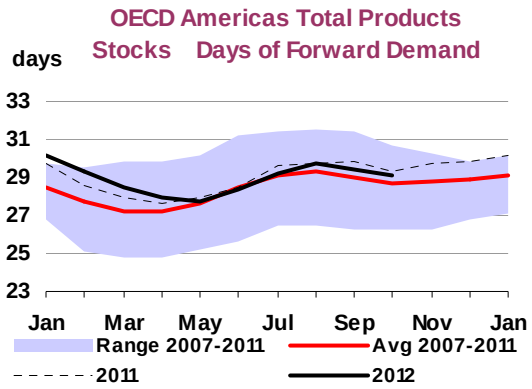
1 Other oils includes NGLs, feedstocks and other hydrocarbons.

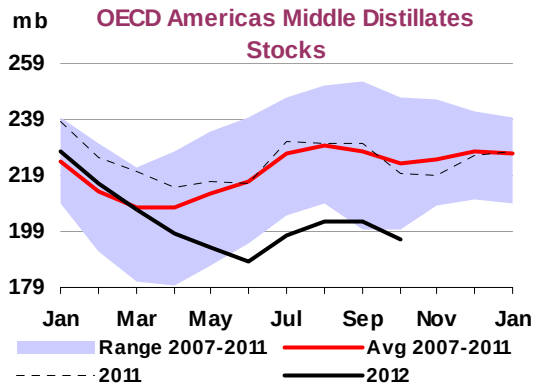
Analysis of Recent OECD Industry Stock Changes

OECD Americas

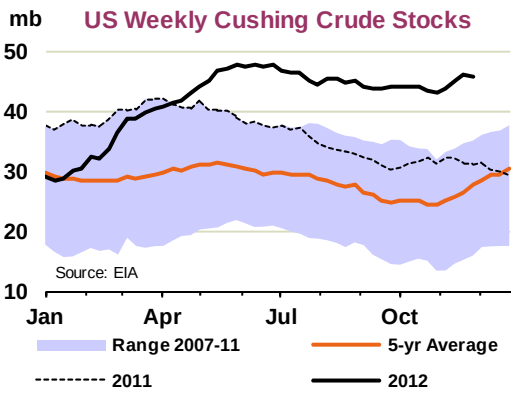
Commercial oil inventories in OECD Americas drew by a seasonal but relatively slight 2.9 mb in October, led by a steep 13.1 mb fall in 'other products'. In recent months, 'other products' stocks had been running approximately 25 mb above five-year average levels, led by growing propane holdings in the US. As noted in previous reports, the oversupply of propane from burgeoning NGL production in the US has pressured prices downwards. Consumers appear to have taken advantage of these low prices to refill their tanks ahead of winter. Middle distillates stocks drew by a seasonal 6.3 mb, again likely due to the

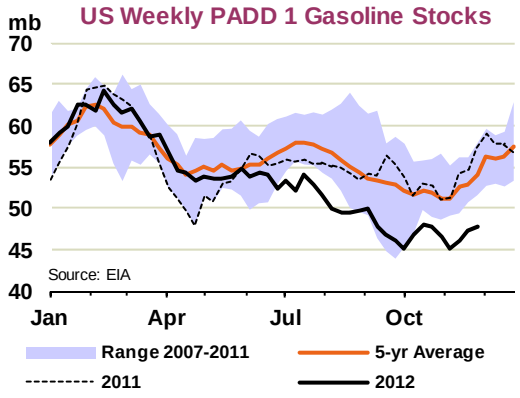
seasonal refilling of consumer heating oil tanks. Despite having built by 1.6 mb over the summer, commercial middle distillate stocks still faced a 27.3 mb deficit to the five-year average at late October, heading into the peak heating season. In contrast, gasoline inventories built by a seasonal but steep 6.5 mb to stand level with year-earlier levels in both absolute terms and days of forward demand. In total, regional product stocks fell by 10.6 mb in October, slightly below the five-year average draw of 12.7 mb for that month. Total product inventories for the region covered a still comfortable 28.7 days of forward demand, just 0.2 days less than at end-September.





In contrast with products, crude oil stocks continued their upwards trajectory, growing by a seasonal 8.7 mb in October. Inventories at the WTI futures delivery point of Cushing, Oklahoma stood at 43 mb at end-October with US EIA weekly data indicating that by late-November levels had increased to 45.6 mb, 2.1 mb below the record levels reported in June. Inventories rose as refinery maintenance cut throughputs at several mid-continent refineries and producers scrambled to move crude to the Gulf Coast. Yet despite these builds, WTI prices have held up more than during similar episodes in 2010 and 2011. This appears to be due to the expansion of storage capacity at the hub over the past couple of years. Inventories currently remain 18.7 mb below the most recent EIA assessment of working capacity undertaken at end-September 2012.

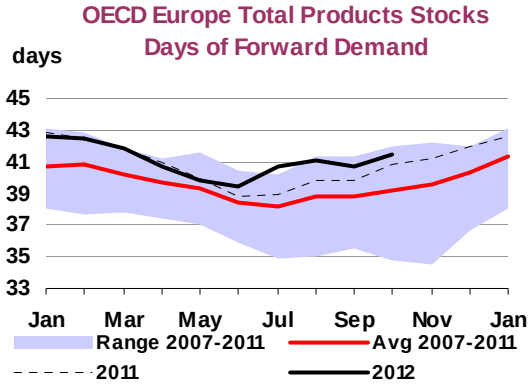


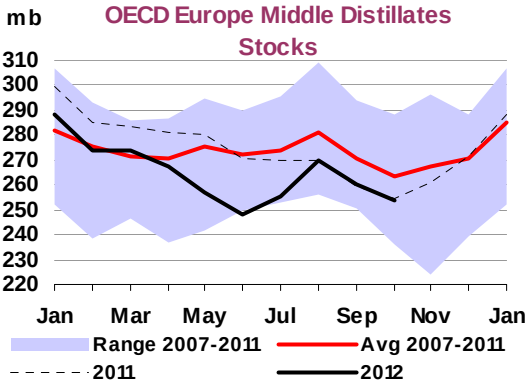


Latest weekly data from the US EIA point to a further 2.7 mb fall in industry oil inventories in November. Data indicate that Hurricane Sandy, which hit the Eastern seaboard in late-October, did not have a lasting impact on product and crude inventories, as stock draws on the East Coast (PADD 1) were offset by builds in the Gulf (PADD 3). Those stemmed from disruptions in pipeline traffic between the two markets, which kept Gulf Coast refiners from moving products to PADD 1. By mid-November, even the regional impact in PADD 1 had dissipated, as local middle distillates and gasoline stocks rebounded to near pre-hurricane levels.

OECD Europe

Industry total oil inventories in OECD Europe plummeted by 13.0 mb in October with draws reported across all categories bar gasoline and fuel oil, which posted modest gains. Despite a sharp decrease in refinery runs, crude oil inventories declined by 5.4 mb, likely on lower imports. Total products contracted by 7.5 mb, led by a seasonal 6.3 mb decrease in middle distillates. Despite those draws and due to an exceptionally weak demand prognosis going into 1Q13, on a forward demand basis total products now cover 41.0 days, a rise of 0.7 days from September.

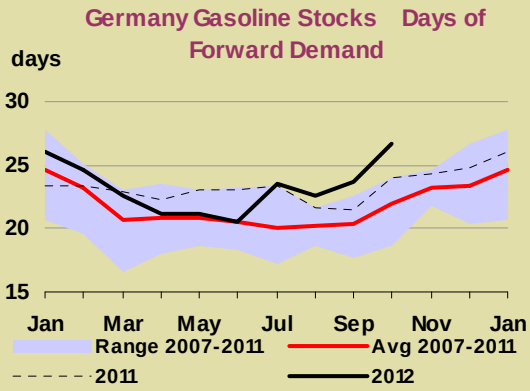




French inventories led the regional decline, drawing by 3.3 mb with falls reported across all product categories, notably middle distillates (-2.2 mb). In contrast, German holdings rose by a combined 2.4 mb, with all categories gaining bar middle distillates, which posted a minor contraction. Gasoline posted yet another unseasonably strong build of 0.8 mb (see *German Gasoline Struggles to Find a Home*). Persistently high prices appear to have hampered the replenishment of German consumer heating oil stocks. Although restocking started earlier than normal this year, tank fill has only increased by 1% of capacity per month since July to stand at 59% by end-October, 2 percentage points below 2011.

German Gasoline Struggles to Find a Home

Following recent high European refinery runs, some refiners appear to be having trouble finding outlets for their increased production. Over the summer, high crack spreads and comfortable margins encouraged refiners to ramp up middle-distillate production. Crude throughputs soared in France, Germany and Spain. As a result, gasoline production also increased.



Recent inventory data suggest that German refiners have found it difficult to find outlets for their excess gasoline. German gasoline inventories have built by 2.3 mb since end-June to stand 1.5 mb above their five-year average by end-October. Demand projections, on the other hand, point to extended dips in consumption. Given those diverging trends in supply and demand, stocks at end-October covered a full three days more forward demand than a year earlier, and were well above seasonal norms – even though the backwardated structure of product markets discouraged stock building.

In contrast, French gasoline holdings have avoided large builds over recent months and at latest count stood level with the five-year average in both absolute terms and forward demand cover. In Spain, which posted the steepest gains in middle distillates production, gasoline inventories remained comfortably within the seasonal range.

German Gasoline Struggles to Find a Home (continued)

The main reason for this disparity appears to be the difficulty that landlocked German refiners face accessing foreign markets when domestic markets do not soak up extra supply. Germany now only has three operating coastal refineries. Its remaining landlocked refineries have only limited access to international markets. In contrast, most French and Spanish refineries are located on the coast and are thus connected with international product markets.

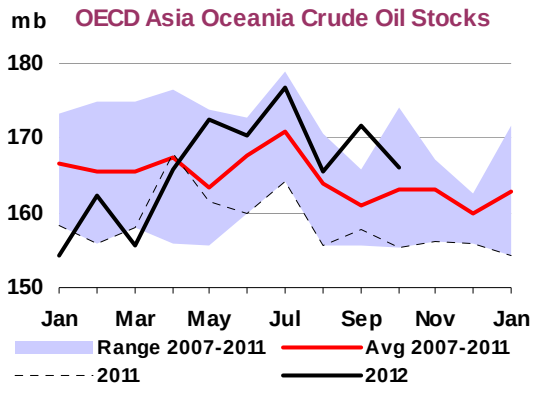
Over the June-to-September period, Spanish gasoline exports rose by approximately 60 kb/d, while German shipments inched up by less than 10 kb/d. French gasoline shipments actually fell, but high runs there coincided with robust domestic demand after the French government decreased taxes on transportation fuels. German gasoline exports have remained relatively range bound at between 110 kb/d and 120 kb/d in 2012, suggesting that German refiners have been exporting as much as possible given constraints in export capacity. Meanwhile French and Spanish exports have fluctuated by as much as 80 kb/d.

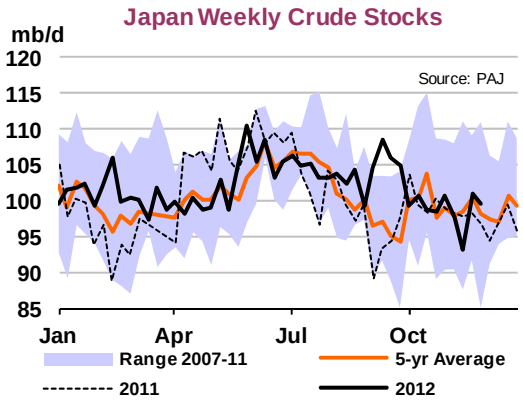
Faced with declining domestic demand and increased refining capacity and diesel yields, Spain appears to be repositioning itself as a product exporter. Trade data suggest that its outflows of middle distillates have risen by 110 kb/d between January and September while gasoline exports also grew by 60 kb/d over the same period.

Preliminary data from Euroilstock suggest a 5.6 mb decline in November inventories, in sharp contrast to the 9.3 mb five-year average build. Stocks were driven lower by a sharp counter-seasonal 4.9 mb decrease in middle distillates, contrary to a 3.9 mb five-year average build. Elsewhere, gasoline fell by 1.8 mb and crude built by a slight 0.3 mb. If these data were to be confirmed by subsequent submissions, the region's deficit to the five-year average would widen to 53.8 mb. Meanwhile, refined products held in independent storage in Northwest Europe fell sharply, led downwards by draws in fuel oil and gasoil with only naphtha rising during the month.

OECD Asia Oceania

Industry oil stocks in OECD Asia Oceania inched down by 0.2 mb in October with a decrease in crude balanced against rises in total products and the NGLs and refinery feedstocks category. Total products were led 3.8 mb higher by a counter seasonal 2.3 mb increase in middle distillates, 'other products' also posted an additional 2.3 mb gain on the month. Only fuel oil drew by a shallower-than-seasonal 0.9 mb. Crude stocks fell by 5.8 mb, in sharp contrast to the five-year average 0.6 mb build. South Korea drove this contraction as crude inventories there fell by 4.1 mb after rising throughputs outpaced crude arrivals. Elsewhere, Japanese stocks rose by a counter-seasonal 3.8 mb after gains in products offset a draw in crude. Notable builds were reported in 'other products' (+2.4 mb) and middle distillates (+1.5 mb).





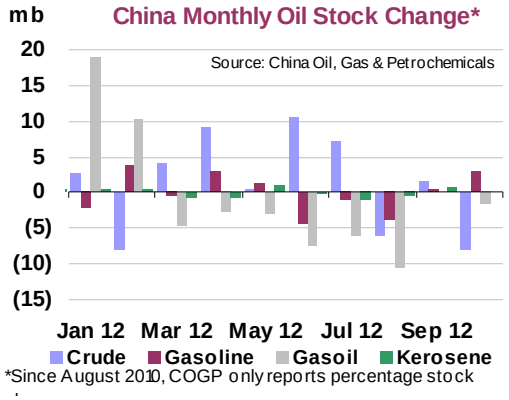
Latest weekly data from the Petroleum Association of Japan suggest a 7.3 mb fall in November inventories with all products drawing except naphtha. Total finished products declined by a combined 5.8 mb with kerosene and residual fuel oil dropping by 2.6 mb and 1.6 mb, respectively, while gasoil fell

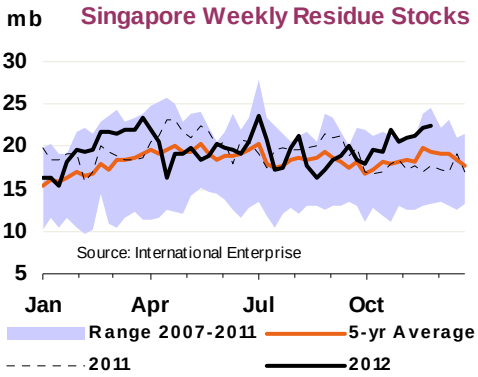
by a slight 0.2 mb. Crude holdings inched down by 0.2 mb, although levels fluctuated wildly over November with levels reaching their lowest in 14 months in mid-month but recovering lost ground by end-month.

Recent Developments in Singapore and China Stocks

According to *China Oil, Gas and Petrochemicals*, Chinese commercial oil inventories drew by 6.5 mb in October. Crude stocks fell by 3.5% (8.0 mb) after crude throughputs, although falling month-on-month, remained at the second highest level this year, outpacing gains in crude production and arrivals. Product holdings were driven upwards after a 5.7 % (3.0 mb) increase in gasoline, reportedly after domestic demand 'faltered', offset a 2.5 % (-1.5 mb) draw in diesel. Meanwhile, kerosene remained relatively stable, posting a minor 0.7 % (+0.1 mb) rise.

The gap between crude oil demand (as measured by reported refinery throughputs) and supply (production plus net imports) widened to +170 kb/d in October, raising the possibility that further SPR building is taking place. If this was the case, it would indicate that a further tranche of Phase-2 capacity has been completed ahead of schedule, previous information suggested that this capacity was due to be completed in 2013.

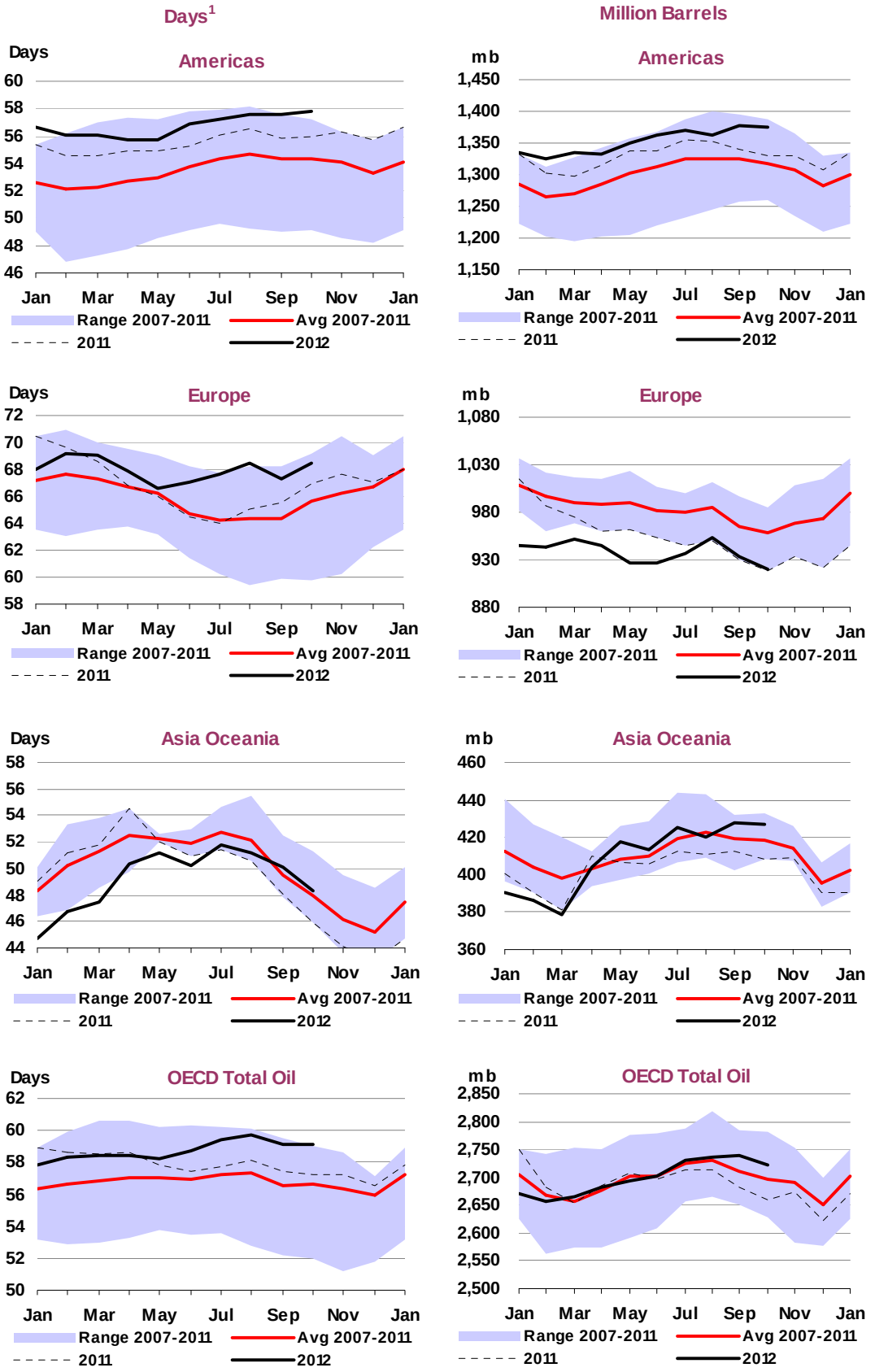




Refined product inventories in Singapore rose by 2.9 mb during November, led by a 2.1 mb build in residual fuel oil, extending earlier gains, after low Asian bunker demand hit exports. These stocks have been on an upward trajectory since mid-summer and now stand near the top of their five-year range. Anecdotal evidence suggests that inventory levels are nearing capacity. Furthermore, Asian fuel oil markets are currently in a steepening contango, which is encouraging stock building. That is forcing market participants to turn to floating storage as a cheap alternative to land-based storage. Meanwhile, Singapore light distillate and middle distillate inventories edged up by 0.3 mb and 0.6 mb, respectively.

Regional OECD End-of-Month Industry Stocks

(in days of forward demand and millions barrels of total oil)



1 Days of forward demand are based on average demand over the next three months

PRICES

Summary

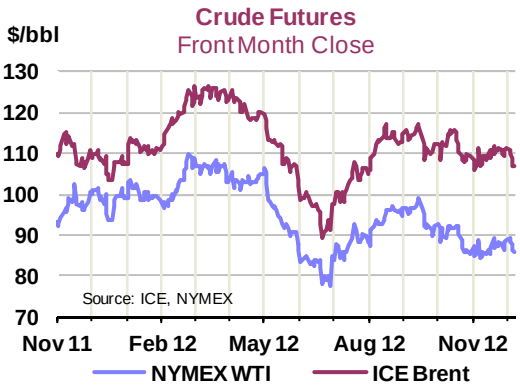
- **Oil futures edged further down in November, extending earlier declines, as persistent concerns about the economy appeared to eclipse heightened political risks in Israel, Gaza, Syria and Iran.** Futures prices also remained under pressure from the divisive debate underway in the US over the looming 'fiscal cliff'. Prices for benchmark crudes continued to inch lower in early December, with WTI last trading at $85.90/bbl and Brent at $107.85/bbl.

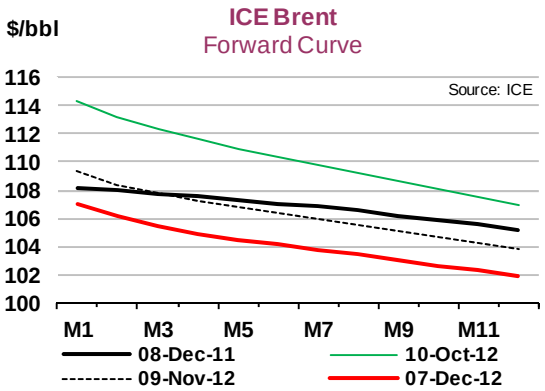
- **Money managers increased their long positions in ICE and CME oil contracts in late November for the first time since August** despite downward price pressures after having reduced their bullish bets on CME WTI contracts earlier in the month on worries about a stalemate in US talks on the 'fiscal cliff'. Money managers reversed the decline, and more, in the second half of the month increasing their net long positions by 41.7% on more upbeat economic news from the US and China.

- **Spot crude oil markets continued their downtrend for the fifth straight month in November,** with relatively steep crude oil inventory builds in the US and Asia Pacific region adding downward pressure. Weaker crack spreads have also pushed crude markets lower.

- **Refined product prices declined across the board in all major markets in November,** with gasoline cracks especially hard hit, while Asian markets proved more robust than the US and Europe. Middle distillates also weakened despite the onset of the northern hemisphere winter season, when heating oil demand normally peaks.

- **Freight costs on the benchmark VLCC Middle East Gulf – Asia route finally moved upwards in late November** as fundamentals tightened on the back of healthy regional demand from exporters. Rates peaked at over $14/mt on 21 November, their highest level since end-May, but by early-December were retreating rapidly as demand waned.





Market Overview

Oil futures continued on a downward trend in November, with monthly prices trading at five-month lows. Heightened concerns about geopolitical risks involving Israel, Gaza, Syria and Iran were eclipsed by downgrades to European GDP rates for 2013 and weaker demand prospects. Futures prices also remained under pressure from the divisive debate underway in the US over the looming fiscal cliff.

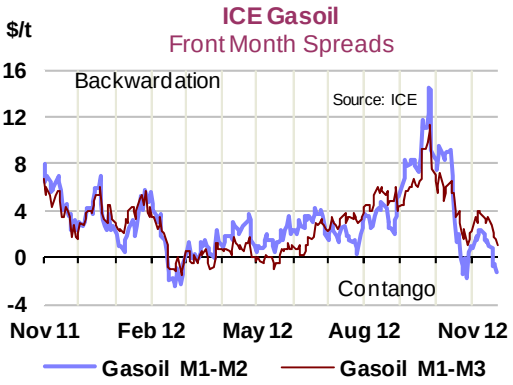
Futures prices escalated at the onset of hostilities between Israel and Gaza but the start of ceasefire talks between the two adversaries ratcheted down tensions. In November, WTI futures fell by $2.84/bbl on

the month to $86.73/bbl while Brent was down just under $2/bbl to $109.53/bbl. Prices for both crudes edged lower in early December, with WTI last trading at $85.90/bbl and Brent at $107.85/bbl.

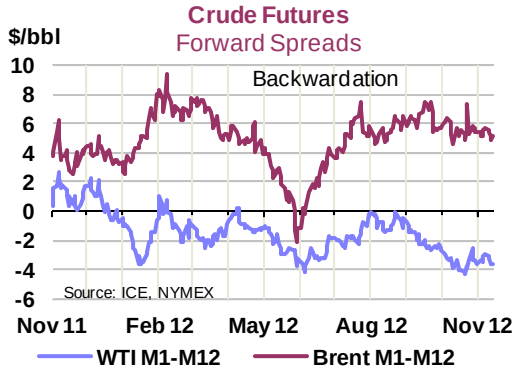
Global oil demand has been revised higher by some 435 kb/d since last month's report, to 90.5 mb/d for 4Q12 but the growth in Asia and the Americas masks exceptionally weak European demand. OECD European oil demand posted its steepest contraction since the 2008-09 financial crisis, in 3Q12 off by just under 900 kb/d over year ago levels.

Underscoring weakness, gasoil oil futures fell almost $4.50/bbl in November. Low middle distillates stocks in Europe and the US, however, may yet buoy prices as the peak heating oil season gets underway.

The Israel-Gaza hostilities provided prices with temporary support, but upward pressure on prices eased once talk of a ceasefire emerged. Iranian crude exports are likely to fall back to the 1 mb/d mark going forward amid new US sanctions on financial transactions (see OPEC Supply, '*Iranian Crude Production Slips Further*').



The backwardation in Brent futures narrowed slightly in November on a recovery in North Sea outages, with the premium to forward prices for M1-M12 contracts averaging around $5.45/bbl in November compared with $6.30/bbl in October and $5.85/bbl in September. The growing supplies of US crudes and near-record levels of stocks at Cushing, Oklahoma helped propel WTI M1-M12 contracts deeper into contango, to around -$3.55/bbl in November, compared with -$2.45/bbl in October and -$0.95/bbl in September.



Prompt Month Oil Futures Prices

(monthly and weekly averages, $/bbl)

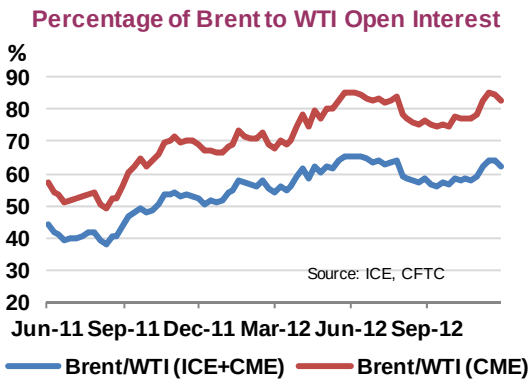
	Sep	Oct	Nov	Nov-Oct Avg Chg	% Chg	Week Commencing: 05 Nov	12 Nov	19 Nov	26 Nov	03 Dec
NYMEX										
Light Sweet Crude Oil	94.56	89.57	86.73	-2.84	-3.3	85.99	85.88	87.92	87.68	87.53
RBOB	125.84	117.86	113.08	-4.78	-4.2	111.00	112.69	115.08	115.42	111.28
No.2 Heating Oil	132.12	131.88	126.51	-5.37	-4.2	125.65	125.23	128.77	127.22	125.24
No.2 Heating Oil ($/mmbtu)	22.68	22.64	21.72	-0.92	-4.2	21.57	21.50	22.11	21.84	21.50
Henry Hub Natural Gas ($/mmbtu)	2.92	3.50	3.69	0.19	5.1	3.57	3.71	3.84	3.68	3.61
ICE										
Brent	113.03	111.52	109.53	-1.99	-1.8	108.45	109.37	110.86	110.46	108.72
Gasoil	132.54	130.90	126.43	-4.47	-3.5	124.95	125.30	128.28	127.54	125.23
Prompt Month Differentials										
NYMEX WTI - ICE Brent	-18.48	-21.95	-22.79	-0.85		-22.46	-23.50	-22.94	-22.78	-21.19
NYMEX No.2 Heating Oil - WTI	37.56	42.31	39.78	-2.53		39.66	39.35	40.85	39.55	37.71
NYMEX RBOB - WTI	31.28	28.29	26.34	-1.94		25.01	26.81	27.16	27.74	23.75
NYMEX 3-2-1 Crack (RBOB)	33.38	32.96	30.82	-2.14		29.89	30.99	31.72	31.68	28.40
NYMEX No.2 - Natural Gas ($/mmbt	19.76	19.14	18.03	-1.11		18.00	17.79	18.27	18.16	17.89
ICE Gasoil - ICE Brent	19.51	19.38	16.90	-2.48		16.49	15.92	17.42	17.08	16.51

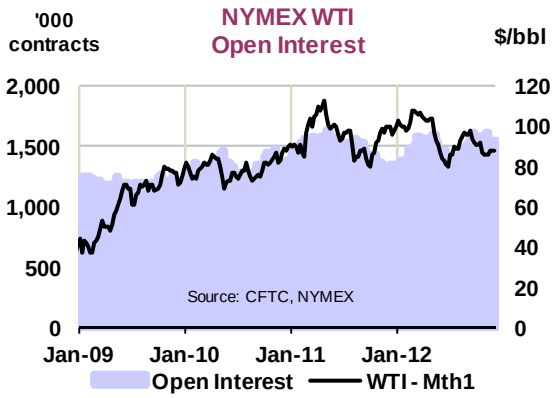
Source: ICE, NYMEX

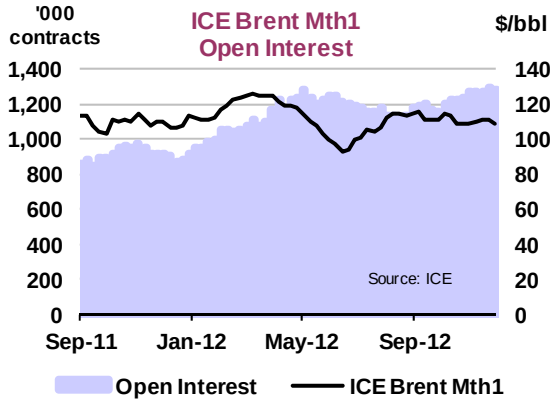
Futures Markets

Activity Levels

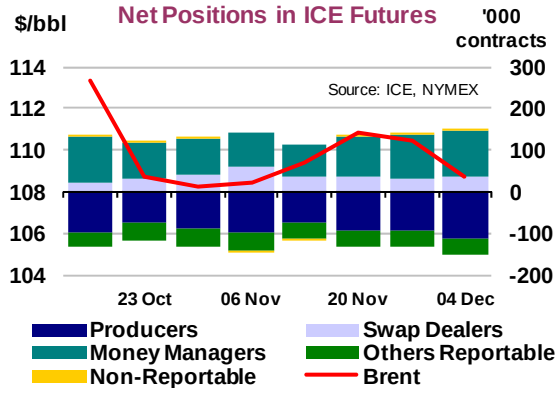
Market activity on oil futures exchanges in November saw open positions in the Brent contract increase while those in WTI decline. At the CME, combined open interest in WTI futures and options sank by 12.6%, to 2.23 million, while open interest in futures-only contracts declined by almost 3.0%, to 1.55 million between 30 October and 4 December, 2012. Over the same period, open interest at the London ICE fell by 4% to 0.5 million for WTI futures-only contracts and declined by 8.4% in futures and options, to 0.61 million contracts. Meanwhile, open interest in ICE Brent futures contracts increased by 4.0% to 1.28 million contracts while ICE Brent futures and options contracts declined by 2.9% to 1.5 million contracts. As a result, the ratio of Brent futures open interest on the London ICE to New York and London WTI oil positions increased by 4.3 percentage points to 62.5% over the referenced period. Stripping out ICE WTI contracts, the ratio of Brent to WTI open interest rose even faster, by 5.6 percentage point to 82.7%.

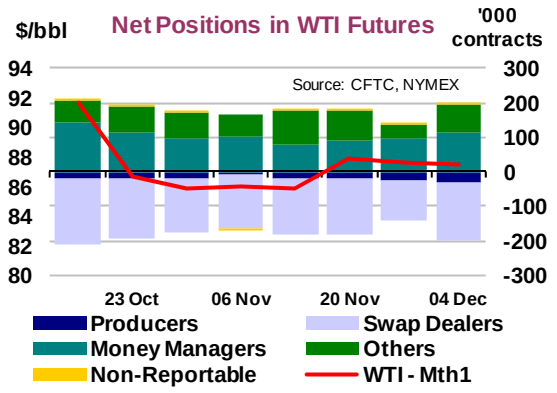






Overall trading activity in oil derivatives declined in November on both the CME and ICE markets, with CME contracts leading the contraction. Total trade volumes in CME WTI contracts fell 18.7% in November 2012 y-o-y and by 20.1% year-to-date, to 11.1 million contracts and 132 million contracts, respectively. Brent monthly volume also declined by 5.5% to 11.8 million contracts last month from 12.5 million in November 2011. However, year to-date Brent volume increased by 12% to 138.7 million.





Money managers increased their long positions in ICE and CME oil contracts in late November for the first time since August. Even though they reduced their bullish bets on CME WTI contracts in the first two weeks of the month due to worries about a stalemate in the US fiscal cliff talks, this was more than offset in the second half of the month. Since mid-November, they increased their net long position by 41.7% as a response to positive economic news from the US and China. Money managers in London ICE Brent contracts followed a similar pattern and increased their bullish wagers by 27.3% to 110 167.

For the first time ever, money manager net long positions on CME and ICE reached equal levels in November, and money managers net long positions in ICE Brent even exceeded their positions in WTI during the two weeks ended 20 November and 27 November.

Producers accounted for 19.3% of the short positions and 17.7% of the long positions in CME WTI futures-only contracts at end-November, increasing their net short positions by 78.7% to 30 948 contracts. Swap dealers, who accounted for 23.1% and 33.8% of the open interest on the long side and short side, respectively, increased their bets on falling prices by 5.2% to 165 745 contracts, reversing the trend seen in September and October. Producers' and swap dealers' trading activity in the London ICE Brent contracts followed a similar pattern as CME WTI contracts. Producers in London ICE Brent contracts increased their net short positions from 89 806 to 112 431 contracts. Similarly, swap dealers reduced their net long positions from 42 744 to 35 363 contracts.

Positions on Light Sweet Crude Oil (WTI) Futures

Thousand Contracts

04 December 2012	Long	Short	Net	Long/Short	Δ Net from Prev. Week	Δ Net Vs Last Month
Producers' Positions	274.6	305.6	-30.9	*Short*	↓ -6.3	↓ -13.6
Swap Dealers' Positions	358.0	523.7	-165.7	*Short*	↓ -47.4	↓ -8.2
Money Managers' Positions	439.8	327.6	112.2	*Long*	↑ 14.0	↑ 14.2
Others' Positions	399.8	318.2	81.6	*Long*	↑ 42.6	↑ 10.0
Non-Reportable Positions	76.8	74.0	2.9	*Long*	↓ -2.9	↓ -2.4
Open Interest			**1549.1**		↑ 26.9	↓ -48.4

Source: CFTC

Positions on ICE Brent Crude Futures

Thousand Contracts

04 December 2012	Long	Short	Net	Long/Short	Δ Net from Prev. Week	Δ Net Vs Last Month
Producers' Positions	543.0	655.4	-112.4	*Short*	↓ -17.3	↓ -22.6
Swap Dealers' Positions	357.2	321.9	35.4	*Long*	↑ 6.5	↓ -7.4
Money Managers' Positions	223.7	113.6	110.2	*Long*	↑ 4.5	↑ 23.7
Others' Positions	110.7	149.0	-38.3	*Short*	↑ 1.2	↑ 3.1
Non-Reportable Positions	46.4	41.2	5.2	*Long*	↑ 5.2	↑ 3.2
Open Interest			**1281.1**		↓ -9.6	↑ 48.8

Source: ICE

NYMEX RBOB futures and combined open interest declined to 273 735 and 280 755 contracts, respectively, over the same period. Open interest in NYMEX heating oil futures contracts was down by 1.3% to 292 708 contracts while open interest in natural gas futures market declined by 2.7% to 1.15 million contracts.

Index investors' long exposure in commodities in October 2012 declined by $6.1 billion to $288.6 billion, after edging up by $7 billion in September. The notional value of long exposures in both on- and off-WTI

Light Sweet Crude Oil futures contracts declined by $2.1 billion in October. The number of long futures equivalent contracts increased by 9 000 to 538 000, equivalent to $46.9 billion in notional value.

Market Regulation

Liquidity in the over-the-counter (OTC) energy markets declined sharply following the implementation of several Dodd-Frank requirements on 12 October 2012 and the resulting decision by ICE to convert energy swaps to futures, as well as CME's initiatives to allow more OTC swaps to be done as block trades in futures markets. The decline in liquidity was especially pronounced in Asian markets. As of 12 October, Dodd-Frank legislation requires that derivatives traders with $8 billion or more in swap transactions in any 12-month period register as swap dealers within 60 days of the end of the month in which they hit that threshold. Once they are registered as swap dealers, traders also face additional requirements in terms of swap data reporting and record-keeping, real-time reporting of swap transaction and pricing data, and internal and external business conduct standards. In order to reduce their clients' exposure to compliance costs associated with the new rules, exchanges introduced swap-like futures contracts. As a result, swap markets contracted, especially in Asia, where interdealer brokers, without being registered as futures brokers, have used traditional voice-brokered business models to serve their clients' swaps transactions. Firstly, the Dodd-Frank requirement forced these dealers to reduce their trades with US entities, since the $8 billion rule applies only to transactions with a US person. Secondly, many of these dealers saw their market contract as their clients started using the alternative instruments offered by the exchanges. To calm disruption to its over-the-counter (OTC) energy derivatives, Singaporean authorities extended the deadline for interdealer brokers to register as futures brokers from mid-November to end-December.

On 27 November 2012, the International Swaps and Derivatives Association (ISDA) released a quantitative impact analysis of initial margin requirements for non-centrally cleared OTC derivatives under current regulatory proposals. The analysis suggests that the initial margin requirement will be between $1.7 trillion and $10.2 trillion depending on the specific models used. The analysis further finds that the required margin requirement is at least three times higher during stressed market periods, leading to increased systemic risk due to greatly increased demand for new funds at the worst possible time for market participants. The increase in margin cost will likely affect the end-users' ability to hedge price risks, especially during stressed market conditions when they need it most.

On 4 December 2012, to address the growing concerns over the impact of cross border application of different regulatory reforms across countries on global swaps markets, leaders of entities responsible for the regulation of the over-the-counter (OTC) derivatives markets in Australia, Brazil, the European Union, Honk Kong, Japan, Canada, Singapore, Switzerland and the United States issued a joint statement on operating principles and areas of exploration in the regulation of the cross border OTC derivatives markets. The regulators agreed to consult with each other prior to making any final determination regarding which derivatives products will be subject to a mandatory clearing requirement. The regulators further recognised the different speed of regulatory reforms across jurisdictions with respect to clearing, reporting, trading and capital requirements; therefore, they pledged to consider appropriate transitional implementation periods for entities in jurisdictions that are implementing comparable regulations, supervision and comprehensive oversight. The authorities will meet again in January 2013 to exchange information about the planned timing of implementation dates for the new rules and transition periods markets will be given.

On 22 November 2012, the *Wall Street Journal* broke the news that the Shanghai Futures Exchanges planned to launch dual-currency oil futures contracts. Although there is no specific date for the launch or details of the contract, it is expected that some foreign investors will be allowed for the first time to trade oil futures contracts in China. The contracts will be priced in US dollars but both dollars and Yuan will be used by foreign investors and domestic investors, respectively, for clearing and settlement.

Extending Principles for Price Reporting Agencies to All Assessments

Allegations of price manipulation in UK wholesale natural gas prices by some major power companies and financial institutions could not have come at a worse time for price reporting agencies (PRAs). Less than a month after IOSCO's publication of principles for oil price reporting agencies, a price reporter at energy-industry data provider ICIS went public with the charge that natural gas prices are regularly manipulated by physical and financial traders, and that prices assessed by price reporting agencies do not accurately reflect the underlying physical market. Furthermore, he argued that poorly trained price assessors often developed close relationships with traders, which led them to routinely engage in Libor-style price fixing exercises. Immediately following these allegations, UK Financial Services Authority (FSA) and energy regulator Ofgem launched investigations into the claims.

Market participants have long claimed that selective reporting by traders and inconsistent methodologies used by price reporting agencies can distort reported prices. These concerns were the basis of a report published by IOSCO in early October, to which the IEA, OPEC and the IEF, responding to a request from the G20, provided input.* The report suggested that " the ability to selectively report data on a voluntary basis creates an opportunity for manipulating the commodity market data that are submitted to PRAs" and "the need for assessors to use judgement under some methodologies creates an opportunity for the submitter of data to deliberately bias a PRA's assessment in order to benefit the submitter's derivatives positions."

In order to enhance the reliability of oil price assessments that are referenced in derivatives contracts subject to regulation by its members, IOSCO set forth a set of principles for the PRAs to follow. IOSCO proposed, in collaboration with the IEA, IEF and OPEC, to review the implementation of the PRA principles after 18 months. If implementation is ineffective, there may be further recommendations.

The IOSCO PRA principles are intended to establish a framework of best business practices for PRAs and include:

- requirements for transparent methodologies adopted by PRAs as well as consultation with industry stakeholders for any proposed material changes in methodologies;
- giving priority to concluded transactions in making assessments;
- employing sufficient measures to ensure the integrity of submitted information;
- encouraging submitters to submit all of their market data;
- publishing criteria according to which transaction data may be excluded from a price assessment;
- specifying criteria that define who may submit market data to PRAs;
- implementing internal controls to identify communications between submitters and price assessors, and to ensure the integrity and reliability of assessments;
- retention of all information and judgments made in reaching a price assessment for at least five years;
- functional and operational separation of a PRA's assessment business from any other business that may present a conflict of interest;
- adoption of formal complaint-handling policies;
- and finally, annual independent external auditing of a PRA's adherence to its stated methodology criteria and with the requirements of the principles.

PRAs initially argued that they are basically news agencies and they are simply using their freedom of expression rights, therefore they cannot be subject to such rules. IOSCO overcame this objection by restricting these principles to be applied only in price assessments that are referenced in oil derivatives contracts. Practically, they recommended that "market authorities consider whether to prohibit trading in any oil derivatives contract that references a PRA-assessed price unless that assessment follows the PRA principles." It is a rather indirect way to force PRAs to adopt such rules. Instead of losing their customer basis, PRAs are expected to adopt these proposed principles.

While a step forward, these principles still do not fully address the problem of selective price reporting. Since traders are not required to submit trade data to PRAs, there is a risk that voluntary reporting could result in selective reporting and seriously compromise the integrity of price assessment. Therefore, it is

Extending Principles for Price Reporting Agencies to All Assessments (Continued)

important, in our view, to allow PRAs to use more information than concluded transactions in making their price assessments. Exclusive reliance on concluded transactions might lead to inaccurate price assessment if submitted prices are false or manipulated. Thanks to the use of other market information, PRAs can check the accuracy of submissions or assess whether submitted prices truly reflect the market place. Demanding traders who chose to voluntarily submit data to provide all of their market data in order to prevent selective reporting is not the answer. Given the voluntary nature of trade reporting, asking traders to submit all of their trade data amounts to an "all or nothing" policy which runs the risk of effectively discouraging price reporting and drastically limiting the pool of information available to PRAs, thereby adversely affecting the reliability of their reports. As long as the submission of data is voluntary, there is a strong risk that such "all or nothing" policy could end up fatally disrupting the flow of information from submitters to PRAs.

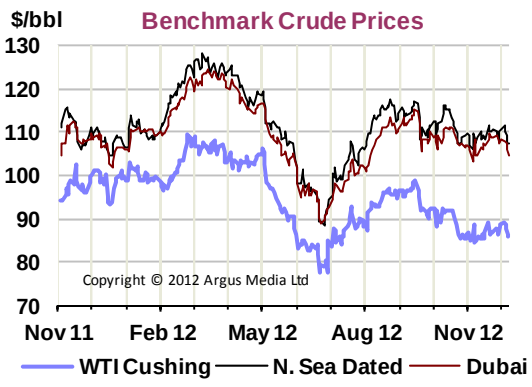
Another weakness in these principles has to do with complaint-handling. While they do call for a formal complaint-handling policy, the principles stop short from requiring the disclosure of complaints to market participants. The principles require PRAs to advise plaintiffs and any other relevant parties of the outcome of the investigation in the event of a formal complaint. Disputes regarding a daily pricing determination will be communicated to the market only when a complaint results in a change in price. However, if the aim of these principles is to increase transparency in price assessment, it may be argued that they should have called for an immediate announcement of all accepted formal complaints to market participants, similar to error trade announcements in exchanges. Furthermore, the principles called for recourse to an independent third party review of complaints if the plaintiff is dissatisfied with the way a complaint has been handled by the relevant PRA. However, the principles require that the independent third party be appointed by the PRA itself. Giving the right to appoint the third party to the PRA to review its own decision clearly creates a conflict of interest and undermines the independence of the external review. To ensure an independent review process, the appointment of the third-party reviewer should be jointly handled by the PRA and industry stakeholders.

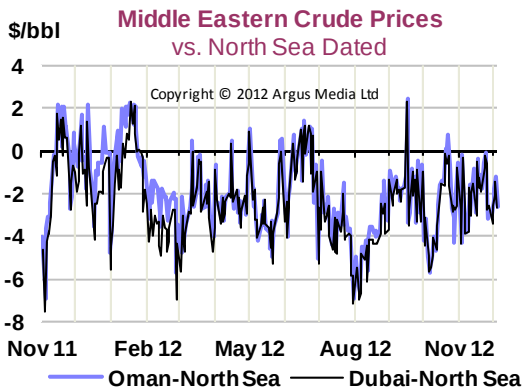
It is important to note that PRAs deliver more than just news. Their assessed prices are used not only in settlement of oil derivatives contracts but also in other derivatives contracts, including but not limited to natural gas and refined products. These assessed prices are also referenced in many long-term physical market contracts. The recent allegations of price-fixing in UK wholesale gas prices show the importance of reliable price assessments. Therefore, the principles developed for oil price assessments that are referenced in derivatives contracts should be universally adopted by PRAs for any price assessment activities.

*The report, "Principles for Oil Price Reporting Agencies", was published on the IOSCO website on 5 October 2012 and can be accessed at http://www.iosco.org/library/pubdocs/pdf/IOSCOPD391.pdf

Spot Crude Oil Prices

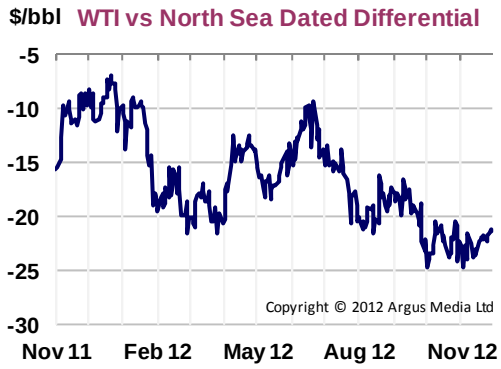
Spot crude oil markets continued their downtrend for the fifth straight month in November, with upward pressure on prices from escalating geopolitical conflicts in the Middle East offset by worries over a weaker demand prospects and relatively steep crude oil stocks in the US and Asia Pacific region. In addition, little progress in discussions between Congressional leaders and the White House to resolve the fiscal cliff continued to unnerve markets. Weaker crack spreads have also added downward pressure on crude markets.

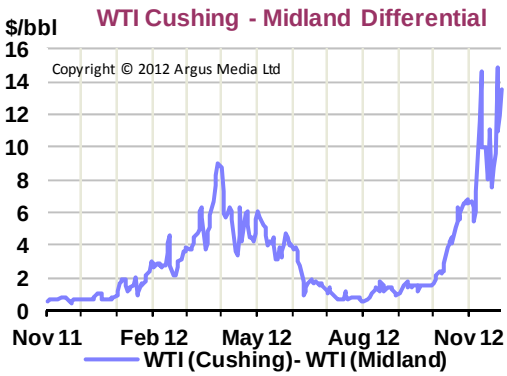




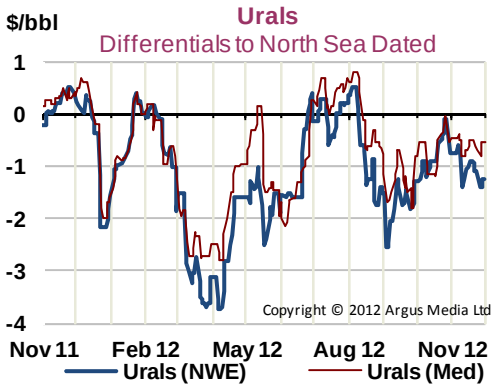
Spot prices for benchmark crudes fell by -$1.60 to just under -$3/bbl in November. WTI spot prices posted the largest decline, off $2.92/bbl to a monthly average of $86.60/bbl, the lowest level in five months and $20/bbl below the 2012 high reached in March. US prices may come under pressure again in December as producers reduce storage levels ahead of year-end inventory tax charges. North Sea Dated prices declined by $2.44/bbl to average $109.16/bbl in November. A surplus of competing crudes from Africa is helping to undermine North Sea markets. Spot prices for Dubai crude posted the smallest decline, off about $1.60/bbl to an average $107.18/bbl in November on stronger demand for Middle Eastern crudes.

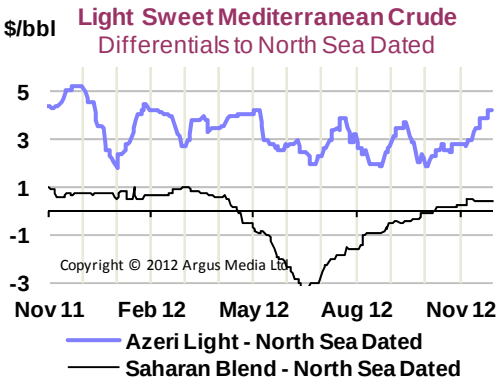
North American crude price structures were severely distorted in November, with price differentials for WTI at both Cushing and Midland trading at atypical levels. The WTI-Brent spread increased by about $0.50/bbl to $22.56/bbl, with stocks at Cushing, Oklahoma well above the 5-year average (*see Stocks*). The WTI-Brent spread, however, may narrow in the New Year with the planned expansion of the Seaway pipeline from 150 kb/d to 400 kb/d in 1Q13.



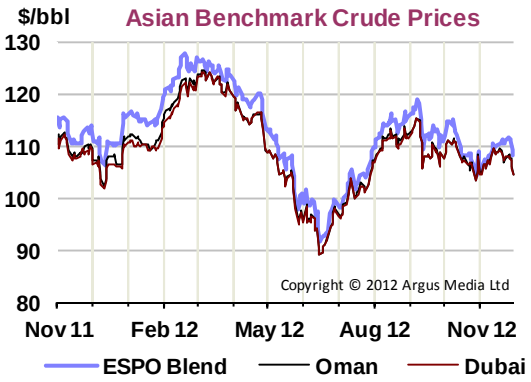


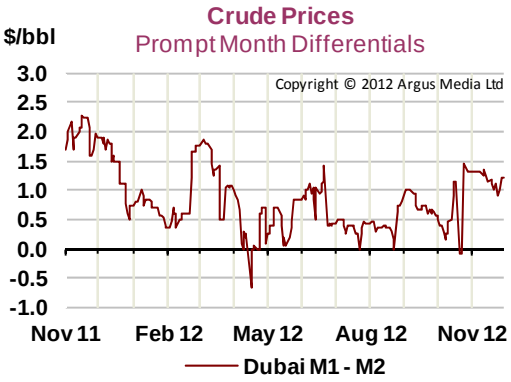
However, oil price differentials between WTI at Cushing and Midland surged in November due to pipeline bottlenecks and maintenance work at a key refinery that processes crude from the Permian basin. However, at the core is surging Texas oil production, which has soared to a 24-year high of 2 mb/d, overwhelming pipeline infrastructure and creating a glut of WTI in the Midland producing hub. The discount of crude at Midland, Texas, has sharply increased relative to WTI at Cushing, reaching an exceptional spread of $14.81/bbl on 4 December compared with $8.12/bbl on average in November, $2.91/bbl in October and a more typical $1.40/bbl in September. Prices could remain at elevated levels until new pipeline projects under development come online early in the New Year, though the differential could ease once the Phillips 66-Cenovus Energy 150 kb/d Borger, Texas refinery comes back into operation. In addition, completion of the reversal of the 220-kb/d Longhorn Pipeline, which currently flows from Houston to El Paso, is expected in early 2013





Urals price differential to Brent weakened in November due to reduced demand for the medium sour crude on lower fuel oil demand. However, Urals discounts in the Mediterranean were less pronounced due to stronger regional demand, especially from Spain, due to a shortage of similar grades. Indeed, Saudi Aramco reduced price differentials to Europe for January liftings on weaker fuel oil demand. The Brent-Urals differential traded at an average -$0.50/bbl, compared to a monthly average of -$0.92/bbl in October and -$1.15/bbl in September. The Brent-Urals spread is expected to come under more pressure following increased Russian exports from Ust Luga, which is steadily rising to its 600 kb/d capacity.





In Asia, regional benchmark Dubai strengthened month-on-month due to increased demand for winter fuels. Dubai's discount to Brent narrowed to $1.98/bbl compared with -$2.80/bbl in October and around $1.85/bbl in September. Seasonal demand for sour crudes helped close the price differential. Underscoring more robust prompt demand for Dubai, the M1-M2 spread widened to $1.25/bbl on average in November compared with just under $0.50/bbl in October.

Asian demand for lighter crudes also remained relatively robust. For the fourth month running, Saudi Aramco raised its prices for Arab Light and Arab Medium, by $0.35/bbl for January liftings. Meanwhile, Dubai crude differentials to North Sea Dated narrowed to -$1.98/bbl in November, from -$2.81/bbl a month earlier. Stronger naphtha and gasoil cracks are likely behind the increase. Meanwhile, Japanese demand for heavy sweet Asian crudes strengthened at end November/early January on stronger demand from utilities, especially in Indonesia.

Spot Crude Oil Prices and Differentials

(monthly and weekly averages, $/bbl)

	Sep	Oct	Nov	Nov-Oct		Week Commencing:				
				Avg Chg	%	05 Nov	12 Nov	19 Nov	26 Nov	03 Dec
Crudes										
North Sea Dated	112.95	111.60	109.16	-2.44	-2.2	108.01	108.95	110.47	109.68	109.12
Brent (Asia) Mth 1	113.81	112.29	109.75	-2.54	-2.3	107.55	109.34	111.35	111.07	109.91
WTI (Cushing) Mth 1	94.51	89.52	86.60	-2.92	-3.3	85.99	85.88	87.43	87.68	87.53
Urals (Mediterranean)	111.81	110.68	108.65	-2.03	-1.8	107.54	108.42	109.81	109.10	108.52
Dubai	111.13	108.79	107.18	-1.61	-1.5	105.25	106.58	108.80	108.31	106.67
Tapis (Dated)	116.75	116.12	114.29	-1.82	-1.6	113.01	114.22	115.65	114.80	114.12
Differential to North Sea Dated										
WTI (Cushing)	-18.45	-22.08	-22.56	-0.48		-22.02	-23.08	-23.03	-22.01	-21.59
Urals (Mediterranean)	-1.15	-0.92	-0.51	0.41		-0.47	-0.53	-0.66	-0.58	-0.60
Dubai	-1.83	-2.81	-1.98	0.83		-2.75	-2.37	-1.67	-1.37	-2.45
Tapis (Dated)	3.80	4.52	5.13	0.62		5.00	5.27	5.18	5.12	5.00
Prompt Month Differential										
Forward Cash Brent Mth1-Mth2	0.55	0.81	0.78	-0.03		0.82	0.98	0.72	0.63	0.76
Forward WTI Cushing Mth1-Mth2	-0.35	-0.40	-0.48	-0.08		-0.47	-0.41	-0.37	-0.61	-0.59
Forward Dubai Mth1-Mth2	0.83	0.47	1.25	0.78		1.30	1.30	1.25	1.08	1.10

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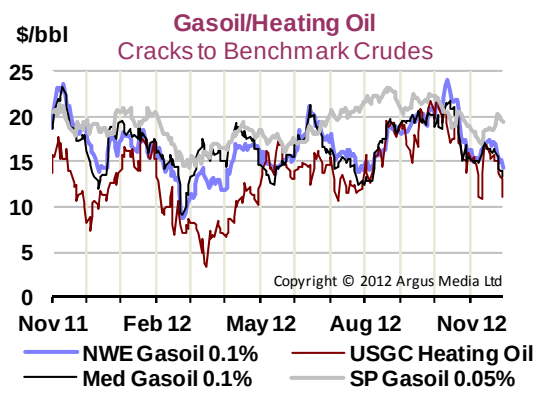
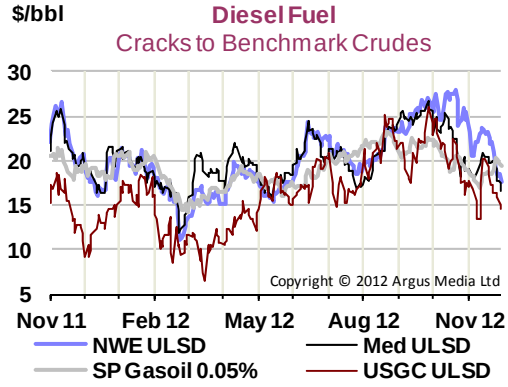
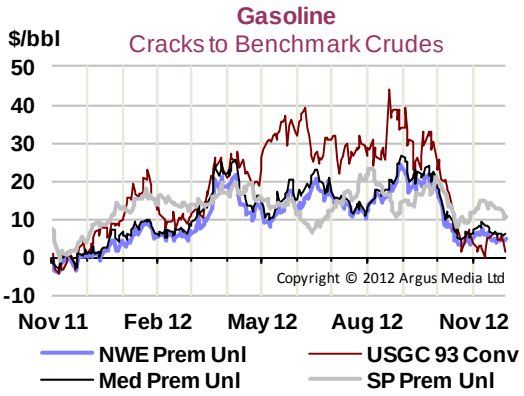
Spot Product Prices

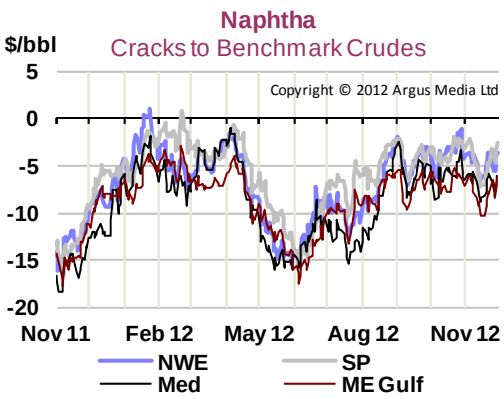
Refined product prices declined across the board in all major markets in November, with gasoline cracks especially hard hit while Asian markets proved more robust than the US and Europe. Middle distillates also weakened ahead of the seasonally stronger winter demand period, after posting more robust crack spreads in October. By contrast, naphtha markets posted the smallest declines. Fuel oil crack spreads also weakened further in November on oversupply and lacklustre bunker demand.





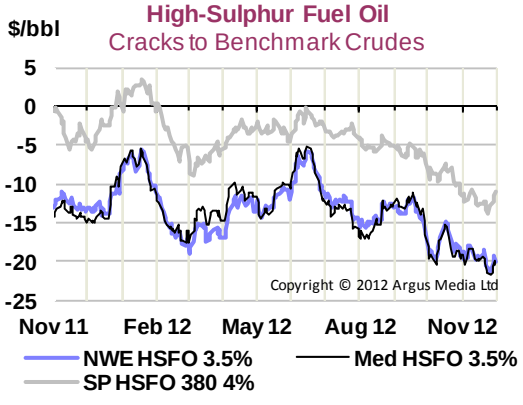
Middle distillate markets weakened in tandem with the start-up of refineries from turnarounds and despite relatively low levels of stocks in the US and Europe. That said, crack spreads for gasoil are still relatively robust, with November levels averaging $16.50/bbl in Rotterdam and $18.50/bbl in Singapore. ULSD in the US averaged $17/bbl in November. Concern over demand growth in the face of continuing economic crisis is curbing the outlook for the New Year.





Gasoline crack spreads for LLS on the US Gulf Coast posted a staggering loss in November following the end of refinery turnarounds and return to normal refinery operations on the East Coast following Hurricane Sandy. LLS crack spreads for premium unleaded plummeted to an average $4.17/bbl in November compared with $18.02/bbl in October and $30.39/bbl in September.

European gasoil cracks in Rotterdam fell by around $4.75/bbl, to an average $16.50/bbl in November compared with $21.25/bbl in October, largely due to restart of refineries following maintenance work. Meanwhile, Fuel oil markets continued their downturn, with oversupply in Asia and reduced demand from utilities depressing crack spreads.



Spot Product Prices

(monthly and weekly averages, $/bbl)

	Sep	Oct	Nov	Nov-Oct Chg	Nov-Oct %	Week Commencing: 05 Nov	12 Nov	19 Nov	26 Nov	03 Dec	Sep	Oct	Nov	Chg
Rotterdam, Barges FOB											**Differential to Dated Brent**			
Premium Unl 10 ppm	133.45	122.63	114.48	-8.14	-6.6	112.58	115.43	116.41	114.27	113.66	20.49	11.03	5.32	-5.70
Naphtha	108.63	107.57	104.94	-2.62	-2.4	104.70	104.90	104.56	105.10	104.42	-4.32	-4.03	-4.22	-0.19
Jet/Kerosene	135.19	132.76	127.27	-5.49	-4.1	125.56	126.72	129.37	128.08	125.98	22.23	21.16	18.11	-3.05
ULSD 10ppm	137.29	137.99	132.15	-5.84	-4.2	132.71	130.13	133.76	131.83	127.53	24.34	26.39	22.99	-3.40
Gasoil 0.1%	132.06	132.83	125.66	-7.17	-5.4	124.45	124.26	127.34	126.72	124.24	19.11	21.24	16.50	-4.73
LSFO 1%	110.43	101.84	95.82	-6.02	-5.9	95.38	95.86	96.76	95.12	93.70	-2.52	-9.75	-13.34	-3.58
HSFO 3.5%	100.03	94.63	90.14	-4.49	-4.7	89.09	90.59	90.93	89.97	88.85	-12.93	-16.97	-19.02	-2.05
Mediterranean, FOB Cargoes											**Differential to Urals**			
Premium Unl 10 ppm	134.68	123.83	115.62	-8.21	-6.6	113.75	116.60	117.57	115.29	114.66	22.87	13.15	6.97	-6.17
Naphtha	106.21	104.62	102.18	-2.44	-2.3	101.95	102.23	101.90	102.19	101.38	-5.60	-6.06	-6.47	-0.41
Jet Aviation fuel	133.93	130.91	125.66	-5.25	-4.0	123.91	125.20	127.84	126.43	124.19	22.13	20.23	17.01	-3.22
ULSD 10ppm	136.40	134.74	128.04	-6.70	-5.0	126.81	126.78	130.05	129.07	126.30	24.59	24.06	19.40	-4.67
Gasoil 0.1%	131.26	130.62	124.42	-6.20	-4.7	123.13	123.40	126.26	125.39	122.72	19.45	19.94	15.77	-4.17
LSFO 1%	111.52	102.54	96.78	-5.76	-5.6	96.34	97.09	97.74	95.87	94.57	-0.29	-8.14	-11.86	-3.72
HSFO 3.5%	99.33	93.45	89.16	-4.29	-4.6	88.17	89.82	90.00	88.72	87.71	-12.48	-17.23	-19.49	-2.26
US Gulf, FOB Pipeline											**Differential to LLS**			
Super Unleaded	143.54	128.28	112.80	-15.49	-12.1	111.81	111.01	114.37	115.52	112.62	30.39	18.02	4.17	-13.85
Unleaded	127.73	116.49	105.93	-10.56	-9.1	105.18	105.86	109.04	105.74	103.11	14.58	6.23	-2.69	-8.92
Jet/Kerosene	133.72	130.37	124.04	-6.33	-4.9	122.41	123.09	127.30	125.78	122.98	20.57	20.11	15.42	-4.69
ULSD 10ppm	133.95	132.53	125.66	-6.86	-5.2	123.98	124.10	129.36	127.41	124.61	20.80	22.26	17.04	-5.22
No. 6 3%*	100.88	96.16	92.86	-3.29	-3.4	92.17	93.00	93.41	93.49	92.34	-12.27	-14.11	-15.76	-1.65
Singapore, FOB Cargoes											**Differential to Dubai**			
Premium Unleaded	125.78	124.12	119.69	-4.43	-3.6	116.11	120.50	122.74	121.29	117.99	14.65	15.33	12.51	-2.82
Naphtha	106.99	105.02	102.85	-2.17	-2.1	102.41	103.49	102.56	102.71	103.19	-4.13	-3.77	-4.33	-0.56
Jet/Kerosene	132.58	130.10	125.21	-4.89	-3.8	123.80	124.68	126.33	125.72	125.43	21.46	21.31	18.03	-3.28
Gasoil 0.05%	132.61	129.81	125.68	-4.13	-3.2	124.16	124.35	126.76	126.96	126.55	21.49	21.03	18.50	-2.52
LSWR Cracked	116.66	108.93	102.65	-6.28	-5.8	102.38	102.57	102.78	102.20	101.56	5.53	0.14	-4.53	-4.68
HSFO 180 CST	107.86	102.45	96.91	-5.54	-5.4	95.51	97.04	97.79	97.10	96.24	-3.27	-6.34	-10.26	-3.93
HSFO 380 CST 4%	105.56	100.67	95.36	-5.31	-5.3	93.99	95.26	96.33	95.49	94.71	-5.57	-8.12	-11.82	-3.70

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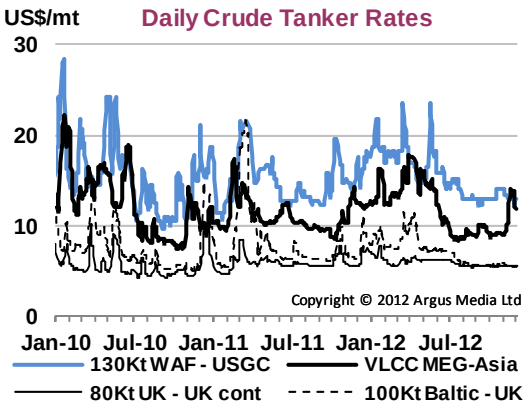
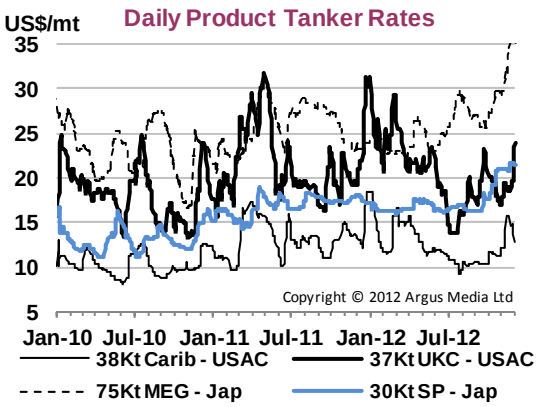
Freight

Freight costs on the benchmark VLCC Middle East Gulf – Asia route finally moved upwards in late November as fundamentals tightened on the back of healthy regional demand from exporters. Rates peaked at over $14/mt on November 21, their highest level since end-May, but by early-December were retreating rapidly as demand waned. Meanwhile, other crude tanker markets remained depressed during November. Notably the benchmark Suezmax West Africa – US Atlantic Coast route remained anchored at approximately $13/mt throughout November with vessels reportedly ballasting to the Middle East Gulf to take advantage of better prospects. In Europe, northern Aframax markets remained static at close to $5.50/mt over the month with no weather-related delays to tighten tonnage lists.





Despite the resurgence in rates for VLCCs, oversupply in the crude tanker fleet remains a millstone. Indeed, last month Maersk became the first owner to attempt to tackle the problem when it announced

it was laying up two of its VLCCs and encouraged other owners to 'behave responsibly' and follow suit. As yet, no other owners have followed, although with VLCC rates currently receding all hope is not lost.

Clean tanker markets are going from strength to strength in the East with the 75Kt Middle East Gulf trade soaring to a peak of over $35/mt at the time of writing. EA Gibson shipbrokers recently reported that a catalyst for this has been the recent conversion of a portion of the clean fleet to carry dirty fuels such as residual fuel oil and waxy residues, which, when combined with robust clean product demand, has rapidly tightened tonnage. In the Atlantic basin, the effects of Hurricane Sandy had largely dissipated by mid-month with rates for vessels supplying Atlantic Coast markets receding quickly as the Linden pipeline reopened. Although, at the time of writing rates on the benchmark UK – US Atlantic coast trade were beginning to take off as healthy demand quickly ate into tonnage lists.

This month has seen renewed interest in the floating storage of refined products. Over November, Asian fuel oil markets moved into steep contango in tandem with waning Asian bunker demand and reports that the market was awash with product. In turn, land-based inventories in Singapore built for five consecutive weeks and traders began to look to floating storage. BP chartered a VLCC to store 2 mb off Singapore and ship tracking data suggest that Brightoil is also storing product in the region. However, unless the contango persists into 2013 or other products move out of backwardation, the likelihood of speculative floating storage absorbing a significant amount of the fat in the fleet remains a distant prospect. Meanwhile, crude is still being stored on the water for operational rather than speculative reasons, Iran is leading the way with a reported 13 mb in storage in either the Middle East Gulf or off Malaysia.

REFINING

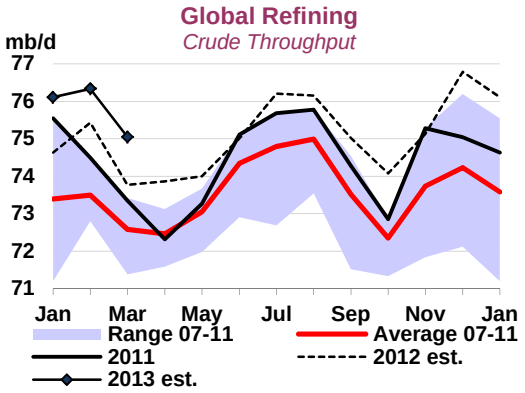
Summary

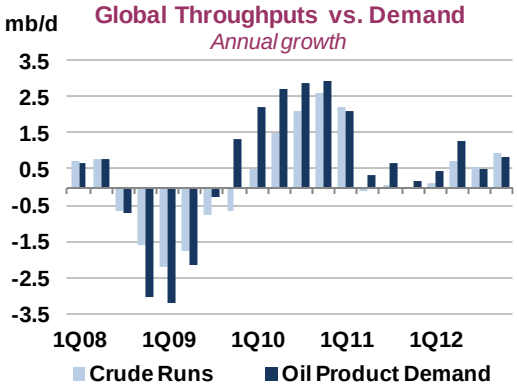
- **Refinery margins fell in all regions except the US Midwest in November,** led by decreases in gasoline and fuel oil prices. Margins on the US Gulf Coast are close to their weakest this year, with low-to-negative cracking margins and dull coking margins. European margins also fell, but healthy distillate cracks supported cracking returns above $5/bbl.

- **Global refinery runs are projected to average around 75.3 mb/d in 4Q12, up 950 kb/d year-on-year**, but 140 kb/d less than estimated in last month's Report. Estimates of 4Q refinery maintenance have been revised upwards on reports of more extensive turnarounds in Europe and Asia than previously assumed. Nevertheless, non-OECD Asia remained by far the main driver of year-on-year growth in refining activity this quarter.

- **OECD crude runs fell abruptly in October, led by a 555 kb/d plunge in European throughputs month-on-month.** Aggregate OECD runs averaged 36.1 mb/d, a steep 730 kb/d below September levels but in line with year-ago levels. Runs are expected to retrace most of their October declines in November, rising to a forecast 36.7 mb/d after the completion of maintenance and as refiners rebuild inventories. Fourth-quarter OECD throughputs are projected at 36.9 mb/d.

- **Non-OECD throughputs for 4Q12 are now estimated at 38.5 mb/d, 970 kb/d above year–earlier levels**, with growth concentrated in non-OECD Asia. After months of relatively subdued growth, Chinese refiners switched gears and moved into more vigorous expansion in September and October as margins improved and depleted product inventories had to be rebuilt. Several Chinese economic indicators also showed stronger readings than in previous months. Additional growth also came from India and Russia, which reported runs at all-time highs in October and November, respectively.





Global Refinery Overview

Estimates of global refinery runs have been revised down by 140 kb/d for 4Q12, due in large part to an abrupt decline in European throughputs in October and more extended maintenance than expected in November. Fourth-quarter global runs are now projected at 75.3 mb/d, a still remarkable 950 kb/d increase year-on-year. Growth is concentrated in non-OECD Asia, with both India and China expected to expand as new capacity is commissioned, though Russia also surprised to the upside in November, refining a record 5.6 mb/d. India recorded record high runs again in October, of 4.5 mb/d, an impressive 680 kb/d above year earlier levels. Chinese refinery runs also returned to strong growth in September and October, rising by more than 600 kb/d year-on-year, after posting average growth of only 170 kb/d over the previous 12 months. Improved refinery economics and the need to rebuild depleted product inventories supported runs, even as several economic indicators also took a turn for the better.

After posting robust growth of more than 200 kb/d on average in 3Q12, European refinery runs are expected to return to contraction in 4Q12, on weak underlying demand and falling margins. Extended maintenance shutdowns already caused European throughputs to weaken considerably in October. US refiners completed maintenance by November and raised throughputs on growing export needs from Latin America and the Atlantic Basin.

Global Refinery Crude Throughput[1 2]

(million barrels per day)

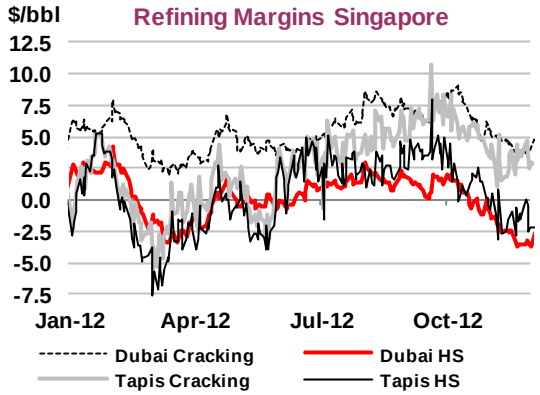
	Aug 12	Sep 12	**3Q2012**	Oct 12	Nov 12	Dec 12	**4Q2012**	Jan 13	Feb 13	Mar 13	**1Q2013**
Americas	18.4	17.8	**18.4**	17.8	18.1	18.4	**18.1**	17.8	18.1	17.9	**17.9**
Europe	12.7	12.4	**12.6**	11.8	12.0	12.4	**12.1**	12.2	11.9	11.7	**11.9**
Asia Oceania	6.8	6.7	**6.7**	6.6	6.6	7.0	**6.7**	7.1	7.2	6.9	**7.0**
Total OECD	**38.0**	**36.9**	**37.7**	**36.1**	**36.7**	**37.8**	**36.9**	**37.1**	**37.1**	**36.5**	**36.9**
FSU	6.8	6.5	**6.6**	6.3	6.9	6.8	**6.7**	6.7	6.9	6.7	**6.8**
Non-OECD Europe	0.5	0.5	**0.5**	0.5	0.5	0.5	**0.5**	0.5	0.5	0.5	**0.5**
China	8.9	9.4	**9.1**	9.4	9.4	9.5	**9.5**	9.7	9.6	9.7	**9.7**
Other Asia	9.3	9.3	**9.3**	9.4	9.1	9.6	**9.4**	9.2	9.5	9.5	**9.4**
Latin America	4.6	4.5	**4.6**	4.4	4.4	4.6	**4.5**	4.7	4.6	4.5	**4.6**
Middle East	6.2	5.8	**6.0**	5.8	5.9	5.8	**5.9**	5.9	5.9	5.6	**5.8**
Africa	1.9	2.1	**2.0**	2.1	2.1	2.1	**2.1**	2.2	2.1	2.1	**2.1**
Total Non-OECD	**38.2**	**38.1**	**38.1**	**37.9**	**38.4**	**39.0**	**38.5**	**39.0**	**39.2**	**38.6**	**38.9**
Total	**76.2**	**75.0**	**75.8**	**74.1**	**75.1**	**76.8**	**75.3**	**76.1**	**76.3**	**75.0**	**75.8**

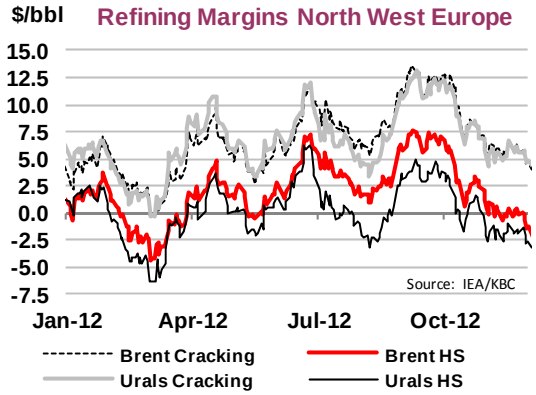
1 Preliminary and estimated runs based on capacity, know n outages, economic run cuts and global demand forecast

2 From the report dated 10 August, 2012 OECD Americas include Chile and OECD Asia Oceania includes Israel.

On average, 2012 global refinery throughputs are projected to average 75 mb/d, 0.8% higher than 2011. The growing trend observed at the end of 2012 should continue into the first months of 2013. Global crude throughput for 1Q13 is projected at 75.8 kb/d, a 480 kb/d ramp-up from 4Q12. Most of the increase is expected in China and Latin America, assuming that Venezuelan refinery outages get resolved. Declining refining margins in all regions may force low-conversion refiners to reduce runs, however.

Refinery margins fell in all regions in November except in the US Midwest, which still benefits from lower regional crude prices due to logistical bottlenecks. In Europe, refining margins fell below $10/bbl in the second week of October and continued to slide through November as gasoline and fuel oil prices decreased. Support came from the middle of the barrel, however, as extensive maintenance drew down distillate inventories, supporting prices (please see Stocks: *'German Gasoline Struggles to Find a Home')*. On average, refining margins in Europe lost $3-4/bbl compared to the previous month to $5.5/bbl for cracking configurations and negative margins for simple refineries.





On the US Gulf Coast, refining margins fell by $4-6/bbl in November to near their weakest levels this year, with low to negative cracking margins and dull coking margins ranging from $2-4/bbl. With the end of the driving season, the completion of refinery maintenance and the recovery of the East Coast after Hurricane Sandy, the main supporting factors that had lifted Gulf Coast prices have disappeared. The persistence of high operating rates and efforts by refiners to limit stock builds due to year-end tax considerations weigh on gasoline cracks, as refiners are running down crude oil stocks while exporting increasing volumes of products. The start-up of a new, 325-kb/d crude distillation unit at Motiva's Port Arthur refinery raises further concerns about product surpluses as winter heating demand has yet to bite into inventories significantly.

IEA/KBC Global Indicator Refining Margins[1]

($/bbl)

	Monthly Average				Change	Average for week ending:				
	Aug 12	Sep 12	Oct 12	Nov 12	Nov 12-Oct 12	02 Nov	09 Nov	16 Nov	23 Nov	30 Nov
NW Europe										
Brent (Cracking)	7.83	12.31	9.03	5.68	-3.35	6.16	5.77	5.71	5.97	5.24
Urals (Cracking)	6.40	11.83	8.64	5.48	-3.16	5.52	5.51	5.50	5.84	5.28
Brent (Hydroskimming)	2.94	6.83	3.16	-0.06	-3.21	0.92	0.29	-0.12	0.05	-0.66
Urals (Hydroskimming)	-0.74	3.79	0.79	-1.87	-2.66	-1.58	-1.77	-1.78	-1.71	-2.10
Mediterranean										
Es Sider (Cracking)	9.88	13.64	9.86	5.93	-3.93	6.55	5.94	5.79	6.21	5.73
Urals (Cracking)	6.78	11.92	9.34	5.43	-3.91	5.92	5.33	5.33	5.83	5.33
Es Sider (Hydroskimming)	5.27	8.76	3.82	0.01	-3.81	0.81	0.21	0.03	0.12	-0.48
Urals (Hydroskimming)	-1.33	3.16	-0.08	-3.46	-3.38	-2.98	-3.47	-3.25	-3.31	-3.82
US Gulf Coast										
50/50 HLS/LLS (Cracking)	12.28	11.36	7.40	2.03	-5.38	2.20	2.64	1.70	2.22	1.37
Mars (Cracking)	5.68	6.74	3.31	-1.93	-5.24	-0.96	-0.33	-3.08	-1.93	-2.98
ASCI (Cracking)	5.17	6.18	2.81	-2.54	-5.36	-1.52	-0.83	-3.75	-2.56	-3.61
50/50 HLS/LLS (Coking)	13.37	12.55	8.61	2.86	-5.76	2.99	3.40	2.41	3.31	2.19
50/50 Maya/Mars (Coking)	9.64	9.89	7.73	4.09	-3.64	3.61	3.94	2.26	6.93	3.42
ASCI (Coking)	9.98	10.93	8.00	1.74	-6.27	2.82	3.19	0.09	2.48	0.71
US Midcon										
WTI (Cracking)	34.42	32.51	26.48	26.11	-0.37	25.02	25.64	26.58	28.29	25.32
30/70 WCS/Bakken (Cracking)	32.89	26.18	25.67	33.04	7.37	33.24	33.71	32.89	34.76	31.15
Bakken (Cracking)	36.93	29.09	26.87	32.64	5.77	33.28	33.88	31.82	34.22	31.06
WTI (Coking)	36.16	34.13	27.89	27.49	-0.40	26.34	26.94	27.87	29.93	26.72
30/70 WCS/Bakken (Coking)	36.28	29.14	28.85	36.11	7.26	36.30	36.56	35.76	38.33	34.36
Bakken (Coking)	37.34	29.45	27.12	32.88	5.77	33.48	34.08	32.03	34.59	31.30
Singapore										
Dubai (Hydroskimming)	1.79	1.22	0.40	-2.71	-3.10	-0.84	-1.97	-2.41	-3.54	-3.46
Tapis (Hydroskimming)	2.49	4.03	1.42	-1.33	-2.75	-0.07	-1.41	-1.71	-1.56	-1.15
Dubai (Hydrocracking)	7.68	7.13	7.07	4.32	-2.75	5.60	4.85	4.56	3.68	3.87
Tapis (Hydrocracking)	5.19	6.88	5.51	3.24	-2.27	3.76	2.75	2.81	3.38	3.78

1 Global Indicator Refining Margins are calculated for various complexity configurations, each optimised for processing the specific crude(s) in a specific refining centre. Margins include energy cost, but exclude other variable costs, depreciation and amortisation. Consequently, reported margins should be taken as an indication, or proxy, of changes in profitability for a given refining centre. No attempt is made to model or otherwise comment upon the relative economics of specific refineries running individual crude slates and producing custom product sales, nor are these calculations intended to infer the marginal values of crude for pricing purposes.

Source: IEA, KBC Advanced Technologies (KBC)

In Singapore, refining margins posted a near $3/bbl decline in November, in large part due to weakening fuel oil cracks. A shift in Chinese policy to impose a new tax on feedstock and let independent refiners import crude oil is creating concern over the emergence of a more persistent fuel oil overhang. So far, only one company, ChemChina, reportedly received a crude import license for 2013, allowing it to import about 200kb/d. Whereas China's major oil companies report detailed data on their refinery operations,

there are no systematic statistics on China's independent refining sector. Yet that segment of China's refining industry is far from marginal. Independent refining capacity is estimated at around 2-2.5 mb/d, or roughly 20% of total Chinese capacity. Regulatory changes affecting their operations are therefore a cause of significant uncertainty, as the scope of China's future crude import increase and of its corresponding cut in fuel oil imports is unclear. The impact is widely expected to be more pronounced in the fuel oil market than in the crude market. Any erosion in Chinese fuel oil demand will put further pressure on fuel oil cracks, especially at a time when demand from the bunker market and utilities is muted.

OECD Refinery Throughputs

OECD crude throughputs fell by 730 kb/d from September to October, with the majority of the decline stemming from extensive maintenance at Northwest European refiners. After three months of higher than year-earlier throughputs, European refinery runs resumed their trend of structural decline in October. In the OECD Americas, US runs remained robust as healthy export demand on the US Gulf Coast by far offset limited shutdowns on the East Coast due to Hurricane Sandy. OECD Asia Oceania refinery throughputs fell for the third consecutive month to 6.6 mb/d as increased refinery runs in South Korea only partly offset seasonally weak Japanese activity. Overall, OECD October preliminary data were 285 kb/d below our previous forecast, while September and August were in line with preliminary estimates overall.

Refinery Crude Throughput and Utilisation in OECD Countries
(million barrels per day)

							Change from		Utilisation rate[1]	
	May 12	Jun 12	Jul 12	Aug 12	Sep 12	Oct 12	*Sep 12*	*Oct 11*	Oct 12	Oct 11
US[2]	15.18	15.63	15.66	15.26	14.86	14.78	-0.08	0.21	83.8%	83.2%
US Virgin Islands	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.27	0.0%	77.4%
Canada	1.59	1.64	1.78	1.82	1.69	1.74	0.05	0.11	93.0%	88.5%
Chile	0.17	0.17	0.16	0.12	0.17	0.16	-0.01	0.02	69.3%	59.5%
Mexico	1.27	1.25	1.23	1.21	1.12	1.08	-0.04	-0.08	65.2%	69.7%
OECD Americas	**18.21**	**18.69**	**18.82**	**18.41**	**17.84**	**17.75**	**-0.08**	**0.00**	**83.0%**	**83.6%**
France	1.03	1.24	1.38	1.36	1.12	1.15	0.03	-0.17	73.7%	79.2%
Germany	1.88	1.81	1.96	1.98	2.04	1.97	-0.07	-0.06	92.5%	95.1%
Italy	1.49	1.44	1.60	1.63	1.57	1.52	-0.05	-0.03	72.5%	71.0%
Netherlands	1.09	1.06	1.04	1.03	1.06	0.76	-0.30	-0.21	59.0%	75.2%
Spain	1.01	1.10	1.32	1.25	1.25	1.33	0.08	0.33	87.7%	66.2%
United Kingdom	1.44	1.43	1.44	1.41	1.31	1.03	-0.29	-0.36	51.2%	60.2%
Other OECD Europe	3.87	3.96	3.97	4.08	4.02	4.06	0.04	0.42	82.5%	73.6%
OECD Europe	**11.81**	**12.04**	**12.71**	**12.74**	**12.38**	**11.82**	**-0.56**	**-0.08**	**76.2%**	**74.2%**
Japan	3.00	2.82	3.15	3.29	3.09	2.96	-0.13	-0.02	64.5%	64.9%
South Korea	2.63	2.59	2.63	2.62	2.60	2.64	0.05	0.02	96.6%	96.1%
Other Asia Oceania	0.93	0.95	0.97	0.93	0.97	0.96	-0.01	0.10	83.6%	71.0%
OECD Asia Oceania	**6.56**	**6.36**	**6.75**	**6.84**	**6.66**	**6.57**	**-0.09**	**0.09**	**77.4%**	**75.7%**
OECD Total	**36.58**	**37.09**	**38.28**	**37.99**	**36.87**	**36.14**	**-0.73**	**0.02**	**79.6%**	**78.3%**

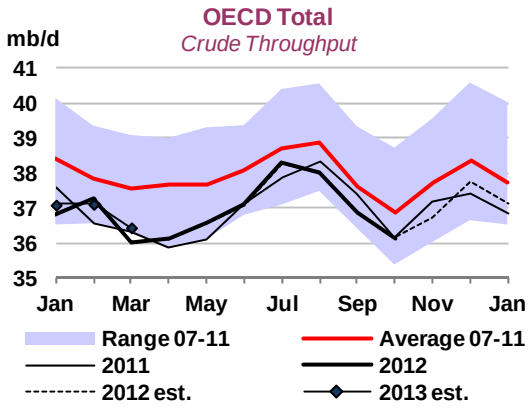
1 Expressed as a percentage, based on crude throughput and current operable refining capacity

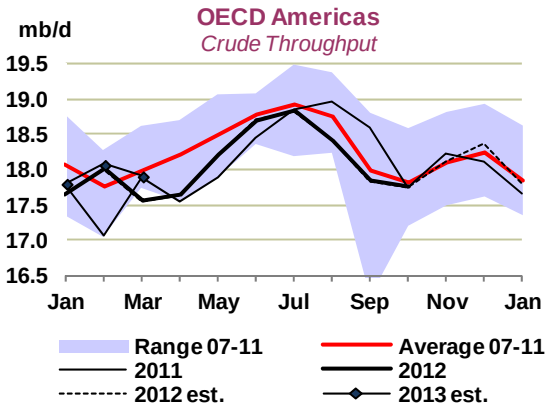
2 US50

3 OECD Americas includes Chile and OECD Asia Oceania includes Israel. OECD Europe includes Slovenia and Estonia, though neither country has a refinery

Preliminary data for November show a reverse trend with steep increases in refinery throughputs expected in all regions. In all, OECD runs are foreseen to rise to 36.7 mb/d, some 565 kb/d more than in October, but still 445 kb/d less than the previous year. Runs are set to rise as maintenance is completed

and in response to higher seasonal demand and low products inventories. 4Q12 OECD throughputs are estimated at 36.9 mb/d, 90 kb/d below our last report.

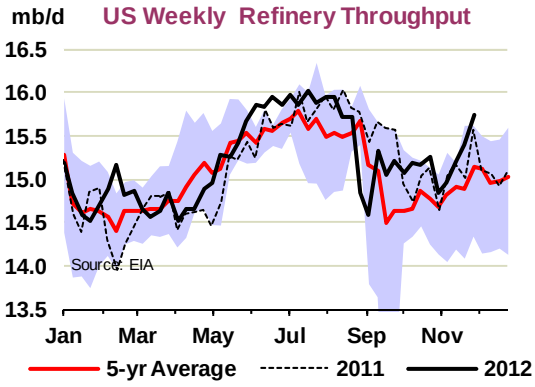


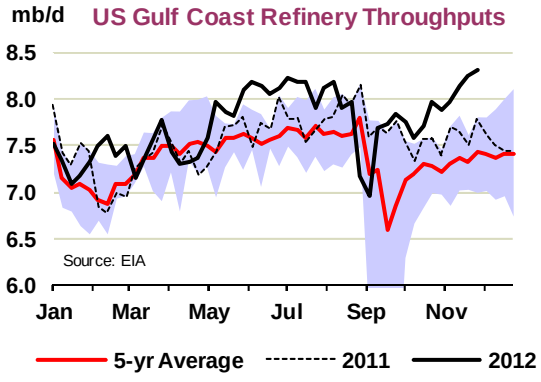


Refinery crude intake in the **OECD Americas** in September was 17.8 mb/d as US crude runs have been revised upwards by 170 kb/d. In October, crude intake in the region fell by 85 kb/d to 17.8 mb/d. Hurricane Sandy caused major fuel shortages on the US East Coast in late October and November but only limited disruptions to the refining sector as only two plants were damaged with combined capacity of 300 kb/d (Hess's Port Reading and Philipps'66 Bayway).

In November, OECD Americas crude throughputs should increase by 355 kb/d to 18.1 mb/d as the hurricane impacted refineries on the US East Coast resumed operations in the aftermath of Hurricane Sandy. Refineries in the Gulf Coast were also running at unseasonably strong rates. Crude throughputs on the US Gulf Coast started increasing in mid-October to mitigate impacts of Hurricane Sandy while exporting significant amounts of petroleum products to Venezuela, as the country is struggling to resume production at its massive 645 kb/d Amuay refinery, which was hit by a deadly explosion and fire at the end of August.

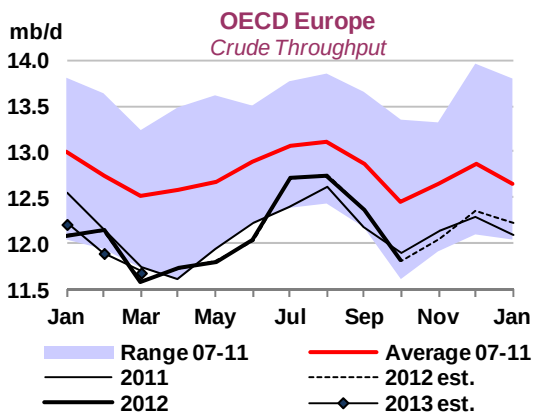
Since the end of October, refineries in the Gulf Coast have been running above 90 percent of installed capacity reaching 95 percent by the end of November. US crude throughputs will most likely continue to increase in the coming months as refiners are back on line (Monroe's Trainer, Philipps66's Wood River) and the new 325 kb/d crude unit at Motiva's Port Arthur is progressively coming on stream. It is expected that the giant 615 kb/d refinery will be in full production by early 2013.

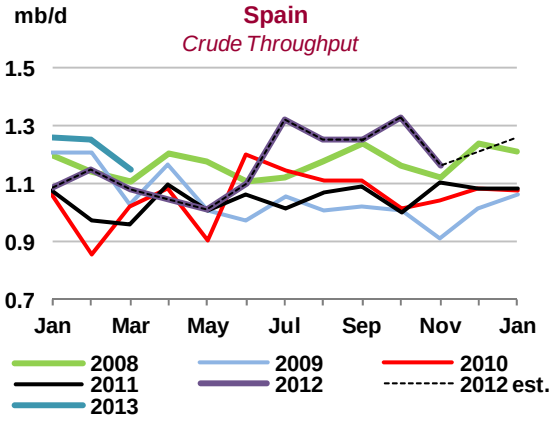




In Mexico, refining activity in October was reduced as the sector suffered from major technical issues in its Minatiltán and Madero refineries. The Salina Cruz refinery was also badly touched by a massive earthquake on the Oaxaca-to-Guatemala Coast.

European refinery crude runs fell by more than 555 kb/d in October, to 11.8 mb/d, due to extensive maintenance shutdowns. Shell's Pernis, BP's Rotterdam, Ineos' Grangemouth, Essar's Stanlow, Valero's Pembroke, Saras' Sarroch, Total's Gonfreville and Gunvor's Antwerp refineries were all reported shut down. This heavy maintenance activity combined with low oil products stocks helped maintaining refining margins in Northwest Europe above the historical trends. Spanish refiners well anticipated the economic context by delaying their refining maintenance and increased their crude runs by 75 kb/d. Refinery crude intake for September was revised downwards by 135 kb/d to 12.4 mb/d on revised data submitted by Belgium and Turkey. October crude throughputs were also lower than our previous forecast. As the autumn maintenance season concludes, crude runs are expected to ramp up progressively, reaching 12.0 mb/d in November and 12.4 mb/d in December. 4Q12 European crude throughputs are expected to average 12.1 mb/d, unchanged year-on-year.



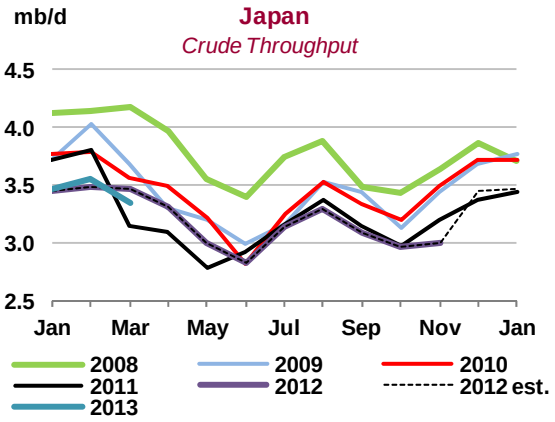


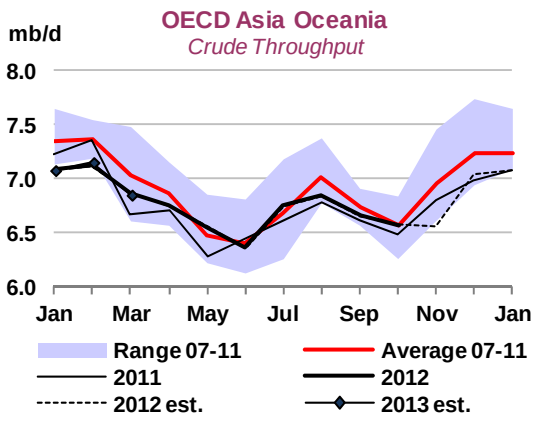
In **France**, the commercial court in Rouen has granted a three-month extension until 5 February for companies to present bids for Petroplus' Petit Couronne refinery. The court held hearings on 4 December to deliberate on the possibility for the refinery to continue operating after 16 December, when the processing agreement with Shell expires. Shell has announced it is not interested in prolonging the tolling agreement. Companies which have expressed an interest in purchasing the plant include: Dubai-based Netoil, Iranian group Tadbir Energy Development Group, Iraqi Jabs Gulf Energy Ltd. and Swiss consortiums Activa Pro and Terrae International. A possible offer from Oilinvest - owned by the Libyan Investment Authority (LIA) - was envisaged at some point, but later denied by the LIA.

In **OECD Asia Oceania**, weekly data from the Petroleum Association of **Japan**, show Japanese crude intake at 3.0 mb/d in November, a small increase (35 kb/d) compared to the previous month's low point. With the start of the heating season in Japan, and the return of refineries from maintenance, crude runs are expected to increase in December to 3.5 mb/d, still a dour 90 kb/d increase y-o-y. JX Nippon Oil & Energy restarted with delays its Negishi refinery and partially resumed operations at the Mizushima B refinery in November, which has been closed for four months after the discovery of false inspection records. A full restart is however not expected before the end of the year.

Australian refinery runs were unchanged from a month earlier at 605 kb/d in October. The sector is continuing its restructuration as announced. The Government has stated in its recent Energy White Paper, that closure of the Clyde and Kurnell refineries will not pose any risk to market security.

In **South Korea,** crude refining runs in October remained unchanged at 2.6 mb/d. Refining utilisation remains high and is likely to stay at this level until the end of the year, as no significant maintenance has been announced. On average, 2012 crude run in South Korea is estimated at 2.6 mb/d, a 2.3% growth compared with last year. Increasing runs in South Korea push our forecast for the region to 6.7 mb/d for 4Q12, 110 kb/d above our previous estimate.





The Next Chapter in Petroleum Products Specifications

Fuels specifications and standards are first and foremost driven by environmental concerns. While there is a long history of emission standards, the current wave of adjustments in specifications can be traced back to the European Union's initiative to cut emissions and improve air quality in 1992. Since then, many countries have followed suit, leading to a concerted campaign by the United Nations Environment Programme to reduce global transport emissions, eliminate lead from gasoline and improve global fuel quality through a significant reduction in sulphur, nitrogen and particulate matter pollutants. The EU completed its last major step in lowering fuel sulphur and improving air quality (Euro V) in 2009. Other countries around the world have since strived to align their standards to the Euro V benchmarks.

Beside air quality, countries may factor in other considerations when setting new fuel standards, not least the promotion of international trade. Indeed, global convergence in environmental standards for refined products will facilitate product imports and exports. Initially, however, adjustments in fuel standards may also in some cases cause temporary trade imbalances and market tightness, as market participants struggle to adapt to the changes. Below is a non-exhaustive list of recent decisions on new fuel quality specifications entering into force in 2013 which could have major impacts on products trade.

Russia: According to the latest plan, Russia will phase out Euro II gasoline and diesel by 2013 and move to Euro III, which allows for a maximum sulphur content of 150 ppm for gasoline and 350 ppm for diesel. Russia's first attempt to introduce more stringent nationwide fuel quality requirements in line with European ones dates back to 2006. At that time, the road map of the Russian federal government was to implement Euro II specifications in 2008, Euro III in 2009, Euro IV in 2010 and Euro V in 2013. Delays in the refineries' modernisation and the age of the Russian vehicle fleet have twice forced postponements in the plan. The new fiscal policy introduced in October 2011 should give oil companies more incentives to upgrade their refineries. Although several refiners have recently completed modernisation programmes and now produce Class 5 quality fuels, Russia as a whole is not expected to complete the full switch to Euro V standards until 2020.

Changes in fuel specifications in Russia have a major effect on product trade. Russia may reduce its exports in order to avoid domestic shortages (as already seen in 2011). The recent spat between Belarus and Russia over the delivery of oil products is a direct consequence of the ban on the sale of low-grade gasoline.

Europe: In November 2012, the Council of the European Union adopted a new directive regulating the sulphur content of marine fuels, in line with International Maritime Organization (IMO) regulations. The IMO adopted in 2010 regulations stipulating that maximum sulphur content allowed in ship fuel will be reduced globally as of 1 January 2012 from 4.5% to 3.5%, and as of 1 January 2020 to 0.5%, subject to a review to be completed by 2018. The Directive also set the general sulphur limit for fuel to 3.5% in all EU waters except in emissions control areas (ECAS), currently including the Baltic Sea, the North Sea and the English Channel, where it is was reduced from 1.5% to 1.0% from 1 July 2010 (and to 0.1% in 2015). However, the EU directive goes further than the IMO regulations on some points, specifically mandating the switch from 3.5% to 0.5% by 2020, independently of the IMO decision on global sulphur limits expected after the 2018 review.

The Next Chapter in Petroleum Products Specifications (Continued)

In October 2012, the European Commission issued a Proposal for a Directive designed to amend the EU legislation on biofuels including the Directive 2009/28/EC on the promotion of the use of energy from renewable sources (Renewable Energy Directive or "RED") and the Directive 98/70/EC relating to the quality of petrol and diesel fuels (Fuel Quality Directive or "FQD"). The Proposal, expected by 2013, is currently at the Parliament's preparatory phase of the legislative procedure. The oil industry considers that these regulations would lead to additional reporting and administrative costs.

Recognising the difficulties faced by the EU oil refining sector and the need to maintain its comptetitiveness, the Commission has decided to set up by 2013 a permanent forum tasked with looking at key issues facing the European refining industry. One of the objectives of this forum is to undertake a `fitness check' of the EU legislation and identify excessive administrative burdens, regulatory overlaps, gaps and inconsistencies, while also assessing the cumulative impact of legislation on the sector. The Commission stated that new legal provisions should only be adopted if they don't run counter to keeping refineries in Europe.

China: Currently, China specifications require 150 ppm sulphur gasoline and 350 ppm sulphur diesel except in Beijing where 10 ppm sulphur fuels are required and other big cities where 50 ppm sulphur fuels are mandatory. According to the 12th five-year environmental protection plan (2011-2015), it is expected that by the end of 2013, gasoline with 50 ppm sulphur will be adopted nationwide (except in Beijing and other big cities) and 50 ppm sulphur on-road diesel by mid 2014.

Brazil: The country has embarked on a major plan to modernise its refineries to produce low sulphur diesel. Brazil has mandated ULSD in urban areas in 2013 for the commercial fleet (diesel-based passenger cars are not allowed). Currently three diesel qualities (50 ppm, 500 ppm and 1800 ppm sulphur) are distributed. By 2013, 1800 ppm sulphur diesel should be phased out and 10 ppm diesel be introduced nationwide to replace 50 ppm.

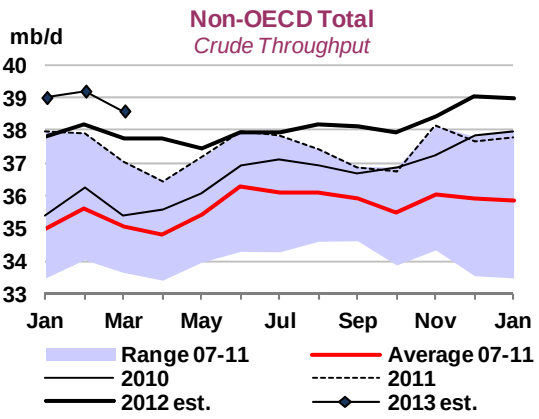
As fuel specifications tend to be stricter, regional trade imbalances will appear and markets will tighten as production of very low sulphur fuels have important impacts on refiners' strategies ranging from crude selection, to modernisation and upgrading or even closure for simple refineries.

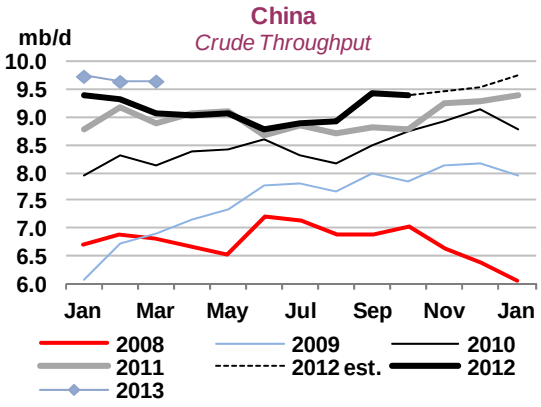
Clearly, the implications of country level specifications and global regulation (like the bunker fuel regulation) on petroleum products trade calls for improved statistics on consumption by fuel quality.

Non-OECD Refinery Throughputs

Non-OECD refinery throughputs for 3Q12 have been revised downards by 95 kb/d to 38.1 mb/d on additional refinery shutdowns not accounted for previously and lower than expected Saudi Arabian crude runs. 4Q12 throughputs are now estimated at 38.5 mb/d, 970 kb/d above a year earlier, with growth stemming mostly from China and India. Chinese crude runs returned to growth in September and October after several months of weak demand, on improved profitability and low product inventories. New price reforms and regulations for 2013 may however reduce the incentives for Chinese refiners to increase utilisation rates further, although new refining capacity will call for more oil. India's refining sector expansion has been remarkable this year with crude throughput reaching an all-time high in October at 4.5 mb/d.

Chinese crude runs for October averaged 9.40 mb/d, slightly weaker than September's record levels (9.43 mb/d), but still a notable 7.3% annual increase. Refining activity was boosted by an apparent recovery in domestic oil demand growth over the last months, improved refinery profitability on higher fuel prices and new refining units as about 500 mb/d of new capacity are expected to come on line between 4Q12 and 1Q13. However, the decision in mid-November to cut domestic gasoline and diesel prices by 3% will squeeze refining margins and probably push down operating rates for some small independent refiners (the teapot refineries). Platts reported that independent refiners in the Shandong province were already running their plants at 42% in October compared to 46% in September.

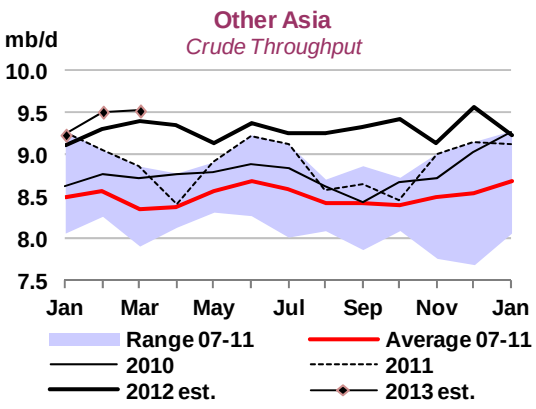




In a move to rationalise its refining sector, the China's State Administration of Taxation has issued new tax regulations to take effect from 1 January 2013. These new measures include levying consumption tax on certain petroleum products that were previously exempt such as MTBE, aromatics and naphtha when used for gasoline production. These measures will drastically impact the profitability of the small teapot refineries, which have little or no secondary processing capacities. Typically, those refineries were importing fuel oil and feedstock without paying taxes to produce mostly gasoil and gasoline for sale in the domestic market. The gasoline produced was then blended with MTBE or aromatics in order to meet the national fuel standards. The new tax imposed will make blended gasoline production cost on a par with, or even higher than, the cost of standard gasoline produced by the state refiners, therefore denting further their weak margins.

It seems that China's independent refining industry is undergoing strong reforms. With an estimated processing capacity between 2.0 and 2.5 mb/d, many of them have a capacity less than or around 40 kb/d. These small plants will be closed by 2013 as per Chinese government decision, but the remaining ones could be finally granted a licence to directly import crude oil like ChemChina, which could be the first independent refiner to receive a quota to import 200 kb/d. The likely outcome of these regulations in 2013 is still unclear. However, if the license to import crude oil is extended to all independent refiners in China, fuel oil market dynamics in the region could be severely reshaped. Yet, fuel oil cracks in Asia have deteriorated substantially over the last months on weak bunker demand in Singapore, softer Japanese demand and supply increases as refiners raise runs in response to strong middle distillate margins.

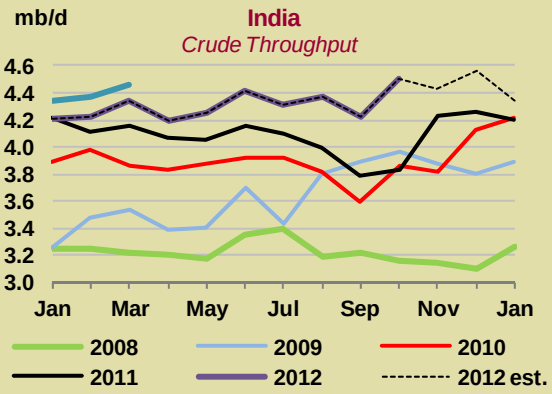
In **'Other Asia', Indian** refinery runs averaged an estimated 4.5 mb/d in October, up an impressive 680 kb/d year-on-year, reaching a new historical record. Half of this increase is on the account of Essar Oil, which has now completed the capacity expansion of its Vadinar refinery from 280 kb/d to 400 kb/d. Consequently, Indian product exports surged nearly 20% last month, reaching a new record of 1.45 mb/d.

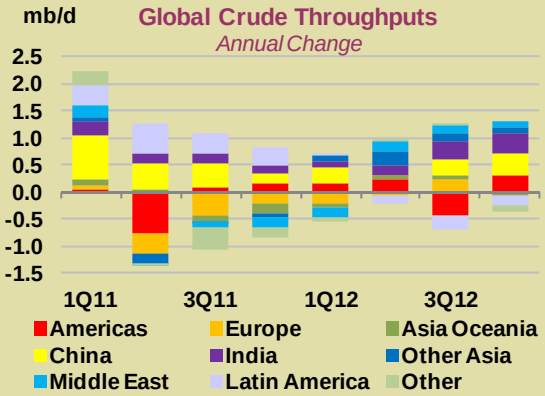


Overall, regional crude throughputs are set to fall by about 300 kb/d in November to 9.1 mb/d, on account of maintenance work in Indonesia and Taiwan. Indonesia had a heavy turnaround schedule in November as three of its major refineries (Cilipac, Balikpapan and Balongan) underwent maintenance. Lower Indonesian runs provided some support to products crack spreads in Singapore. It was reported that 380 kb/d of gasoline was to be imported.

India's Private Refiners Push Product Trade to New Record

As 2012 is drawing to a close, India stands out as one of the top contributors to growth in the refining sector this year. The latest readings for Indian refinery throughputs show the country processed 4.5 mb/d of crude oil in October, 680 kb/d higher than a year earlier. Year-to-date, Indian crude runs are up 260 kb/d compared with 2011, accounting for almost half of global crude throughput growth in the same period.

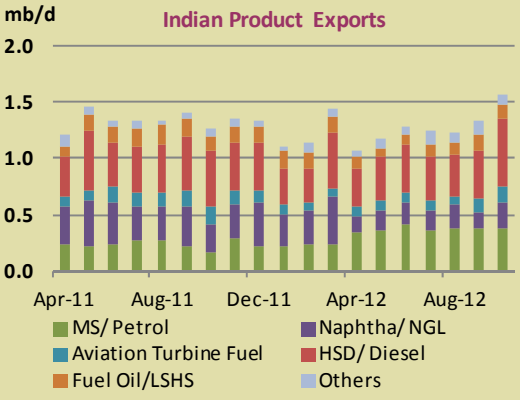


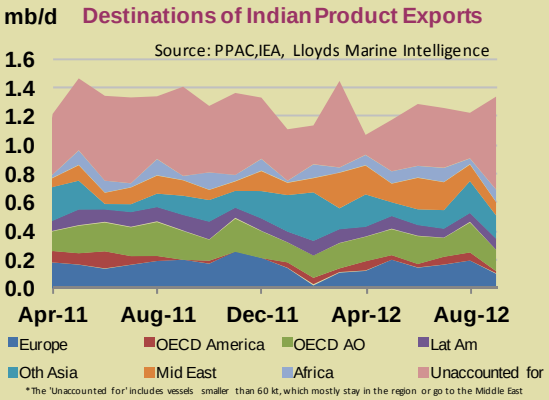


So far in 2012, India's refining capacity has been boosted by 400 kb/d, through the completion of HPCL's 180 kb/d Bathinda refinery, a 120 kb/d expansion of Essar's Vadinar refinery and some smaller expansions at state refiners. Another 400 kb/d of capacity could be added in 2013 if Indian Oil Corporation's (IOC) 300 kb/d Paradip and Nagarjuna's 120 kb/d Cuddalore refineries are completed on schedule by end-year.

Further investments planned for the medium term are getting increasingly hard to justify, as India's state refiners have to supply the domestic market at subsidised prices. IOC posted a loss of Rs 224.5 bn ($4.12 bn) in 2Q12 -- the largest quarterly loss ever of an Indian company -- due in large part to the fuel subsidies. India normally compensates state refiners for about 60% of under-recoveries, but the state may fund a smaller portion this year as the under-recoveries could reach an exorbitant levels, of up to Rs 2 trillion for the 2012-2013 fiscal year according to some sources. (Fore more information on India, Please see: '*Understanding Energy Challenges in India – Policy, Players and Issue's,* available on the IEA website).

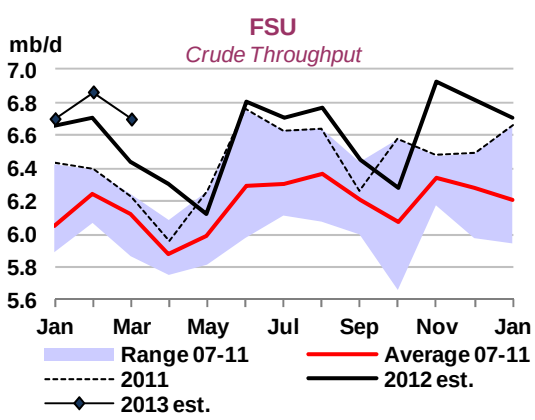
The private sector, which now holds 1.64 mb/d of refining capacity at Reliance's Jamnagar and Essar's Vadinar plants, is faring better, since unlike the state sector it is free to export products and collect international fuel prices. Indian exports of refined petroleum products reached another record high in October, at more than 1.5 mb/d according to the country's Petroleum Planning & Analysis Cell. Of this, 39% was diesel, 25% gasoline, 15% naphtha and 8% jet fuel.

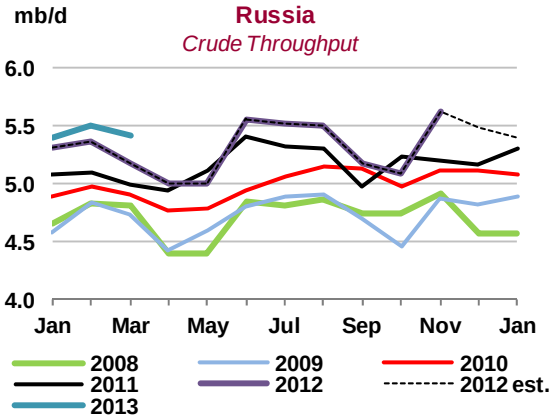




In terms of destinations, OECD Europe has been importing just over 100 kb/d on average so far this year (Jan-Sept), but shipping data suggest that this increased sharply in October and November. Latin America has also increased its imports from India, and at last count took in about 120 kb/d of Indian product exports. The bulk of the Indian exports stay in the region, however, feeding both OECD and non-OECD Asian countries, but also, to an increasing degree, Middle Eastern customers.

Russia's refinery throughputs in November rose 8.3 percent from a year earlier to a record 5.6 mb/d**.** By January 2013, Russia is to ban the sale of low grade gasoline (Euro II) and move to Euro III which allows maximum sulphur content of 150 ppm for gasoline and 350 ppm for diesel (See '*Tightening International Fuel Quality Standards impact Product Markets and Trade'*). Although it is likely that the government will extend the deadline, Russia could import products from Belarus to avoid any shortages.

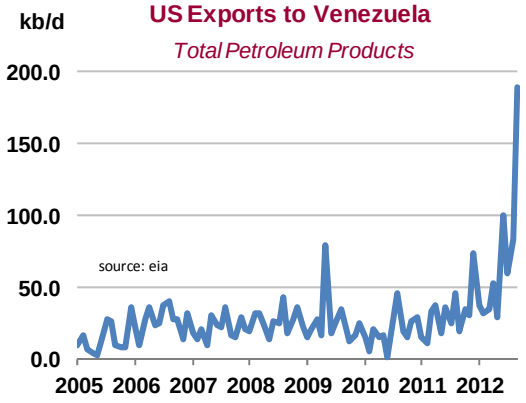


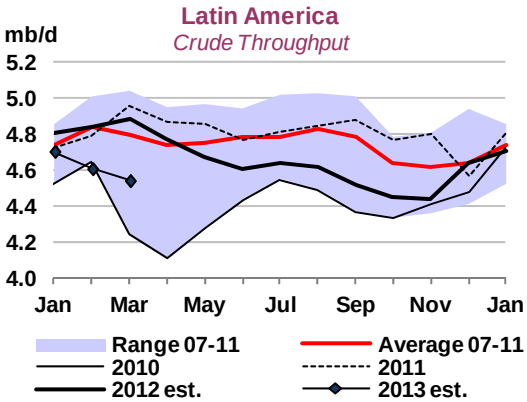


Kazakhstan's refinery crude intake declined 24.5% in October to 215 kb/d as the Shymkent Refinery shut down for a planned overhaul. Total **FSU** crude runs for 1Q13 is estimated at 6.7 mb/d, slightly higher than a year earlier (6.6 mb/d).

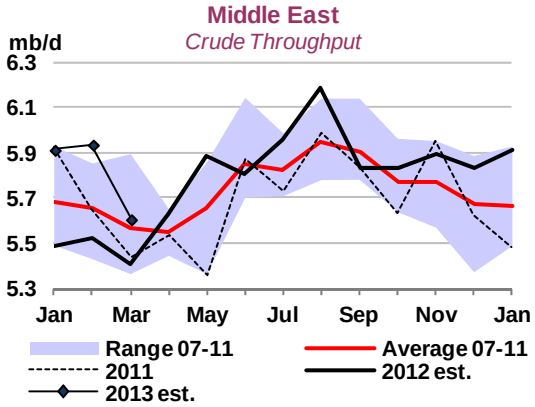
In **Latin America**, **Brazil** continued to post robust refinery runs in October, at 2.0 mb/d. As the country is struggling to rein in costly petroleum products imports and meet higher fuel demand, refineries should continue to operate at high utilisation rates. In a move to raise finance for its development plan, Petrobras has announced this month that it was planning to sell all its refineries outside of Brazil, including the Houston Texas refinery. Concomitantly, it was reported that PDVSA did not submit the required guarantees to acquire a stake (40%) in the new refinery Abreu e Lima (230 kbd/), which is scheduled to be commissioned in two phases over 2014 and 2015.

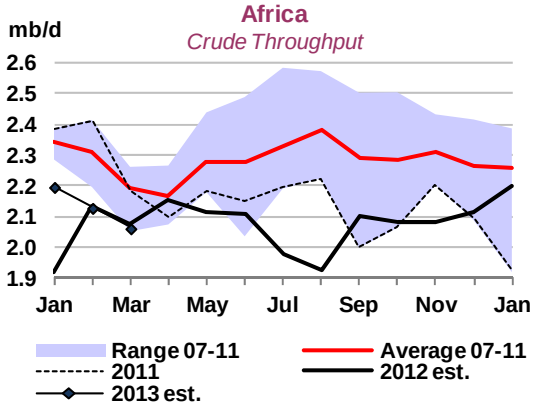
Refining throughputs in **Venezuela** continues to be highly impacted by outages at Amuay refinery. Surprisingly, official crude run for September submitted to JODI shows a monthly increase of almost 100 kb/d, to 900 kb/d, inconsistent with outages in Amuay and others refineries (El Palito) and a surge in products imports from the USA, as reported by the EIA. News reports on Amuay refinery mention that additional units have been shut down (flexicoker) while the plant continues to operate at around half capacity. Consequently, our 4Q12 refining throughputs forecast has been adjusted downwards at 720 kb/d considering that Amuay will not return to full operation before 1Q13.





Middle East refinery throughputs for September were revised down by 170 kb/d to 5.8 mb/d as monthly Saudi Arabian JODI data show a surprisingly sharp decline in throughputs following strong runs in August. Regional crude runs are likely to remain steady above 5.8 mb/d until the end of the year. In early 2013, Saudi throughputs could increase as Saudi Aramco and Total start's trial runs at their 400 kb/d Jubail refinery Start-up of the new refinery will be partially offset by a major maintenance shutdown for modernisation at Yanbu refinery by the end of 1Q13, however. In a constant effort to reduce its dependence on imported fuels, Iran has announced that it has increased the capacity at its Bandar Abbas refinery by 25 kb/d to 345 kb/d.





African crude runs for 3Q12 are unchanged from the last report at 2.0 mb/d and forecast for 4Q12 is 2.1 mb/d. Tema Oil Refinery, Ghana's sole refinery (45 kb/d) were shut at the end of November due to technical problems and crude shortage. Over the last four years, the refinery, which processes mainly Nigerian crude oil, operated at very low rates accumulating massive debt. The expected restart of the refinery is uncertain as its creditor, the Ghana Commercial Bank cut off support. In **Nigeria**, the NNPC Kaduna Refinery and Petrochemical Company (110 kb/d) has recently shut down for routine maintenance lowering total country crude oil processing for December down to 75 kb/d. **Libya's** Zawiya refinery was shut down for a second time this month after soldiers protested outside the plant. African crude runs for 2012 are estimated at 2.1 mb/d, a reduction of 115 kb/d from the previous year, mainly due to planned and unplanned refinery outages in Libya, Algeria and Egypt.

Table 1
WORLD OIL SUPPLY AND DEMAND

(million barrels per day)

	2009	2010	1Q11	2Q11	3Q11	4Q11	2011	1Q12	2Q12	3Q12	4Q12	2012	1Q13	2Q13	3Q13	4Q13	2013
OECD DEMAND																	
Americas[1]	23.7	24.1	24.2	23.8	24.2	24.0	24.1	23.5	23.8	23.9	23.9	23.8	23.6	23.6	24.0	24.1	23.8
Europe[2]	14.7	14.7	14.3	14.2	14.7	14.1	14.3	13.7	13.8	13.8	13.9	13.8	13.4	13.3	13.9	13.8	13.6
Asia Oceania[3]	8.0	8.1	8.6	7.4	8.0	8.6	8.1	9.1	8.0	8.2	8.5	8.5	9.0	7.8	8.0	8.4	8.3
Total OECD	46.3	46.9	47.1	45.3	46.9	46.7	46.5	46.3	45.6	46.0	46.3	46.0	46.0	44.8	45.9	46.3	45.7
NON-OECD DEMAND																	
FSU	4.0	4.2	4.2	4.4	4.6	4.6	4.4	4.5	4.5	4.7	4.6	4.6	4.6	4.6	4.8	4.9	4.7
Europe	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.7	0.7
China	7.9	8.8	9.3	9.3	9.0	9.4	9.2	9.6	9.3	9.4	9.9	9.5	9.9	9.7	9.7	10.0	9.8
Other Asia	10.3	10.9	11.1	11.1	10.8	11.2	11.0	11.3	11.4	11.2	11.6	11.4	11.6	11.7	11.3	11.8	11.6
Latin America	5.7	6.0	6.1	6.3	6.5	6.4	6.3	6.3	6.4	6.6	6.5	6.5	6.4	6.6	6.8	6.7	6.6
Middle East	7.1	7.3	6.9	7.4	7.8	7.3	7.4	7.1	7.7	8.0	7.5	7.6	7.3	7.8	8.2	7.7	7.8
Africa	3.4	3.3	3.3	3.3	3.2	3.3	3.3	3.4	3.4	3.4	3.4	3.4	3.5	3.5	3.5	3.5	3.5
Total Non-OECD	39.1	41.1	41.5	42.3	42.6	43.0	42.4	42.8	43.4	44.0	44.2	43.6	44.0	44.7	45.1	45.3	44.8
Total Demand[4]	85.4	88.0	88.7	87.6	89.4	89.7	88.9	89.1	89.0	90.0	90.5	89.7	90.0	89.5	91.1	91.6	90.5
OECD SUPPLY																	
Americas[1,7]	13.6	14.1	14.3	14.3	14.5	15.2	14.6	15.6	15.5	15.6	16.2	15.7	16.4	16.3	16.5	16.8	16.5
Europe[2]	4.5	4.1	4.0	3.7	3.5	3.7	3.8	3.8	3.6	3.1	3.3	3.4	3.4	3.2	3.1	3.3	3.3
Asia Oceania[3]	0.6	0.7	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.6	0.5	0.6	0.5	0.5	0.5	0.5	0.5
Total OECD	18.8	18.9	18.9	18.6	18.6	19.5	18.9	19.9	19.6	19.4	20.0	19.7	20.3	20.1	20.1	20.7	20.3
NON-OECD SUPPLY																	
FSU	13.3	13.5	13.6	13.6	13.5	13.6	13.6	13.7	13.6	13.6	13.8	13.7	13.7	13.6	13.4	13.6	13.6
Europe	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
China	3.8	4.1	4.2	4.2	4.0	4.0	4.1	4.2	4.1	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
Other Asia[5]	3.6	3.7	3.7	3.5	3.6	3.6	3.6	3.6	3.5	3.5	3.5	3.6	3.5	3.5	3.4	3.4	3.5
Latin America[5,7]	3.9	4.1	4.2	4.2	4.2	4.3	4.2	4.3	4.1	4.1	4.2	4.2	4.2	4.3	4.4	4.5	4.4
Middle East	1.7	1.7	1.8	1.7	1.7	1.5	1.6	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Africa[5]	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.4	2.3	2.3	2.3	2.3	2.4	2.4	2.4	2.5	2.4
Total Non-OECD	29.0	29.8	30.2	29.8	29.8	29.7	29.9	29.8	29.2	29.3	29.7	29.5	29.7	29.7	29.5	29.8	29.7
Processing Gains[6]	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.2	2.2	2.2	2.2	2.2
Global Biofuels[7]	1.6	1.8	1.5	1.9	2.2	1.8	1.9	1.6	1.9	2.2	1.9	1.9	1.6	2.0	2.4	2.1	2.0
Total Non-OPEC[5]	51.4	52.6	52.7	52.4	52.7	53.2	52.8	53.4	52.9	53.0	53.8	53.3	53.8	54.0	54.1	54.7	54.2
OPEC																	
Crude[8]	29.1	29.2	29.9	29.4	29.9	30.3	29.9	31.4	31.7	31.5							
NGLs	4.9	5.4	5.8	5.7	5.8	5.9	5.8	6.0	6.1	6.3	6.3	6.2	6.3	6.4	6.6	6.6	6.5
Total OPEC[5]	34.0	34.6	35.7	35.1	35.6	36.2	35.7	37.4	37.8	37.8							
Total Supply[9]	85.4	87.3	88.4	87.5	88.3	89.4	88.4	90.8	90.7	90.8							
STOCK CHANGES AND MISCELLANEOUS																	
Reported OECD																	
Industry	-0.1	0.1	-0.4	0.5	-0.1	-0.7	-0.2	0.5	0.4	0.4							
Government	0.1	0.0	0.0	0.0	-0.4	0.1	-0.1	0.0	0.0	0.0							
Total	0.0	0.1	-0.5	0.5	-0.5	-0.6	-0.3	0.5	0.4	0.4							
Floating Storage/Oil in Transit	0.3	-0.2	0.2	-0.2	-0.2	0.0	-0.1	-0.4	0.2	-0.1							
Miscellaneous to balance[10]	-0.3	-0.6	0.0	-0.4	-0.3	0.3	-0.1	1.6	1.1	0.5							
Total Stock Ch. & Misc	0.0	-0.8	-0.2	-0.1	-1.1	-0.3	-0.4	1.7	1.7	0.8							
Memo items:																	
Call on OPEC crude + Stock ch.[11]	29.1	30.0	30.1	29.5	31.0	30.6	30.3	29.7	30.0	30.7	30.4	30.2	29.8	29.2	30.3	30.2	29.9
Adjusted Call on OPEC + Stock ch.[12]	28.8	29.3	30.2	29.1	30.6	30.9	30.2	31.3	31.1	31.2	30.7	31.1	30.1	29.5	30.6	30.5	30.2

1 As of August 2012 OMR, OECD Americas includes Chile.
2 As of August 2012 OMR, OECD Europe includes Estonia and Slovenia.
3 As of August 2012 OMR, OECD Asia Oceania includes Israel.
4 Measured as deliveries from refineries and primary stocks, comprises inland deliveries, international marine bunkers, refinery fuel, crude for direct burning, oil from non-conventional sources and other sources of supply.
5 Other Asia includes Indonesia throughout. Latin America excludes Ecuador throughout. Africa excludes Angola throughout.
Total Non-OPEC excludes all countries that were members of OPEC at 1 January 2009.
Total OPEC comprises all countries which were OPEC members at 1 January 2009.
6 Net volumetric gains and losses in the refining process and marine transportation losses.
7 As of the July 2010 OMR, Global Biofuels comprise all world biofuel production including fuel ethanol from the US and Brazil.
8 As of the March 2006 OMR, Venezuelan Orinoco heavy crude production is included within Venezuelan crude estimates. Orimulsion fuel remains within the OPEC NGL and non-conventional category, but Orimulsion production reportedly ceased from January 2007.
9 Comprises crude oil, condensates, NGLs, oil from non-conventional sources and other sources of supply.
10 Includes changes in non-reported stocks in OECD and non-OECD areas.
11 Equals the arithmetic difference between total demand minus total non-OPEC supply minus OPEC NGLs.
12 Equals the "Call on OPEC + Stock Ch." with "Miscellaneous to balance" added for historical periods and with an average of "Miscellaneous to balance" for the most recent 8 quarters added for forecast periods.

Table 1A
WORLD OIL SUPPLY AND DEMAND: CHANGES FROM LAST MONTH'S TABLE 1
(million barrels per day)

	2009	2010	1Q11	2Q11	3Q11	4Q11	2011	1Q12	2Q12	3Q12	4Q12	2012	1Q13	2Q13	3Q13	4Q13	2013
OECD DEMAND																	
Americas	-	-	-	-	-	-	-	-	-	-	0.1	-	-	-	-	0.1	-
Europe	-	-	-	-	-0.1	-0.1	-0.1	-	-0.1	-0.2	0.1	-	-	-0.1	-0.1	0.1	-
Asia Oceania	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total OECD	-	-	-	-	-0.1	-0.1	-0.1	-	-0.1	-0.2	0.2	-	-0.1	-	-0.1	0.1	-
NON-OECD DEMAND																	
FSU	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-	0.1	-	0.1	0.1	0.1	-	0.1
Other Asia	-	-	-	-	-	-	-	-	0.1	-	0.1	-	-	-	-	0.1	-
Latin America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Middle East	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Non-OECD	-	-	-	-	-	-	-	-	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1
Total Demand	-	-	-	-0.1	-0.1	-0.1	-0.1	-	-	-0.1	0.4	0.1	0.1	0.1	-	0.2	0.1
OECD SUPPLY																	
Americas	-	-	-	-	-	-	-	-	-	0.1	0.1	0.1	0.1	-	0.1	0.1	0.1
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Asia Oceania	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total OECD	-	-	-	-	-	-	-	-	-	0.1	-	-	0.1	-	-	-	-
NON-OECD SUPPLY																	
FSU	-	-	-	-	-	-	-	-	-	-	0.1	-	-	-	-	-	-
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-	-0.1	-	-	-	-	-	-
Other Asia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Latin America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Middle East	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Non-OECD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.1	-	-
Processing Gains	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Global Biofuels	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Non-OPEC	-	-	-	-	-	-	-	-	-	0.1	-	-	0.1	-	0.1	0.1	0.1
OPEC																	
Crude	-	-	-	-	-	-	-	-	-	-							
NGLs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total OPEC	-	-	-	-	-	-	-	-	-	-							
Total Supply	-	-	-	-	-	-	-	-	-	0.1							
STOCK CHANGES AND MISCELLANEOUS																	
REPORTED OECD																	
Industry	-	-	-	-	-	-	-	-	-	-0.1							
Government	-	-	-	-	-	-	-	-	-	-							
Total	-	-	-	-	-	-	-	-	-	-0.1							
Floating Storage/Oil in Transit	-	-	-	-	-	-	-	-	-	-							
Miscellaneous to balance	-	0.1	-	-	0.1	0.1	-	-	-	0.3							
Total Stock Ch. & Misc	-	0.1	-	-	0.1	0.1	0.1	0.1	-	0.3							
Memo items:																	
Call on OPEC crude + Stock ch.	-	-0.1	-	-	-0.1	-0.1	-0.1	-0.1	-	-0.2	0.4	-	-	0.1	-	0.1	-
Adjusted Call on OPEC + Stock ch.	-	-	-	-	-	-	-	-	-	0.1	0.5	0.1	-	0.1	-	0.2	0.1

When submitting their monthly oil statistics, OECD Member countries periodically update data for prior periods. Similar updates to non-OECD data can occur.

Table 2

SUMMARY OF GLOBAL OIL DEMAND

	2010	1Q11	2Q11	3Q11	4Q11	2011	1Q12	2Q12	3Q12	4Q12	2012	1Q13	2Q13	3Q13	4Q13	2013
Demand (mb/d)																
Americas[1]	24.14	24.24	23.81	24.21	23.99	24.06	23.51	23.81	23.93	23.92	23.79	23.60	23.60	24.02	24.08	23.83
Europe[2]	14.65	14.28	14.16	14.70	14.11	14.31	13.75	13.78	13.82	13.85	13.80	13.37	13.34	13.89	13.81	13.61
Asia Oceania[3]	8.10	8.60	7.36	7.98	8.58	8.13	9.08	7.97	8.23	8.53	8.45	9.02	7.83	8.01	8.36	8.30
Total OECD	46.89	47.11	45.33	46.88	46.68	46.50	46.34	45.56	45.98	46.29	46.04	46.00	44.77	45.93	46.25	45.74
Asia	19.65	20.36	20.32	19.80	20.65	20.28	20.88	20.70	20.57	21.49	20.91	21.52	21.44	21.03	21.81	21.45
Middle East	7.32	6.92	7.38	7.82	7.34	7.37	7.12	7.70	8.03	7.47	7.58	7.34	7.84	8.23	7.70	7.78
Latin America	6.04	6.05	6.26	6.47	6.38	6.29	6.25	6.45	6.63	6.50	6.46	6.38	6.58	6.82	6.66	6.61
FSU	4.15	4.22	4.36	4.58	4.57	4.43	4.45	4.47	4.66	4.62	4.55	4.56	4.64	4.80	4.86	4.72
Africa	3.30	3.34	3.31	3.19	3.33	3.29	3.41	3.36	3.38	3.43	3.40	3.48	3.51	3.49	3.54	3.51
Europe	0.68	0.66	0.68	0.71	0.72	0.69	0.68	0.73	0.73	0.72	0.72	0.69	0.73	0.75	0.74	0.73
Total Non-OECD	41.14	41.55	42.31	42.56	42.99	42.36	42.80	43.41	44.01	44.23	43.61	43.97	44.74	45.12	45.31	44.79
World	88.02	88.66	87.64	89.44	89.68	88.86	89.13	88.96	90.00	90.52	89.66	89.96	89.50	91.05	91.56	90.52
of which: US50	19.18	19.15	18.86	19.08	18.94	19.01	18.49	18.72	18.73	18.69	18.66	18.48	18.52	18.85	18.87	18.68
Europe 5*	8.92	8.68	8.52	8.85	8.50	8.64	8.26	8.20	8.20	8.30	8.24	8.07	7.89	8.23	8.22	8.10
China	8.80	9.27	9.26	9.03	9.42	9.24	9.59	9.26	9.40	9.92	9.54	9.90	9.75	9.70	10.04	9.85
Japan	4.44	4.83	3.91	4.31	4.81	4.46	5.28	4.30	4.48	4.73	4.70	5.23	4.14	4.25	4.49	4.53
India	3.37	3.54	3.61	3.31	3.60	3.51	3.67	3.74	3.49	3.75	3.66	3.76	3.84	3.57	3.86	3.76
Russia	2.98	3.00	3.20	3.42	3.39	3.25	3.22	3.29	3.49	3.42	3.36	3.33	3.44	3.63	3.62	3.51
Brazil	2.77	2.78	2.86	2.98	2.95	2.89	2.90	2.96	3.05	3.00	2.98	2.95	3.04	3.14	3.09	3.06
Saudi Arabia	2.76	2.56	2.94	3.18	2.81	2.87	2.66	3.09	3.41	2.96	3.03	2.81	3.23	3.51	3.10	3.16
Canada	2.26	2.32	2.22	2.36	2.25	2.29	2.24	2.32	2.47	2.34	2.34	2.30	2.30	2.41	2.36	2.34
Korea	2.27	2.36	2.05	2.21	2.30	2.23	2.31	2.19	2.23	2.31	2.26	2.30	2.19	2.24	2.33	2.27
Mexico	2.08	2.11	2.12	2.14	2.16	2.13	2.11	2.14	2.11	2.25	2.15	2.16	2.15	2.13	2.20	2.16
Iran	1.84	1.84	1.79	1.78	1.78	1.80	1.83	1.86	1.72	1.71	1.78	1.80	1.77	1.72	1.73	1.75
Total	61.66	62.44	61.32	62.65	62.92	62.34	62.56	62.09	62.78	63.38	62.70	63.10	62.26	63.38	63.91	63.16
% of World	70.1%	70.4%	70.0%	70.0%	70.2%	70.2%	70.2%	69.8%	69.8%	70.0%	69.9%	70.1%	69.6%	69.6%	69.8%	69.8%
Annual Change (% per annum)																
Americas[1]	2.0	2.0	-1.2	-1.0	-1.0	-0.3	-3.0	0.0	-1.1	-0.3	-1.1	0.4	-0.9	0.4	0.7	0.2
Europe[2]	-0.3	-1.0	-1.3	-1.8	-5.2	-2.3	-3.7	-2.7	-6.0	-1.8	-3.6	-2.7	-3.2	0.5	-0.3	-1.4
Asia Oceania[3]	1.8	0.7	-3.3	0.9	3.0	0.4	5.6	8.2	3.2	-0.6	4.0	-0.7	-1.8	-2.7	-1.9	-1.8
Total OECD	1.3	0.9	-1.6	-0.9	-1.6	-0.8	-1.6	0.5	-1.9	-0.8	-1.0	-0.7	-1.7	-0.1	-0.1	-0.7
Asia	7.9	6.5	2.7	2.8	1.1	3.2	2.6	1.8	3.9	4.1	3.1	3.0	3.6	2.2	1.5	2.6
Middle East	2.8	0.4	0.5	0.3	1.5	0.7	2.9	4.2	2.8	1.8	2.9	3.1	1.9	2.4	3.0	2.6
Latin America	6.1	4.6	3.8	4.6	3.9	4.2	3.3	3.0	2.6	1.8	2.7	2.0	2.1	2.8	2.5	2.4
FSU	3.2	3.5	8.5	7.6	7.4	6.8	5.5	2.6	1.8	1.1	2.7	2.5	3.7	3.1	5.1	3.6
Africa	-1.9	2.1	-2.0	-2.4	1.6	-0.2	2.1	1.7	6.0	2.9	3.2	2.0	4.3	3.2	3.3	3.2
Europe	-1.4	-1.7	0.4	3.8	2.6	1.3	2.9	7.2	3.5	0.1	3.4	1.5	-0.3	2.3	2.2	1.5
Total Non-OECD	5.2	4.3	2.6	2.7	2.3	3.0	3.0	2.6	3.4	2.9	3.0	2.7	3.1	2.5	2.4	2.7
World	3.1	2.5	0.4	0.8	0.2	0.9	0.5	1.5	0.6	0.9	0.9	0.9	0.6	1.2	1.1	1.0
Annual Change (mb/d)																
Americas[1]	0.48	0.49	-0.28	-0.25	-0.24	-0.07	-0.73	0.00	-0.28	-0.08	-0.27	0.10	-0.21	0.09	0.16	0.04
Europe[2]	-0.04	-0.14	-0.18	-0.26	-0.77	-0.34	-0.53	-0.38	-0.88	-0.26	-0.51	-0.37	-0.44	0.07	-0.04	-0.19
Asia Oceania[3]	0.14	0.06	-0.25	0.07	0.25	0.03	0.49	0.60	0.26	-0.05	0.32	-0.06	-0.14	-0.22	-0.16	-0.15
Total OECD	0.59	0.40	-0.72	-0.44	-0.77	-0.38	-0.78	0.23	-0.90	-0.39	-0.46	-0.34	-0.79	-0.06	-0.04	-0.31
Asia	1.44	1.24	0.53	0.53	0.23	0.63	0.52	0.37	0.77	0.84	0.63	0.64	0.74	0.46	0.32	0.54
Middle East	0.20	0.03	0.04	0.02	0.11	0.05	0.20	0.31	0.22	0.14	0.22	0.22	0.14	0.20	0.22	0.20
Latin America	0.35	0.26	0.23	0.29	0.24	0.26	0.20	0.19	0.17	0.12	0.17	0.12	0.14	0.19	0.16	0.15
FSU	0.13	0.14	0.34	0.32	0.32	0.28	0.23	0.11	0.08	0.05	0.12	0.11	0.17	0.14	0.23	0.16
Africa	-0.06	0.07	-0.07	-0.08	0.05	-0.01	0.07	0.06	0.19	0.10	0.10	0.07	0.15	0.11	0.11	0.11
Europe	-0.01	-0.01	0.00	0.03	0.02	0.01	0.02	0.05	0.02	0.00	0.02	0.01	0.00	0.02	0.02	0.01
Total Non-OECD	2.04	1.73	1.08	1.11	0.97	1.22	1.25	1.10	1.45	1.24	1.26	1.17	1.33	1.11	1.08	1.17
World	2.63	2.13	0.36	0.67	0.20	0.83	0.47	1.32	0.56	0.85	0.80	0.83	0.54	1.05	1.04	0.87
Revisions to Oil Demand from Last Month's Report (mb/d)																
Americas[1]	0.00	0.00	0.00	0.00	0.00	0.00	0.02	-0.01	0.03	0.14	0.04	0.02	0.04	0.03	0.08	0.04
Europe[2]	-0.05	-0.02	-0.05	-0.09	-0.06	-0.06	-0.03	-0.05	-0.20	0.12	-0.04	-0.04	-0.08	-0.09	0.05	-0.04
Asia Oceania[3]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.03	-0.05	-0.02	-0.05	0.00	-0.02	-0.02	-0.02
Total OECD	-0.05	-0.02	-0.05	-0.09	-0.07	-0.06	-0.01	-0.06	-0.21	0.21	-0.02	-0.07	-0.03	-0.08	0.11	-0.02
Asia	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.08	0.20	0.08	0.14	0.12	0.11	0.11	0.12
Middle East	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.03	0.01	0.01	0.01	0.02	0.02	0.01
Latin America	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.04	-0.03	-0.02	-0.02	-0.01	-0.02	-0.01	-0.02
FSU	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Africa	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	-0.01	0.00	0.02	0.00	0.01	0.01	0.01	0.01	0.01
Europe	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Non-OECD	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	0.06	0.07	0.22	0.09	0.13	0.13	0.13	0.12	0.13
World	-0.05	-0.03	-0.05	-0.09	-0.07	-0.06	-0.02	0.00	-0.14	0.44	0.07	0.06	0.09	0.05	0.23	0.11
Revisions to Oil Demand Growth from Last Month's Report (mb/d)																
World	0.00	0.00	-0.01	-0.01	-0.02	-0.01	0.01	0.05	-0.05	0.51	0.13	0.08	0.09	0.19	-0.21	0.04

1 As of the August 2012 OMR, includes Chile.

2 As of the August 2012 OMR, includes Estonia and Slovenia.

3 As of the August 2012 OMR, includes Israel.

* France, Germany, Italy, Spain and UK

Table 2a

OECD REGIONAL OIL DEMAND[1]

(million barrels per day)

	2010	2011	4Q11	1Q12	2Q12	3Q12	Jul 12	Aug 12	Sep 12 [2]	Latest month vs. Aug 12	Latest month vs. Sep 11
Americas[3]											
LPG&Ethane	2.98	3.11	3.27	3.20	2.89	3.00	2.93	3.01	3.05	0.04	0.24
Naphtha	0.35	0.36	0.34	0.35	0.35	0.33	0.31	0.35	0.31	-0.04	0.02
Motor Gasoline	10.66	10.43	10.31	10.17	10.69	10.58	10.58	10.91	10.24	-0.67	-0.15
Jet/Kerosene	1.67	1.67	1.62	1.61	1.66	1.70	1.73	1.75	1.61	-0.14	-0.04
Gasoil/Diesel Oil	4.98	5.15	5.26	5.09	5.01	4.95	4.79	5.08	4.99	-0.09	-0.25
Residual Fuel Oil	0.96	0.89	0.87	0.81	0.75	0.75	0.81	0.81	0.62	-0.19	-0.29
Other Products	2.53	2.45	2.33	2.27	2.46	2.63	2.64	2.76	2.48	-0.29	-0.13
Total	24.14	24.06	23.99	23.51	23.81	23.93	23.79	24.68	23.30	-1.38	-0.61
Europe[4]											
LPG&Ethane	0.96	0.96	0.95	1.00	0.93	0.87	0.91	0.90	0.81	-0.09	-0.14
Naphtha	1.27	1.17	1.09	1.27	1.11	1.14	1.08	1.14	1.20	0.07	0.11
Motor Gasoline	2.21	2.11	2.05	1.91	2.03	2.04	2.06	2.08	1.98	-0.11	-0.21
Jet/Kerosene	1.23	1.24	1.18	1.08	1.22	1.30	1.31	1.28	1.32	0.05	-0.04
Gasoil/Diesel Oil	6.16	6.08	6.23	5.94	5.86	5.87	6.00	5.67	5.95	0.27	-0.50
Residual Fuel Oil	1.31	1.26	1.21	1.20	1.10	1.09	1.10	1.08	1.07	-0.02	-0.19
Other Products	1.51	1.49	1.40	1.34	1.52	1.50	1.54	1.51	1.46	-0.05	-0.23
Total	14.65	14.31	14.11	13.75	13.78	13.82	14.00	13.67	13.79	0.12	-1.21
Asia Oceania[5]											
LPG&Ethane	0.86	0.85	0.88	0.99	0.81	0.82	0.85	0.82	0.79	-0.03	0.02
Naphtha	1.71	1.71	1.73	1.78	1.68	1.76	1.72	1.77	1.79	0.02	0.07
Motor Gasoline	1.63	1.61	1.64	1.59	1.56	1.68	1.67	1.76	1.62	-0.14	0.01
Jet/Kerosene	0.90	0.88	0.99	1.19	0.65	0.65	0.63	0.65	0.67	0.02	-0.04
Gasoil/Diesel Oil	1.69	1.70	1.79	1.80	1.68	1.73	1.75	1.76	1.68	-0.08	0.00
Residual Fuel Oil	0.79	0.79	0.86	1.00	0.90	0.90	0.91	0.92	0.88	-0.03	0.07
Other Products	0.51	0.59	0.70	0.73	0.70	0.68	0.56	0.75	0.72	-0.03	0.07
Total	8.10	8.13	8.58	9.08	7.97	8.23	8.10	8.43	8.17	-0.26	0.19
OECD											
LPG&Ethane	4.81	4.91	5.09	5.20	4.63	4.69	4.69	4.73	4.65	-0.08	0.12
Naphtha	3.33	3.24	3.16	3.40	3.14	3.23	3.11	3.26	3.31	0.05	0.20
Motor Gasoline	14.49	14.15	14.00	13.67	14.28	14.31	14.30	14.76	13.84	-0.92	-0.36
Jet/Kerosene	3.81	3.79	3.79	3.88	3.53	3.65	3.66	3.68	3.61	-0.07	-0.12
Gasoil/Diesel Oil	12.84	12.93	13.28	12.84	12.54	12.56	12.55	12.52	12.62	0.10	-0.75
Residual Fuel Oil	3.06	2.94	2.94	3.01	2.75	2.74	2.83	2.81	2.57	-0.24	-0.42
Other Products	4.55	4.54	4.42	4.34	4.69	4.81	4.74	5.02	4.66	-0.36	-0.29
Total	46.89	46.50	46.68	46.34	45.56	45.98	45.90	46.78	45.25	-1.53	-1.62

1 Demand, measured as deliveries from refineries and primary stocks, comprises inland deliveries, international bunkers and refinery fuel. It includes crude for direct burning, oil from non-conventional sources and other sources of supply. Jet/kerosene comprises jet kerosene and non-aviation kerosene. Gasoil comprises diesel, light heating oil and other gasoils. North America comprises US 50 states, US territories, Mexico and Canada.
2 Latest official OECD submissions (MOS).
3 As of the August 2012 OMR, includes Chile.
4 As of the August 2012 OMR, includes Estonia and Slovenia.
5 As of the August 2012 OMR, includes Israel.

Table 2b

OIL DEMAND IN SELECTED OECD COUNTRIES[1]

(million barrels per day)

	2010	2011	4Q11	1Q12	2Q12	3Q12	Jul 12	Aug 12	Sep 12 [2]	Latest month vs. Aug 12	Latest month vs. Sep 11
United States[3]											
LPG	2.17	2.28	2.42	2.38	2.11	2.19	2.13	2.20	2.24	0.04	0.17
Naphtha	0.26	0.26	0.26	0.26	0.25	0.22	0.21	0.24	0.21	-0.03	-0.02
Motor Gasoline	8.99	8.76	8.63	8.49	8.96	8.86	8.84	9.15	8.57	-0.57	-0.17
Jet/Kerosene	1.45	1.44	1.40	1.36	1.45	1.45	1.47	1.48	1.38	-0.10	-0.04
Gasoil	3.80	3.90	3.99	3.83	3.73	3.66	3.55	3.75	3.69	-0.06	-0.25
Residual Fuel Oil	0.54	0.46	0.44	0.42	0.35	0.35	0.41	0.35	0.29	-0.07	-0.19
Other Products	1.97	1.90	1.80	1.75	1.88	2.00	2.04	2.13	1.82	-0.31	-0.21
Total	19.18	19.01	18.94	18.49	18.72	18.73	18.66	19.30	18.20	-1.10	-0.72
Japan											
LPG	0.48	0.50	0.52	0.63	0.50	0.49	0.53	0.47	0.48	0.00	0.04
Naphtha	0.78	0.73	0.72	0.73	0.66	0.70	0.68	0.73	0.67	-0.07	-0.05
Motor Gasoline	1.00	0.98	1.00	0.96	0.93	1.04	1.01	1.10	0.99	-0.11	0.01
Jet/Kerosene	0.55	0.53	0.62	0.83	0.35	0.34	0.33	0.35	0.36	0.01	-0.02
Diesel	0.44	0.44	0.47	0.45	0.43	0.46	0.46	0.46	0.45	-0.01	0.00
Other Gasoil	0.40	0.37	0.39	0.45	0.32	0.33	0.33	0.33	0.32	-0.01	0.01
Residual Fuel Oil	0.39	0.44	0.52	0.60	0.54	0.57	0.56	0.58	0.58	-0.01	0.10
Other Products	0.39	0.47	0.58	0.64	0.57	0.56	0.47	0.60	0.60	-0.01	0.07
Total	4.44	4.46	4.81	5.28	4.30	4.48	4.37	4.63	4.44	-0.19	0.16
Germany											
LPG	0.11	0.10	0.09	0.10	0.10	0.11	0.12	0.11	0.11	-0.01	0.00
Naphtha	0.39	0.37	0.33	0.39	0.35	0.36	0.36	0.37	0.34	-0.03	0.00
Motor Gasoline	0.45	0.45	0.45	0.42	0.44	0.43	0.43	0.44	0.42	-0.02	-0.05
Jet/Kerosene	0.18	0.18	0.17	0.16	0.18	0.20	0.19	0.19	0.21	0.02	0.02
Diesel	0.64	0.67	0.68	0.64	0.67	0.70	0.69	0.71	0.69	-0.03	-0.05
Other Gasoil	0.45	0.38	0.43	0.36	0.36	0.33	0.39	0.23	0.35	0.12	-0.09
Residual Fuel Oil	0.15	0.14	0.14	0.14	0.13	0.12	0.13	0.12	0.11	-0.01	-0.02
Other Products	0.09	0.10	0.11	0.06	0.10	0.11	0.11	0.10	0.11	0.01	-0.02
Total	2.47	2.40	2.41	2.27	2.33	2.35	2.42	2.29	2.34	0.05	-0.21
Italy											
LPG	0.11	0.10	0.11	0.12	0.08	0.08	0.09	0.08	0.08	0.00	-0.01
Naphtha	0.10	0.08	0.07	0.07	0.08	0.06	0.07	0.04	0.08	0.03	0.00
Motor Gasoline	0.24	0.23	0.22	0.18	0.21	0.21	0.22	0.21	0.20	-0.01	-0.04
Jet/Kerosene	0.09	0.09	0.08	0.07	0.08	0.10	0.10	0.10	0.09	-0.01	-0.02
Diesel	0.49	0.50	0.50	0.43	0.47	0.46	0.49	0.43	0.45	0.02	-0.09
Other Gasoil	0.12	0.11	0.13	0.11	0.09	0.10	0.10	0.09	0.11	0.02	0.00
Residual Fuel Oil	0.14	0.13	0.12	0.13	0.11	0.13	0.12	0.14	0.11	-0.03	-0.03
Other Products	0.24	0.22	0.20	0.18	0.20	0.21	0.20	0.23	0.20	-0.03	-0.03
Total	1.54	1.45	1.43	1.30	1.32	1.34	1.38	1.33	1.31	-0.01	-0.23
France											
LPG	0.12	0.10	0.11	0.13	0.09	0.08	0.08	0.08	0.08	0.00	-0.01
Naphtha	0.14	0.14	0.13	0.15	0.15	0.14	0.15	0.15	0.12	-0.03	0.00
Motor Gasoline	0.18	0.18	0.17	0.15	0.17	0.18	0.19	0.18	0.16	-0.02	-0.02
Jet/Kerosene	0.15	0.15	0.15	0.14	0.15	0.16	0.16	0.16	0.16	0.00	0.00
Diesel	0.68	0.69	0.69	0.67	0.70	0.69	0.73	0.67	0.68	0.01	-0.04
Other Gasoil	0.30	0.27	0.27	0.33	0.23	0.26	0.29	0.21	0.29	0.08	-0.04
Residual Fuel Oil	0.09	0.08	0.09	0.09	0.07	0.06	0.06	0.07	0.06	0.00	-0.03
Other Products	0.17	0.17	0.16	0.14	0.16	0.15	0.15	0.14	0.17	0.03	-0.06
Total	1.83	1.79	1.75	1.80	1.71	1.73	1.80	1.66	1.73	0.06	-0.19
United Kingdom											
LPG	0.14	0.13	0.12	0.13	0.12	0.09	0.12	0.09	0.06	-0.03	-0.06
Naphtha	0.03	0.03	0.02	0.03	0.02	0.02	0.02	0.02	0.03	0.01	0.01
Motor Gasoline	0.36	0.34	0.33	0.33	0.33	0.32	0.31	0.32	0.33	0.01	-0.01
Jet/Kerosene	0.33	0.32	0.32	0.30	0.31	0.31	0.30	0.30	0.33	0.03	-0.03
Diesel	0.45	0.45	0.47	0.45	0.46	0.46	0.45	0.45	0.47	0.02	0.00
Other Gasoil	0.12	0.12	0.11	0.11	0.11	0.13	0.12	0.13	0.13	0.00	0.00
Residual Fuel Oil	0.07	0.06	0.06	0.05	0.05	0.05	0.05	0.05	0.05	0.00	-0.02
Other Products	0.15	0.15	0.14	0.15	0.14	0.13	0.14	0.13	0.13	0.00	-0.03
Total	1.63	1.61	1.57	1.54	1.55	1.50	1.51	1.48	1.53	0.05	-0.15
Canada											
LPG	0.34	0.37	0.38	0.35	0.34	0.36	0.36	0.36	0.37	0.00	0.07
Naphtha	0.08	0.08	0.06	0.09	0.10	0.10	0.10	0.10	0.10	0.00	0.05
Motor Gasoline	0.75	0.76	0.75	0.77	0.82	0.83	0.84	0.85	0.79	-0.06	0.03
Jet/Kerosene	0.11	0.12	0.12	0.12	0.10	0.13	0.13	0.15	0.12	-0.02	0.00
Diesel	0.24	0.30	0.30	0.30	0.30	0.30	0.29	0.29	0.31	0.01	0.00
Other Gasoil	0.31	0.27	0.27	0.26	0.25	0.30	0.26	0.32	0.33	0.00	-0.01
Residual Fuel Oil	0.10	0.09	0.09	0.08	0.08	0.07	0.09	0.07	0.06	-0.01	-0.02
Other Products	0.32	0.31	0.29	0.27	0.33	0.37	0.33	0.38	0.40	0.02	0.05
Total	2.26	2.29	2.25	2.24	2.32	2.47	2.40	2.53	2.47	-0.06	0.17

1 Demand, measured as deliveries from refineries and primary stocks, comprises inland deliveries, international bunkers and refinery fuel. It includes crude for direct burning, oil from non-conventional sources and other sources of supply. Jet/kerosene comprises jet kerosene and non-aviation kerosene. Gasoil comprises diesel, light heating oil and other gasoils.
2 Latest official OECD submissions (MOS).
3 US figures exclude US territories.

Table 3
WORLD OIL PRODUCTION
(million barrels per day)

	2011	2012	2013	2Q12	3Q12	4Q12	1Q13	2Q13	Sep 12	Oct 12	Nov 12
OPEC											
Crude Oil											
Saudi Arabia	9.04			9.77	9.60				9.50	9.50	9.60
Iran	3.62			3.14	2.81				2.68	2.72	2.70
Iraq	2.67			2.92	3.07				3.14	3.20	3.21
UAE	2.50			2.65	2.69				2.69	2.67	2.65
Kuwait	2.24			2.45	2.47				2.48	2.52	2.48
Neutral Zone	0.59			0.60	0.60				0.60	0.60	0.60
Qatar	0.74			0.74	0.75				0.75	0.73	0.73
Angola	1.66			1.76	1.72				1.75	1.73	1.80
Nigeria	2.18			2.17	2.17				2.06	1.98	1.88
Libya	0.46			1.40	1.43				1.44	1.42	1.45
Algeria	1.18			1.16	1.18				1.17	1.12	1.18
Ecuador	0.50			0.48	0.49				0.50	0.48	0.48
Venezuela	2.50			2.50	2.52				2.48	2.48	2.47
Total Crude Oil[6]	29.88			31.73	31.50				31.23	31.15	31.22
Total NGLs[1,6]	5.78	6.20	6.48	6.11	6.31	6.33	6.34	6.36	6.31	6.33	6.33
Total OPEC[6]	35.65			37.85	37.82				37.55	37.48	37.55
OPEC: Historical Composition[6]	35.65			37.85	37.82				37.55	37.48	37.55
NON-OPEC[2]											
OECD											
Americas[7]	14.59	15.72	16.53	15.49	15.60	16.22	16.43	16.35	15.80	16.11	16.24
United States[5]	8.12	9.04	9.61	8.88	9.01	9.43	9.50	9.50	9.24	9.44	9.48
Mexico	2.94	2.92	2.80	2.93	2.92	2.89	2.83	2.81	2.92	2.88	2.89
Canada	3.51	3.76	4.11	3.67	3.66	3.89	4.08	4.03	3.63	3.78	3.86
Chile	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Europe[8]	3.75	3.45	3.25	3.60	3.14	3.27	3.40	3.25	2.70	3.09	3.30
UK	1.10	0.95	0.88	1.01	0.81	0.89	0.97	0.90	0.60	0.73	0.94
Norway	2.04	1.90	1.79	1.98	1.75	1.79	1.84	1.77	1.51	1.78	1.77
Others	0.61	0.60	0.57	0.61	0.58	0.59	0.59	0.58	0.58	0.58	0.60
Asia Oceania[9]	0.57	0.55	0.51	0.53	0.62	0.53	0.47	0.51	0.63	0.55	0.53
Australia	0.48	0.47	0.43	0.45	0.54	0.45	0.39	0.43	0.55	0.46	0.45
Others	0.09	0.09	0.08	0.09	0.08	0.08	0.08	0.08	0.08	0.08	0.08
Total OECD	18.91	19.72	20.29	19.62	19.36	20.03	20.30	20.11	19.13	19.75	20.07
NON-OECD											
Former USSR	13.58	13.70	13.59	13.62	13.60	13.83	13.74	13.61	13.64	13.82	13.89
Russia	10.60	10.73	10.64	10.68	10.71	10.82	10.76	10.67	10.74	10.80	10.86
Others	2.98	2.97	2.95	2.94	2.89	3.01	2.98	2.95	2.90	3.02	3.02
Asia	7.68	7.71	7.70	7.60	7.71	7.73	7.78	7.72	7.86	7.65	7.76
China	4.10	4.15	4.23	4.09	4.17	4.18	4.24	4.23	4.28	4.10	4.21
Malaysia	0.65	0.66	0.66	0.64	0.65	0.65	0.66	0.65	0.65	0.65	0.65
India	0.91	0.91	0.90	0.90	0.91	0.93	0.92	0.91	0.94	0.94	0.94
Indonesia	0.93	0.87	0.82	0.88	0.85	0.85	0.85	0.83	0.85	0.84	0.85
Others	1.09	1.11	1.09	1.09	1.13	1.11	1.10	1.10	1.13	1.11	1.12
Europe	0.14	0.14	0.13	0.15	0.14	0.13	0.13	0.13	0.14	0.14	0.13
Latin America	4.23	4.18	4.36	4.14	4.10	4.22	4.24	4.35	4.06	4.16	4.24
Brazil[5]	2.19	2.16	2.35	2.12	2.07	2.18	2.26	2.34	2.01	2.10	2.20
Argentina	0.69	0.67	0.62	0.67	0.68	0.67	0.63	0.62	0.69	0.68	0.67
Colombia	0.92	0.94	1.00	0.95	0.94	0.96	0.97	0.99	0.96	0.96	0.97
Others	0.43	0.41	0.39	0.40	0.41	0.41	0.39	0.38	0.41	0.42	0.40
Middle East[3]	1.65	1.46	1.47	1.46	1.50	1.49	1.47	1.47	1.49	1.50	1.49
Oman	0.89	0.92	0.95	0.91	0.93	0.93	0.92	0.95	0.93	0.93	0.93
Syria	0.33	0.16	0.14	0.16	0.16	0.16	0.15	0.14	0.16	0.16	0.16
Yemen	0.23	0.18	0.19	0.18	0.21	0.21	0.21	0.19	0.20	0.21	0.21
Others	0.20	0.19	0.19	0.20	0.19	0.19	0.19	0.19	0.19	0.19	0.19
Africa	2.60	2.33	2.42	2.28	2.29	2.31	2.35	2.40	2.30	2.31	2.31
Egypt	0.74	0.73	0.72	0.74	0.73	0.73	0.73	0.73	0.73	0.73	0.73
Gabon	0.25	0.26	0.26	0.25	0.26	0.26	0.26	0.26	0.26	0.26	0.26
Others	1.61	1.34	1.44	1.29	1.30	1.32	1.36	1.42	1.31	1.32	1.32
Total Non-OECD	29.88	29.52	29.67	29.25	29.33	29.71	29.72	29.68	29.48	29.57	29.83
Processing Gains[4]	2.11	2.14	2.18	2.11	2.16	2.13	2.18	2.16	2.13	2.09	2.16
Global Biofuels[5]	1.87	1.88	2.03	1.87	2.15	1.94	1.61	2.03	2.14	1.94	1.94
TOTAL NON-OPEC[6]	52.77	53.27	54.17	52.85	53.00	53.81	53.81	53.97	52.88	53.34	53.99
Non-OPEC: Historical Composition[6]	52.77	53.27	54.17	52.85	53.00	53.81	53.81	53.97	52.88	53.34	53.99
TOTAL SUPPLY	88.42			90.70	90.82				90.43	90.82	91.54

1 Includes condensates reported by OPEC countries, oil from non-conventional sources, e.g. Venezuelan Orimulsion (but not Orinoco extra-heavy oil), and non-oil inputs to Saudi Arabian MTBE. Orimulsion production reportedly ceased from January 2007.
2 Comprises crude oil, condensates, NGLs and oil from non-conventional sources
3 Includes small amounts of production from Jordan and Bahrain.
4 Net volumetric gains and losses in refining and marine transportation losses.
5 As of the July 2010 OMR, Global Biofuels comprise all world biofuel production including fuel ethanol from the US and Brazil.
6 Total OPEC comprises all countries which were OPEC members at 1 January 2009. OPEC Historical Composition comprises countries which were OPEC members at that point in time. Total Non-OPEC excludes all countries that were OPEC members at 1 January 2009. Non-OPEC Historical Composition excludes countries that were OPEC members at that point in time.
7 As of the August 2012 OMR, includes Chile.
8 As of the August 2012 OMR, includes Estonia and Slovenia.
9 As of the August 2012 OMR, includes Israel.

Table 4

OECD INDUSTRY STOCKS[1] AND QUARTERLY STOCK CHANGES

	RECENT MONTHLY STOCKS[2] in Million Barrels					PRIOR YEARS' STOCKS[2] in Million Barrels			STOCK CHANGES in mb/d			
	Jun2012	Jul2012	Aug2012	Sep2012	Oct2012*	Oct2009	Oct2010	Oct2011	4Q2011	1Q2012	2Q2012	3Q2012
OECD Americas												
Crude	525.0	510.4	502.1	509.1	517.8	467.4	515.8	475.6	-0.02	0.41	0.23	-0.17
Motor Gasoline	240.9	243.7	236.2	235.9	242.4	241.2	243.4	242.7	0.09	-0.03	-0.17	-0.05
Middle Distillate	188.3	197.8	202.8	202.5	196.2	247.3	240.2	220.1	-0.04	-0.21	-0.21	0.15
Residual Fuel Oil	46.1	45.4	43.0	44.7	47.0	43.9	50.2	45.5	-0.02	0.02	0.03	-0.02
Total Products[3]	668.1	688.5	690.5	691.8	681.2	717.0	706.0	684.7	-0.14	-0.27	0.02	0.26
Total[4]	1361.5	1369.5	1362.4	1377.7	1374.8	1348.4	1387.3	1330.7	-0.35	0.28	0.30	0.18
OECD Europe												
Crude	317.1	309.3	317.9	305.8	300.3	323.3	337.0	299.6	-0.24	0.27	0.08	-0.12
Motor Gasoline	88.7	93.5	91.5	95.2	95.6	98.1	96.9	91.2	0.07	-0.01	-0.06	0.07
Middle Distillate	247.9	255.7	269.7	260.1	253.9	288.2	281.9	254.4	0.13	0.02	-0.29	0.13
Residual Fuel Oil	82.0	85.6	85.0	85.1	85.7	89.2	94.6	86.4	-0.04	-0.01	-0.01	0.03
Total Products[3]	537.9	557.4	565.8	557.5	550.0	586.6	581.5	553.5	0.13	0.00	-0.35	0.21
Total[4]	926.5	937.1	953.3	932.6	919.6	980.1	984.6	919.0	-0.08	0.32	-0.27	0.07
OECD Asia Oceania												
Crude	170.4	176.8	165.5	171.7	166.0	165.5	157.7	155.4	-0.02	0.00	0.16	0.02
Motor Gasoline	26.4	27.3	28.1	28.2	28.3	24.9	24.6	24.4	-0.02	0.04	0.01	0.02
Middle Distillate	61.5	64.5	70.7	69.0	71.3	68.6	67.5	67.0	-0.07	-0.07	0.07	0.08
Residual Fuel Oil	19.8	21.0	21.8	21.6	20.7	21.1	20.1	19.9	-0.01	0.01	0.00	0.02
Total Products[3]	167.3	173.0	182.0	183.8	187.5	180.1	182.1	181.5	-0.18	-0.13	0.16	0.18
Total[4]	413.1	424.9	419.9	427.4	427.2	410.2	409.5	408.3	-0.24	-0.13	0.38	0.16
Total OECD												
Crude	1012.5	996.4	985.4	986.6	984.1	956.3	1010.5	930.6	-0.28	0.68	0.46	-0.28
Motor Gasoline	355.9	364.4	355.7	359.4	366.4	364.2	364.9	358.3	0.13	-0.01	-0.22	0.04
Middle Distillate	497.7	518.0	543.1	531.7	521.4	604.1	589.6	541.5	0.02	-0.26	-0.42	0.37
Residual Fuel Oil	147.9	152.0	149.8	151.4	153.4	154.2	164.9	151.7	-0.07	0.02	0.02	0.04
Total Products[3]	1373.2	1418.9	1438.3	1433.0	1418.7	1483.7	1469.6	1419.7	-0.19	-0.40	-0.17	0.65
Total[4]	2701.1	2731.4	2735.7	2737.7	2721.6	2738.7	2781.5	2658.0	-0.67	0.47	0.41	0.40

OECD GOVERNMENT-CONTROLLED STOCKS[5] AND QUARTERLY STOCK CHANGES

	RECENT MONTHLY STOCKS[2] in Million Barrels					PRIOR YEARS' STOCKS[2] in Million Barrels			STOCK CHANGES in mb/d			
	Jun2012	Jul2012	Aug2012	Sep2012	Oct2012*	Oct2009	Oct2010	Oct2011	4Q2011	1Q2012	2Q2012	3Q2012
OECD Americas												
Crude	696.0	696.0	696.0	695.0	695.0	725.1	726.6	696.0	0.00	0.00	0.00	-0.01
Products	1.0	1.0	1.0	1.0	1.0	2.0	2.0	0.0	0.01	0.00	0.00	0.00
OECD Europe												
Crude	192.6	194.2	194.8	195.3	195.4	185.6	186.6	182.8	0.04	0.03	0.04	0.03
Products	234.6	233.8	234.6	236.5	236.3	243.8	230.0	239.6	-0.02	-0.04	0.00	0.02
OECD Asia Oceania												
Crude	393.5	393.4	393.4	393.5	393.5	388.4	387.1	391.1	0.03	0.00	0.00	0.00
Products	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	0.01	0.00	0.00	0.00
Total OECD												
Crude	1282.1	1283.6	1284.2	1283.8	1283.8	1299.1	1300.3	1269.9	0.07	0.03	0.04	0.02
Products	255.7	254.8	255.6	257.5	257.3	265.8	252.0	259.6	0.00	-0.03	0.00	0.02
Total[4]	1539.0	1539.7	1541.1	1542.5	1542.4	1566.4	1553.5	1530.8	0.07	-0.01	0.04	0.04

* estimated

1 Stocks are primary national territory stocks on land (excluding utility stocks and including pipeline and entrepot stocks where known) and include stocks held by industry to meet IEA, EU and national emergency reserve commitments and are subject to government control in emergencies.

2 Closing stock levels.

3 Total products includes gasoline, middle distillates, fuel oil and other products.

4 Total includes NGLs, refinery feedstocks, additives/oxygenates and other hydrocarbons.

5 Includes government-owned stocks and stock holding organisation stocks held for emergency purposes.

Table 5
TOTAL STOCKS ON LAND IN OECD COUNTRIES[1]

('millions of barrels' and 'days')

	End September 2011		End December 2011		End March 2012		End June 2012		End September 2012 [3]	
	Stock Level	Days Fwd[2] Demand	Stock Level	Days Fwd Demand	Stock Level	Days Fwd Demand	Stock Level	Days Fwd Demand	Stock Level	Days Fwd Demand
OECD Americas										
Canada	176.0	78	177.9	79	174.9	76	171.4	69	173.8	-
Chile	11.5	35	9.9	29	10.5	30	10.3	30	9.8	-
Mexico	46.1	21	44.4	21	44.8	21	45.3	21	48.7	-
United States[4]	1780.9	94	1750.7	95	1778.8	95	1809.4	97	1819.4	-
Total[4]	2036.7	85	2005.0	86	2031.2	86	2058.4	86	2073.7	87
OECD Asia Oceania										
Australia	38.8	37	40.1	39	39.5	38	40.5	39	42.5	-
Israel	-	-	-	-	-	-	-	-	-	-
Japan	601.1	125	588.5	111	579.5	135	601.3	134	605.7	-
Korea	173.6	75	166.8	72	164.0	75	176.7	79	183.8	-
New Zealand	8.7	56	8.9	56	9.0	60	8.0	56	8.9	-
Total	822.2	96	804.3	89	792.0	99	826.6	100	840.9	99
OECD Europe[5]										
Austria	21.3	81	22.6	91	22.1	86	21.1	78	20.4	-
Belgium	36.7	58	36.4	56	34.8	57	38.6	63	38.3	-
Czech Republic	20.1	105	20.7	114	20.2	101	18.6	88	18.9	-
Denmark	22.4	138	22.4	142	21.4	133	19.5	120	20.9	-
Estonia	1.2	47	1.3	48	1.2	42	1.1	42	1.1	-
Finland	26.4	130	29.2	149	29.9	159	28.0	148	28.2	-
France	160.0	92	165.0	92	164.7	96	163.7	95	164.0	-
Germany	276.9	115	278.6	123	281.2	121	280.2	119	284.3	-
Greece	30.9	93	27.9	79	29.1	94	28.9	94	30.1	-
Hungary	16.2	112	15.4	125	17.2	143	15.9	117	15.6	-
Ireland	11.3	77	10.7	84	11.7	91	10.5	83	9.5	-
Italy	147.6	103	145.7	113	147.9	112	145.2	108	153.0	-
Luxembourg	0.7	11	0.6	10	0.5	8	0.6	11	0.7	-
Netherlands	115.9	116	103.0	104	121.1	117	112.6	113	113.5	-
Norway	24.5	92	25.9	106	29.1	115	27.4	108	27.0	-
Poland	65.2	110	64.5	126	64.5	118	62.7	114	62.8	-
Portugal	21.9	90	21.9	90	20.9	88	20.4	87	20.5	-
Slovak Republic	8.3	99	8.5	110	9.0	124	9.0	110	8.8	-
Slovenia	4.7	82	4.4	79	4.7	87	4.6	84	5.2	-
Spain	131.2	97	132.8	99	134.3	104	132.8	104	130.8	-
Sweden	32.6	108	31.5	109	29.6	98	29.0	95	30.5	-
Switzerland	37.0	140	35.7	137	35.3	142	35.2	140	36.7	-
Turkey	56.4	80	55.8	84	57.6	79	60.7	79	61.0	-
United Kingdom	84.7	54	87.8	57	88.6	57	88.7	59	83.7	-
Total	1354.1	95	1348.3	98	1376.6	100	1355.0	98	1365.6	99
Total OECD	4212.9	90	4157.6	90	4199.8	92	4240.0	92	4280.2	92
DAYS OF IEA Net Imports[6]	-	144	-	143	-	144	-	150	-	151

1 Total Stocks are industry and government-controlled stocks (see breakdown in table below). Stocks are primary national territory stocks on land (excluding utility stocks and including pipeline and entrepot stocks where known) they include stocks held by industry to meet IEA, EU and national emergency reserves commitments and are subject to government control in emergencies.
2 Note that days of forward demand represent the stock level divided by the forward quarter average daily demand and is very different from the days of net imports used for the calculation of IEA Emergency Reserves.
3 End September 2012 forward demand figures are IEA Secretariat forecasts.
4 US figures exclude US territories. Total includes US territories.
5 Data not available for Iceland.
6 Reflects stock levels and prior calendar year's net imports adjusted according to IEA emergency reserve definitions (see www.iea.org/netimports.asp). Net exporting IEA countries are excluded.

TOTAL OECD STOCKS

CLOSING STOCKS	Total	Government[1] controlled	Industry	Total	Government[1] controlled	Industry
	Millions of Barrels			*Days of Fwd. Demand[2]*		
3Q2009	4353	1568	2785	93	34	60
4Q2009	4232	1568	2664	91	34	57
1Q2010	4270	1571	2699	93	34	59
2Q2010	4345	1566	2779	92	33	59
3Q2010	4322	1553	2769	91	33	58
4Q2010	4257	1565	2693	90	33	57
1Q2011	4216	1562	2654	93	34	59
2Q2011	4262	1565	2697	91	33	57
3Q2011	4213	1530	2683	90	33	57
4Q2011	4158	1536	2621	90	33	57
1Q2012	4200	1536	2664	92	34	59
2Q2012	4240	1539	2701	92	33	59
3Q2012	4280	1542	2738	92	33	59

1 Includes government-owned stocks and stock holding organisation stocks held for emergency purposes.
2 Days of forward demand calculated using actual demand except in 3Q2012 (when latest forecasts are used).

Table 6

IEA MEMBER COUNTRY DESTINATIONS OF SELECTED CRUDE STREAMS[1]

(million barrels per day)

	2009	2010	2011	4Q11	1Q12	2Q12	3Q12	Jul 12	Aug 12	Sep 12	Year Earlier Sep 11	Year Earlier change
Saudi Light & Extra Light												
Americas	0.52	0.69	0.69	0.85	0.84	0.88	0.67	0.68	0.73	0.61	0.31	0.30
Europe	0.59	0.66	0.83	0.88	0.76	0.91	0.97	0.96	1.05	0.88	0.82	0.06
Asia Oceania	1.28	1.21	1.24	1.27	1.37	1.21	1.21	1.25	1.16	1.22	1.27	-0.04
Saudi Medium												
Americas	0.40	0.36	0.37	0.40	0.47	0.44	0.41	0.41	0.43	0.39	0.45	-0.06
Europe	0.02	0.00	0.02	0.01	0.05	0.07	0.05	0.06	0.01	0.08	0.03	0.05
Asia Oceania	0.34	0.34	0.40	0.40	0.46	0.42	0.48	0.46	0.49	0.47	0.45	0.02
Saudi Heavy												
Americas	0.03	0.02	0.02	0.01	-	0.15	0.02	0.03	0.03	-	0.07	-
Europe	0.02	0.00	0.01	0.03	0.04	0.12	0.21	0.16	0.26	0.21	0.02	0.18
Asia Oceania	0.15	0.22	0.20	0.18	0.21	0.18	0.19	0.20	0.19	0.19	0.25	-0.06
Iraqi Basrah Light[2]												
Americas	0.40	0.36	0.29	0.21	0.39	0.55	0.46	0.41	0.57	0.39	0.23	0.15
Europe	0.12	0.09	0.11	0.11	0.14	0.18	0.42	0.50	0.40	0.34	0.19	0.15
Asia Oceania	0.24	0.29	0.34	0.32	0.26	0.34	0.39	0.41	0.31	0.46	0.35	0.12
Iraqi Kirkuk												
Americas	0.06	0.03	0.07	0.06	0.06	0.08	0.04	0.04	0.04	0.06	0.00	0.06
Europe	0.31	0.27	0.27	0.26	0.20	0.23	0.21	0.18	0.20	0.25	0.26	-0.02
Asia Oceania	-	-	-	-	-	-	-	-	-	-	-	-
Iranian Light												
Americas	-	-	-	-	-	-	-	-	-	-	-	-
Europe	0.15	0.24	0.23	0.21	0.25	0.16	0.05	0.00	0.10	0.03	0.17	-0.14
Asia Oceania	0.07	0.04	0.04	0.03	0.03	0.02	0.01	-	0.02	-	0.02	-
Iranian Heavy[3]												
Americas	-	-	-	-	-	-	-	-	-	-	-	-
Europe	0.40	0.49	0.55	0.54	0.33	0.21	0.08	0.04	0.12	0.07	0.71	-0.63
Asia Oceania	0.57	0.52	0.51	0.49	0.48	0.38	0.11	0.01	0.08	0.25	0.53	-0.27
Venezuelan Light & Medium												
Americas	0.39	0.14	0.18	0.13	0.07	0.15	0.14	0.19	0.08	0.14	0.24	-0.10
Europe	0.07	0.02	0.02	0.02	0.01	-	0.01	0.02	0.02	-	0.02	-
Asia Oceania	-	-	-	-	0.01	0.01	-	-	-	-	-	-
Venezuelan 22 API and heavier												
Americas	0.75	0.86	0.76	0.69	0.68	0.58	0.77	0.71	0.78	0.82	0.51	0.30
Europe	0.07	0.06	0.05	0.05	0.08	0.09	0.11	0.12	0.08	0.12	0.05	0.07
Asia Oceania	-	-	-	-	-	-	-	-	-	-	-	-
Mexican Maya												
Americas	0.93	0.91	0.82	0.84	0.72	0.69	0.76	0.76	0.77	0.77	0.76	0.01
Europe	0.10	0.11	0.12	0.12	0.12	0.14	0.13	0.11	0.10	0.17	0.11	0.06
Asia Oceania	-	-	-	-	-	-	-	-	-	-	-	-
Mexican Isthmus												
Americas	0.01	0.04	0.07	0.07	0.04	0.03	0.05	0.09	0.07	0.00	0.07	-0.07
Europe	0.01	0.02	0.01	0.01	0.02	0.05	0.03	0.05	-	0.03	-	-
Asia Oceania	-	-	-	-	-	-	-	-	-	-	-	-
Russian Urals												
Americas	0.15	0.08	0.01	0.02	-	0.01	0.01	0.02	-	-	-	-
Europe	1.72	1.80	1.69	1.61	1.75	1.76	1.97	1.97	2.01	1.95	1.56	0.38
Asia Oceania	-	-	-	-	-	-	-	-	-	-	-	-
Nigerian Light[4]												
Americas	0.54	0.60	0.53	0.46	0.25	0.31	0.25	0.22	0.28	0.24	0.22	0.02
Europe	0.32	0.34	0.45	0.48	0.51	0.52	0.72	0.62	0.70	0.83	0.55	0.28
Asia Oceania	0.00	-	0.05	0.05	0.03	0.06	0.03	-	0.05	0.05	0.06	-0.01
Nigerian Medium												
Americas	0.21	0.25	0.18	0.14	0.04	0.07	0.14	0.16	0.15	0.11	0.17	-0.06
Europe	0.13	0.09	0.14	0.13	0.26	0.25	0.26	0.31	0.22	0.26	0.14	0.13
Asia Oceania	-	-	-	-	-	-	0.00	-	0.01	-	-	-

1 Data based on monthly submissions from IEA countries to the crude oil import register (in '000 bbl), subject to availability. May differ from Table 8 of the Report.
IEA Americas includes United States and Canada.
IEA Europe includes all countries in OECD Europe except Estonia, Hungary and Slovenia.
IEA Asia Oceania includes Australia, New Zealand, Korea and Japan.

2 Iraqi Total minus Kirkuk.

3 Iranian Total minus Iranian Light.

4 33° API and lighter (e.g., Bonny Light, Escravos, Qua Iboe and Oso Condensate).

Table 7
REGIONAL OECD IMPORTS[1,2]
(thousand barrels per day)

	2009	2010	2011	4Q11	1Q12	2Q12	3Q12	Jul-12	Aug-12	Sep-12	Year Earlier Sep-11	Year Earlier % change
Crude Oil												
Americas	7541	7496	6870	6668	6159	6495	6125	6240	6139	5993	6742	-11%
Europe	8893	9072	8985	8903	9119	9176	9774	9786	10071	9456	9217	3%
Asia Oceania	6311	6472	6609	6730	6994	6727	6627	6778	6525	6576	6515	1%
Total OECD	22746	23039	22464	22301	22272	22398	22527	22804	22735	22025	22474	-2%
LPG												
Americas	43	34	33	20	20	28	34	35	33	33	35	-6%
Europe	261	285	309	328	300	281	272	256	256	304	337	-10%
Asia Oceania	537	565	568	553	658	603	594	536	616	632	580	9%
Total OECD	840	884	909	902	978	911	900	827	905	969	952	2%
Naphtha												
Americas	22	36	42	38	15	34	17	10	26	15	45	-66%
Europe	336	399	272	238	399	363	298	341	240	314	268	17%
Asia Oceania	849	907	884	861	839	878	920	816	899	1050	918	14%
Total OECD	1207	1343	1198	1137	1253	1275	1235	1167	1164	1379	1230	12%
Gasoline[3]												
Americas	884	801	762	655	673	775	799	811	919	661	602	10%
Europe	206	187	222	213	280	180	223	275	169	224	207	8%
Asia Oceania	111	84	94	113	95	92	68	65	68	71	87	-19%
Total OECD	1200	1073	1078	981	1048	1047	1089	1151	1156	956	896	7%
Jet & Kerosene												
Americas	62	76	77	67	41	58	95	47	134	104	65	61%
Europe	449	418	396	449	290	375	458	486	460	426	454	-6%
Asia Oceania	60	46	56	61	77	38	55	61	54	49	68	-28%
Total OECD	571	539	530	577	408	471	607	594	648	579	586	-1%
Gasoil/Diesel												
Americas	91	100	72	58	71	45	50	43	45	61	78	-21%
Europe	1063	1071	1042	1101	1026	859	956	994	979	894	1148	-22%
Asia Oceania	92	104	147	171	170	176	194	222	221	137	167	-18%
Total OECD	1246	1275	1261	1329	1267	1080	1200	1259	1246	1092	1393	-22%
Heavy Fuel Oil												
Americas	271	277	268	228	220	217	208	207	195	223	195	15%
Europe	489	464	536	550	631	534	534	533	465	605	597	1%
Asia Oceania	116	118	153	182	221	203	227	223	225	234	183	28%
Total OECD	876	860	957	961	1072	954	969	963	885	1062	974	9%
Other Products												
Americas	877	807	871	828	751	835	880	857	777	1011	872	16%
Europe	747	692	690	619	590	664	628	666	580	638	647	-1%
Asia Oceania	353	375	373	375	389	370	359	340	363	374	445	-16%
Total OECD	1977	1874	1934	1822	1730	1869	1867	1863	1720	2023	1964	3%
Total Products												
Americas	2250	2132	2124	1893	1791	1992	2083	2011	2130	2108	1890	12%
Europe	3551	3516	3467	3498	3516	3256	3368	3551	3150	3406	3657	-7%
Asia Oceania	2117	2199	2277	2316	2450	2361	2417	2263	2445	2547	2448	4%
Total OECD	7918	7847	7868	7708	7757	7608	7868	7824	7725	8061	7995	1%
Total Oil												
Americas	9791	9627	8995	8562	7950	8487	8208	8251	8269	8101	8632	-6%
Europe	12445	12588	12452	12401	12635	12432	13143	13337	13221	12862	12875	0%
Asia Oceania	8428	8671	8886	9047	9443	9088	9044	9041	8970	9123	8962	2%
Total OECD	30664	30886	30332	30009	30029	30006	30395	30628	30460	30086	30469	-1%

1 Based on Monthly Oil Questionnaire data submitted by OECD countries in tonnes and converted to barrels.
2 Excludes intra-regional trade.
3 Includes additives.

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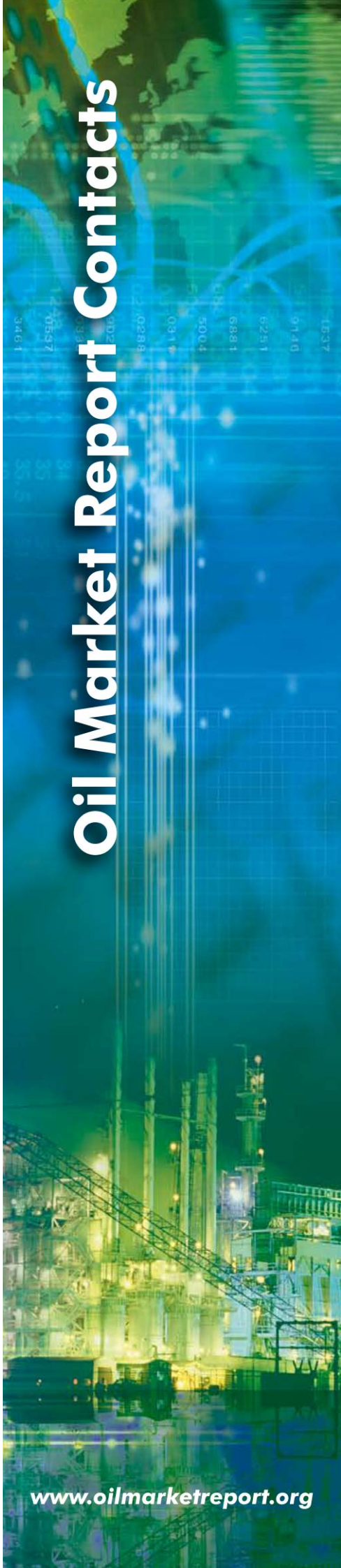
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