INTERNATIONAL ENERGY AGENCY/AGENCE INTERNATIONALE DE L'ENERGIE

OIL MARKET REPORT

A MONTHLY OIL MARKET AND STOCKS ASSESSMENT

www.oilmarketreport.org

INTERNATIONAL ENERGY AGENCY

AGENCE INTERNATIONALE DE L'ENERGIE

18 January 2007

HIGHLIGHTS

- **Crude oil prices** fell to 20-month lows in mid-January as lower demand, due to unusually warm weather and fund repositioning in commodity markets, offset the impact of OPEC cuts. Despite a sharp fall in US crude stocks, high inventories at the NYMEX delivery point of Cushing, Oklahoma, are contributing to the persistence of higher forward prices.
- **Global oil product demand** has been cut by 450 kb/d in 4Q06 following large US data revisions, unseasonably mild temperatures, fuel switching and lower apparent demand in the FSU. Some of these factors, together with a lower US GDP assumption, contribute to a reduction in forecast global demand growth to 1.6% in 2007 (85.8 mb/d).
- **World oil supply** rose by 110 kb/d in December to 85.4 mb/d, as strong recent non-OPEC growth continued. However, revisions to Norway, Mexico, Canada and Latin America lowered non-OPEC supply by 0.3 mb/d to 52.3 mb/d in 2007. Mild weather cut the 4Q06 'call on OPEC plus stock change' to 29.4 mb/d, but the 2007 call was lifted by 0.1 mb/d to 28.6 mb/d, only marginally below the average call in 2006.
- **December OPEC-11 crude supply** fell by 155 kb/d to 28.8 mb/d, but persistent disruptions to Iraqi and Nigerian supply limit effective spare capacity to 2.5 mb/d. Indications of further cuts in 1Q OPEC output follow the recent fall in prices and an agreement in Abuja to curb supply by 500 kb/d from February. Angola became an OPEC member from January 2007.
- **OECD refinery throughputs** increased by 1.1 mb/d in November to average 39.1 mb/d. Weekly data suggest a further increase of 0.6 mb/d in December to a winter peak of 39.7 mb/d. Global throughputs are expected to decrease over the course of the first quarter, as maintenance takes place sequentially in the US, Europe, the Middle East and Asia.
- **OECD total industry oil stocks** continued to decline in November, falling by 33 mb as product draws offset a modest crude oil stock build. Provisional data suggest the trend continued in December. While total OECD stocks are 41 mb higher than one year ago at 2,712 mb, forward demand cover fell by one day from October to 54 days.

Next Issue: 13 February 2007

CONTENTS

THE CAPACITY TO SURPRISE

The explanation for the recent fall in the oil price appears pretty straightforward. Weather has been warm, demand has been weak and OPEC supply has been above levels implied by announced cuts for the first half of the winter. Undoubtedly, fund selling and a switch from bull to bear market psychology played their part as well, but there are other issues to consider.

Stocks have been falling, as they normally do in the fourth quarter – despite the mild weather. Total crude and product stocks among OECD industry, based on very preliminary data (M-1 and US/PAJ weeklies and Euroilstock trends) imply a 1.1 mb/d drawdown in 4Q06. While this puts total crude and product stocks just above the five-year average, the level of forward demand cover remains within seasonal norms. But note that gasoline stocks are low, as are crude, and the total stock number is, to an extent, bloated by fuel oil and 'other products'.

We should perhaps be a little wary about placing too much emphasis on inventory trends – as adjustments over the past year have shown, preliminary data are frequently adjusted (October OECD stock data have been revised higher by 23.8 mb in this month's report). And, if we take preliminary data on supply, demand and stocks together with a sharp fall in the amount of oil on the water and in floating storage, it is difficult to escape the conclusion that preliminary data look likely to be revised.

There has also been a preponderance of reports noting that fund managers of key passive funds have been reducing their exposure, if not to commodities in general, certainly to energy and some base metals. As most passive funds readjust their positions at the start of each year, coincident price swings are hardly surprising.

At first glance, the sharp fall in US crude stocks and the persistence of the wide contango structure in WTI looks like a speculative-led distortion, but dig deeper and there is some rationality to it. US crude stocks of around 315 mb are close to the trigger point normally associated with a switch of the crude market from contango to backwardation, but the NYMEX WTI contango between the first and sixth month remains high at over $6/bbl.

In reality, inventory at the NYMEX WTI delivery point of Cushing in the US Midwest determines the forward price structure. These stock levels have remained high and on this basis, the relationship between stocks and the contango remains intact. It is already noticeable that differentials between WTI and other domestic crudes are beginning to reflect a tightening market. Ultimately, this should rebalance the contango, but it may take time.

Refining margins are sending mixed signals. Margins for full conversion refineries remain excellent, but hydroskimming margins for light sweet crude in Europe and Asia have been poor and cracking margins are only attractive for certain heavy sour crudes. That margins have been driven lower by weaker product cracks, rather than tight crude markets, adds further weight to perceptions of weaker-than-expected oil buying – but this may simply reflect lower run rates during the first-quarter US maintenance season.

Despite some apparent change in fund sentiment towards commodities, most of the recent movement in crude prices relates to fundamental factors. Weather has been important, but so too, surprisingly, have been OPEC cuts. The meteoric rises in copper and nickel are a prime example of how commodity prices can react when spare capacity runs out. It should not be surprising, therefore, that when OPEC effectively abandoned quotas and had little readily marketable spare capacity, oil prices and demand for stocks increased. So ironically, the restart of output restraint by OPEC offers proof to consumers that there is marketable spare capacity in the system and thus exerts a downward pressure on prices.

It may not last - if stocks continue on a declining path, at some point market tightness will push spot prices higher and send forward spreads into backwardation. Further, despite recent increases, the overall level of spare capacity remains thin. There is also a further factor - while most projects remain economic below $40/barrel, it is clear that OPEC countries are mindful of the high levels of spare capacity that built up in the 1980s and 90s. Should producers defer future expansion plans because of a fall in spot prices, spare capacity may be tight for some time to come.

Due to an anomaly in received data, the planned publication of an update to the Medium-Term Oil Market Report has been postponed. We will publish the report as soon as these issues have been resolved.

DEMAND

Summary

- **Global oil product demand growth** has been revised downwards to 0.9% in 2006 (84.4 mb/d) and +1.6% in 2007 (85.8 mb/d) given significant revisions in the United States, mild weather, adjustments to US GDP assumptions and lower apparent demand in the FSU.

Global Oil Demand from 2005 to 2007

	1Q05	2Q05	3Q05	4Q05	2005	1Q06	2Q06	3Q06	4Q06	2006	1Q07	2Q07	3Q07	4Q07	2007
Demand (mb/d)	84.55	82.42	83.31	84.11	83.59	84.81	83.03	83.93	85.74	84.38	86.06	84.24	85.30	87.46	85.77
Annual Change (%)	2.68	1.55	1.59	0.06	1.46	0.31	0.74	0.74	1.94	0.94	1.47	1.46	1.63	2.01	1.65
Annual Change (mb/d)	2.20	1.26	1.31	0.05	1.20	0.26	0.61	0.62	1.63	0.78	1.24	1.21	1.37	1.72	1.39
Changes from last month's report (mb/d)	-	-	0.03	-	0.01	-	-	-	-0.45	-0.12	-0.22	-0.22	-0.19	-0.01	-0.16

- **OECD oil product demand** was down by 300 kb/d in 4Q06, as a result of large revisions to US data and to unseasonably mild temperatures that have tamed heating and residual oil demand. Fuel oil consumption continues to decrease due to improved availability of natural gas and the increasing switching to coal-fired power generation. Total oil product demand in the OECD is expected to decline by 0.6% in 2006 on an annual basis, but should rebound by 0.7% in 2007.

Global Oil Demand by Region
(million barrels per day)

	Demand		Annual Change			Annual Change (%)		
	2006	2007	2005	2006	2007	2005	2006	2007
North America	25.35	25.74	0.14	-0.16	0.38	0.5	-0.6	1.5
Europe	16.20	16.20	0.04	-0.02	0.00	0.2	-0.1	0.0
OECD Pacific	8.47	8.45	0.10	-0.12	-0.02	1.2	-1.4	-0.2
China	6.98	7.35	0.18	0.37	0.38	2.8	5.6	5.4
Other Asia	8.87	9.04	0.16	0.10	0.17	1.8	1.1	1.9
Subtotal Asia	24.32	24.84	0.44	0.35	0.53	1.9	1.4	2.2
FSU	3.91	3.93	0.05	0.11	0.02	1.3	2.8	0.5
Middle East	6.45	6.77	0.32	0.33	0.32	5.6	5.4	4.9
Africa	2.94	3.01	0.08	0.07	0.06	3.0	2.4	2.1
Latin America	5.20	5.28	0.13	0.11	0.08	2.7	2.1	1.6
World	84.38	85.77	1.20	0.78	1.39	1.5	0.9	1.6

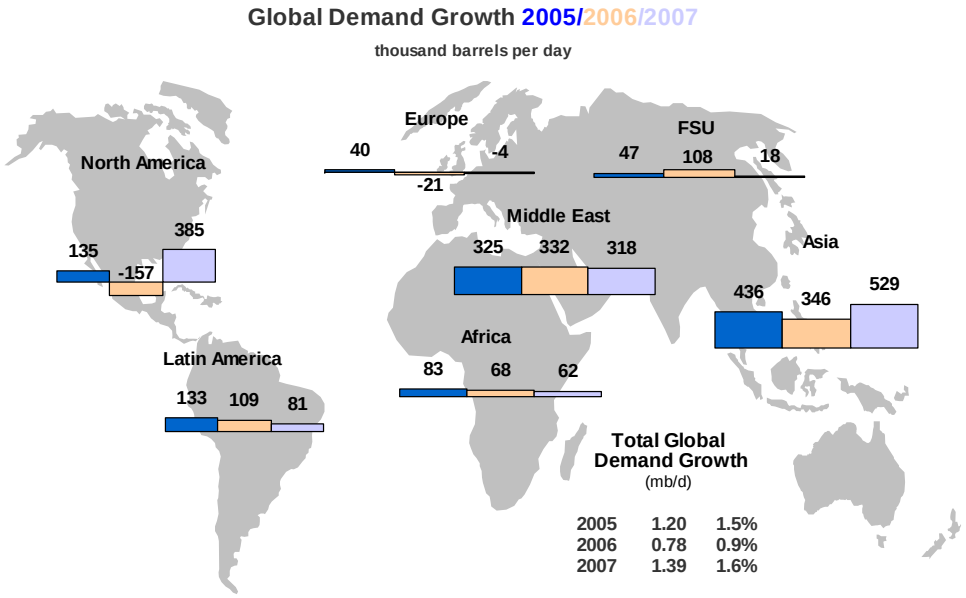
- **Non-OECD oil product demand** has also been cut in 4Q06 by 160 kb/d, given weaker-than-expected apparent demand in the FSU. Total non-OECD oil product consumption is nonetheless forecast to grow by a healthy 3.2% in 2006 and 3.0% in 2007.

Worldwide Overview

Given milder-than-expected temperatures and minor revisions to our economic growth assumptions, we have revised downwards our global annual growth forecast for 2006 and 2007 (to +0.9% and +1.6%, respectively). In absolute terms, demand is expected to stand at 84.4 mb/d in 2006 and 85.8 mb/d in 2007. In particular, the annual growth rates in 4Q06 and 1Q07 look weaker than expected in our last report, at +1.9% and +1.5%, respectively.

As noted, one key factor driving this revision is the weather. Indeed, this winter has so far proved to be extraordinarily mild because of the El Niño effect, resulting in a significant decrease in heating oil consumption, mostly in the OECD. However, this decline is also structural, notably in the key US Northeast and German markets, as well as in some Asian countries, as consumers switch to natural gas (whose relatively low, weather-related prices have also prompted switching from gasoil and kerosene used for heating). Furthermore, in electricity generation coal is increasingly competing against both natural gas and oil (residual fuel or direct crude burning).

Regarding the economy, we adjusted our 2007 US GDP assumption, based on the most recent OECD forecast and trends in the survey by *Consensus Economics*. However, as we mentioned in our last report, contradictory signals fail to confirm the much-trumpeted slowdown of the US economy. As



such, global oil demand growth is expected to be somewhat less buoyant in 2007 but nonetheless sustained. Indeed, it should be emphasised once again that a slower US expansion will not necessarily eat too much into oil demand growth. Most of the forecast growth is driven by transportation fuels, which are income- and price-inelastic in the short term.

OECD

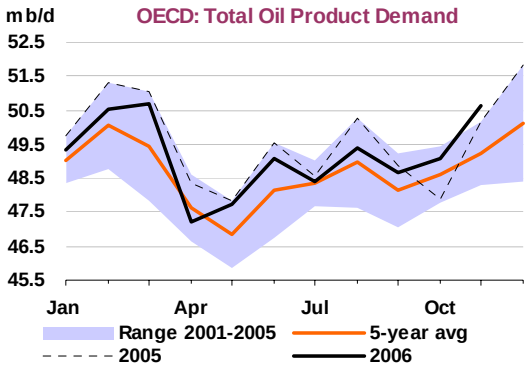
Total OECD demand growth was positive in November (+0.8% versus levels of a year ago), driven primarily by North America (+2.2%), where gains in naphtha and diesel offset a sharp decline in heating oil, and by the Pacific (+0.9%), due to strong deliveries of transportation fuels (gasoline and diesel) and naphtha. In Europe, by contrast, total deliveries were weak (-1.3%), mostly due to a year-on-year fall in heating oil demand.

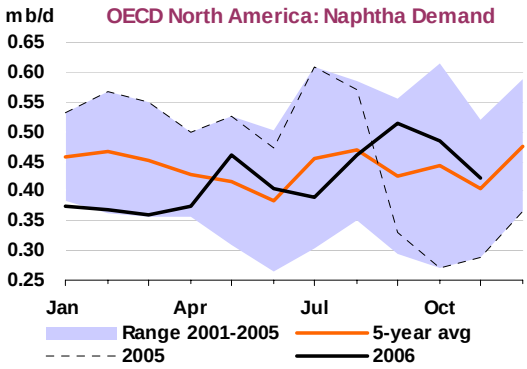
OECD Demand based on Adjusted Preliminary Submissions - November 2006
(million barrels per day)

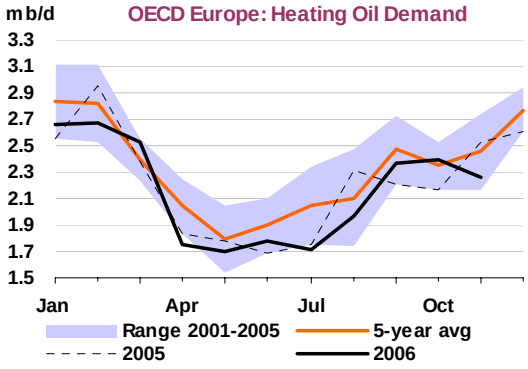
	Gasoline		Jet/Kerosene		Diesel		Other Gasoil		RFO		Other		Total Products	
	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa
OECD North America	**10.66**	**1.0**	**1.95**	**-1.7**	**4.06**	**13.4**	**1.46**	**-2.6**	**1.15**	**-29.2**	**6.71**	**8.33**	**25.99**	**2.2**
USA*	9.16	0.5	1.71	1.0	3.55	14.9	0.92	-5.0	0.59	-39.5	5.28	10.5	21.21	2.9
Canada	0.70	2.2	0.13	-33.2	0.18	1.1	0.39	0.6	0.21	1.0	0.76	7.8	2.37	0.5
Mexico	0.72	6.0	0.06	26.8	0.28	6.3	0.12	6.3	0.25	-27.5	0.61	-6.2	2.03	-2.7
OECD Europe	**2.50**	**-2.3**	**1.23**	**3.4**	**4.20**	**3.0**	**2.26**	**-10.9**	**1.78**	**-1.0**	**3.83**	**-0.4**	**15.80**	**-1.3**
Germany	0.51	-2.6	0.18	8.8	0.66	2.5	0.50	-19.8	0.19	0.7	0.67	12.6	2.71	-1.1
UK	0.44	-2.8	0.35	2.8	0.45	0.7	0.16	-3.7	0.08	0.3	0.39	1.0	1.86	-0.1
France	0.22	-5.8	0.15	4.6	0.66	3.8	0.30	-21.4	0.12	0.6	0.47	-4.2	1.92	-4.2
Italy	0.30	-5.4	0.08	8.0	0.56	2.3	0.15	-11.1	0.24	-22.8	0.36	-4.1	1.68	-5.8
Spain	0.15	-0.8	0.11	3.0	0.50	2.7	0.24	-6.4	0.23	3.5	0.41	2.1	1.64	0.9
OECD Pacific	**1.58**	**-1.3**	**1.11**	**4.2**	**1.33**	**3.1**	**0.58**	**-10.5**	**1.01**	**-4.8**	**3.21**	**4.4**	**8.82**	**0.9**
Japan	1.01	-2.5	0.76	3.0	0.65	2.6	0.44	-12.8	0.51	-13.5	1.96	6.8	5.33	-0.1
Korea	0.17	3.5	0.22	6.6	0.31	2.7	0.13	0.6	0.48	8.4	1.03	1.5	2.35	3.6
Australia	0.34	0.6	0.11	8.9	0.32	6.2	0.00	-28.1	0.02	-18.9	0.20	-1.0	0.99	2.3
OECD Total	**14.74**	**0.2**	**4.29**	**1.2**	**9.59**	**7.2**	**4.29**	**-8.2**	**3.95**	**-12.1**	**13.75**	**4.8**	**50.61**	**0.8**

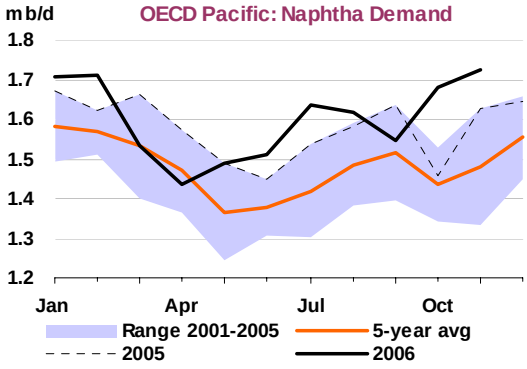
* Fifty States Only

According to preliminary estimates, warmer-than-normal temperatures contributed to reduce total consumption in the OECD by some 600 kb/d in December (compared with what would be normally expected). Coupled with US October revisions, our 4Q06 OECD forecast is consequently revised downwards by roughly 300 kb/d to 50.2 mb/d. For 2006 as a whole, we foresee OECD demand falling by 0.6% on an annual basis. Assuming that winter temperatures revert to their ten-year average in 2007, total OECD oil product consumption should increase by 0.7% on an annual basis versus 2006.









Total OECD Demand by Product
(million barrels per day)

	2005	2006	4Q05	1Q06	2Q06	3Q06	Aug 06	Sep 06	Oct 06*	Latest month vs. Sep 06	Latest month vs. Oct 05
LPG & Ethane	4.73	4.65	4.76	5.03	4.44	4.38	4.46	4.16	4.36	0.19	0.16
Naphtha	3.22	3.16	3.09	3.22	2.94	3.13	3.17	3.13	3.28	0.15	0.31
Motor Gasoline	14.84	14.88	14.76	14.35	14.96	15.27	15.50	14.88	14.91	0.03	0.40
Jet & Kerosene	4.25	4.20	4.40	4.48	3.99	3.98	3.98	3.99	4.03	0.04	0.07
Gas/Diesel Oil	13.06	13.25	13.41	13.74	12.64	12.87	12.92	13.42	13.67	0.25	0.80
Residual Fuel Oil	4.44	4.02	4.50	4.64	3.79	3.81	3.89	3.70	3.64	-0.05	-0.60
Other Products	5.05	5.13	5.02	4.73	5.23	5.38	5.49	5.37	5.20	-0.17	0.10
Total Products	**49.61**	**49.29**	**49.96**	**50.19**	**47.99**	**48.82**	**49.41**	**48.64**	**49.08**	**0.44**	**1.22**

* Latest official OECD submissions (MOS)

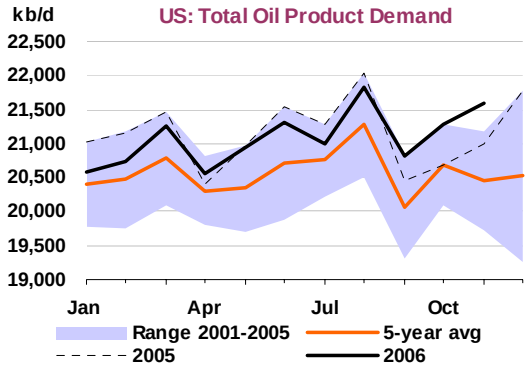
North America

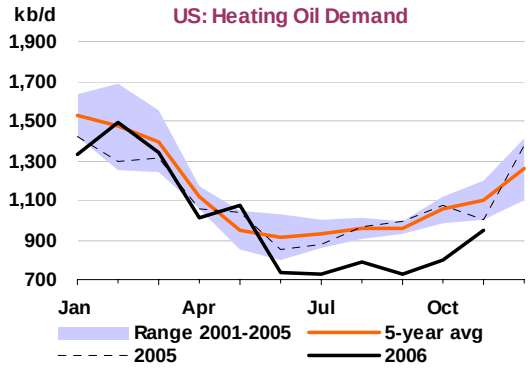
According to preliminary data, November's inland deliveries in the **United States** – a proxy of demand – of all product categories bar heating oil and residual fuel oil rose compared with levels of a year ago. Overall, total US petroleum deliveries rose by 2.9% versus November 2005. Revisions, meanwhile, stood at -330 kb/d in October, due to upward adjustments in LPG/ethane and naphtha, and downward corrections in gasoline and jet/kerosene.

November's strong growth in inland deliveries is explained by last year's hurricane-stricken base. Nonetheless, the strength of diesel deliveries (+14.9% on an annual basis) indicates that road freight growth continues – thus suggesting that the slowing of economic activity is much softer than many forecasts suggested. Gasoline deliveries, though, were up by a more modest 0.5%, after the strong jump recorded in both September and October (of over 3% in both months). Arguably, the rebound in primary gasoline demand, related to secondary restocking, has dissipated.

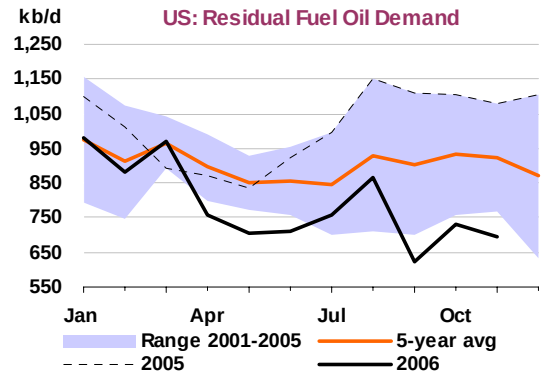
The relative weakness of heating oil deliveries (-5.0%) matched weather conditions (November was warmer-than-normal: the number of 'heating-degree days' or HDDs was some 2% lower than the ten-year average). Given that milder-than-normal conditions also prevailed in December (HDDs were 12% lower than normal), heating oil demand is expected to be significantly subdued in 4Q06.

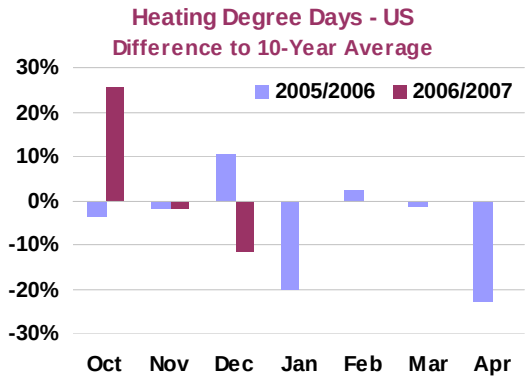
Residual fuel oil deliveries, meanwhile, plummeted by 39.5% year-on-year. It should be recalled that last year's hurricanes had led to both natural gas supply tightness and a sharp increase in gas prices, prompting many industrial and utility users to switch to residual fuel oil. This year, by contrast, natural gas supplies have improved and prices have fallen as a result of mild temperatures and high stocks, thus encouraging the opposite substitution effect.





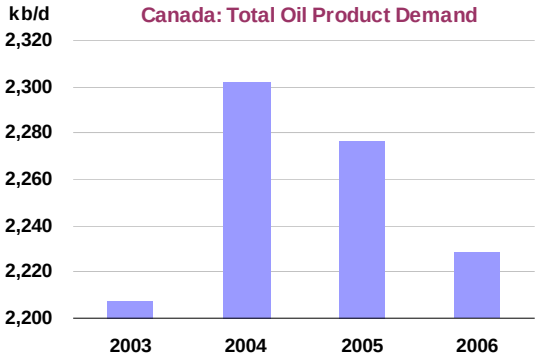
Aside from the weather, the weakness of heating oil and the continued fall of residual fuel oil owe much to structural factors. Heating oil is being increasingly replaced by natural gas, while residual fuel, normally used for power generation, is being replaced by either natural gas, coal or even by heavy crude oil (coal has a solid price advantage over both oil and gas). However, if temperatures get colder and oil prices continue to fall, both heating and residual fuel oil could once again become attractive.

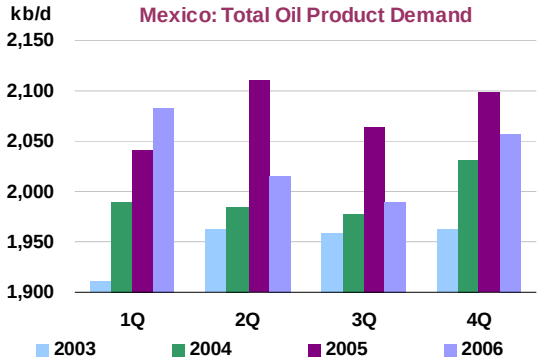




Given adjustments to preliminary data and the sharp fall in heating and residual fuel oil, we have reduced our 4Q06 US demand forecast by 270 kb/d, bringing yearly growth for 2006 to -0.4% (a negative rate has not been recorded since 2001). In 2007, we expect US total oil product demand to increase by 1.4%, assuming normal weather conditions. Note that our 2007 forecast is slightly lower than last month's report, mostly as a result of revising down our GDP assumption for the US economy (based on the OECD and *Consensus Economics*) from 2.9% to 2.4% in 2007. This suggests a 'soft-landing' scenario that should continue to lend support to relatively strong demand growth in all product categories bar heating and residual fuel oil – which, as noted, face structural decline.

According to preliminary data, **Canada** is expected to record lower oil product demand in 2006, compared with 2005. Total consumption is poised to fall by 2.1% to some 2.2 mb/d, despite the country's healthy economy. As in the US, this is mostly linked to shrinking deliveries of heating and residual fuel oil, increasingly replaced by natural gas. **Mexico**, meanwhile, is expected to post three weak quarters in a row (2Q, 3Q and 4Q) in 2006, compared with 2005; demand is thus forecast to decline in 2006 (-2.6%) to 2.0 mb/d.





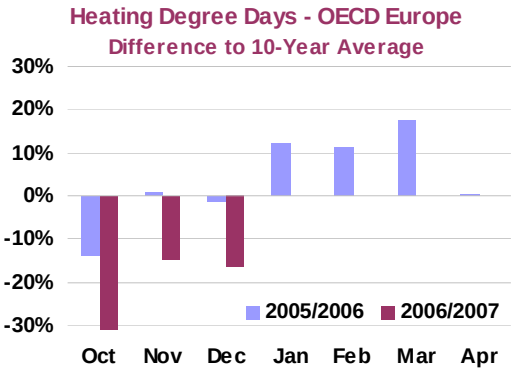
OECD North America Demand by Product
(million barrels per day)

	2005	2006	4Q05	1Q06	2Q06	3Q06	Aug 06	Sep 06	Oct 06*	Latest month vs. Sep 06	Latest month vs. Oct 05
LPG & Ethane	2.82	2.80	2.81	2.98	2.65	2.67	2.71	2.61	2.73	0.11	0.28
Naphtha	0.46	0.43	0.31	0.37	0.41	0.45	0.46	0.51	0.48	-0.03	0.21
Motor Gasoline	10.59	10.73	10.60	10.35	10.80	11.00	11.18	10.70	10.80	0.10	0.35
Jet & Kerosene	1.97	1.92	1.99	1.87	1.95	1.94	1.91	1.94	1.91	-0.03	-0.04
Gas/Diesel Oil	5.09	5.21	5.15	5.35	5.01	5.06	5.26	5.10	5.33	0.22	0.27
Residual Fuel Oil	1.56	1.21	1.63	1.43	1.15	1.18	1.29	1.04	1.12	0.07	-0.47
Other Products	3.01	3.05	2.99	2.78	3.14	3.18	3.34	3.16	3.11	-0.05	0.04
Total Products	**25.51**	**25.35**	**25.48**	**25.12**	**25.09**	**25.48**	**26.16**	**25.08**	**25.48**	**0.40**	**0.64**

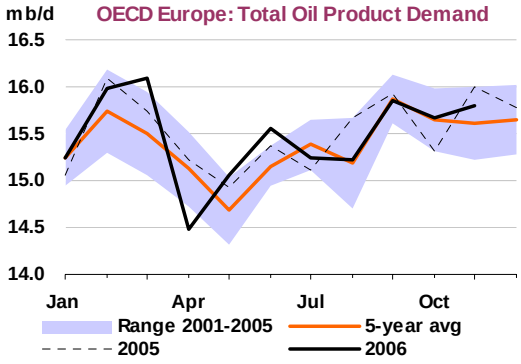
* Latest official OECD submissions (MOS)

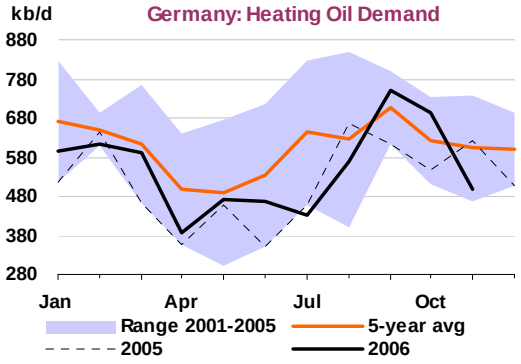
Europe

In November, oil product demand in Europe declined by 1.3% compared with the same month in 2005, dragged down by lower heating oil demand (-10.9%). The fact that heating oil deliveries were so weak after the strong growth observed in the past few months suggests that end-users have completed their pre-winter stock building and that milder temperatures are reducing seasonal demand (HDDs were 15% lower than normal). High domestic tank levels augur weak primary heating oil deliveries in 1Q07.

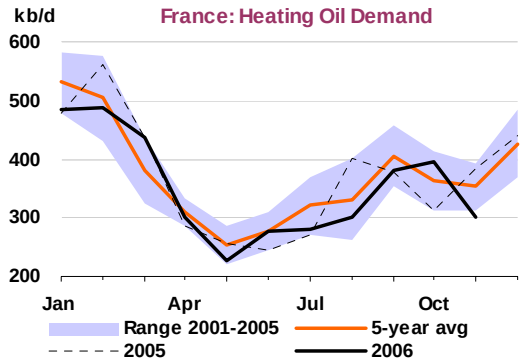


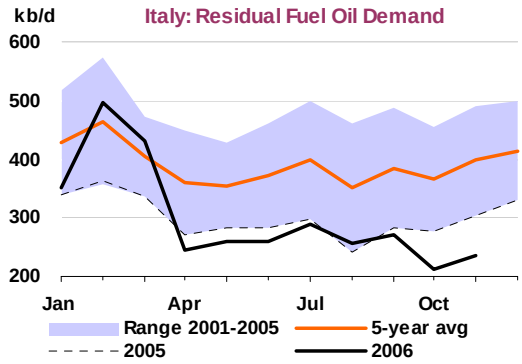
Germany's October demand figures were revised upwards sharply (+148 kb/d), mostly because of a reappraisal of heating oil demand, which grew by +27.1% on a yearly basis. In November, by contrast, preliminary data suggest that heating oil deliveries plummeted by 19.8%, arguably due to ample storage (with tanks filled at around 68% of capacity by end-October) and mild weather. Meanwhile, diesel demand was relatively strong for the third month in a row (+2.5%). Some observers contend that this is related to wholesale purchases ahead of the VAT increase on 1 January 2007. Although this is plausible, another reason may be the strong rebound of the German economy in 2H06.





In **France**, deliveries of heating oil were also quite weak (-21.4% compared with November 2005). French consumer heating oil stock data are unavailable, but this decline is arguably similar to that observed in Germany – namely, sufficient stocks and mild weather.





In **Italy**, the weakness in residual fuel oil deliveries continued in November (-22.8% on an annual basis). This is related to continued natural gas substitution in power stations. Moreover, given abundant natural gas stocks, anticipation of stable Russian supplies, despite Russia's gas price row with Belarus in late December (which was followed by an oil price dispute in early January), and mild weather in the first half of the winter, residual fuel oil demand is unlikely to spike in 1Q07. Last year, Russian natural gas supplies to Europe were briefly interrupted in the first quarter, leading to a surge in residual fuel oil demand in several countries, notably in Italy, where that fuel is used mainly for power generation.

OECD Europe Demand by Product
(million barrels per day)

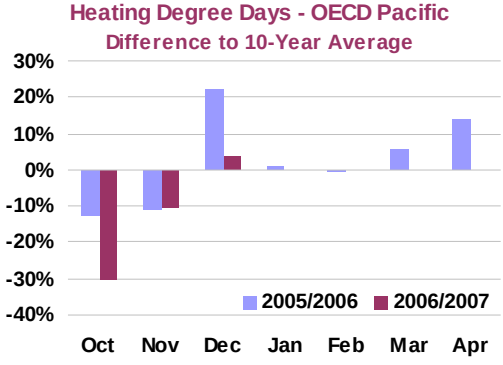
	2005	2006	4Q05	1Q06	2Q06	3Q06	Aug 06	Sep 06	Oct 06*	Latest month vs. Sep 06	Latest month vs. Oct 05
LPG & Ethane	1.03	0.97	1.07	1.13	0.96	0.83	0.84	0.74	0.84	0.10	-0.11
Naphtha	1.18	1.13	1.21	1.20	1.05	1.07	1.09	1.07	1.11	0.05	-0.13
Motor Gasoline	2.64	2.55	2.56	2.44	2.61	2.64	2.63	2.61	2.54	-0.07	0.00
Jet & Kerosene	1.24	1.28	1.23	1.19	1.28	1.37	1.41	1.38	1.32	-0.05	0.08
Gas/Diesel Oil	6.10	6.22	6.35	6.46	5.85	6.12	5.95	6.62	6.57	-0.04	0.48
Residual Fuel Oil	1.84	1.81	1.81	2.06	1.70	1.73	1.70	1.73	1.66	-0.07	-0.02
Other Products	1.49	1.52	1.47	1.29	1.59	1.67	1.60	1.72	1.62	-0.09	0.07
Total Products	**15.51**	**15.48**	**15.69**	**15.77**	**15.03**	**15.43**	**15.23**	**15.85**	**15.68**	**-0.18**	**0.37**

* Latest official OECD submissions (MOS)

Overall, Germany's October upward heating oil revisions largely offset lower demand as a result of mild temperatures. Overall, 4Q06 oil product demand in Europe is revised by only 9 kb/d, thus leaving our growth forecast virtually unchanged at -0.2% in 2006, compared with the previous year.

Pacific

According to preliminary data, oil product demand in **Japan** resumed its briefly interrupted decline (-0.1% compared with November 2005), mostly because of weak inland deliveries of heating oil and residual fuel oil. Above-normal temperatures (HDDs in the Pacific were about 11% lower than the 10-year average) help to partly explain the relatively depressed demand of heating oil (kerosene). However, other structural factors are also at work, notably the switch by Japanese users to electricity and natural gas (LNG) for heating purposes, as well as conservation and efficiency efforts.



Meanwhile, the sharp drop in Japanese fuel oil consumption (-13.5% year-on-year) is related to the fact that utilities have boosted nuclear power generation.

Naphtha demand in **Korea** continued to grow in November (+6.4% compared with the same month of the previous year), although at a lower pace than that observed in October (+23.1%), following the end of the petrochemical maintenance season. Combined with robust growth in transportation fuels, it helped lift the country's total oil product demand by 3.6% on a yearly basis.

OECD Pacific Demand by Product
(million barrels per day)

	2005	2006	4Q05	1Q06	2Q06	3Q06	Aug 06	Sep 06	Oct 06*	Latest month vs. Sep 06	Latest month vs. Oct 05
LPG & Ethane	0.89	0.88	0.88	0.92	0.84	0.87	0.90	0.81	0.79	-0.02	-0.01
Naphtha	1.58	1.61	1.58	1.65	1.48	1.60	1.62	1.55	1.68	0.13	0.22
Motor Gasoline	1.61	1.59	1.61	1.57	1.56	1.63	1.69	1.56	1.56	0.00	0.05
Jet & Kerosene	1.04	1.00	1.19	1.42	0.75	0.67	0.66	0.67	0.79	0.12	0.02
Gas/Diesel Oil	1.87	1.82	1.91	1.92	1.79	1.69	1.71	1.70	1.77	0.07	0.05
Residual Fuel Oil	1.05	1.00	1.07	1.16	0.95	0.91	0.89	0.93	0.87	-0.06	-0.11
Other Products	0.55	0.56	0.55	0.67	0.50	0.52	0.55	0.49	0.47	-0.03	-0.01
Total Products	**8.59**	**8.47**	**8.79**	**9.30**	**7.87**	**7.90**	**8.02**	**7.71**	**7.92**	**0.21**	**0.21**

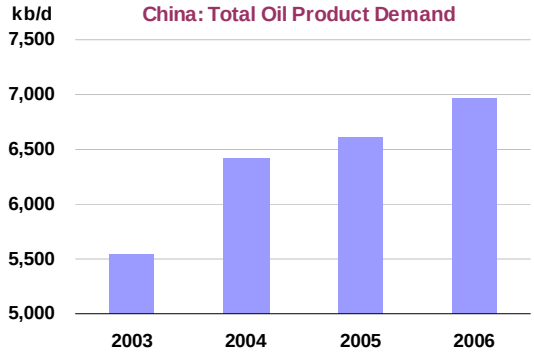
* Latest official OECD submissions (MOS)

Non-OECD

China

Our forecast of China's apparent demand (defined as refinery output plus net oil product imports, adjusted for fuel oil and direct crude burning, smuggling and stock changes) has been kept unchanged versus our last report, at 7.0 mb/d in 2006 (+5.6% over 2005) and 7.4 mb/d in 2007 (+5.4% over 2006). This is due to an anomaly in received data, which we are currently reviewing. Once these inconsistencies are resolved we will publish an update to the *Medium-Term Oil Market Report*, which may include revisions to our data series and forecasts.

November's sharp rise in crude imports to nearly 3.2 mb/d – almost 1.0 mb/d above October levels and similar to a previous surge in September – suggests that China may have been building crude inventories since the end of the summer, possibly to fill its new strategic petroleum reserve (SPR), although higher refinery runs are also related to this import spike. Zhang Guobao, vice chairman of the National Development and Reform Commission, has reportedly declared that China is indeed building up its SPR by taking oil in lieu of taxes from domestic producers.



The aim is to eventually hold the equivalent of some 60 days worth of consumption (about 400 million barrels at current levels); draws, managed by a special unit of the Energy Bureau, would take place only in cases of severe supply shortage. Still, this filling target will take several years to be achieved – the government's stated (and quite ambitious) goal is to reach about 100 million barrels of stocks within the next two years, spread across four sites. Nevertheless, by the end of December some unofficial estimates put China's SPR in excess of 20 million barrels. However, the SPR's ownership and control remain uncertain, with the filling coinciding with the leasing by Sinopec of one-third of the 33-million-barrel tanks at Zhenhai, near the east coast city of Ningbo. The lack of a clear definition of stock ownership and control has led to concerns that the inventories may be used for commercial purposes.

Instead of introducing an entirely new oil price mechanism as had been persistently rumoured, the Chinese government decided instead to cut the retail price of jet fuel and gasoline by approximately 3.8% in early January (diesel prices, though, remain unchanged). There had been some talk of introducing a new price framework, which, it was hoped, would reduce volatility by linking retail fuel prices to the cost of a basket of crudes (Brent, Dubai and Minas). Since November 2001, China – officially, rather than practically – links retail prices to international oil product prices in New York, Singapore and Rotterdam. The idea was that refiners would get a fixed profit plus refining and transportation costs. However, such a system would likely replicate the product supply distortions seen over the past few years. In the meantime, in late December the government decided – for the second year in a row – to grant Sinopec a subsidy of about $640 million to partially cover its retail losses. In 2005, the company had received approximately twice as much.

China Crude & Product Trade
(thousand barrels per day)

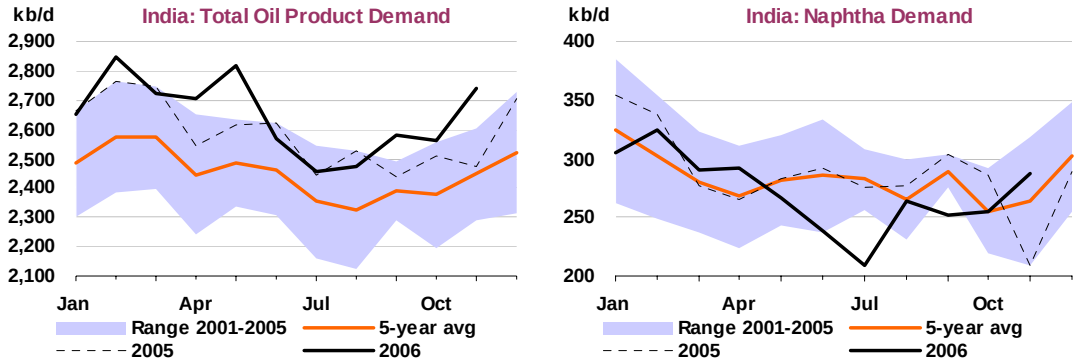
	2004	2005	4Q2005	1Q2006	2Q2006	3Q2006	Sep 06	Oct 06	Nov 06	Latest month vs. Oct 06	Latest month vs. Nov 05
Net Imports/(Exports) of:											
Crude Oil	2346	2387	2407	2878	2821	2757	3253	2363	3220	857	930
Products & Feedstocks	660	479	599	512	765	707	709	567	418	-150	-170
Gasoil/Diesel	43	-19	-3	-10	-14	-6	5	6	29	23	21
Gasoline	-125	-130	-55	-107	-56	-63	-51	-86	-103	-18	-47
Heavy Fuel Oil	506	418	402	406	522	575	519	357	282	-76	-89
LPG	201	194	182	146	227	125	153	134	196	62	0
Naphtha	-33	-35	1	-15	-36	-31	-32	9	-33	-42	-13
Jet & Kerosene	16	11	30	43	33	43	65	79	28	-51	2
Other	51	40	42	49	90	65	51	66	19	-47	-45
Total	3007	2866	3006	3390	3586	3464	3962	2930	3637	708	760

Sources: China Oil, Gas and Petrochemicals plus IEA estimates.

Other Non-OECD

According to preliminary data, **India's** oil product demand roared ahead by some 10.7% year-on-year in November, pulled by strong gains in naphtha (+47.6%) and transportation fuels (gasoline sales rose by 5.7%, jet/kerosene by 8.6% and diesel by 10.4%). As a result, we have lifted our 2006 oil product demand forecast to 2.6% (versus 2.2% in our last report).

This is the second month in a row that records relatively strong naphtha sales, which had been structurally depressed by India's gradual adoption of natural gas (note, however, that weak demand in November 2005 was related to price spike). Arguably, this is related to natural gas supply problems, which have forced petrochemical plants and domestic utilities to use naphtha as a feedstock to respectively produce fertilizers (ahead of the soon-to-start agricultural season) and generate electricity. The natural gas scarcity, though, should ease as both domestic supplies and LNG imports gradually increase, transmission infrastructure is improved and pricing issues are solved.



FSU apparent demand – defined as domestic crude production minus net exports of crude and oil products – was revised downwards by almost 190 kb/d in 4Q06. This was due to higher-than-expected net crude and oil product exports (the former notably from Azerbaijan), coupled with slightly higher-than-expected crude production. For 2006, this translates into a 40 kb/d downward adjustment, bringing the region's annual growth rate to 2.8%.

In 2007, FSU oil products exports should ease given higher local demand spurred by increasing prosperity. Demand for gasoline and gasoil should increase as the regional car fleet grows, while the use of fuel oil in power generation may rise in Russia in order to boost more lucrative exports of natural gas, which is increasingly in tight supply. In the longer term, though, exports may increase again as local refineries are upgraded.

SUPPLY

Summary

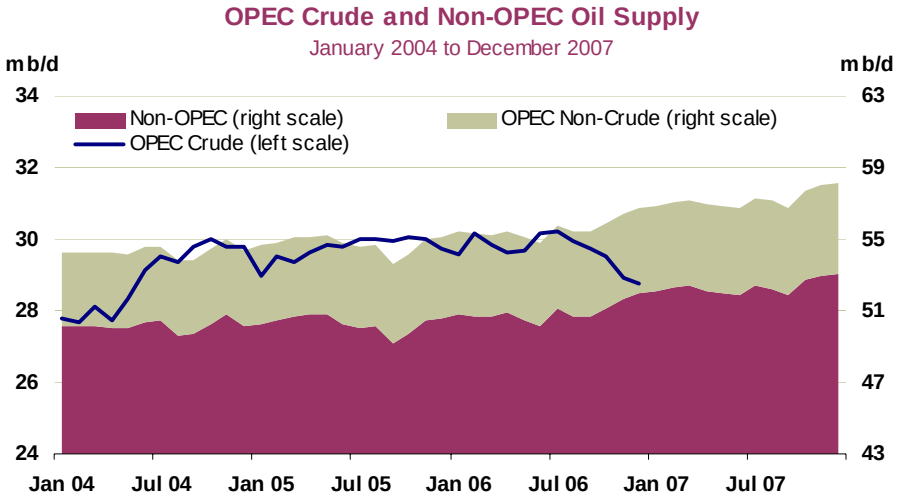
- **World oil supply** gained an estimated 110 kb/d in December to reach 85.4 mb/d. Increases were centred in North America and the North Sea, offset in part by lower output from the Caspian republics and from OPEC. All told, estimates for October and November global supply are trimmed by 95 kb/d and 45 kb/d respectively, largely due to weaker supply from both North and Latin America. Fourth-quarter global supply of 85.4 mb/d stood 675 kb/d higher than in 2005, with OPEC crude 865 kb/d lower year-on-year, OPEC NGLs up by 220 kb/d and non-OPEC oil supply showing yearly growth of 1.3 mb/d.

- **Non-OPEC supply** is adjusted down significantly for 2007, despite recent signs of accelerating growth. Output for 4Q06 is trimmed by 100 kb/d amid weaker indications for Norway, Canada, Mexico and Latin America, which offset higher-than-expected FSU supply. A 2006 total of 50.9 mb/d represents growth of 0.6 mb/d versus 2005. However, growth in 2H06 averaged 1.2 mb/d. For 2007, the non-OPEC forecast is revised down by 0.3 mb/d to 52.3 mb/d, adjustments being concentrated in the second half. Norway, Mexico, Canada, Cuba and Ecuador underpin the revision, the former two following government announcements of markedly lower expectations for 2007. Nonetheless, 2007 growth comes in at 1.4 mb/d, centred on the FSU, Africa and biofuels. In addition, OPEC gas liquids in 2007 repeat last year's 0.2 mb/d of growth.

- **Total OPEC crude supply** fell by 155 kb/d in December to 28.8 mb/d, after a 600 kb/d cut seen in November. Saudi Arabia, Iraq, Iran and Kuwait accounted for the bulk of December's reduction. Ongoing disruptions continued to impede supply from Iraq and Nigeria, where output averaged 1.8 mb/d and 2.2 mb/d respectively. Effective spare capacity stood at 2.5 mb/d when Indonesia, Iraq, Nigeria and Venezuela are excluded from a notional total of 3.8 mb/d.

- **OPEC-10 (excluding Iraq) output** edged lower, by 85 kb/d, in December to 27.0 mb/d. Supply stands 665 kb/d below September levels, the implied benchmark against which OPEC's original 1.2 mb/d cuts were to be measured. OPEC members have signalled further cuts in January and February export liftings, following continued mild northern hemisphere winter weather and an agreement reached at the December OPEC meeting in Abuja to cut supply by 500 kb/d from February. That meeting also agreed to admit Angola as a full OPEC member from January 2007.

- **The 'call on OPEC crude and stock change'** is revised down to 29.4 mb/d for 4Q06 on weaker, weather-related demand but is revised up for next year, notably in 2H07 , when lower non-OPEC supply estimates counteract more modest demand-side adjustments. In total, the call for 2007 now averages 28.6 mb/d compared with 28.4 mb/d last month, and shows a much flatter year-on-year trend than suggested in previous reports.



All world oil supply figures for December discussed in this report are IEA estimates. Estimates for OPEC countries, Alaska, Norway 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. 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. These aside, no contingency allowance for random events is subtracted from the supply forecast. While upside variations can occur, experience in recent years indicates that the random events listed above may cause supply losses of between 300 kb/d and 400 kb/d for non-OPEC supply each year.

Impending Change in Classification for Angola

With effect from the *OMR* of 13 February 2007, Angolan production will be reclassified within OPEC and excluded from the non-OPEC total, for the period January 2007 onwards. Historical data prior to January 2007 will continue to allocate Angolan production to non-OPEC. We will take the opportunity of Angola's entry to OPEC to standardise the currently different data series contained in the *Monthly Oil Data Service* and those of the *OMR's Annual Statistical Supplement*. From February, all historical data will show a primary OPEC total with OPEC *as it was comprised at the time in question*, and similarly for non-OPEC. In summary:

- Angolan supply will be allocated to the non-OPEC total through December 2006, but included within the OPEC aggregate from January 2007 onwards;
- Ecuador will be included in OPEC totals through 1992, but in non-OPEC thereafter;
- Gabon will be included in OPEC totals through 1994, but in non-OPEC thereafter.

To facilitate year-on-year comparisons, new secondary aggregates showing current OPEC and non-OPEC compositions extended back into history will be added to the databases.

OPEC

OPEC crude supply continued to decline in December, falling by 155 kb/d to 28.8 mb/d. This was the lowest supply level seen since May 2004. Reductions of 50-100 kb/d each came from Saudi Arabia, Iraq, Kuwait and Iran. Venezuela and the UAE are estimated to have seen supply move higher in December by 60-70 kb/d each. The reduction in overall OPEC supply pushed nominal spare capacity to 3.8 mb/d. However, excluding Indonesia, Iraq, Nigeria and Venezuela, which have faced physical or political impediments to raising production in recent months, effective spare capacity is a more modest 2.5 mb/d.

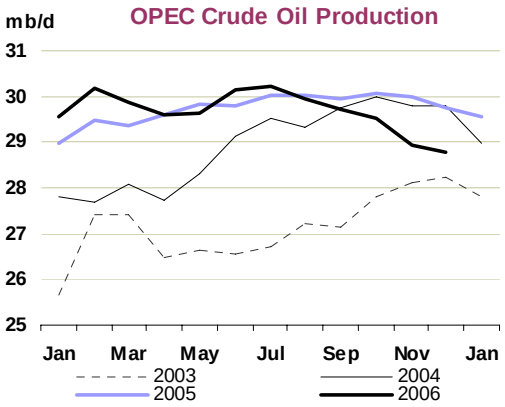
OPEC Crude Production[1]
(million barrels per day)

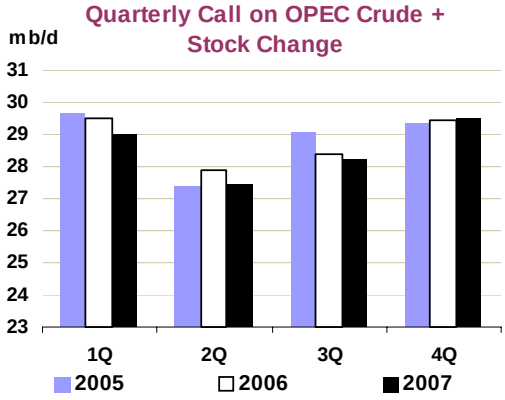
	1 July 2005 Target[2]	December 2006 Production	Sustainable Production Capacity[3]	Spare Capacity vs Dec 2006 Production	Production vs. Target
Algeria	0.89	1.34	1.39	0.05	0.45
Indonesia	1.45	0.86	0.95	0.10	-0.60
Iran	4.11	3.75	3.90	0.15	-0.36
Kuwait[4]	2.25	2.44	2.60	0.16	0.19
Libya	1.50	1.73	1.75	0.02	0.23
Nigeria[5]	2.31	2.19	2.47	0.28	-0.12
Qatar	0.73	0.80	0.85	0.05	0.07
Saudi Arabia[4]	9.10	8.80	10.80	2.00	-0.30
UAE	2.44	2.59	2.70	0.11	0.15
Venezuela[6]	3.22	2.50	2.70	0.20	-0.72
Subtotal	**28.00**	**26.99**	**30.11**	**3.12**	**-1.01**
Iraq		1.77	2.50	0.73	
Total		**28.76**	**32.61**	**3.85**	
(excluding Iraq, Nigeria, Venezuela., Indonesia				*2.54)*	

1 Angola joins OPEC effective 1 January 2007
2 Target production levels superseded by decision to cut output by 1.2 mb/d from 1 November 2006 and 0.5 mb/d from 1 February 2007
3 Capacity levels can be reached within 30 days and sustained for 90 days
4 Includes half of Neutral Zone Production
5 Nigeria excludes some 545 kb/d of shut-in capacity
6 Includes Orinoco extra-heavy oil assumed at 580 kb/d in December

OPEC-10 production excluding Iraq is estimated at 27.0 mb/d, some 85 kb/d lower than in November. This takes the cumulative reduction versus September production to 660 kb/d. However, recent export schedules for Middle East Gulf producers tend to suggest further cuts being enacted in January and February. OPEC ministers had earlier agreed cuts of 1.2 mb/d, implicitly relative to September output, effective from November. The organisation's mid-December meeting in Abuja, Nigeria then agreed to further curbs amounting to 500 kb/d, effective from 1 February. However, it is not entirely certain which baseline is being used for the most recently announced cuts. Ambiguity about prevailing production levels has tended to reinforce market scepticism as to whether February's announced cuts are genuinely incremental to those announced for November onwards. Rather, market sources have suggested that Abuja's announcement of further cuts was aimed at placing a floor under prices, but also at prompting better compliance with the original 1.2 mb/d curbs.

Further decisions reached in Abuja included the admission of Angola as a full OPEC member from 1 January 2007 (see below), the appointment of Abdulla Salem El Badri from Libya as the new OPEC Secretary General and confirmation that the next OPEC ordinary meeting will take place on 15 March in Vienna. Speculation over an emergency meeting ahead of that date was prompted by further easing in prices in the second week of January, but looks unlikely to materialise. So far, OPEC cuts have been mitigated in part by mild northern hemisphere winter weather. That said, recent announcements from non-OPEC producers, including Mexico and Norway, that 2007 supplies are now likely to prove lower than previously expected have acted to tighten the global oil balance for the second half of the year. The average call on OPEC crude and stock change in 2H07 in this report now stands at just under 29.0 mb/d, close to prevailing OPEC supply.





This report revises down **Nigerian** capacity to below 2.5 mb/d, reflecting some 545 kb/d of EA, Forcados and Escravos production shut in for a number of months due to security concerns in the Niger Delta. Earlier estimates had simply held capacity unchanged until the likely extent and duration of stoppages became clear. In fact, December saw average shut-in production rise by 75 kb/d from November to 630 kb/d, as temporary outages also affected the Bonny, Brass River and offshore Okono crude streams. However, offsetting increases elsewhere are believed to have held actual Nigerian supply relatively unchanged in December at 2.2 mb/d. Reports in late November that Shell personnel were being moved back to assess damage at EA and Forcados facilities have not, to date, been followed by news of an imminent production restart.

Iraqi crude supply in December (net of field reinjection and deliveries into storage) fell by 70 kb/d to 1.77 mb/d. Adverse weather delayed exports from Basrah, leaving a total export figure of 1.44 mb/d. Domestic crude use also slipped to 335 kb/d on reduced runs at the Baiji refinery following attacks on the workforce in early December. These were only reinstated in late December. Southern exports will likely remain disrupted in January with a scheduled shut-down at Basrah for four days from mid-January for the installation of new metering equipment. This work was deferred from December. However, an offset should come from renewed shipments from the Turkish port of Ceyhan. Having accumulated over 4 mb of crude in storage, Iraqi state marketer SOMO awarded a tender to lift a combined 3 mb of crude from Ceyhan to Total, Cepsa and ERG on 15 January.

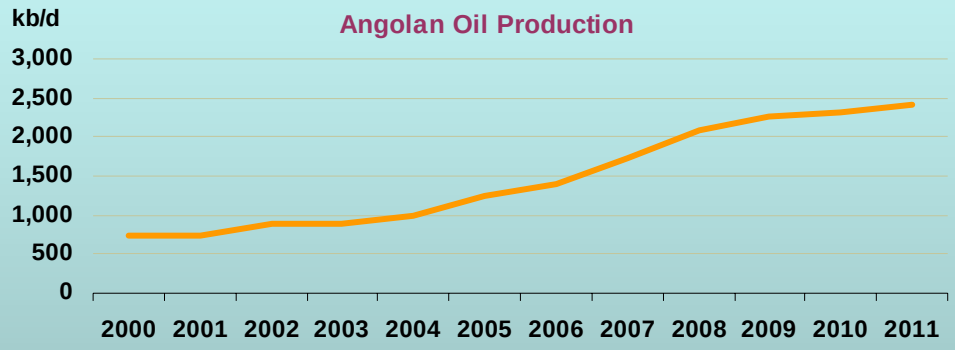
Saudi Arabian crude supply for December is assessed at 8.8 mb/d, 100 kb/d below November. Progressive reductions from Saudi Arabia are evident, not least in terms of export allocations to Asian customers. Reductions of up to 5% versus contract volumes for December steepened to 8-9% for January and over 10% for February. However, in late November Oil Minister Ali Naimi reiterated the

Kingdom did not wish to take on the role of swing producer, this implying that other producers might be lagging in their implementation of OPEC cuts. Furthermore, the Kingdom is pursuing a capacity expansion programme which should bear initial fruit with start up towards end-2007 at the 500 kb/d Khursaniyah field. Aramco has announced a 4.5% rise in development spending for 2007, at $2.51 billion, and a plan to boost active drilling rigs from 110 at end-2006 to 121 by the end of 2007. The Kingdom's longer-term plans see installed capacity reaching 12.5 mb/d by the end of the decade.

For its part, **Venezuela** in mid-January insisted that it was continuing to ask operators of the four Orinoco joint venture projects to rein-in production in line with output curbs totalling 138 kb/d from November and 57 kb/d from February. The implication is that compliance to date has been less than complete, after maintenance at the Sincor unit in November had initially trimmed supply by some 100 kb/d. There have been signs of renewed cuts by Orinoco operators in January however, against a backdrop of calls for widespread renationalisation of energy assets.

Angola Joins OPEC from 1 January 2007

At its 14 December meeting in Abuja, OPEC agreed to admit the organisation's first new member in over 30 years, with Angola taking up full membership from 1 January 2007. Nigeria, Ecuador and Gabon were the last new members to join in the early 1970s, although Ecuador and Gabon left in late 1992 and early 1995 respectively. First-quarter 2007 production by Angola of 1.54 mb/d, rising to 1.9 mb/d by end-year, should thus add 2% to a prevailing 34% market share for OPEC crude (measured in terms of global demand). More importantly however, Angola's production prior to OPEC membership was due to rise to 2.25 mb/d in 2009 and 2.4 mb/d in 2011 based on planned developments, net of field decline. The cartel has thus gathered into the fold one of the six main sources of likely non-OPEC growth over the coming five years. This in turn raises the possibility that future Angolan growth will be reined-in, depending upon OPEC price and market management imperatives. For now, Angolan production remains unconstrained, lying outside the 500 kb/d cuts agreed for February 2007.



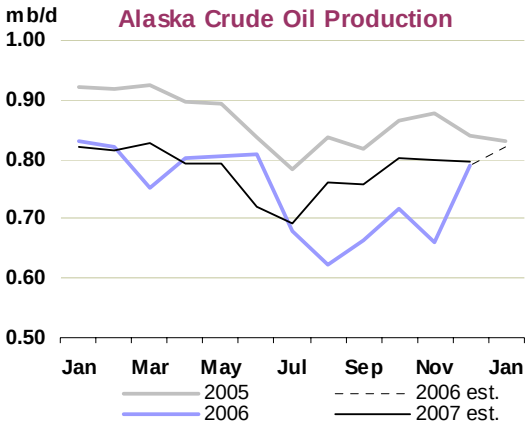
From an Angolan viewpoint, joining OPEC signals its arrival into the 'big league' of producers. At nine billion barrels of proven reserves, Angola stands 19th in the world rankings, while 2006 production of 1.4 mb/d makes it the world's 18th largest oil producer. There have also been suggestions that ultra-deepwater expansion will require higher prices in future, and that the country may be willing to hold output in check to realise the necessary investment flows. Moreover, it is likely that Angola may be given a certain period of grace, allowing production to rise in excess of a pre-determined level (perhaps 2 mb/d?) before becoming subject to future production curbs. Notwithstanding this latter point, rather than sustaining investment, OPEC membership in the short term could actually defer investment flows by foreign operating companies until such time as the basis for Angola's future participation in OPEC production management becomes clear.

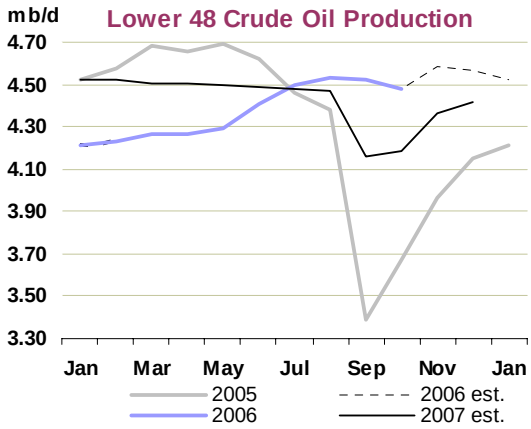
On OPEC's part, the notional control it hopes to exert over future Angolan expansion may prove to be just that. For the second time in some three months, there is a real prospect for OPEC of an unintended Catch 22 arising. Future attempts to curb output without involving Angola risk creating an impression of two-tier membership, while only exacerbating the currently-dormant disquiet over the inequities of the last official quota system. But including Angola in a cut-back programme just as companies there are putting finishing touches to new expansion projects may meet with resistance, potentially undermining OPEC credibility.

OECD

North America

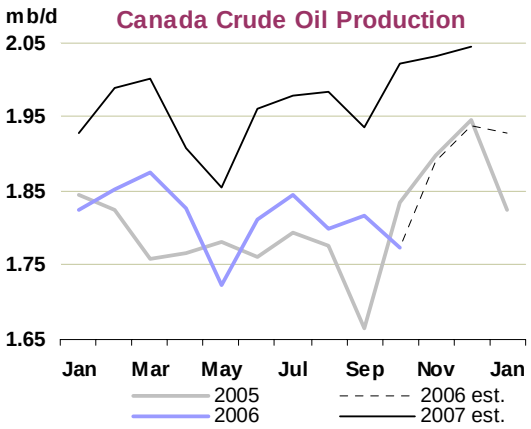
US – Alaska December actual, others estimated: Preliminary weekly data for December raise the US production baseline and this feeds through to add 30 kb/d to the 2007 production forecast. Adjustments affect crude oil only, but are assumed to be widespread. The US forecast now shows oil production growth gathering pace in 2007 to 135 kb/d, giving a total of 7.5 mb/d, of which 5.2 mb/d is crude oil. Liquids growth in 2006 amounted to only 70 kb/d after a hurricane-affected drop of 340 kb/d in 2005. Early-year output was adversely affected by Gulf of Mexico (GOM) facilities remaining shut after storms in late 2005, while autumn supply was dragged down by pipeline-related outages in Alaska. Recovery this year is expected to derive from Alaska, and from higher crude and NGL supply from the GOM. Key increments from the GOM in 2007 come from the Atlantic and Genghis Khan fields, with more significant expansions from the Thunder Horse, Tahiti and Blind Faith fields following in 2008.

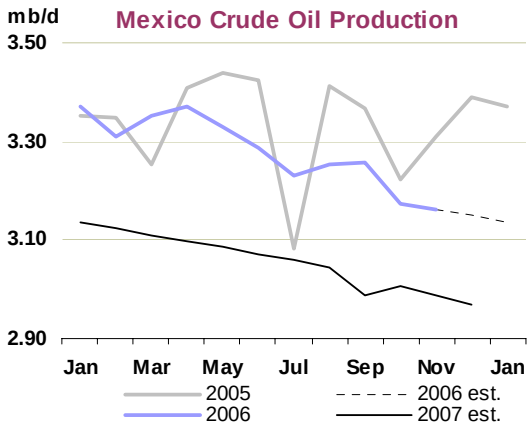




Canada – October actual: Unscheduled outages affecting both syncrude supply and offshore east coast production underpin another downward adjustment for Canadian supply. A defective water injection system at the Terra Nova field is likely to restrict output to 80 kb/d compared with a normal 110 kb/d between mid-December and mid-January. This latest mishap occurred only one month after Terra Nova had resumed production after extended outages and a refit running through the early part of 2006. A coker unit at the Syncrude Canada heavy oil upgrader will be out of action through end-January, reducing production to below 300 kb/d from more usual levels closer to 350 kb/d.

Total Canadian production is trimmed by 30 kb/d for 4Q06 and by 45 kb/d for 2007. Despite repeated production outages in 2006, growth of some 150 kb/d is now expected, taking total oil supply to 3.2 mb/d. In 2007, further growth of 165 kb/d is expected, taking total production to 3.36 mb/d. Growth comes from an assumed recovery in offshore Terra Nova production, allied to build-up in supply from the nearby White Rose field which is now approaching its 125 kb/d capacity. These two fields add a combined 100 kb/d to Canadian 2007 output. Synthetic crude expansion slows from 115 kb/d in 2006 to 30 kb/d in 2007 after Syncrude Canada's latest expansion. Albertan bitumen supply also increases by 115 kb/d in 2007 to reach 625 kb/d.



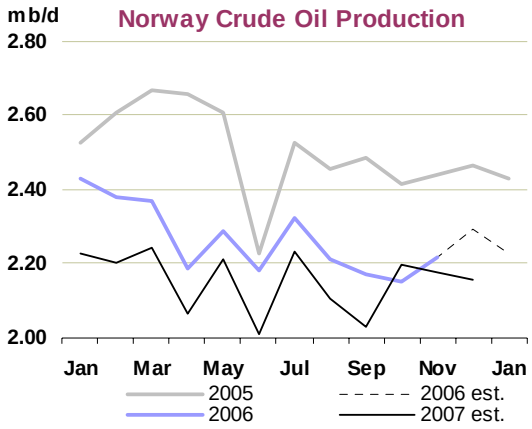


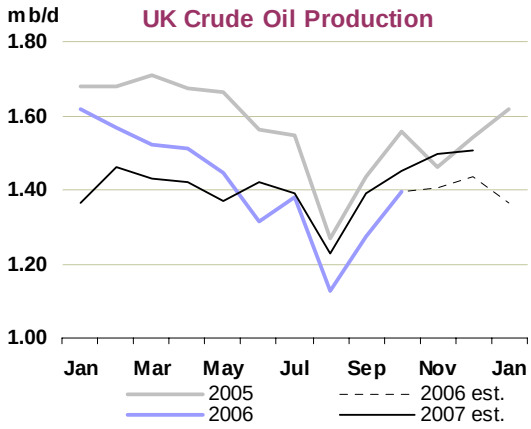
Mexico – November actual: We have made fundamental changes to the Mexican supply forecast this month. Oil production is now seen averaging 3.7 mb/d in 2006 (of which 3.3 mb/d is crude oil), a drop of 60 kb/d versus 2005. Data for November came in lower than expected and this leads to a 25 kb/d downward revision for 4Q06. Aside from lower baseline supply going into 2007 however, this year's supply is hit by what now appear more pessimistic expectations from within Mexico itself. Firstly, Pemex representatives after OPEC's Abuja meeting suggested lower exports were now likely with immediate effect due to ongoing decline at the baseload Cantarell field. Then Mexico's lower house of Congress agreed a spending bill allocating less money for 2007 to Pemex. We have cut 85 kb/d off the 2007 supply forecast, assuming spending to offset Cantarell decline is constrained. In this new, more pessimistic scenario, Mexican production falls by 200 kb/d to 3.5 mb/d.

North Sea

Norway – November actual, December provisional: In an echo of developments in Mexico, lower official production data for late 2006 and a sharply reduced government production forecast for 2007 have caused us to make a substantial revision to our own forecast of Norwegian supply. A 60 kb/d downward adjustment to December supply was augmented by news in late December that output from the Kvitebjorn gas and condensate field would be restricted to around half of normal volumes for up to five months. Precise reasons for the cut were not mentioned. Then in January the Norwegian Petroleum Directorate (NPD) released a revised medium-term oil and gas supply forecast through to 2011 in which total liquids supply for 2007 was revised down from 3.0 mb/d to 2.6 mb/d. However, this report's estimate for 2007 was already lower than prevailing NPD levels, at 2.8 mb/d. The NPD forecast did not include field details. However, our own re-examination of the latest status on a number of new field increments, namely Volve, Ormen Lange and Gulltop, resulted in deferral of new production by several months in each case.

Taken together, the lower late 2006 baseline, Kvitebjorn outage and new field deferrals cause us to reduce the 2007 Norwegian forecast by 145 kb/d (of which around 100 kb/d is crude). Total production now averages 2.7 mb/d in 2007 compared with 2.8 mb/d in 2006, with continued growth in gas liquids supply partially offsetting a sharper drop in crude production. While drilling and equipment delays hold the potential for 2007 supply to drop further, the *OMR* retains for now a flatter profile for Norwegian output than implied by NPD projections, with less of a dip in 2007 but, correspondingly, less of a rebound for 2008.

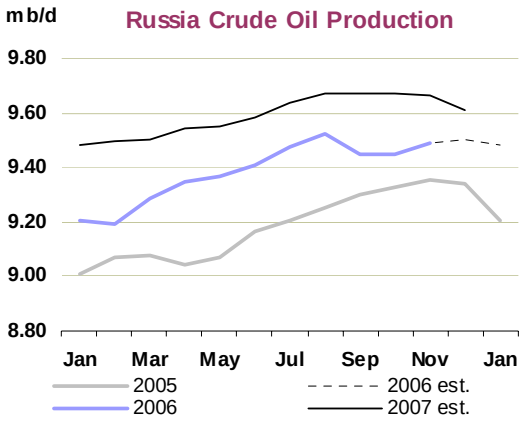




UK – October actual: Sharply lower January loading schedules for the main UK North Sea production systems suggest a downward revision of some 100 kb/d for this month's output. However, that is offset by what now appears likely to be a sharper build in production from the newly inaugurated Buzzard field. After several delays due to adverse weather conditions, Buzzard finally entered service in early January. Our latest forecast retains a conservative build-up, Buzzard oil production reaching around 100 kb/d by 2Q and 180 kb/d by 4Q07. However, earlier concerns that high hydrogen sulphide content might delay the build-up in supply still further now seem to have dissipated. Buzzard seems likely to temporarily stem a rate of decline in UK offshore crude output that has averaged 165 kb/d each year this decade. In 2007, offshore crude production is seen levelling off at 1.4 mb/d, or 1.7 mb/d if NGL and onshore crude are included.

Former Soviet Union (FSU)

Russia – November actual, December provisional: Final November production data and early indications for December again point to upward adjustments compared with this report's earlier projections. Output of crude and gas condensate reached 9.8 mb/d in November and an estimated 9.84 mb/d in December. Annual 2006 output now comes in at 9.7 mb/d. While yearly growth seems to have slipped to 1.6% in 4Q06, dragging down 2006 growth to 2.3% from 2.7% in 2005, there is now scope for the slow-down in Russian supply growth to level off. Forecast 2007 production therefore remains largely unchanged from last month at 9.9 mb/d, up by 2.3% on 2006.



Weaker fourth-quarter performance from Surgutneftegaz, TNK-BP and Rosneft, allied to several companies' revised expectations for 2007, led to downward revisions of some 60 kb/d for 2007 compared with last month's forecast. As an offset however, it is clear that we were previously being overly cautious regarding supply from the Sakhalin 1 project in Russia's Far East. Overshadowed by the delays affecting the neighbouring Sakhalin 2 project, and not least Gazprom's high profile takeover of a stake previously held by Shell, Sakhalin 1 output doubled to some 200 kb/d in December. Our earlier projections, mindful of the problems facing PSAs in general, had assumed 200 kb/d only from summer 2007. Upgraded expectations for Sakhalin 1 therefore counteract downward adjustments elsewhere, leaving the aggregate 2007 Russian forecast unchanged.

November's **net FSU exports** also exceeded expectations, rising by 270 kb/d despite earlier indications the December fall in Russian export duties might deter exporters in November. In the event, net exports reached 8.15 mb/d, after a two month dip in September and October. To some extent constrained shipments were in evidence, with oil products exports remaining unchanged and the gain in Transneft shipments from Russia restricted to a recovery in Druzhba pipeline deliveries into central Europe. However, a sharper than expected rise came from BTC pipeline deliveries to the Mediterranean, up by 210 kb/d in November, in line with an increase in offshore Azeri production. Early data indications support our earlier comments that December exports were likely to rise further as lower Russian export duties came into force.

FSU Net Exports of Crude & Petroleum Products
(million barrels per day)

	2004	2005	4Q2005	1Q2006	2Q2006	3Q2006	Sep 06	Oct 06	Nov 06	Latest month vs. Oct 06	Latest month vs. Nov 05
Crude											
Black Sea	2.20	2.27	2.23	2.25	2.26	2.27	2.15	2.14	2.12	-0.02	-0.21
Baltic	1.51	1.59	1.55	1.54	1.73	1.49	1.46	1.34	1.36	0.02	-0.23
Arctic/FarEast	0.25	0.19	0.17	0.10	0.11	0.20	0.20	0.21	0.17	-0.04	-0.04
BTC	0.00	0.00	0.00	0.00	0.01	0.22	0.22	0.25	0.46	0.21	0.46
Crude Seaborne	3.96	4.05	3.95	3.89	4.11	4.18	4.02	3.94	4.11	0.16	-0.02
Druzhba Pipeline	1.10	1.15	1.23	1.20	1.16	1.23	1.23	1.12	1.20	0.07	0.07
Other Routes	0.23	0.25	0.26	0.31	0.38	0.38	0.42	0.46	0.48	0.02	0.24
Total Crude Exports	5.29	5.45	5.44	5.39	5.65	5.80	5.67	5.53	5.79	0.26	0.29
Of Which: Transneft	3.76	4.04	4.07	4.05	4.23	4.16	4.10	3.78	3.88	0.11	-0.21
Products											
Fuel oil	0.90	0.93	1.04	0.87	1.05	0.94	0.88	0.95	0.94	-0.02	-0.03
Gasoil	0.84	0.87	0.95	1.01	0.95	0.94	0.94	0.92	0.92	0.00	0.09
Other Products	0.46	0.58	0.60	0.60	0.70	0.63	0.52	0.52	0.54	0.02	0.00
Total Product	2.19	2.38	2.58	2.47	2.69	2.50	2.34	2.40	2.40	0.00	0.06
Total Exports	7.48	7.83	8.02	7.87	8.34	8.30	8.02	7.92	8.18	0.26	0.35
Imports	0.01	0.02	0.02	0.03	0.03	0.05	0.06	0.04	0.03	-0.01	0.00
Net Exports	7.47	7.81	8.00	7.84	8.31	8.25	7.96	7.88	8.15	0.27	0.35

Sources: Petro-Logistics, IEA estimates
Note: Transneft data has been revised to exclude Russian CPC volumes.

Russian crude export schedules for January, allied to mild winter weather, initially suggested a further rise in overall exports in January. However, a brief shut-down of the Druzhba pipeline (see below) and Azerbaijan's curb on crude exports via Novorossiysk in early January both argue against any marked rise in FSU exports compared with December.

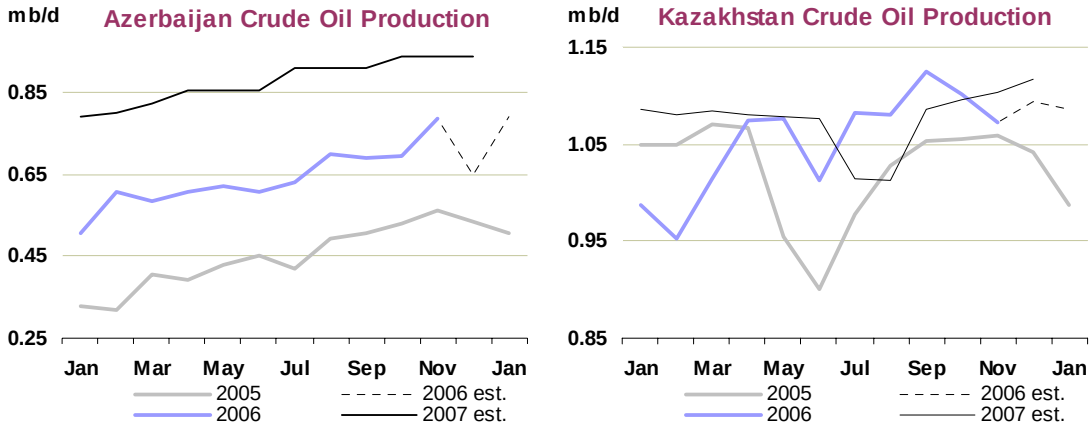
Russia Briefly Turns Off the Taps Again

January's Druzhba pipeline disruption arose after Belarus responded to Russia's ending of duty-free crude sales by imposing a $45/tonne transit fee for Russian crude deliveries to Central Europe crossing Belarus. Russia on the night of 7 January cut supplies to the 1.2 mb/d segment of Druzhba which feeds refineries in Poland, Germany, the Slovak and Czech Republics and Hungary after Belarus extracted crude in lieu of transit fee payment. However, pipeline supplies had resumed on 11 January after Belarus returned the crude and agreed to rescind the transit fee. Russia in turn has agreed to the phased introduction of duty on crude exports to Belarus.

While minor in actual impact, had the dispute proved longer lasting it would have forced Russian producers to shut-in production. Moreover, those Central European refiners with limited alternative sources of crude supply were facing the prospect of using more complex supply routes and tapping government stocks in order to sustain operations. While on the one hand, Russia's application of more market-oriented pricing for energy supplies to neighbouring countries is understandable, the use of heavy-handed supply disruption tactics when contract disputes arise raises real questions in Europe over Russia's reputation as a secure supplier.

Azerbaijan – November actual: Azeri supply estimates are revised up by 65 kb/d for November but down by 75 kb/d for December. Offshore production from the ACG (Azeri-Chirag-Guneshli) fields exceeded expectations in November, but a turbine problem on the central Azeri platform caused an eight day December shutdown of some 200 kb/d. December also saw the start-up of gas and condensate production at the Shah Deniz field. However, supplies were short-lived as a gas leak forced production to be shut-in again after only a week of operations. Shah Deniz supplies are likely to remain constrained through January, but are forecast to rise towards phase one output capacity of 20 kb/d of condensate by early 2008.

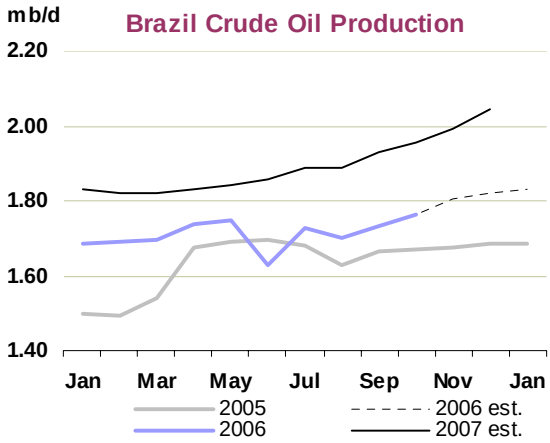
Higher-than-expected production from the ACG fields in late 2006 (despite the December shut-in) results in a 25 kb/d upward revision to 2007 Azerbaijan supply, focused in the early months of the year. Reports that gas reinjection at oilfields is being curbed to free up supply for local use are not, for the time being, believed to be having a material impact on oil production. After rising by 190 kb/d in 2006 to 645 kb/d, oil production this year should gain a further 235 kb/d to reach 880 kb/d.



Kazakhstan – November actual: Production of liquids at the Karachaganak field surged over 300 kb/d in November, underpinning a 45 kb/d upward revision compared with this report's earlier estimate. However, we have held Karachaganak production below 300 kb/d going forward until it becomes clear whether November merely represents a post-maintenance spike in production. In contrast, output from smaller fields came in below expectation, leading to a 10 kb/d downward adjustment for production through 2007. As was evident in 2006, production this year is expected to rise modestly, by some 30 kb/d, to 1.33 mb/d after much stronger increases in the first half of the decade. Karachaganak upside potential could eventually push the 2007 total higher. However, longer-term gains from Kazakhstan are likely to depend on progress at the much-delayed Kashagan field and expansion in output from Tengiz, which itself depends on a long-delayed CPC pipeline expansion.

Latin America

Several revisions accrue to the Latin America total this month which collectively knock 25 kb/d off the 2006 production estimate and 55 kb/d off 2007. There are, at best, infrequent reports available on heavy **Cuban** oil production. Earlier indications suggested that expansion took production close to 70 kb/d by mid-decade, with imminent prospects for further growth. However, a new government report cites 2006 production at less than 60 kb/d and we have revised down 2005-2007 production accordingly, with the 2007 estimate reduced by 25 kb/d to 55 kb/d. **Ecuador** too sees estimates revised down by 20 kb/d for the period from 4Q06 onwards after weaker-than-expected data for September and October. In all, Ecuadorean production remains stable in 2007 at some 535 kb/d.



The main driver of Latin American supply growth, however, remains **Brazil.** In this month's report revisions accruing to Brazil are minor, as long standing deferral of start-up at the Piranema project is offset by an earlier than expected start in January at new Espadarte facilities. Total Brazilian liquids production is expected to reach 2.3 mb/d in 2007 (including 400 kb/d of alcohol fuels and NGL) compared with 2.1 mb/d in 2006. Longer-term growth prospects however may be slipping, with news that floating production and storage facilities for the deepwater Jubarte and Roncador fields are unlikely to hit late-decade start dates.

Revisions to Non-OPEC Estimates

Revisions to Non-OPEC Oil Supply
(million barrels per day)

	Last Month's OMR				This Month's OMR				This Month vs. Last Month			
	2006	2007	06 v 05	07 v 06	2006	2007	06 v 05	07 v 06	2006	2007	06 v 05	07 v 06
North America	14.32	14.49	0.18	0.17	14.30	14.39	0.16	0.09	-0.02	-0.10	-0.02	-0.08
Europe	5.20	5.27	-0.40	0.06	5.20	5.13	-0.41	-0.07	-0.01	-0.14	-0.01	-0.14
Pacific	0.57	0.66	-0.01	0.08	0.57	0.66	-0.01	0.08	0.00	0.00	0.00	0.00
Total OECD	**20.09**	**20.42**	**-0.23**	**0.32**	**20.07**	**20.17**	**-0.26**	**0.11**	**-0.02**	**-0.24**	**-0.03**	**-0.22**
Former USSR	12.05	12.55	0.42	0.49	12.06	12.56	0.42	0.49	0.01	0.01	0.01	0.00
Europe	0.15	0.13	-0.01	-0.01	0.15	0.13	-0.01	-0.01	0.00	0.00	0.00	0.00
China	3.68	3.74	0.07	0.05	3.68	3.74	0.07	0.05	0.00	0.00	0.00	0.00
Other Asia	2.70	2.74	0.02	0.03	2.71	2.74	0.03	0.04	0.00	0.01	0.00	0.01
Latin America	4.43	4.64	0.13	0.20	4.41	4.58	0.12	0.17	-0.03	-0.05	-0.02	-0.03
Middle East	1.74	1.70	-0.12	-0.05	1.74	1.69	-0.12	-0.05	0.00	-0.01	0.00	-0.01
Africa	3.99	4.46	0.28	0.47	3.99	4.46	0.28	0.47	0.00	0.00	0.00	-0.01
Total Non-OECD	**28.75**	**29.95**	**0.78**	**1.20**	**28.74**	**29.90**	**0.77**	**1.16**	**-0.01**	**-0.05**	**-0.01**	**-0.04**
Processing Gains	1.90	1.92	0.04	0.02	1.90	1.92	0.04	0.02	0.00	0.00	0.00	0.00
Other Biofuels	0.18	0.34	0.06	0.17	0.17	0.34	0.06	0.16	-0.01	-0.01	-0.01	0.00
Total Non-OPEC	**50.92**	**52.63**	**0.65**	**1.70**	**50.88**	**52.33**	**0.61**	**1.45**	**-0.04**	**-0.30**	**-0.04**	**-0.25**

OMR = Oil Market Report

OECD STOCKS

Summary

- **Total OECD oil stocks** fell by 33 mb in November, on product stock declines in all three regions. This was most pronounced in North America and particularly in the US where it was only partly offset by a build in crude inventories. Total OECD stocks remain higher than one year ago, with the annual difference increasing to 41 mb, up from the 33 mb reported last month. Preliminary data for December show a net stock draw in all regions.

- **OECD total product inventories fell** by 38.6 mb in November, to 1,425 mb, or 11.9 mb higher than last year. This continues October's downward trend, although the magnitude has been tempered by a 23.8 mb upward revision to preliminary total stocks data. Nevertheless, combined data for October (revised) and November data (preliminary) show a total product stock draw of 70 mb, moving levels back within the five-year range.

- **OECD crude oil stocks rose** by 7.2 mb in November to 987 mb on a 4.2 mb crude stock build in North America. OECD Europe and Pacific saw gains of around 1.5 mb each, leaving crude stocks a net 36.6 mb higher than last year and still well above the five-year range.

Preliminary Industry Stock Change in November 2006 and Third Quarter 2006

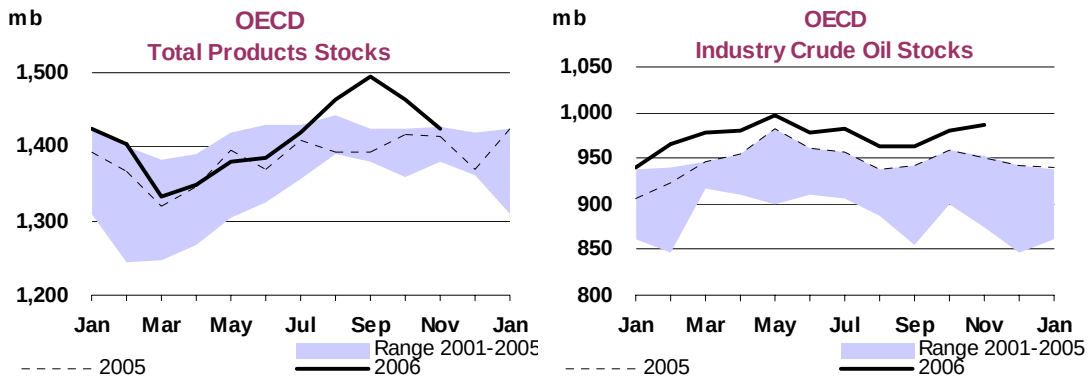
(million barrels per day)

	November (preliminary)				*Third Quarter 2006*			
	North America	Europe	Pacific	Total	North America	Europe	Pacific	Total
Crude Oil	**0.14**	**0.05**	**0.05**	**0.24**	**0.03**	**-0.12**	**-0.07**	**-0.15**
Gasoline	-0.15	0.02	0.00	-0.12	0.03	0.04	-0.01	0.06
Distillates	-0.35	-0.15	-0.14	-0.64	0.26	0.15	0.18	0.59
Residual Fuel Oil	0.00	-0.08	-0.05	-0.13	0.01	0.02	0.01	0.04
Other Products	-0.30	0.01	-0.11	-0.40	0.29	0.08	0.13	0.50
Total Products	**-0.79**	**-0.19**	**-0.31**	**-1.29**	**0.59**	**0.29**	**0.30**	**1.18**
Other Oils[1]	-0.06	-0.03	0.04	-0.05	0.16	0.03	0.02	0.21
Total Oil	**-0.71**	**-0.17**	**-0.21**	**-1.09**	**0.79**	**0.20**	**0.25**	**1.24**

1 Other oils includes NGLs, feedstocks, and other hydrocarbons.

- **Days of forward demand cover** for total OECD (industry) stocks stood at 54 days at the end of November, at parity with last month's reported level, but down from an upward-revised October level of 55 days.

- **Finalised data for October show an upward revision** of 23.8 mb for total industry stocks. This was mainly due to a change in North American product stocks (+9.7 mb, of which two thirds was distillate) and a 12.4 mb increase in European crude stocks. This correction means that there was a 24.0 mb decline in total OECD industry stocks in October rather than the 40 mb shown by last month's preliminary data (September data were also revised up by 7.3 mb).



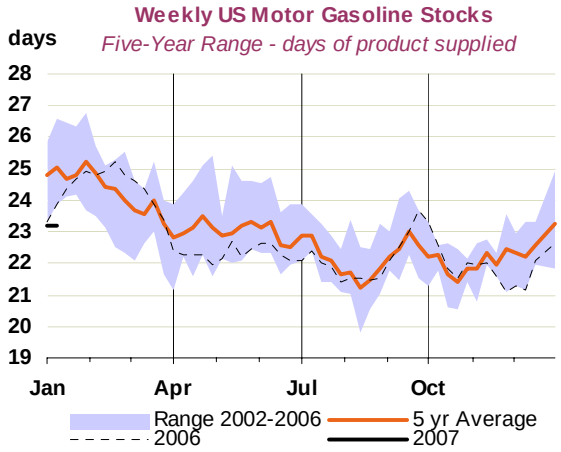
OECD Industry Stock Changes in November 2006

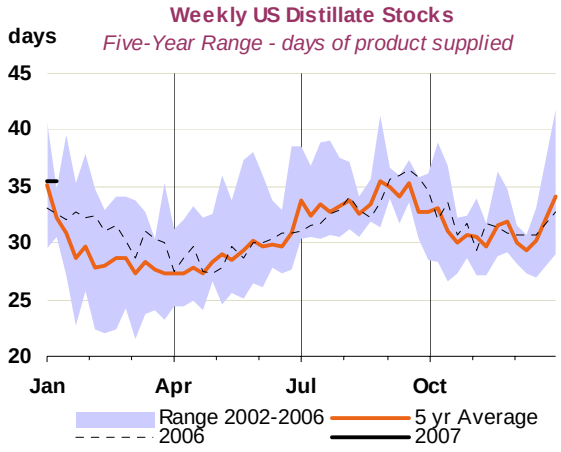
OECD North America

North American crude oil inventories increased by 4.2 mb in November to 471.4 mb due to a crude stock build of 5.1 mb in the US, leaving North American crude stocks 14 mb higher year-on-year. Mexico saw a slight drop in crude stocks of 0.9 mb. NYMEX WTI's near-month contango widened slightly in the first half of November, offering a strong return to tank owners and a financial incentive to hold stocks. At the same time, refinery runs only inched upwards slowly due to ongoing maintenance.

This trend reversed in December, with weekly data showing a 21.6 mb fall in US crude stocks. Although refinery crude throughputs only edged upwards another 116 kb/d, crude imports fell by 270 kb/d. The lower influx may be read as evidence of lower OPEC production, but was at least partly due to problems in the Houston and Calcasieu shipping channels – key routes to major regional refineries – where crude stocks fell by 5.1 mb. Since their mid-November high of 341 mb, US crude stocks fell to only 318 mb at end-December, a steeper tumble than is usual at this time of year, and a level that is usually associated with a switch in the forward spread from contango to backwardation. US crude stocks thus end the year 3.3 mb lower than one year ago, or, at 20 days, one day higher than the five-year average on a preliminary basis. This contrasts with the end of 2005 when they stood at 21 days.

North American product stocks fell by 23.6 mb in November, to 677.5 mb, or only 1.4 mb higher than end-November last year. This reflected the tail-end of a heavier-than-expected and protracted refinery maintenance season. Most of the fall stemmed from the US, and half of its 22.2 mb product stock draw was in middle distillates (-11 mb). US gasoline inventories also fell by 4.2 mb, while 'other products' decreased by 7.7 mb. In Mexico, total product inventories fell by 1.4 mb. Broken down, Mexican 'other products' fell by 1.2 mb, and residual fuel by 600 kb, somewhat balanced by a middle distillate build of 500 kb.





In December, US-50 product stocks increased by 2.2 mb on higher refinery throughputs and weak demand, in part due to the unusually warm weather. Based upon weekly data, total product stocks ended the year at 707.7 mb, or 19.8 mb higher than at the end of hurricane-affected 2005. A strong month-on-month increase in gasoline inventory levels (+10.4 mb) and total distillate stocks (+4.7 mb) outweighed draws in propane/propylene (-7.7 mb), 'other oils' (-6.1 mb) and unfinished oils (-1.2 mb).

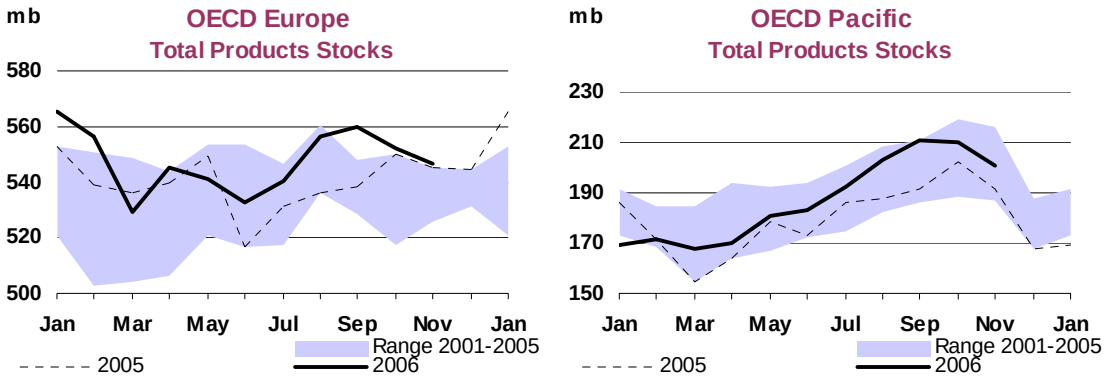
In terms of forward demand, gasoline stocks in the US stood at 23 days of cover at the end of the year, which is two days higher than the end of November, and one day higher than the end of 2005. However, it is two days lower than the five-year average. Total distillate stocks represented 33 days of cover at the end of December, which was also two days higher than end-November, and one day higher than the end of 2005. It is also slightly higher than the five-year average.

OECD Europe

European crude oil stocks increased by 1.5 mb in November to 336 mb, or 9.5 mb higher than the previous year. Builds were seen in the Netherlands (+2.6 mb) and Italy (+2.2 mb), but declined in

Germany (-2.6 mb). The crude stock gain came despite an increase in refinery throughputs of 300 kb/d. In early October, WTI fell to a discount to Dated Brent, in theory discouraging the flow of Brent-related crude grades across the Atlantic. December Euroilstock data for the EU-16 showed a crude draw of 11.3 mb, leaving crude stocks 17.3 mb higher than at the end of 2005.

European product inventories fell by 5.8 mb to 546.4 mb in November, or just 1 mb higher year-on-year. Most of this draw was in middle distillates, which fell by 4.4 mb, much of it in the Netherlands (-3.7 mb). Meanwhile, a lesser draw in European residual fuel oil inventories of 2.5 mb was somewhat balanced by gains in gasoline (+700 kb) and 'other products' (+400 kb). With the exception of the UK, where total products fell by 300 kb, the other major European countries all saw November product stocks rise. France registered an increase of 2.7 mb, Italy 600 kb and Germany 100 kb.



Preliminary Euroilstock December data for the EU-16 showed total product inventories rising by 5.6 mb on the return of refineries from maintenance, and the warm weather reducing demand for heating oil. In Germany, consumer heating oil stocks fell to 64% of capacity at the end of December. One month ago, they had been at a relatively high 68%, after end-users stocked up ahead of an increase in VAT to be introduced from early 2007. Combined December Euroilstock crude and product stock data showed a total draw of 5.7 mb.

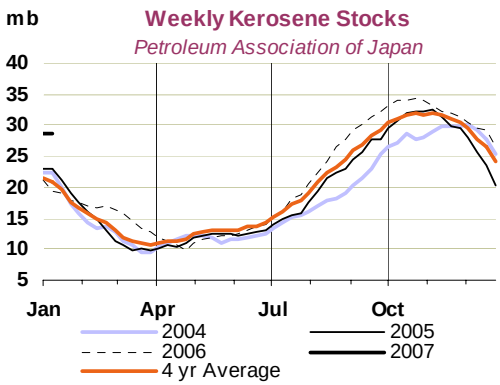
OECD Pacific

In the Pacific, crude oil stocks edged up by 1.6 mb to 179 mb in November, or 13 mb higher year-on-year. The increase was due to a surge in Korean crude stocks of 4.1 mb, while Japanese crude inventories fell by 1.8 mb. Both countries saw their refinery throughputs increase in November, more noticeably in Japan, where runs rose by 500 kb/d. According to weekly Petroleum Association of Japan (PAJ) figures, onshore crude stocks fell by a further 5 mb in December, as crude inputs into refineries rose by another 250 kb/d.

Pacific product inventories fell by 9.2 mb to 201 mb in November, to stand 10 mb higher than one year ago. In Japan, total product stocks were down by 6.2 mb on 3 mb draws both in middle distillates and 'other products'. Gasoline and residual fuel stocks were more or less unchanged. In Korea, a total product stock draw of 2.4 mb was due to declines in residual fuel oil (-1.3 mb) and middle distillate levels (-0.9 mb).

Weekly data from the PAJ show that, in December, total finished Japanese product stocks continued to fall, drawing by 6.4 mb to 95 mb. Most of this was due to tumbling kerosene stocks, which shed 4.6 mb to end the year at 27 mb.

In Northeast Asia, temperatures have not been as unusually warm as in Europe and North America. This end-year figure is nevertheless some 7 mb higher than at the end of 2005, due to a counter-seasonal rise in stocks in the last week of December. Naphtha stocks also fell by 1.4 mb in December on strong demand from splitters.



OECD Inventory Position at End-November and Revisions to Preliminary Data

OECD total industry stocks stood at 2,712 mb at the end of November, a fall of 33 mb from October and 41 mb higher year-on-year. This year-on-year increase is higher than last month's report, when the difference was 33 mb. Total product stocks rose 12 mb on the year, while crude levels were 37 mb higher. On a regional basis, total North American stocks are 14 mb over 2005 equivalents; European levels are 5 mb higher, while total Pacific oil stocks are 21 mb up on the year.

Year-on-Year OECD Industry Stock Comparisons for November 2006

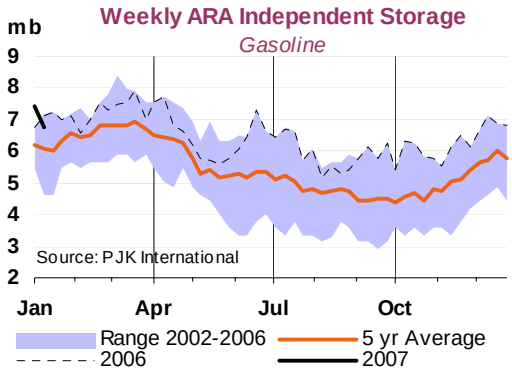
	(million barrels)					*(Days of Forward Demand)*			
	North America	Europe	Pacific	Total		North America	Europe	Pacific	Total
Crude Oil	**14.0**	**9.5**	**13.1**	**36.6**	**Total Oil**	**0.3**	**0.7**	**3.3**	**1.0**
Total Products	1.4	1.0	9.5	11.9	*Versus 2004*	3.9	0.8	-1.3	2.0
Other Oils[1]	-0.9	-5.6	-1.2	-7.7	*Versus 2003*	3.6	0.4	2.6	2.4
Total Oil	**14.5**	**4.9**	**21.4**	**40.7**	**Total Products**	**-0.1**	**0.3**	**1.5**	**0.3**
Versus 2004	89.1	3.3	-14.3	78.1	*Versus 2004*	1.0	1.5	0.1	1.0
Versus 2003	99.3	13.7	21.3	134.2	*Versus 2003*	0.8	0.3	0.6	0.6

1 Other oils includes NGLs, feedstocks, and other hydrocarbons.

Revisions to October stock data show a sizeable upward hike of 23.8 mb meaning that that total crude and product stocks fell by only 24.0 mb in October rather than the 40 mb draw originally reported (September data were also revised up by 7.3 mb). This is more or less equally due to crude and product stocks, which were revised upwards by 15.6 mb and 12.4 mb respectively. Balancing this, 'other oils' were revised downwards by 4.1 mb. On a regional basis, the product revision was mostly due to North American product stocks, which were hiked by 9.7 mb. European crude stocks were revised upwards by 12.4 mb, of which around half was in the UK, where refinery runs were lower than expected in October.

Recent Developments in ARA Independent Storage

Total oil product inventories held in independent storage in the Amsterdam-Rotterdam-Antwerp (ARA) area rose by 1.6 mb in December to 27.1 mb, according to consultant PJK International. Gains in gasoline, gas oil and fuel oil outweighed draws in jet/kerosene and naphtha inventory levels. Much of the month saw unfavourable arbitrage economics to send gasoline to the US, which in combination with higher runs caused stocks to rise. Meanwhile, warmer weather helped gas oil stocks to increase, while German consumers drew on their domestic stocks.



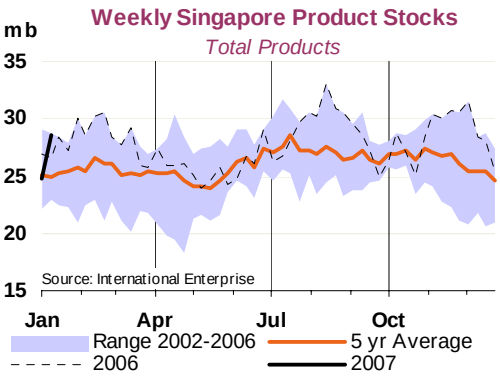
Fuel oil stocks, which gained 660 kb last month, stood at 3.7 mb at end-December. News reports of several fixtures to Singapore underline the growing premium of Singapore high-sulphur fuel oil to Rotterdam prices. The spread doubled in December and has doubled again in the first 10 days of January to around $10/bbl, which resulted in several reported fixings to the east.

Recent Developments in Singapore Stocks

According to International Enterprise, total oil product stocks held in Singapore fell by 5.7 mb in December to 25 mb.

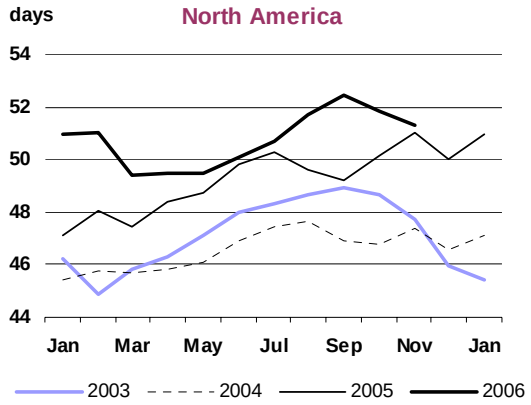
A residual fuel oil stock draw of 4.0 mb provided most of the momentum, but light and middle distillates also fell by 780 kb and 930 kb respectively.

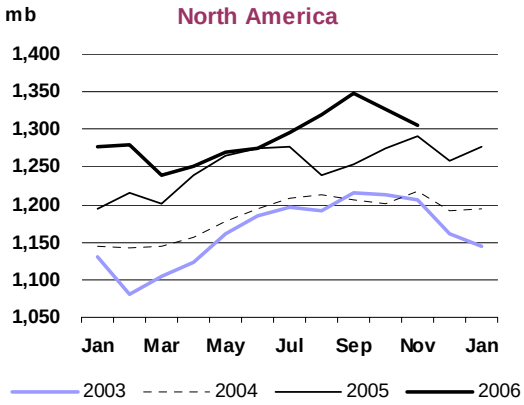
With strong gains in early January however, most noticeably in residual fuel oil, all three products start 2007 at the upper end of the five-year average range.

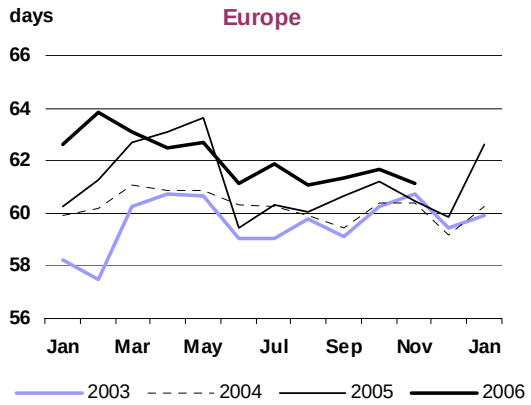


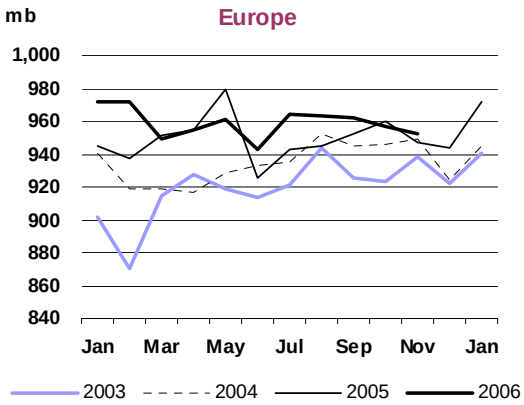
Regional OECD End-of-Month Industry Stocks

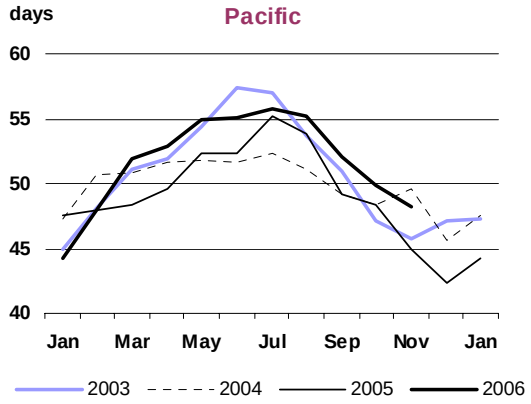
(in days of forward demand and millions of barrels of total oils)

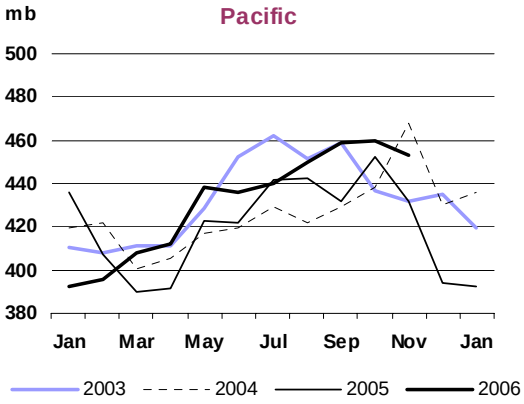


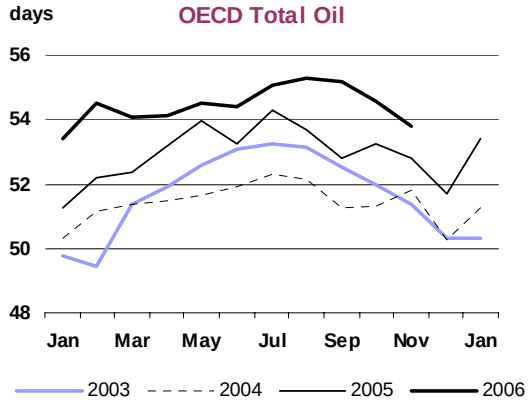


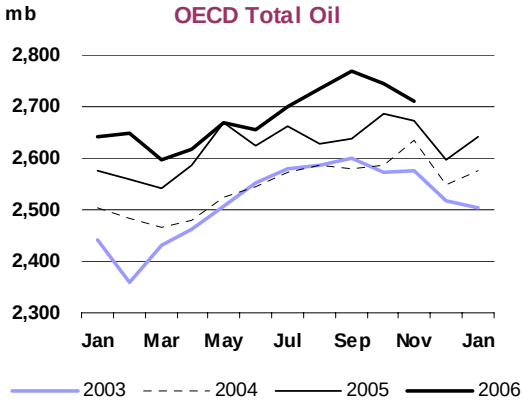












PRICES

Summary

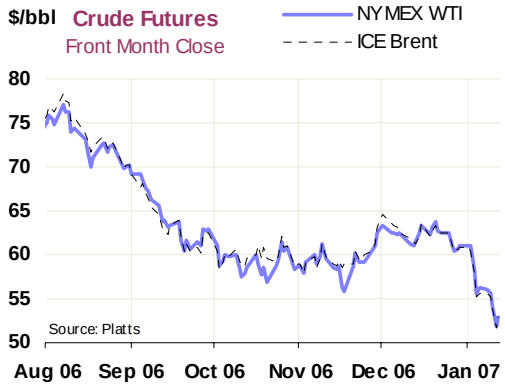
- **Oil prices fell to 20-month lows in early January** after trading in a $60-65/bbl range in December. Unusually warm weather reduced demand, particularly in the Atlantic Basin, while OPEC output in December was marginally below November levels. Although further OPEC cuts have been proposed, there seems to be an offsetting price effect from higher spare capacity. A downturn in commodity markets appears to reflect a change in investor sentiment, but this could change if OPEC cuts result in a further tightening of crude stocks and a backwardated market.

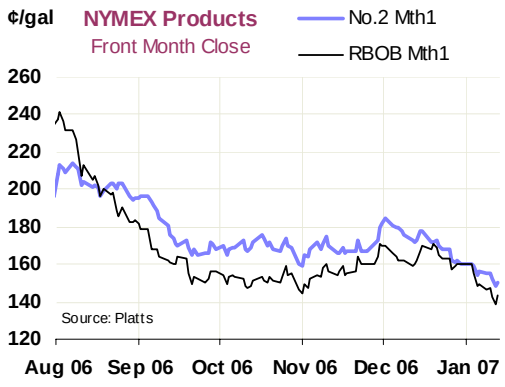
- **Benchmark crude prices generally followed the downward trend** and a narrowing Brent-Dubai spread made Atlantic Basin crudes more attractive for Asian buyers. Urals crude discounts to Brent narrowed on the Druzhba outages in January, while the decline in Middle Eastern crudes was stemmed by announced OPEC cuts.

- **Refining margins fell to unusually low levels** in December as crude outperformed products in a downward trending market. Brent hydroskimming returns fell to their lowest level in at least ten years. But in January, this trend was reversed, and refining margins have recovered due to crude's relative weakness.

- **Product prices declined across the board**, but January's crude fall meant cracks to benchmark crudes were steady or rose in January. Distillate cracks remained flat on the warm temperatures, while gasoline spreads edged up. Naphtha and fuel oil cracks saw strong gains due to a tighter market.

- **Long-haul crude freight rates remained depressed** on weak demand due to warm temperatures and lower OPEC loadings. Tanker rates for smaller Aframax and Suezmax vessels in contrast gained on Turkish Straits delays and a flurry of fixings in the Baltic and Caribbean. Clean rates showed little change, as January declines offset increases in December.





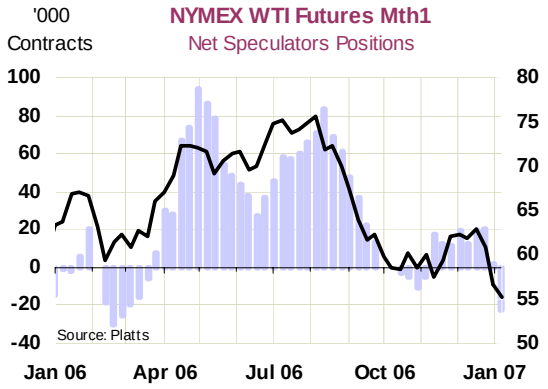
Overview

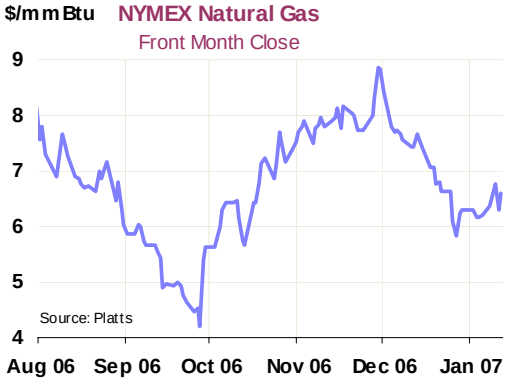
After weakening over the course of December, oil prices fell as much as 15% in early January, to levels last seen in late May 2005. Weaker demand on unusually warm weather led to product stock builds in the Atlantic Basin, and the combination of OPEC cuts and expected non-OPEC supply growth have been the main drivers behind lower prices. In addition, a lower dollar and a general downturn in commodity markets and investor confidence have contributed to weaker sentiment.

Oil demand in the first half of this winter has clearly been dented by the mild temperatures. But it is too early to conclude that the current El Niño conditions in the Pacific Ocean will lead this to be the warmest winter on record: January and February could still be cold. At the time of writing, an ice storm and a cold front had hit parts of the US, bolstering heating demand.

Notably though, prices have failed to respond to countervailing and renewed efforts by OPEC to stem the downward trend. The group announced a 500 kb/d output reduction from 1 February at its 14 December meeting in Abuja. This follows on from a previous 1.2 mb/d reduction announced in late October.

Prices appeared not to respond to OPEC action, nor to other supply-related developments such as a half-week cut-off of FSU crude supplies through the Druzhba pipeline into Central and Eastern Europe, or a little-reported (but substantial) downward revision to the Norwegian Government's forecast for 2007 oil production. The lack of upside price response to these developments in part reflects confidence that there is spare capacity in the system, but also that there have been offsetting demand-side developments. Ironically, the deeper OPEC cuts, the higher the rise in confidence that there is marketable spare capacity in the system. However, at the end of the day, this will only act as a partial offset if recent tightening stock trends persist. Further, we note that effective spare capacity remains historically low and that it could be argued that conditions in some of the world's geopolitical hotspots have been deteriorating.





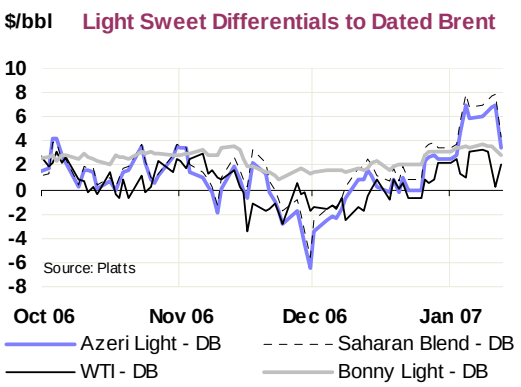
There have been other, less visible, price influences. Commodity markets in general have weakened, with the price of copper falling to a nine-month low in early January. Some blame this on expectations of an economic slowdown, while others put it down to growing copper supplies. Much may also be due to commodity index funds (and other investors) simply rebalancing their portfolios, reducing their energy and metals holdings. Given the sustained contango in crude futures, long-only strategies are not profitable and well-known commodity index funds have fallen during last year. Further, the recent weakening of the dollar may have had a short-term influence.

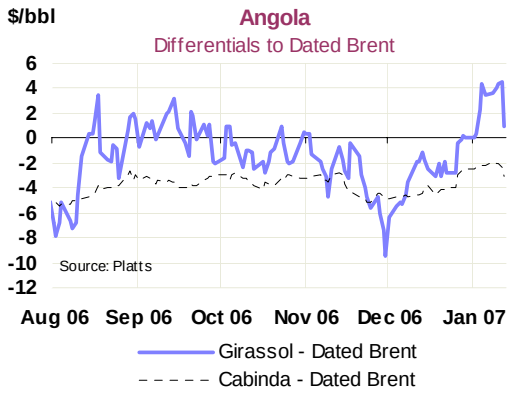
Certainly the first week of January, in which prices plummeted, saw the non-commercial holdings in NYMEX WTI swing to a net-short position for the first time since early November, even though overall open interest in NYMEX futures has actually risen slightly. However, with a large proportion of fund trades taking place in the *over-the-counter* (OTC) market, NYMEX open interest may not necessarily be a good barometer of trends in fund activity. If OPEC cuts (and other factors) do eventually succeed in tightening prompt supplies, this may eventually lead the futures markets to swing back into backwardation. This in turn could enhance returns to commodity investors who would then buy forward at a cheaper price and sell a few months later at a higher spot level.

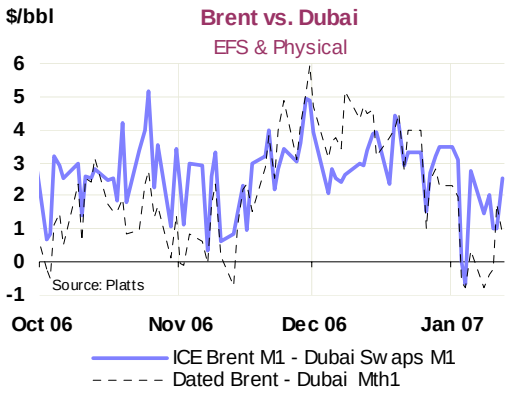
Spot Crude Oil Prices

Besides the general downward trend, crude prices were most affected by the counter-seasonal decline in interest for grades with high middle distillate yields due to prevailing warm temperatures. Refiners in the US, in particular, appear to be showing a preference for crudes with a high gasoline yield ahead of the mogas stock building season. A strengthening of fuel oil cracks due to crude's weakness since early January is also noteworthy. Depressed or, in the case of many simple plants, negative refining margins in December also reduced demand for crude.

In terms of spot oil trade, two factors are of key significance. Crude futures have declined strongly, while announcements of OPEC cuts have stemmed declines in Dubai and other Middle Eastern grades. As a consequence, a flurry of extra-regional crude deals has been reported as Brent/Dubai spreads narrowed, making the arbitrage from the Atlantic Basin to Asia attractive.







Asian refiners have been showing greater interest in North Sea and African grades, raising premia against Dated Brent. This effect has been exacerbated by German and other buyers unusually stepping into the same market after the Belarus/Russia spat cut exports briefly into Central and Eastern Europe. In the North Sea, an anticipated surge in physical Brent loadings in February has seen competing light sweets rise in value. This is also true for Forties, where the inclusion of the new Buzzard stream has passed without the feared impact on differentials.

US refiners too, according to tanker loadings, appear to be drawing in higher volumes of West African crude. Girassol, an Angolan heavy sweet suitable for fuel oil and to a lesser extent gasoline production, has seen its differential to Dated Brent rise a spectacular $14/bbl into strong positive territory since early December, on both stronger Chinese and US buying.

Strong reported Asian interest in competing Mediterranean crudes Saharan Blend and Azeri Light has seen their premia rise relative to WAF crudes. Compared with regional Asian sweet marker Tapis, all of these alternative sweet crudes look attractive. As regards long-haul imports, market news has also indicated Asian refiners buying Latin American grades as WTI weakened, making crudes from the region relatively cheap.

Regarding sourer grades, until the temporary cut-off of crude through the Druzhba pipeline, Urals was at a significant discount to Oman and Dubai, making it competitive in Asia. Urals Med gained support from lengthening delays through the Turkish Straits and loading problems at the Black Sea port of Novorossiysk, though lower volumes could be compensated by a 3 mb Kirkuk tender from Ceyhan in mid-January.

Spot Crude Oil Prices and Differentials

(monthly and weekly averages, $/bbl)

	Oct	Nov	Dec	Dec-Nov Avg Change	%	Week Commencing: 11 Dec	18 Dec	25 Dec	01 Jan	08 Jan
Crudes										
Dated Brent	57.79	58.92	62.32	3.41	5.8	62.41	62.41	59.59	55.70	52.00
Brent (Asia) Mth1 adjusted	60.70	60.31	62.85	2.54	4.2	62.37	62.79	61.49	59.03	55.32
WTI (Cushing) Mth1 adjusted	58.82	59.03	61.96	2.93	5.0	61.89	62.39	60.75	56.54	54.07
Urals (Northwest Europe)	55.31	55.51	57.48	1.98	3.6	57.56	57.32	55.49	52.01	49.09
Urals (Mediterranean)	55.68	55.95	57.95	2.00	3.6	58.27	57.64	56.02	52.75	49.53
Dubai Mth1 adjusted	56.42	56.72	58.68	1.97	3.5	58.15	58.61	57.43	55.07	51.77
Dubai Swaps Mth1 adjusted	57.27	57.28	59.21	1.93	3.4	58.65	59.18	58.07	55.54	52.21
Minas (Dated)	55.02	56.93	62.54	5.61	9.9	61.44	63.19	63.78	60.30	55.44
Tapis (Dated)	62.69	61.72	65.54	3.82	6.2	65.45	66.21	65.19	61.49	58.57
Differential to Dated Brent										
WTI (Cushing) Mth1 adjusted	1.03	0.11	-0.37	-0.48		-0.53	-0.02	1.16	0.84	2.07
Urals (Mediterranean)	-2.12	-2.97	-4.38	-1.41		-4.15	-4.77	-3.57	-2.96	-2.47
Urals (Northwest Europe)	-2.49	-3.41	-4.84	-1.43		-4.86	-5.09	-4.10	-3.70	-2.91
Dubai Mth1 adjusted - Dated Brent	-1.37	-2.20	-3.64	-1.44		-4.26	-3.80	-2.16	-0.63	-0.23
Dubai Swaps - Brent Asia	-3.43	-3.03	-3.63	-0.60		-3.71	-3.62	-3.43	-3.49	-3.11
Tapis (Dated)	4.90	2.80	3.22	0.42		3.03	3.80	5.61	5.79	6.57
Prompt Month Differential										
Forward Cash Brent Mth1-Mth2 adj.	-1.18	-1.19	-0.84	0.35		-0.74	-0.90	-1.00	-0.94	-0.94
Forward WTI Cushing Mth1-Mth2 adj	-1.68	-1.81	-0.96	0.86		-0.86	-0.53	-1.15	-1.02	-0.98

In the US, Gulf Coast benchmark Mars's discount to WTI narrowed on the latter's weakness, despite a near-emptying of the Louisiana Offshore Oil Port's storage tanks for maintenance, which left the region awash with Mars. A sharp decline in US crude stocks in December (-22 mb), and ongoing warm weather could indicate a shift back to a greater focus on crude inventories and prices. But much of this stock draw has been on the US West Coast (PADD 5), tightening the market there, as reflected in ANS's relative gain versus WTI.

Delivered Crude Prices in October

Average delivered crude prices in IEA countries dropped by $5.80/bbl to $56.93/bbl in October, following the $6.88/bbl decline in September. The October level was also slightly lower than the $57.01/bbl a year ago. The CIF price in North America fell by $6.09 month-on-month as refiners in the region paid $54.25/bbl in October, well below the $56.32 they paid in October last year. On average, IEA countries in Europe paid $56.88/bbl or $4.82/bbl less than in September. In the OECD Pacific, the price of delivered crude dropped by $7.11/bbl to $61.58/bbl.

Refining Margins

In December, refining margins fell to lower levels in all regions. Crude gains outpaced products on weaker-than-expected demand. Brent hydroskimming in Northwest Europe was particularly weak, with margins falling to their lowest in at least ten years. In late December, even Brent cracking briefly fell into negative territory. US Gulf Coast light sweet cracking margins (Brent and LLS) were also very weak in December. In fact, the only region to see any strength was the US West Coast, where refinery throughputs rose by some 200 kb/d after the end of maintenance, albeit from a below-average level.

Selected Refining Margins in Major Refining Centres

($/bbl)

		Monthly Average			Change	Week Ending:				
		Oct 06	Nov 06	Dec 06	Dec 06-Nov 06	15 Dec	22 Dec	29 Dec	05 Jan	12 Jan
NW Europe	Brent (Cracking)	2.43	2.25	0.31	-1.94	0.35	-0.26	1.13	2.90	4.02
	Urals (Cracking)	4.15	4.46	4.38	-0.07	4.51	4.43	5.02	5.67	5.93
	Brent (Hydroskimming)	-2.05	-2.67	-5.39	-2.72	-5.36	-6.06	-4.59	-2.39	-0.60
	Urals (Hydroskimming)	-1.67	-1.81	-2.89	-1.08	-2.63	-3.16	-2.30	-1.32	-0.25
Mediterranean	Es Sider (Cracking)	1.31	2.80	1.66	-1.14	1.45	1.21	1.32	1.92	3.09
	Urals (Cracking)	3.45	4.03	3.88	-0.14	3.77	4.10	4.14	4.67	5.51
	Es Sider (Hydroskimming)	-3.99	-3.00	-4.80	-1.80	-5.00	-5.29	-4.96	-3.90	-2.13
	Urals (Hydroskimming)	-2.89	-2.90	-3.88	-0.98	-4.02	-3.70	-3.33	-2.35	-0.57
US Gulf Coast	Brent (Cracking)	-2.88	-2.20	-4.47	-2.27	-4.36	-4.24	-4.12	-3.26	-2.62
	LLS (Cracking)	1.46	0.84	-0.99	-1.83	-0.66	-0.96	-1.39	-1.44	-1.06
	Mars (Cracking)	1.62	0.98	0.05	-0.92	-0.40	0.98	0.68	0.39	0.69
	Mars (Coking)	7.59	7.61	7.04	-0.58	6.81	7.89	7.38	6.71	5.97
	Maya (Coking)	8.56	9.91	10.24	0.33	10.41	10.74	9.77	9.45	8.59
US West Coast	ANS (Cracking)	4.56	7.83	5.28	-2.55	4.43	2.70	4.54	6.78	6.21
	Kern (Cracking)	6.14	7.21	3.87	-3.34	3.74	-0.16	2.46	5.85	6.43
	Oman (Cracking)	-1.82	1.36	1.08	-0.28	1.01	-1.05	0.42	2.80	2.50
	Kern (Coking)	14.73	18.12	15.93	-2.19	15.45	14.55	16.89	18.15	16.88
Singapore	Dubai (Hydroskimming)	-2.71	-3.97	-4.39	-0.41	-4.09	-4.07	-3.70	-3.32	-0.41
	Tapis (Hydroskimming)	-5.74	-4.77	-5.85	-1.07	-5.91	-6.11	-6.23	-5.79	-3.91
	Dubai (Hydrocracking)	1.00	0.42	0.63	0.21	1.04	1.06	1.10	1.16	3.20
	Tapis (Hydrocracking)	-2.05	-0.82	-1.92	-1.09	-1.87	-2.13	-2.40	-1.99	-0.40
China	Cabinda (Hydroskimming)	-5.89	-6.52	-6.97	-0.45	-7.03	-6.88	-6.36	-5.13	-2.77
	Daqing (Hydroskimming)	-7.15	-8.20	-10.58	-2.38	-9.93	-11.04	-11.80	-11.63	-7.93
	Dubai (Hydroskimming)	-3.12	-4.31	-4.69	-0.38	-4.44	-4.38	-3.97	-3.56	-0.72
	Daqing (Hydrocracking)	-1.84	-2.16	-3.94	-1.78	-3.32	-4.24	-5.12	-5.18	-2.30
	Dubai (Hydrocracking)	0.54	0.11	0.32	0.21	0.64	0.74	0.84	0.89	2.87

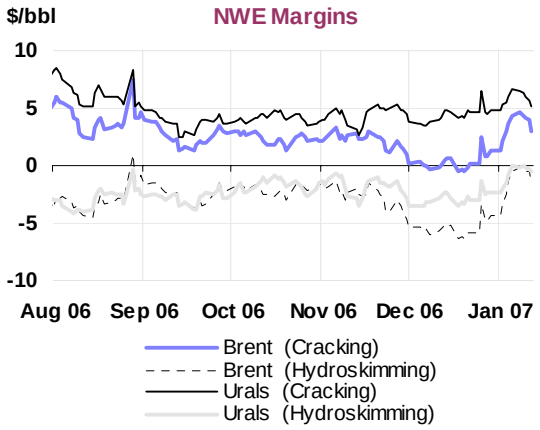
For the purposes of this report, refining margins are calculated for various complexity configurations, each optimized for processing the specific crude in a specific refining centre on a 'full-cost' basis. Consequently, reported margins should be taken as an indication, or proxy, of changes in profitability 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.

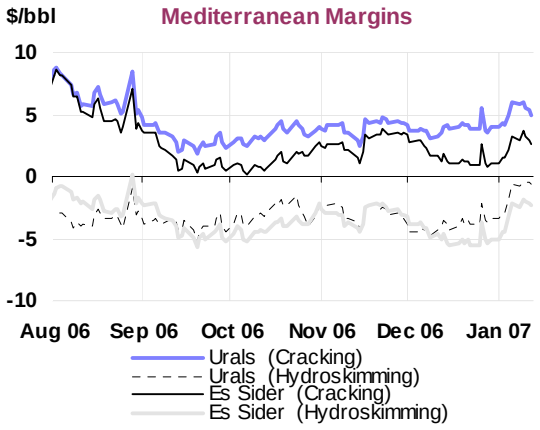
*The China refinery margin calculation represents a model based on spot product import/export parity, and does not reflect internal pricing regulations.

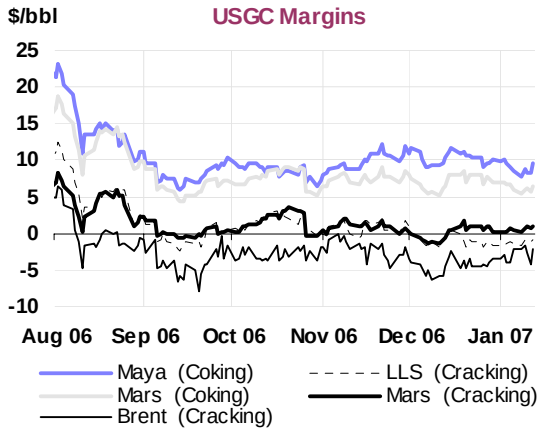
Sources: IEA, Purvin & Gertz Inc.

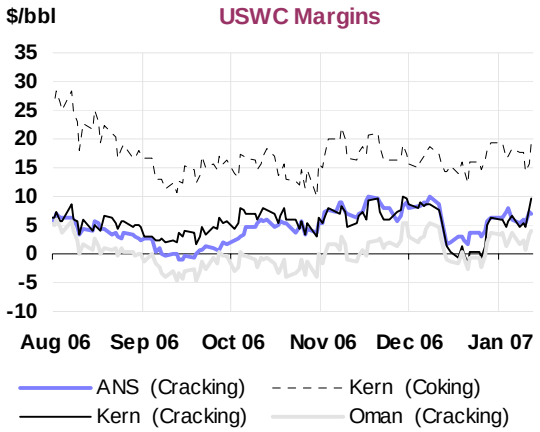
Since early January, however, there has been a reversal, and refining margins have recovered, largely due to crude's weakness. As regards complex margins, they are in most cases back to the attractive levels of the second half of last year. The greatest growth has been seen in Asia, despite Dubai's slide

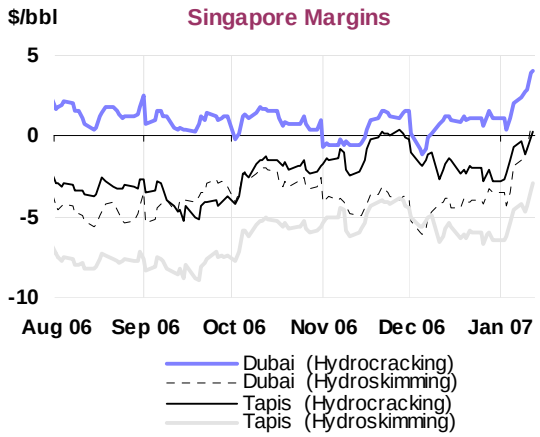
being somewhat stemmed by the prospect of lower OPEC output. Saudi Arabia announced in early January it would be reducing February term volumes to selected Asian refiners by around 10%, following an announced December reduction of 8-9% for January barrels. In both European regions, all margins increased, though simple margins remained in negative territory. In the US Gulf Coast, light sweet cracking margins unusually also remained negative on pronounced product weakness.

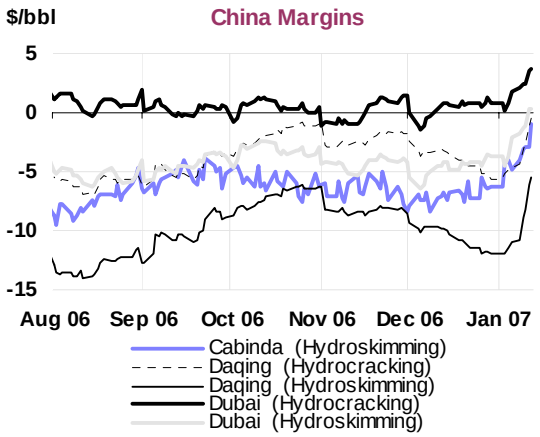








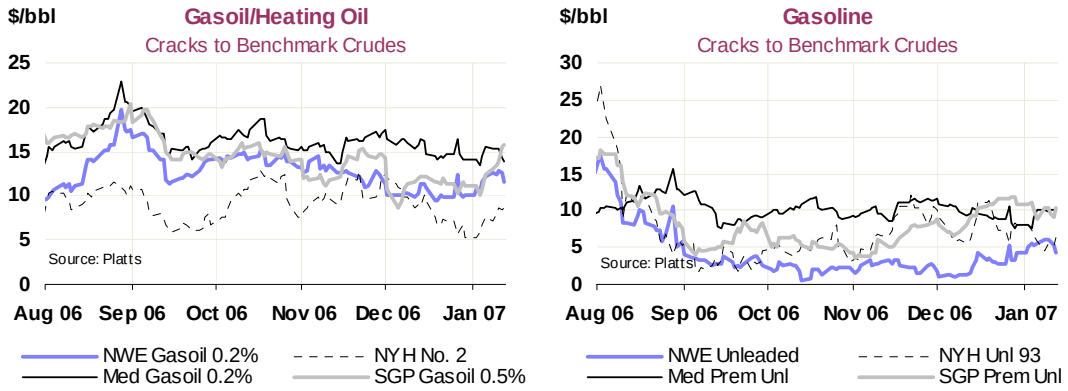




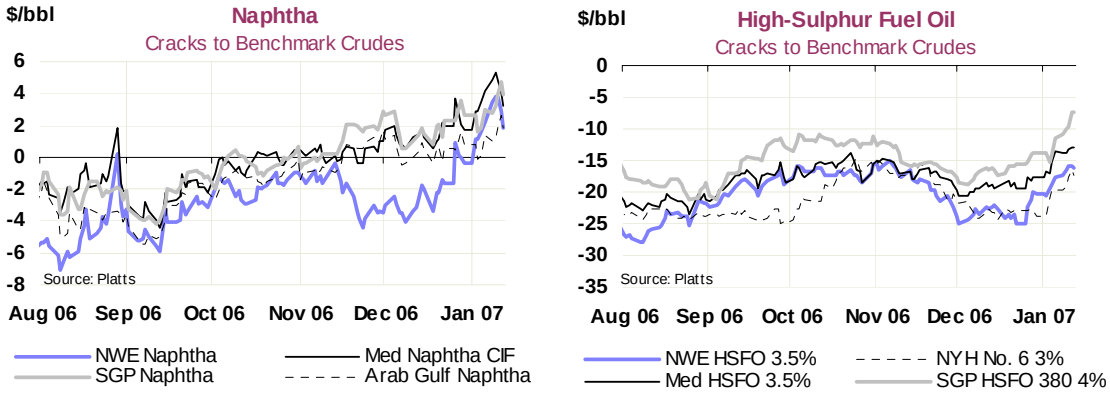
NB.: In collaboration with Purvin & Gertz Inc., we are in the process of reworking the basis for our refining margin calculations. This will include, among other things, additional desulphurisation costs due to the introduction of ultra-low-sulphur diesel in the US, a shift to Bonny Light instead of Brent as the main US Gulf Coast foreign sweet margin indicator, and a recalculation of freight rate costs based upon the Worldscale (WS) index. These changes, accompanied by explanations, should be included in the report dated 13 February 2007.

Spot Product Prices

Despite an uptick since early January, product cracks in all regions have remained relatively flat. The warm weather has kept heating oil, diesel and jet spreads muted. Gasoline spreads to benchmark crudes inched up in Singapore and NWE, while significant gains were seen in naphtha and fuel oil cracks. In absolute terms, all product prices fell quite sharply in December and early January, with the notable exception of high-sulphur fuel oil in Singapore.



Naphtha's crack gains – albeit from lows in early December, particularly in Northwest Europe – appeared to be due to increasing demand from crackers ending maintenance shutdowns. In Asia, continued lower Indian exports lent additional support, as did delays of compensating shipments from the Middle East. Some fixings from NWE to Asia lent support in the former. Meanwhile, gasoline cracks were more or less flat. A gasoline stock build in the US in December (+10.4 mb) added to weakness there, while European margins suffered from unfavourable arbitrage economics across the Atlantic.



Weak demand for heating oil due to the warm winter saw distillate cracks remain relatively flat in December but they did rise in early January. In Japan, where temperatures were higher year-on-year, but not as unseasonably warm as Europe and the US, the most recent weekly stock data from the Petroleum Association of Japan (PAJ) showed kerosene stocks begin 2007 some 35% higher than the average of the last four years. On the other hand, following an import tax cut, Chinese diesel imports in December hit a two-year high of 190,000 tonnes, according to preliminary data, rising from November's 150,000 tonnes. Some additional support for regional (higher-sulphur) gas oil in Asia may come from Indonesia's specification change to 3,500 ppm diesel. This is officially due to come into effect from March, but could be delayed, thus requiring additional imports from the region. Additional gas oil buying came from Vietnam ahead of the Lunar New Year holiday in February.

In Europe, the Druzhba outage also led to lower product exports from two key Belarusian refineries, after throughputs were halted. On the other hand, a widened premium of Rotterdam over New York diesel improved the economics of sending barrels from west to east. There were also reports of ultra-low-sulphur diesel barrels flowing into NWE tanks from East Asian refiners, the first arrivals of cargoes reported in last month's report.

Spot Product Prices

(monthly and weekly averages, $/bbl)

	Oct	Nov	Dec	Dec-Nov		Week Commencing:					Oct	Nov	Dec
				Change	%	11 Dec	18 Dec	25 Dec	01 Jan	08 Jan			
Rotterdam, Barges FOB											**Differential to Brent**		
Premium Unleaded	61.00	62.63	66.10	3.47	5.5	66.22	66.80	64.23	62.27	58.61	3.20	3.71	3.78
Naphtha	55.96	56.71	60.16	3.44	6.1	59.83	60.24	59.35	57.22	55.15	-1.83	-2.20	-2.17
Jet/Kerosene	73.89	74.01	78.49	4.48	6.0	79.12	78.41	75.22	72.61	70.74	16.09	15.09	16.16
ULSD	74.92	74.53	75.60	1.07	1.4	76.34	74.81	72.10	69.21	66.97	17.13	15.61	13.27
Gasoil .2%	72.03	71.44	72.64	1.20	1.7	73.16	72.14	69.50	66.95	64.38	14.24	12.53	10.32
LSFO 1%	39.42	40.23	38.81	-1.43	-3.5	39.35	38.12	37.91	38.73	38.01	-18.38	-18.68	-23.52
HSFO 3.5%	40.92	40.35	39.43	-0.92	-2.3	40.02	38.31	38.94	36.61	35.57	-16.87	-18.57	-22.90
Mediterranean, FOB Cargoes											**Differential to Urals**		
Premium 50 ppm	60.68	62.83	65.70	2.87	4.6	65.80	66.45	63.73	61.64	57.21	5.00	6.88	7.75
Naphtha	55.08	55.78	59.03	3.26	5.8	58.96	58.70	57.57	55.33	53.55	-0.60	-0.17	1.08
Jet Aviation fuel	72.91	72.71	76.84	4.13	5.7	77.49	76.57	73.13	70.89	68.75	17.23	16.76	18.89
Gasoil .2%	72.38	71.78	73.32	1.54	2.1	73.91	72.03	70.32	67.11	64.34	16.71	15.83	15.37
LSFO 1%	39.93	39.81	39.95	0.13	0.3	40.22	40.08	38.85	38.21	36.28	-15.74	-16.14	-18.00
HSFO 3.5%	39.58	39.09	38.96	-0.13	-0.3	39.28	38.87	38.07	37.12	36.17	-16.10	-16.86	-18.99
New York Harbour, Barges											**Differential to WTI**		
Super Unleaded	69.65	74.89	76.21	1.32	1.8	74.52	78.21	74.63	70.18	66.21	10.83	15.86	14.25
Unleaded	63.90	66.79	69.83	3.04	4.6	69.62	71.94	68.19	63.00	59.50	5.08	7.76	7.87
Jet/Kerosene	74.45	74.38	77.63	3.24	4.4	77.99	77.58	74.30	70.80	68.73	15.63	15.35	15.67
No. 2 (Heating Oil)	69.04	69.30	70.46	1.16	1.7	71.10	69.52	66.72	63.31	62.28	10.21	10.28	8.50
LSFO 1%	39.34	42.48	40.05	-2.43	-5.7	40.57	40.08	37.76	36.63	36.42	-19.48	-16.55	-21.91
No. 6 3%	39.98	41.29	38.88	-2.40	-5.8	38.50	39.40	37.65	36.55	36.01	-18.84	-17.74	-23.08
Singapore, Cargoes											**Differential to Dubai**		
Premium Unleaded	61.83	62.89	68.16	5.27	8.4	67.40	69.58	68.96	65.05	61.73	5.41	6.17	9.48
Naphtha	56.03	57.66	60.54	2.87	5.0	59.53	60.27	60.33	57.21	55.48	-0.39	0.95	1.85
Jet/Kerosene	74.02	73.63	77.42	3.80	5.2	77.90	77.43	74.12	72.09	70.03	17.60	16.91	18.74
Gasoil .5%	71.17	69.99	69.76	-0.23	-0.3	70.18	70.18	68.37	66.09	66.05	14.75	13.27	11.08
LSWR Cracked	40.14	39.31	42.94	3.63	9.2	42.26	43.16	42.99	39.67	38.90	-16.28	-17.41	-15.74
HSFO 180 CST	44.21	42.02	42.90	0.88	2.1	42.50	43.06	43.21	41.02	42.05	-12.22	-14.70	-15.78
HSFO 380 CST 4%	44.44	41.76	42.29	0.52	1.3	41.64	42.56	43.12	41.42	42.71	-11.98	-14.95	-16.40

Fuel oil cracks improved on OPEC cuts of residue-rich grades. In Asia in particular, deeply negative refining margins in December may have also encouraged some refinery throughput cuts, limiting fuel oil supply. In addition, Korean refiners will reportedly cut January exports by 15% from December, as low oil prices have encouraged domestic utilities to turn to fuel oil burning instead of more expensive liquefied natural gas (LNG) imports. A soaring premium for HSFO in Singapore over Rotterdam prices, as well as above-average stocks in the latter, have encouraged shipments to the east.

End-User Product Prices in December

Despite the December downturn in benchmark oil prices, many retail prices rose, though there was a distortion effect due to US dollar fluctuations. In local currency terms, gasoline prices before tax increased by over 5% in Canada and the US, and by around 2% on average in France, Germany, Spain and the UK. Only Japan saw a noteworthy downturn of 3.8%. Automotive diesel prices before tax also saw considerable gains of 4.7% and 3.8% in Canada and the US respectively, as well as a more muted increase of 2.2% in Germany – all in national currency. End-user heating oil prices were down in most countries, but rose by 6.4% in Canada. Low-sulphur fuel oil followed the general market trend, and fell by over 3% in OECD Europe countries.

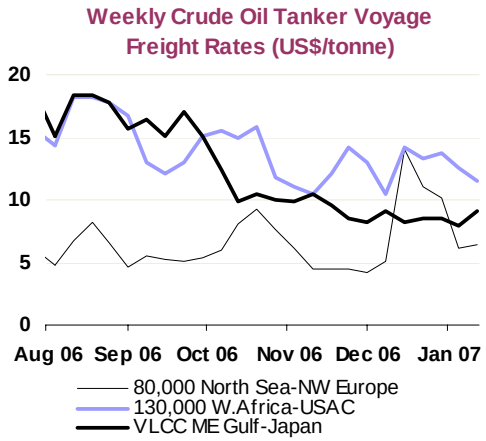
Freight

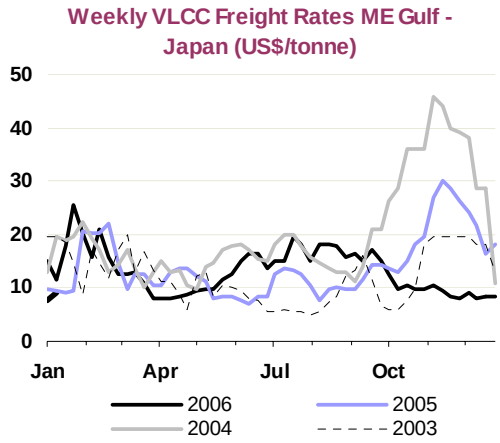
Freight rates for VLCCs, the two million-barrel crude carriers, continue to be undermined by OPEC output cuts and mild winter temperatures in consumer regions. In contrast, typical seasonal delays in the Turkish Straits in mid-December caused shipping rates for medium-sized crude cargoes to spike in the Mediterranean and further afield. Clean product shipping costs firmed in December, boosted by higher demand for product imports in Asia and sustained above-average gasoline imports into the US.

Reduced OPEC exports continue to weigh on VLCC rates from the Middle East Gulf. Eastbound vessel demand was dented on 11 December when Saudi Arabia notified certain Asian customers that crude cargoes would be reduced by 8-9% below term-contract volumes in January. Japan-bound VLCC rates remained around $9/tonne in December, approximately half the December 2005 average. Reports of deeper Saudi cuts to Asian cargoes in February add downside risk to eastbound rates.

Tanker movement reports suggested that there was a slight increase in crude moving to Western markets towards the end of December. Nevertheless, rates have faced downward pressure from reduced demand following mild temperatures and lower oil-on-water. VLCC rates for ships heading for the US Gulf were down to $14/tonne at end-2006, dramatically lower than the end-2005 value of $25/tonne.

Mediterranean Aframax rates more than doubled in mid-December as transit delays through the Turkish Straits stretched regional vessel availability. Delays of six to seven days in both directions during a busy trading period pushed Black Sea to Mediterranean Aframax rates (for approx. 600 kb crude cargoes) from $10/tonne on 8 December to over $22/tonne on 15 December. Increased Baltic export activity in December added further constraints to the Aframax fleet. The sentiment of vessel tightness spread across the Atlantic to the Caribbean and worsened when fog also caused mid-December closures to major shipping channels feeding US Gulf refineries. Caribbean to US Gulf Aframax rates gained over $5/tonne to top $15/tonne mid-month. Demand for million-barrel Suezmaxes in the Mediterranean and West Africa was also boosted by the reductions to Aframax supply. West Africa to US Atlantic Coast Suezmax rates rose from under $13/tonne to almost $20/tonne in the middle of December. However, as delays cleared towards end-year, most Aframax and Suezmax routes lost the majority of their mid-month gains, returning to unseasonably low levels.





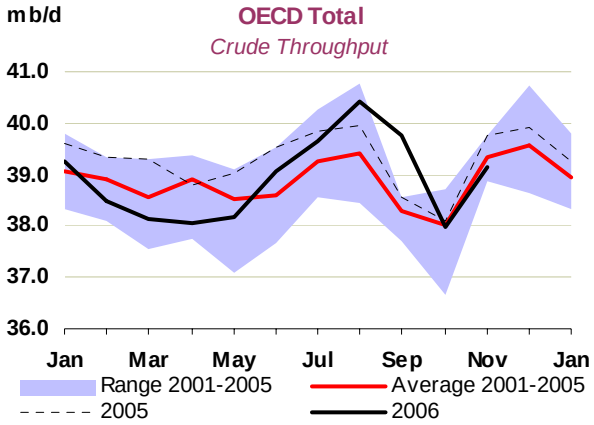
Clean tanker rates returned to usual winter levels in December after an unseasonably weak November. Most notably, Asian rates rose as winter product trade supported regional vessel demand. Naphtha trade from the Middle East Gulf to Japan was boosted by Asian petrochemical plants restarting after maintenance and the diversion of competing Indian naphtha exports to domestic fertiliser production. 75,000-tonne rates for this trade rose from $21.50/tonne at the start of December to $32/tonne in early January. In the west, US demand for gasoline imports remained firm in December as low stocks kept upward pressure on transatlantic clean rates. Clean rates corrected downwards in January, especially in Europe, following the build-up of a surplus of tonnage available for charter.

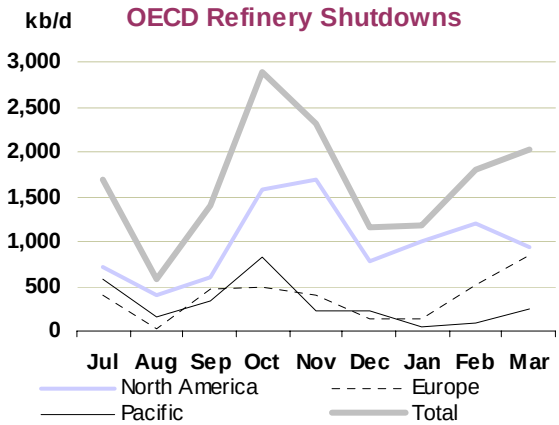
REFINING

Summary

- **OECD refinery throughput** increased by 1.1 mb/d in November to 39.1 mb/d. Japanese refineries accounted for the lion's share of the increase following the end of seasonal maintenance, but runs were generally higher in other OECD countries. However, November crude runs were more than 600 kb/d below November 2005, as lower crude throughput in Europe and the Pacific more than offset the increase seen in North America.

- **December OECD refinery runs** are expected to have increased by 0.6 mb/d to average 39.7 mb/d, as refiners reached their peak end-of-year throughput. January sees the start of maintenance at US refineries, which should reduce runs by around 250 kb/d from December's level. The weak margin environment is also likely to restrain runs at hydroskimming refineries in Europe and the Pacific, despite the recent weakening in crude prices. Crude runs are also likely to have been reduced slightly by the disruption to the Druzhba pipeline in early January, although the impact is not seen as significant.





- **OECD refinery yield data** for October show that distillate yields reached their highest level in five years on the back of robust diesel demand and crack values. The switch to winter-grade diesel in Europe pressured jet/kerosene yields, although they remain above the historical average for this time of year. In the Pacific, Japanese gasoline yields increased as refiners sought to meet demand despite lower crude throughputs as a result of maintenance.

- **December offline capacity in the OECD** is estimated to have declined to 1.2 mb/d from 2.3 mb/d in November. January's offline capacity is forecast to increase slightly from this level with the start of first-quarter maintenance at US refineries. First-quarter maintenance in North America is currently expected to peak in February at an average of 1.2 mb/d. Global offline capacity is expected to increase from 1.4 mb/d in December to 1.7 mb/d in January and 2.8 mb/d in February.

Refinery Throughput

OECD refinery crude runs in November increased by 1.1 mb/d, to an estimated 39.1 mb/d, as refineries in Japan, Germany, the UK and the US finished autumn maintenance work. Half of the increase from October's downwardly revised (-288 kb/d) figure of 38.0 mb/d occurred in the Pacific, with Europe and North America contributing equally to the other half of the increase. The rebound in throughputs raised average OECD capacity utilisation to 86.8% in November from October's 84.3%, but still below November 2005's 88.9%.

Despite average November OECD throughputs increasing, runs were 617 kb/d below November 2005's level. The shortfall was primarily in Europe, where crude runs were 638 kb/d below last year. The weak margin environment and the turnaround at ExxonMobil's 298 kb/d Antwerp refinery contributed to the decrease. North American crude runs were only 202 kb/d higher than a year-ago, down from last month's year-on-year difference of 1.3 mb/d as the impact of 2005's hurricane season diminished. Hydroskimming margins in Europe and Asia remain significantly weaker than the levels seen this time last year, further contributing to weaker year-on-year crude runs.

Weekly data indicate that December US crude runs rose by 370 kb/d to 15.5 mb/d and Japanese runs increased by 300 kb/d, to average 4.2 mb/d. We expect European runs to be broadly unchanged in December, as lower maintenance offset the impact of weak hydroskimming margins. Overall OECD crude runs in December are forecast to have increased by over 600 kb/d to 39.7mb/d.

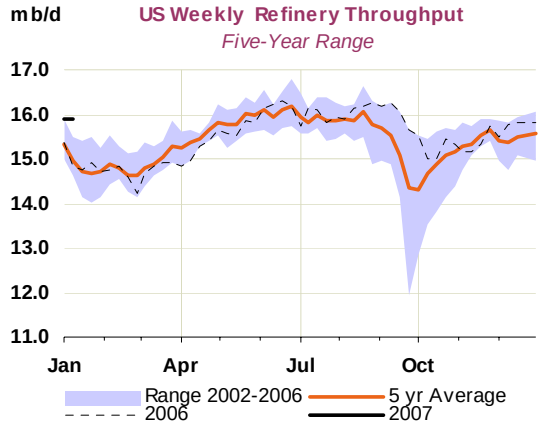
Refinery Crude Throughput and Utilisation in OECD Countries

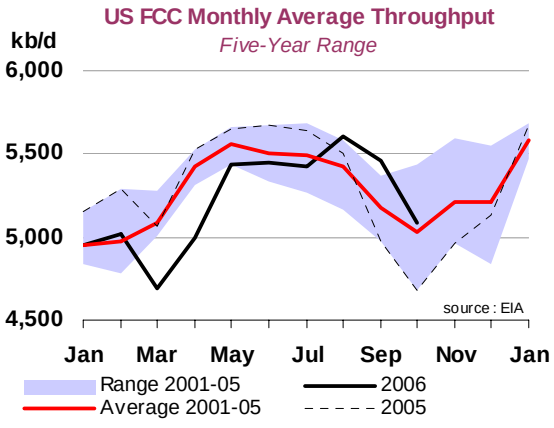
	million barrels per day						*Change from*		Utilisation rate[2]	
	Jun 06	Jul 06	Aug 06	Sep 06	Oct 06	Nov 06	*Oct 06*	*Nov 05*	Nov 06	Nov 05
OECD North America										
US[3]	15.84	15.67	15.79	15.74	15.00	15.14	0.14	0.12	87.07	87.67
Canada	1.73	1.88	1.90	1.83	1.81	1.85	0.04	0.02	91.70	90.49
Mexico	1.22	1.25	1.22	1.18	1.14	1.24	0.10	0.06	73.64	71.96
Total	18.79	18.79	18.92	18.75	17.95	18.23	0.28	0.20	86.44	86.52
OECD Europe										
France	1.64	1.72	1.81	1.86	1.74	1.81	0.08	-0.04	91.68	95.27
Germany	2.34	2.37	2.45	2.18	2.19	2.40	0.21	-0.01	98.91	98.25
Italy	1.87	1.87	1.93	1.88	1.95	1.91	-0.04	-0.06	82.34	85.18
Netherlands	0.99	0.94	0.98	1.03	1.02	1.04	0.03	-0.05	85.39	88.68
Spain	1.26	1.19	1.24	1.22	1.17	1.11	-0.06	-0.13	87.15	97.16
UK	1.60	1.61	1.68	1.64	1.35	1.50	0.15	-0.14	80.11	89.88
Other OECD Europe	4.27	4.19	4.16	4.11	4.02	3.95	-0.08	-0.21	81.84	89.09
Total	13.97	13.90	14.27	13.92	13.44	13.73	0.30	-0.64	86.23	91.42
OECD Pacific										
Japan	3.51	3.84	4.09	3.92	3.44	3.94	0.50	-0.20	84.37	87.90
Korea	2.14	2.43	2.41	2.46	2.42	2.51	0.08	-0.01	97.36	97.68
Other OECD Pacific	0.65	0.70	0.72	0.70	0.72	0.71	-0.01	0.02	88.63	80.29
Total	6.30	6.97	7.22	7.08	6.59	7.16	0.57	-0.18	88.95	90.19
OECD Total	39.06	39.66	40.41	39.75	37.98	39.13	1.15	-0.62	86.82	88.92

1 Estimate
2 Based on crude throughput and current operable refining capacity
3 US50

OECD North America

North American crude throughputs increased by 281 kb/d in November from October's downwardly revised level of 18.0 mb/d, to an estimated 18.2 mb/d. The US accounted for half of the increase, Mexico for a further third and Canada the remainder. Crude throughputs registered a 202 kb/d gain over November 2005 as year-on-year comparisons were less affected by the 2005 hurricane season. Consequently, North American capacity utilisation was 86.4% in November, up from October's 85.1% and in line with last year's 86.5%.

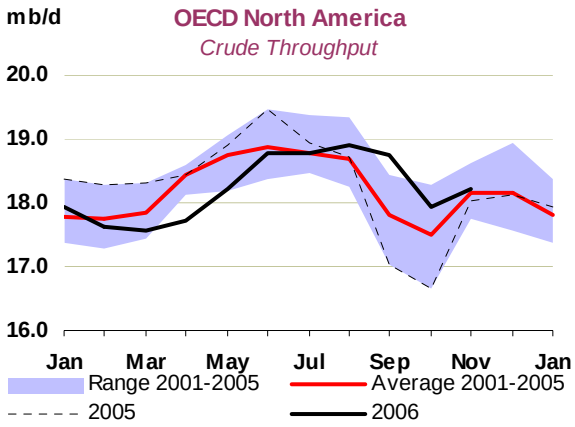


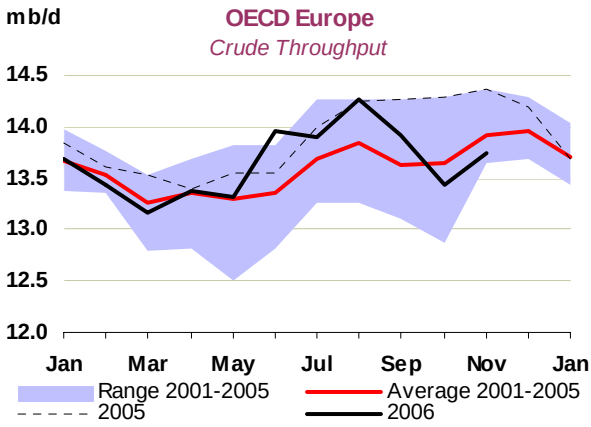


Crude throughputs in the US averaged 15.1 mb/d in November, an increase of 142 kb/d from October's downwardly revised (-64 kb/d) level of 15.0 mb/d. Crude runs on the US West Coast recovered over the course of the month as refineries returned from the heavy maintenance scheduled for late October and early November. US refiners undertook a significant amount of work on catalytic cracking units during October, as highlighted in the graph shown, which limited crude runs, while in November there appeared to be more refineries undergoing complete shutdowns. US crude runs remained above the November 2005

level, although the year-on-year difference declined to 118 kb/d. As a result, average capacity utilisation increased slightly to 87.1% from October's 86.3%.

Canadian crude runs are estimated to have averaged 1.9 mb/d in November, some 40 kb/d higher than October's estimate. Maintenance work is thought to have declined over the course of the month, allowing refiners to increase runs. Canada's September crude runs were revised by 24 kb/d, while August's were trimmed to 17 kb/d. December is thought to have seen similarly strong crude runs, although reports of problems at two Imperial Oil refineries may have reduced runs. Mexican crude runs in November were reported to be 1.2 mb/d, an increase of 102 kb/d from October and 59 kb/d ahead of last year's level. The slowdown in Mexican runs in September and October would suggest that Pemex has undertaken maintenance work at some of its refineries, but this could not be confirmed.

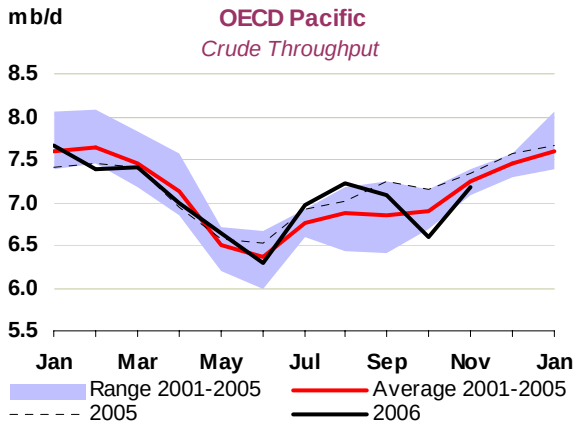


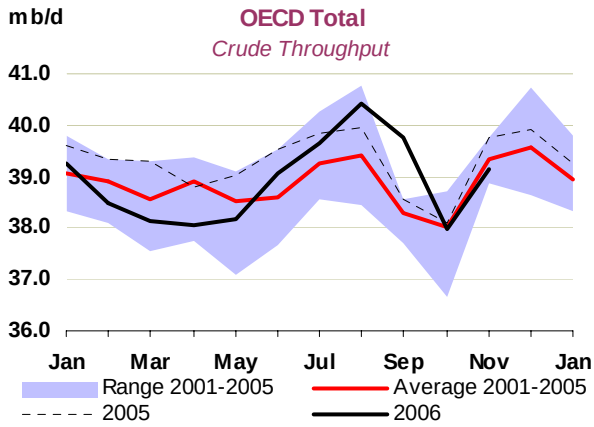


Weekly data for the US indicate that December crude throughputs averaged 15.5 mb/d and reached 15.6 mb/d in early January. Crude runs increased on the West Coast and Midwest as refiners returned from maintenance and unplanned outages. January average crude runs are expected to decline as maintenance work increases. Reports suggest that refinery turnarounds will occur at Total's Port Arthur refinery, Shell's Deer Park facility and Marathon's Garyville plant.

OECD Europe

European crude throughputs averaged 13.7 mb/d in November, 298 kb/d higher than October's downwardly revised (-207 kb/d) level of 13.4 kb/d, but 638 kb/d below November 2005's level. With the exception of Austria, Belgium, Denmark, Italy and Spain, European countries reported higher crude runs.

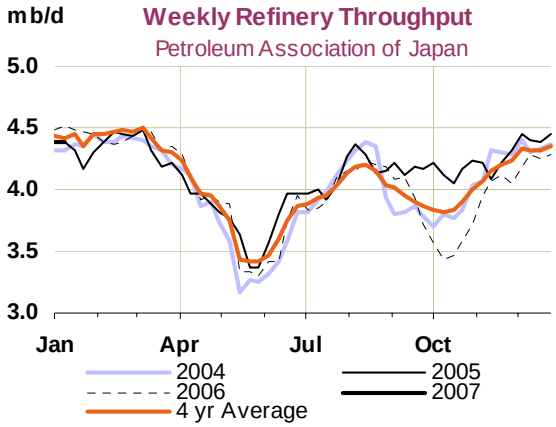




However, the broad-based increase was offset by maintenance at ExxonMobil's 298 kb/d Antwerp refinery. Of note is the 305 kb/d downward revision to UK throughputs, which cut October's reported runs by almost 20% to 1.3 mb/d. Europe's shortfall against November 2005's level continues to suggest that the weak margin environment is restricting crude runs at hydroskimming refineries in the region. In late December Preem's Gothenburg and ConocoPhillips's Wilhelmshaven refineries were both reported to have cut runs due to poor margins. December crude runs are expected to be broadly level with November's - with the return of ExxonMobil's 298 kb/d Antwerp facility offset by lower runs in Germany and France.

OECD Pacific

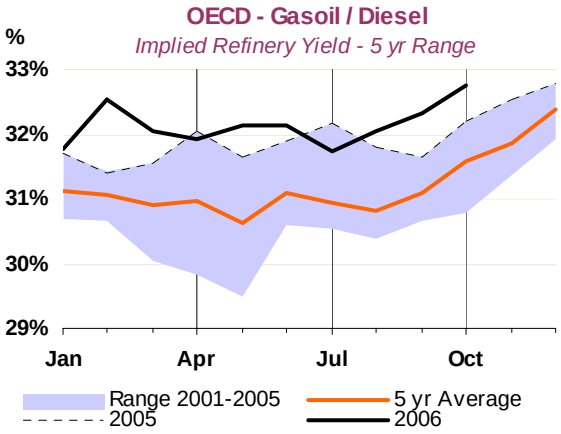
Crude throughputs in the OECD Pacific region increased by 9% in November, but remain below the previous year's level. Runs increased by 569 kb/d from October's downwardly revised (-17 kb/d) level, to an average of 7.2 mb/d. The increase was centred in Japan where runs were 496 kb/d higher, reversing the previous month's decline as planned maintenance ended. Japanese refineries are estimated to have processed 3.9 mb/d during the month, resulting in capacity utilisation of 84.4%. Korean runs also recovered slightly over the course of November to a near-record of 2.5 mb/d, an increase of 84 kb/d from October and in line with November 2005's level. This resulted in a capacity utilisation rate of 97.4% in November. December crude runs are expected to be weaker as warm weather forced refiners to implement run cuts.

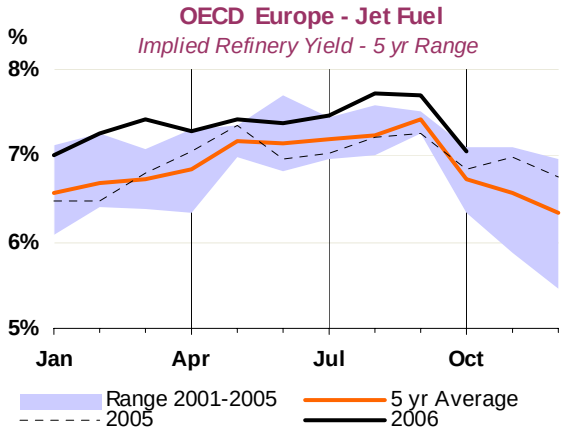


Weekly data from the Petroleum Association of Japan show that crude runs increased further in December to average 4.2 mb/d with no planned maintenance reported. However, run cuts due to poor margins would appear to have restricted crude runs, with Nippon Oil importing finished products to compensate for lower crude runs. Warmer weather, relative to the December 2005, hampered kerosene sales, which were 29% lower than the December 2005 level. The company expects January crude runs to be kept unchanged, at 1.0 mb/d.

OECD Refinery Yields

OECD refinery yield data for October show refiners raised diesel/gasoil yields further to 32.8%, the highest level in the last five years. This appears to be in response to continued strong demand for diesel, particularly in the US. North American distillate yields continued to increase to 28.1 % and remain above those seen in the Pacific, where yields remain below the five-year range. Weak demand for diesel in Japan appears to be one of the contributing factors. Consequently, Japan exported 3.9 mb of ULSD in September and a further 2 mb in October, the highest seasonal level for the last five years.



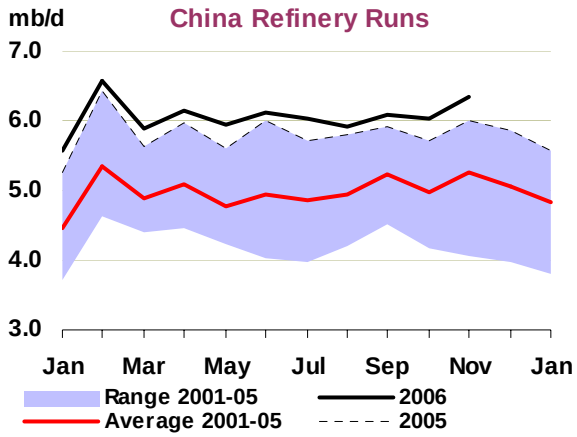


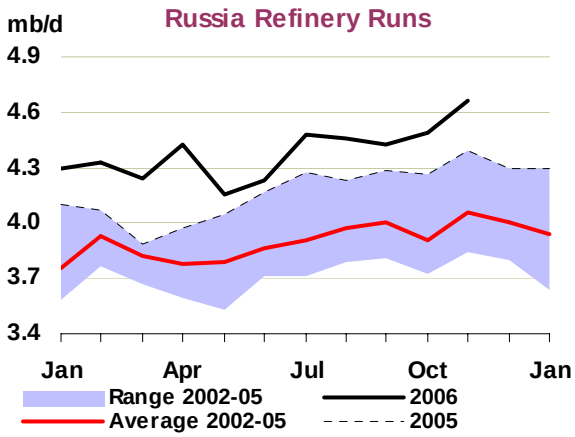
Furthermore, Japan and Korea minimised kerosene yields in order to increase jet fuel yields. Jet and kerosene imports fell to historically low levels while jet fuel exports increased strongly year-on-year in both countries. Weak demand for kerosene and high stock levels would appear to be dictating refinery production plans at this juncture. In Europe jet/kerosene yields stayed high as crack values remained strong. However, yields declined from September's level for all countries except for Finland and Norway. This suggests that preparations for winter-specification diesel, which requires better cold properties, reduced available jet/kerosene supplies in the region.

Despite the continuing weakness in gasoline cracks during the course of October, refiners increased yields in all three regions. In the Pacific, higher gasoline yields were driven by Japanese refiners who raised yields to meet supply commitments, as throughputs were curtailed by maintenance. In addition Japanese imports of gasoline increased three-fold from 2005, to their highest October level in the last five years and accounted for 5% of product supply during the month.

Non-OECD Throughput

Chinese crude runs increased by 310 kb/d in November to 6.4 mb/d, a growth rate of 6.4% from November 2005. The increase in runs was reported to be centred on refineries operated by PetroChina, as world oil prices declined to a level which allowed refiners to break even. Indian data for November indicate that runs averaged 3.1 mb/d, an increase of 18% year-on-year. The start-up of Essar's Vadinar refinery late in the month would have lifted runs slightly but the majority of the gains came from increased crude runs at Panipat, Mangalore and Mumbai.

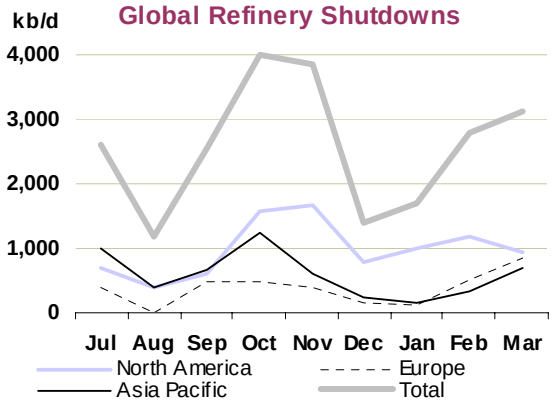


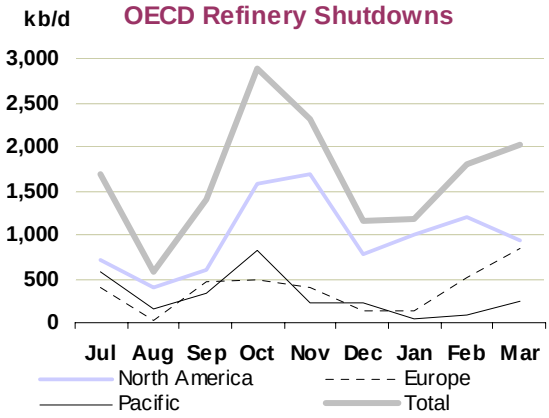


Russian crude runs increased again in November to another (post-Soviet era) record of 4.66 mb/d from October's level of 4.49 mb/d. Increased crude runs at the Kirishi and Nizhny Novgorod plants accounted for much of the increase.

Offline Refinery Capacity

Offline capacity estimates for the first quarter have been revised slightly upwards as more details have emerged for planned maintenance shutdowns in the OECD and globally. First-quarter offline capacity in North America is forecast to peak in February at 1.2 mb/d, 180 kb/d above January's estimate and 400 kb/d above December's downwardly revised estimate of 783 kb/d. Currently available information falls short (by 300 kb/d) of explaining the recovery in US crude runs in December. European first-quarter maintenance is expected to pick up late in the first quarter and continue in the early part of the second quarter. OECD Pacific maintenance is expected to remain very low in the first quarter as refiners in Japan and Korea meet peak winter heating oil (kerosene) demand, despite the recent relatively mild weather.





Global offline refining capacity follows a similar path to that of the OECD, with work starting at refineries in Oman and Iran in February and March and further work reportedly planned in Saudi Arabia in the second quarter.

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

	2003	2004	1Q05	2Q05	3Q05	4Q05	2005	1Q06	2Q06	3Q06	4Q06	2006	1Q07	2Q07	3Q07	4Q07	2007
OECD DEMAND																	
North America	24.5	25.4	25.6	25.3	25.6	25.5	25.5	25.1	25.1	25.5	25.7	25.4	25.6	25.4	25.9	26.1	25.7
Europe	15.4	15.5	15.6	15.2	15.6	15.7	15.5	15.8	15.0	15.4	15.7	15.5	15.6	15.1	15.5	15.7	15.5
Pacific	8.6	8.5	9.4	8.1	8.1	8.8	8.6	9.3	7.9	7.9	8.8	8.5	9.2	7.8	8.0	8.8	8.4
Total OECD	48.6	49.3	50.7	48.6	49.2	50.0	49.6	50.2	48.0	48.8	50.2	49.3	50.3	48.2	49.4	50.6	49.6
NON-OECD DEMAND																	
FSU	3.6	3.8	3.8	3.7	3.8	3.9	3.8	3.9	3.7	4.0	4.1	3.9	4.0	3.7	3.9	4.1	3.9
Europe	0.7	0.7	0.8	0.7	0.7	0.7	0.7	0.8	0.7	0.7	0.7	0.7	0.8	0.7	0.7	0.7	0.7
China	5.5	6.4	6.6	6.4	6.6	6.8	6.6	6.8	7.1	6.9	7.2	7.0	7.1	7.4	7.3	7.6	7.4
Other Asia	8.1	8.6	8.9	8.9	8.6	8.7	8.8	8.9	8.9	8.7	9.0	8.9	9.0	9.1	8.9	9.2	9.0
Latin America	4.7	5.0	5.0	5.1	5.2	5.1	5.1	5.1	5.2	5.3	5.2	5.2	5.1	5.3	5.4	5.3	5.3
Middle East	5.4	5.8	6.0	6.1	6.4	6.0	6.1	6.3	6.4	6.7	6.4	6.5	6.7	6.8	6.8	6.9	6.8
Africa	2.7	2.8	2.9	2.9	2.8	2.9	2.9	3.0	3.0	2.9	3.0	2.9	3.0	3.0	2.9	3.0	3.0
Total Non-OECD	30.7	33.1	33.9	33.9	34.1	34.1	34.0	34.6	35.0	35.1	35.6	35.1	35.7	36.0	35.9	36.8	36.1
Total Demand[1]	79.3	82.4	84.5	82.4	83.3	84.1	83.6	84.8	83.0	83.9	85.7	84.4	86.1	84.2	85.3	87.5	85.8
OECD SUPPLY																	
North America	14.6	14.6	14.5	14.7	13.7	13.8	14.1	14.2	14.2	14.3	14.5	14.3	14.7	14.4	14.2	14.4	14.4
Europe	6.3	6.1	5.9	5.7	5.4	5.5	5.6	5.5	5.1	4.9	5.2	5.2	5.2	5.0	5.0	5.2	5.1
Pacific	0.7	0.6	0.5	0.6	0.6	0.6	0.6	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7
Total OECD	21.6	21.2	20.9	21.0	19.7	19.8	20.3	20.2	19.8	19.9	20.3	20.1	20.5	20.0	19.8	20.3	20.2
NON-OECD SUPPLY																	
FSU	10.3	11.2	11.5	11.5	11.7	11.9	11.6	11.7	12.0	12.2	12.3	12.1	12.4	12.5	12.6	12.7	12.6
Europe	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
China	3.4	3.5	3.6	3.6	3.6	3.6	3.6	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.8	3.7
Other Asia	2.6	2.7	2.7	2.6	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.8	2.7	2.7	2.7	2.7
Latin America	4.0	4.1	4.2	4.4	4.3	4.3	4.3	4.3	4.4	4.4	4.5	4.4	4.5	4.5	4.6	4.7	4.6
Middle East	2.0	1.9	1.9	1.9	1.9	1.8	1.9	1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
Africa	3.0	3.4	3.5	3.6	3.8	3.9	3.7	3.9	3.9	4.0	4.1	4.0	4.3	4.3	4.6	4.7	4.5
Total Non-OECD	25.6	27.0	27.5	27.7	28.2	28.4	28.0	28.4	28.6	28.9	29.1	28.7	29.5	29.7	30.0	30.4	29.9
Processing Gains[2]	1.8	1.8	1.9	1.9	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
Other Biofuels[3]	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3
Total Non-OPEC[4]	49.1	50.1	50.5	50.6	49.8	50.2	50.3	50.7	50.5	50.8	51.6	50.9	52.3	52.0	52.1	52.9	52.3
Non-OPEC excl. Angola[10]	48.2	49.2	49.3	49.5	48.5	48.8	49.0	49.3	49.1	49.4	50.1	49.5	50.7	50.4	50.3	51.0	50.6
OPEC																	
Crude[5]	27.1	28.9	29.3	29.7	30.0	29.9	29.7	29.9	29.8	30.0	29.1	29.7					
NGLs	3.7	4.2	4.4	4.4	4.5	4.5	4.5	4.6	4.7	4.7	4.7	4.7	4.8	4.8	4.9	5.0	4.9
Total OPEC	30.8	33.1	33.7	34.2	34.5	34.5	34.2	34.5	34.5	34.7	33.8	34.4					
OPEC incl. Angola[10]	31.7	34.1	34.8	35.3	35.8	35.9	35.4	35.9	35.8	36.1	35.3	35.8					
Total Supply[6]	79.8	83.2	84.1	84.8	84.3	84.7	84.5	85.2	84.9	85.5	85.4	85.2					
STOCK CHANGES AND MISCELLANEOUS																	
Reported OECD																	
Industry	0.1	0.1	-0.1	0.9	0.2	-0.5	0.1	0.0	0.6	1.2							
Government	0.2	0.1	0.1	0.3	0.0	-0.1	0.1	0.0	0.1	0.0							
Total	0.3	0.2	0.1	1.2	0.2	-0.5	0.2	0.0	0.7	1.3							
Floating Storage/Oil in Transit	0.2	0.0	-0.4	0.1	0.0	0.1	-0.1	0.1	-0.1	0.3							
Miscellaneous to balance[7]	0.1	0.6	-0.1	1.1	0.8	1.0	0.7	0.2	1.2	0.0							
Total Stock Ch. & Misc	0.6	0.8	-0.4	2.4	1.0	0.6	0.9	0.3	1.9	1.6	-0.4	0.9					
Memo items:																	
Call on OPEC crude + Stock ch.[8]	26.5	28.1	29.7	27.4	29.0	29.3	28.9	29.5	27.9	28.4	29.4	28.8	29.0	27.4	28.2	29.5	28.6
"Call" incl. Angola[10]	27.4	29.1	30.8	28.5	30.4	30.7	30.1	30.9	29.2	29.8	30.9	30.2	30.6	29.0	30.1	31.4	30.3
Total Demand ex. FSU	75.7	78.6	80.7	78.7	79.5	80.2	79.8	80.9	79.3	80.0	81.6	80.5	82.1	80.5	81.4	83.3	81.8
Total demand exc. FSU (% ch)[9]	1.9	3.9	2.4	1.6	1.7	0.2	1.5	0.3	0.8	0.6	1.8	0.8	1.4	1.5	1.8	2.1	1.7

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 Net volumetric gains and losses in the refining process (excludes net gain/loss in former USSR, China and non-OECD Europe) and marine transportation losses
3 Biofuels from sources outside Brazil and US.
4 Non-OPEC supplies include crude oil, condensates, NGL and non-conventional sources of supply such as synthetic crude, ethanol and MTBE. No allowance is made in the non-OPEC forecast for exceptional events which have, at certain times historically, reduced non-OPEC supply by 300-400 kbd on an annual basis
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 & non-conventional category, but Orimulsion production will reportedly cease 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 Year on year % growth in global oil demand excluding FSU
10 With effect from OMR of 13 February 2007, Angolan production will be reclassified within OPEC and excluded from the Non-OPEC total, for the period January 2007 onwards. Secondary aggregates allow comparison with previous year totals by including Angola within OPEC retroactively

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

(million barrels per day)

	2003	2004	1Q05	2Q05	3Q05	4Q05	2005	1Q06	2Q06	3Q06	4Q06	2006	1Q07	2Q07	3Q07	4Q07	2007
OECD DEMAND																	
North America	-	-	-	-	-	-	-	-	-	-0.1	-0.3	-0.1	-0.1	-	-	0.1	-
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total OECD	-	-	-	-	-	-	-	-	-	-	-0.3	-0.1	-0.1	-0.1	-	0.1	-
NON-OECD DEMAND																	
FSU	-	-	-	-	-	-	-	-	-	-	-0.2	-	-0.1	-0.1	-0.1	-0.1	-0.1
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Asia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Latin America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Middle East	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Non-OECD	-	-	-	-	-	-	-	-	-	-	-0.2	-	-0.2	-0.2	-0.2	-0.1	-0.2
Total Demand	-	-	-	-	-	-	-	-	-	-	-0.5	-0.1	-0.2	-0.2	-0.2	-	-0.2
OECD SUPPLY																	
North America	-	-	-	-	-	-	-	-	-	-	-0.1	-	-0.1	-	-0.1	-0.2	-0.1
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-0.2	-0.1	-0.1	-0.1	-0.1
Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total OECD	-	-	-	-	-	-	-	-	-	-	-0.1	-	-0.2	-0.2	-0.2	-0.3	-0.2
NON-OECD SUPPLY																	
FSU	-	-	-	-	-	-	-	-	-	-	-	-	0.1	-	-	-0.1	-
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Asia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Latin America	-	-	-	-	-	-	-	-	-	-	-	-	-0.1	-0.1	-	-	-0.1
Middle East	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Non-OECD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-0.1	-0.1	-
Processing Gains	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Biofuels	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Non-OPEC	-	-	-	-	-	-	-	-	-	-	-0.1	-	-0.2	-0.2	-0.3	-0.5	-0.3
OPEC																	
Crude	-	-	-	-	-	-	-	-	-	-							
NGLs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total OPEC	-	-	-	-	-	-	-	-	-	-							
Total Supply	-	-	-	-	-	-	-	-	-	-							
STOCK CHANGES AND MISCELLANEOUS																	
REPORTED OECD																	
Industry	-	-	-	-	-	-	-	-	-	0.1							
Government	-	-	-	-	-	-	-	-	-	-							
Total	-	-	-	-	-	-	-	-	-	0.1							
Floating Storage/Oil in Transit	-	-	-	-	-	-	-	-	-	-							
Miscellaneous to balance	-	-	-	-	-	-	-	-	-	-0.1							
Total Stock Ch. & Misc	-	-	-	-	-	-	-	-	-	-							
Memo items:																	
Call on OPEC crude + Stock ch.	-	-	-	-	-	-	-	-	-	-	-0.4	-0.1	-	-	0.1	0.4	0.1
Total Demand ex. FSU	-	-	-	-	-	-	-	-	-	-	-0.3	-0.1	-0.2	-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

	2004	1Q05	2Q05	3Q05	4Q05	2005	1Q06	2Q06	3Q06	4Q06	2006	1Q07	2Q07	3Q07	4Q07	2007
Demand (mb/d)																
North America	25.37	25.61	25.33	25.61	25.48	25.51	25.12	25.09	25.48	25.70	25.35	25.55	25.37	25.89	26.13	25.74
Europe	15.48	15.62	15.17	15.56	15.69	15.51	15.77	15.03	15.43	15.67	15.48	15.61	15.06	15.51	15.67	15.46
Pacific	8.49	9.45	8.06	8.07	8.79	8.59	9.30	7.87	7.90	8.81	8.47	9.15	7.81	8.00	8.84	8.45
Total OECD	49.35	50.68	48.55	49.25	49.96	49.61	50.19	47.99	48.82	50.18	49.29	50.31	48.24	49.39	50.64	49.65
FSU	3.76	3.82	3.71	3.79	3.89	3.80	3.88	3.71	3.96	4.10	3.91	3.97	3.72	3.92	4.12	3.93
Europe	0.70	0.77	0.71	0.66	0.72	0.72	0.79	0.72	0.67	0.73	0.73	0.80	0.74	0.69	0.74	0.74
China	6.42	6.56	6.45	6.63	6.77	6.60	6.75	7.05	6.91	7.19	6.98	7.12	7.39	7.33	7.58	7.35
Other Asia	8.62	8.90	8.85	8.65	8.72	8.78	8.88	8.93	8.71	8.98	8.87	9.02	9.09	8.91	9.15	9.04
Latin America	4.96	4.96	5.12	5.18	5.10	5.09	5.07	5.20	5.31	5.21	5.20	5.14	5.28	5.41	5.29	5.28
Middle East	5.79	5.96	6.10	6.36	6.05	6.12	6.29	6.43	6.70	6.38	6.45	6.66	6.76	6.75	6.90	6.77
Africa	2.79	2.90	2.91	2.79	2.90	2.88	2.97	2.98	2.86	2.97	2.94	3.04	3.03	2.92	3.04	3.01
Total Non-OECD	33.05	33.87	33.86	34.06	34.15	33.99	34.62	35.03	35.11	35.56	35.09	35.75	36.00	35.91	36.82	36.12
World	82.40	84.55	82.42	83.31	84.11	83.59	84.81	83.03	83.93	85.74	84.38	86.06	84.24	85.30	87.46	85.77
of which:																
US50	*20.73*	*20.84*	*20.65*	*20.92*	*20.79*	*20.80*	*20.49*	*20.60*	*20.86*	*20.96*	*20.73*	*20.83*	*20.77*	*21.18*	*21.29*	*21.02*
Euro4	*8.27*	*8.25*	*7.95*	*8.26*	*8.21*	*8.17*	*8.42*	*7.88*	*8.07*	*8.19*	*8.14*	*8.26*	*7.85*	*8.14*	*8.17*	*8.10*
Japan	*5.29*	*6.00*	*4.94*	*5.03*	*5.46*	*5.35*	*5.96*	*4.78*	*4.81*	*5.43*	*5.24*	*5.74*	*4.69*	*4.85*	*5.42*	*5.17*
Korea	*2.16*	*2.40*	*2.07*	*2.01*	*2.23*	*2.18*	*2.28*	*2.03*	*2.02*	*2.27*	*2.15*	*2.32*	*2.04*	*2.05*	*2.29*	*2.18*
Mexico	*2.00*	*2.04*	*2.11*	*2.06*	*2.10*	*2.08*	*2.08*	*2.02*	*1.99*	*2.06*	*2.04*	*2.09*	*2.05*	*2.06*	*2.14*	*2.08*
Canada	*2.30*	*2.36*	*2.24*	*2.28*	*2.23*	*2.28*	*2.18*	*2.14*	*2.28*	*2.31*	*2.23*	*2.25*	*2.20*	*2.30*	*2.33*	*2.27*
Brazil	*2.15*	*2.12*	*2.18*	*2.25*	*2.21*	*2.19*	*2.18*	*2.19*	*2.31*	*2.25*	*2.23*	*2.21*	*2.23*	*2.35*	*2.29*	*2.27*
India	*2.57*	*2.72*	*2.59*	*2.47*	*2.56*	*2.59*	*2.74*	*2.70*	*2.50*	*2.68*	*2.65*	*2.80*	*2.77*	*2.58*	*2.73*	*2.72*
Annual Change (% per annum)																
North America	3.5	1.4	1.0	0.7	-0.9	0.5	-1.9	-0.9	-0.5	0.9	-0.6	1.7	1.1	1.6	1.7	1.5
Europe	0.3	0.7	0.7	0.6	-1.3	0.2	1.0	-0.9	-0.8	-0.1	-0.2	-1.0	0.2	0.5	0.0	-0.1
Pacific	-1.6	2.3	2.3	-0.5	0.6	1.2	-1.6	-2.4	-2.2	0.2	-1.4	-1.6	-0.7	1.2	0.4	-0.2
Total OECD	1.5	1.3	1.2	0.4	-0.8	0.5	-1.0	-1.2	-0.9	0.4	-0.6	0.2	0.5	1.2	0.9	0.7
FSU	4.7	8.7	-0.2	0.0	-2.7	1.3	1.6	-0.1	4.4	5.2	2.8	2.2	0.2	-1.0	0.6	0.5
Europe	2.2	2.1	2.1	1.7	1.6	1.9	2.5	1.4	1.6	1.6	1.8	0.8	1.8	1.9	1.6	1.5
China	15.8	4.4	-1.3	5.4	2.7	2.8	2.9	9.4	4.2	6.1	5.6	5.4	4.8	6.1	5.4	5.4
Other Asia	6.8	4.3	2.4	2.5	-1.6	1.8	-0.2	0.9	0.7	3.0	1.1	1.7	1.8	2.3	1.9	1.9
Latin America	5.8	3.1	3.0	2.4	2.1	2.7	2.3	1.6	2.5	2.2	2.1	1.4	1.5	1.8	1.6	1.6
Middle East	6.9	5.7	5.8	5.6	5.3	5.6	5.4	5.4	5.4	5.6	5.4	6.0	5.1	0.7	8.2	4.9
Africa	4.1	3.3	3.3	2.5	2.7	3.0	2.4	2.3	2.4	2.4	2.4	2.4	1.7	2.1	2.2	2.1
Total Non-OECD	7.7	4.7	2.1	3.3	1.3	2.8	2.2	3.5	3.1	4.1	3.2	3.2	2.8	2.3	3.5	3.0
World	3.9	2.7	1.6	1.6	0.1	1.5	0.3	0.7	0.7	1.9	0.9	1.5	1.5	1.6	2.0	1.6
Annual Change (mb/d)																
North America	0.85	0.35	0.26	0.17	-0.23	0.14	-0.49	-0.23	-0.13	0.22	-0.16	0.43	0.27	0.40	0.43	0.38
Europe	0.05	0.11	0.11	0.09	-0.20	0.03	0.15	-0.14	-0.13	-0.02	-0.03	-0.16	0.02	0.08	0.00	-0.01
Pacific	-0.14	0.21	0.18	-0.04	0.06	0.10	-0.15	-0.19	-0.18	0.02	-0.12	-0.15	-0.05	0.10	0.03	-0.02
Total OECD	0.75	0.67	0.56	0.22	-0.38	0.26	-0.49	-0.56	-0.43	0.22	-0.31	0.12	0.25	0.58	0.46	0.35
FSU	0.17	0.31	-0.01	0.00	-0.11	0.05	0.06	0.00	0.17	0.20	0.11	0.08	0.01	-0.04	0.02	0.02
Europe	0.02	0.02	0.01	0.01	0.01	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
China	0.88	0.28	-0.09	0.34	0.18	0.18	0.19	0.61	0.28	0.42	0.37	0.36	0.34	0.42	0.39	0.38
Other Asia	0.55	0.37	0.20	0.21	-0.14	0.16	-0.02	0.08	0.06	0.27	0.10	0.15	0.16	0.20	0.17	0.17
Latin America	0.27	0.15	0.15	0.12	0.11	0.13	0.11	0.08	0.13	0.11	0.11	0.07	0.08	0.10	0.08	0.08
Middle East	0.37	0.32	0.34	0.34	0.31	0.32	0.32	0.33	0.34	0.34	0.33	0.38	0.33	0.05	0.52	0.32
Africa	0.11	0.09	0.09	0.07	0.08	0.08	0.07	0.07	0.07	0.07	0.07	0.07	0.05	0.06	0.06	0.06
Total Non-OECD	2.37	1.53	0.70	1.09	0.43	0.94	0.75	1.17	1.05	1.41	1.10	1.12	0.97	0.79	1.26	1.04
World	3.12	2.20	1.26	1.31	0.05	1.20	0.26	0.61	0.62	1.63	0.78	1.24	1.21	1.37	1.72	1.39
Revisions to Oil Demand from Last Month's Report (mb/d)																
North America	-	-	-	0.03	-	0.01	-	-	-0.06	-0.28	-0.08	-0.06	-0.04	-0.04	0.05	-0.02
Europe	-	-	-	-	-	-	-	-	0.03	-0.01	0.01	0.01	-	0.01	0.03	0.01
Pacific	-	-	-	-	-	-	-	-	-	-0.01	-	-	-0.01	-	0.05	0.01
Total OECD	-	-	-	0.03	-	0.01	-	-	-0.03	-0.30	-0.08	-0.05	-0.06	-0.02	0.14	-
FSU	-	-	-	-	-	-	-	-	0.02	-0.19	-0.04	-0.06	-0.05	-0.05	-0.06	-0.05
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Asia	-	-	-	-	-	-	-	-	-	0.04	0.01	-0.04	-0.04	-0.05	-0.02	-0.04
Latin America	-	-	-	-	-	-	-	-	-	-0.01	-	-0.03	-0.03	-0.02	-0.03	-0.03
Middle East	-	-	-	-	-	-	-	-	-	-	-	-0.03	-0.03	-0.03	-0.03	-0.03
Africa	-	-	-	-	-	-	-	-	-	-	-	-0.01	-0.01	-0.01	-0.01	-0.01
Total Non-OECD	-	-	-	-	-	-	-	-	0.02	-0.16	-0.03	-0.16	-0.16	-0.16	-0.15	-0.16
World	-	-	-	0.03	-	0.01	-	-	-	-0.45	-0.12	-0.22	-0.22	-0.19	-0.01	-0.16
Revisions to Oil Demand Growth from Last Month's Report (mb/d)																
World	-	0.00	-	0.03	-	0.01	0.00	0.00	-0.03	-0.45	-0.12	-0.22	-0.22	-0.18	0.44	-0.04

Table 3
WORLD OIL PRODUCTION
(million barrels per day)

	2005	2006	2007	3Q06	4Q06	1Q07	2Q07	3Q07	Oct 06	Nov 06	Dec 06
OPEC											
Crude Oil											
Saudi Arabia	9.06	8.97		8.95	8.64				8.78	8.62	8.52
Iran	3.88	3.87		4.05	3.79				3.83	3.80	3.75
Iraq	1.81	1.90		2.04	1.85				1.94	1.84	1.77
UAE	2.46	2.62		2.65	2.60				2.67	2.53	2.59
Kuwait	2.13	2.21		2.20	2.20				2.22	2.21	2.16
Neutral Zone	0.58	0.58		0.57	0.57				0.58	0.57	0.56
Qatar	0.77	0.81		0.82	0.80				0.81	0.80	0.80
Nigeria	2.40	2.22		2.24	2.21				2.24	2.20	2.19
Libya	1.64	1.71		1.73	1.74				1.75	1.73	1.73
Algeria	1.34	1.35		1.34	1.34				1.35	1.34	1.34
Venezuela	2.71	2.56		2.51	2.48				2.51	2.43	2.50
Indonesia	0.94	0.89		0.87	0.86				0.86	0.86	0.86
Total Crude Oil	29.74	29.67		29.97	29.07				29.52	28.92	28.76
Total NGLs[1]	4.46	4.69	4.89	4.72	4.75	4.79	4.82	4.92	4.74	4.74	4.75
Total OPEC	34.20	34.36		34.69	33.82				34.26	33.66	33.52
OPEC incl. Angola[6]	35.45	35.77		36.14	35.25				35.64	35.12	34.99
NON-OPEC[2]											
OECD											
North America	14.14	14.30	14.39	14.33	14.49	14.66	14.38	14.17	14.33	14.45	14.69
United States	7.32	7.40	7.53	7.46	7.56	7.65	7.58	7.44	7.46	7.55	7.68
Mexico	3.76	3.70	3.50	3.69	3.57	3.56	3.52	3.47	3.58	3.55	3.59
Canada	3.06	3.20	3.37	3.18	3.36	3.45	3.28	3.26	3.29	3.36	3.42
Europe	5.61	5.20	5.13	4.93	5.19	5.22	5.04	5.00	5.06	5.21	5.30
UK	1.84	1.67	1.68	1.48	1.68	1.71	1.67	1.59	1.63	1.68	1.72
Norway	2.97	2.78	2.70	2.73	2.76	2.76	2.63	2.66	2.67	2.77	2.83
Others	0.80	0.75	0.75	0.72	0.75	0.75	0.74	0.75	0.75	0.76	0.75
Pacific	0.58	0.57	0.66	0.65	0.65	0.64	0.63	0.67	0.65	0.65	0.65
Australia	0.54	0.54	0.61	0.61	0.62	0.61	0.59	0.62	0.62	0.61	0.61
Others	0.04	0.04	0.05	0.04	0.03	0.03	0.03	0.05	0.03	0.03	0.03
Total OECD	20.33	20.07	20.17	19.91	20.33	20.52	20.05	19.85	20.04	20.31	20.63
NON-OECD											
Former USSR	11.64	12.06	12.56	12.19	12.31	12.41	12.52	12.59	12.25	12.41	12.28
Russia	9.48	9.70	9.92	9.78	9.80	9.82	9.88	9.99	9.76	9.80	9.84
Others	2.16	2.36	2.64	2.41	2.51	2.59	2.63	2.61	2.49	2.60	2.44
Asia	6.30	6.39	6.48	6.35	6.40	6.46	6.46	6.48	6.39	6.41	6.42
China	3.62	3.68	3.74	3.68	3.67	3.71	3.72	3.74	3.65	3.67	3.68
Malaysia	0.77	0.75	0.76	0.75	0.76	0.76	0.75	0.75	0.77	0.76	0.76
India	0.78	0.79	0.82	0.77	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Others	1.13	1.17	1.16	1.15	1.16	1.17	1.17	1.16	1.15	1.16	1.17
Europe	0.16	0.15	0.13	0.14	0.14	0.14	0.14	0.13	0.14	0.14	0.14
Latin America	4.29	4.41	4.58	4.42	4.46	4.52	4.53	4.59	4.41	4.48	4.49
Brazil	1.99	2.10	2.29	2.10	2.17	2.22	2.24	2.30	2.14	2.19	2.20
Argentina	0.78	0.78	0.77	0.79	0.77	0.77	0.77	0.77	0.78	0.77	0.77
Colombia	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53
Ecuador	0.53	0.54	0.54	0.54	0.53	0.53	0.53	0.54	0.52	0.54	0.53
Others	0.46	0.46	0.46	0.46	0.46	0.46	0.45	0.46	0.45	0.46	0.46
Middle East[3]	1.86	1.74	1.69	1.72	1.71	1.70	1.70	1.69	1.71	1.70	1.70
Oman	0.79	0.74	0.71	0.73	0.72	0.72	0.71	0.71	0.73	0.72	0.72
Syria	0.46	0.42	0.38	0.41	0.40	0.39	0.38	0.38	0.41	0.40	0.40
Yemen	0.42	0.39	0.41	0.38	0.38	0.40	0.41	0.41	0.38	0.39	0.39
Africa	3.72	3.99	4.46	4.04	4.12	4.26	4.34	4.56	4.04	4.13	4.17
Egypt	0.70	0.67	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66
Angola	1.25	1.41	1.73	1.45	1.43	1.54	1.61	1.83	1.38	1.45	1.47
Gabon	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23
Others	1.54	1.67	1.85	1.69	1.79	1.82	1.85	1.85	1.77	1.79	1.80
Total Non-OECD	27.96	28.74	29.90	28.86	29.14	29.48	29.68	30.04	28.95	29.28	29.21
Processing Gains[4]	1.86	1.90	1.92	1.88	1.92	1.92	1.92	1.92	1.92	1.92	1.92
Other Biofuels[5]	0.12	0.17	0.34	0.17	0.17	0.34	0.34	0.34	0.17	0.17	0.17
TOTAL NON-OPEC	50.27	50.88	52.33	50.82	51.56	52.26	51.99	52.15	51.08	51.68	51.93
Non-OPEC excl. Angola[6]	49.03	49.47	50.60	49.37	50.13	50.72	50.38	50.32	49.70	50.22	50.46
TOTAL SUPPLY	84.48	85.24		85.51	85.38				85.35	85.34	85.45

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 will reportedly cease from January 2007.
2 Comprises crude oil, condensates, NGLs and oil from non-conventional sources. No allowance is made in the non-OPEC forecast for exceptional events, which have, at certain times historically, reduced non-OPEC supply by 300-400 kbd on an annual basis.
3 Includes small amounts of production from Israel, Jordan and Bahrain.
4 Net volumetric gains and losses in refining (excludes net gain/loss in FSU, China and non-OECD Europe) and marine transportation losses.
5 Comprises Fuel Ethanol and Biodiesel supply from outside Brazil and US.
6 With effect from OMR of 13 February 2007, Angolan production will be reclassified within OPEC and excluded from the Non-OPEC total, for the period January 2007 onwards. Secondary aggregates allow comparison with previous year totals by including Angola within OPEC retroactively

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			
	Jul2006	Aug2006	Sep2006	Oct2006	Nov2006*	Nov2003	Nov2004	Nov2005	4Q2005	1Q2006	2Q2006	3Q2006
North America												
Crude	456.1	455.9	461.7	467.2	471.4	400.6	410.6	457.3	0.26	0.07	-0.05	0.03
Motor Gasoline	238.7	237.7	244.7	232.2	227.8	232.7	241.0	234.0	0.10	0.07	-0.01	0.03
Middle Distillate	209.2	218.8	224.0	216.5	206.1	209.4	195.2	210.7	0.16	-0.20	0.06	0.26
Residual Fuel Oil	52.4	52.5	53.1	51.8	51.9	44.0	50.1	47.2	0.03	0.07	0.02	0.01
Total Products[3]	687.1	702.8	724.2	701.1	677.5	652.3	656.6	676.1	-0.04	-0.26	0.38	0.59
Total[4]	1297.0	1319.3	1348.1	1327.6	1306.5	1207.2	1217.4	1292.0	0.04	-0.20	0.40	0.79
Europe												
Crude	349.6	332.8	327.4	334.8	336.2	327.9	348.8	326.7	-0.13	0.18	-0.07	-0.12
Motor Gasoline	97.7	101.4	103.9	105.1	105.8	115.5	111.0	109.3	0.09	-0.01	-0.12	0.04
Middle Distillate	263.8	271.9	270.4	262.5	258.1	239.4	239.5	258.2	-0.02	-0.11	0.11	0.15
Residual Fuel Oil	74.3	77.3	77.2	79.8	77.3	77.2	72.9	77.2	-0.02	-0.04	0.06	0.02
Total Products[3]	540.3	556.5	559.8	552.2	546.4	537.5	527.3	545.4	0.07	-0.16	0.04	0.29
Total[4]	964.0	963.7	961.8	957.2	952.0	938.3	948.7	947.1	-0.08	0.05	-0.06	0.20
Pacific												
Crude	175.9	173.8	174.9	177.6	179.2	160.7	192.3	166.1	-0.12	0.15	0.11	-0.07
Motor Gasoline	23.4	23.7	23.4	23.8	23.8	23.2	24.8	24.2	0.00	0.02	0.00	-0.01
Middle Distillate	75.4	80.9	86.0	87.6	83.2	81.9	82.9	79.0	-0.18	-0.01	0.10	0.18
Residual Fuel Oil	25.1	24.6	23.8	23.5	22.0	23.0	23.7	23.2	-0.04	-0.01	0.04	0.01
Total Products[3]	192.5	203.2	210.7	210.1	201.0	197.0	200.9	191.4	-0.26	0.00	0.17	0.30
Total[4]	440.2	449.9	458.6	459.7	453.3	432.0	467.6	431.8	-0.42	0.16	0.30	0.25
Total OECD												
Crude	981.6	962.5	963.9	979.6	986.8	889.2	951.7	950.2	0.01	0.40	-0.01	-0.15
Motor Gasoline	359.8	362.9	372.0	361.0	357.4	371.4	376.8	367.5	0.19	0.08	-0.12	0.06
Middle Distillate	548.4	571.6	580.3	566.5	547.4	530.6	517.6	547.8	-0.05	-0.33	0.27	0.59
Residual Fuel Oil	151.8	154.3	154.1	155.1	151.1	144.2	146.7	147.6	-0.03	0.02	0.12	0.04
Total Products[3]	1419.8	1462.5	1494.7	1463.5	1424.9	1386.8	1384.8	1413.0	-0.24	-0.42	0.58	1.18
Total[4]	2701.1	2732.9	2768.5	2744.5	2711.7	2577.5	2633.6	2671.0	-0.46	0.01	0.64	1.24

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			
	Jul2006	Aug2006	Sep2006	Oct2006	Nov2006*	Nov2003	Nov2004	Nov2005	4Q2005	1Q2006	2Q2006	3Q2006
North America												
Crude	687.9	687.8	687.8	688.6	688.7	633.6	672.8	685.6	-0.10	0.02	0.02	0.00
Products	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	0.00	0.00	0.00	0.00
Europe												
Crude	174.5	174.5	175.5	174.7	174.7	154.0	164.1	167.1	0.01	0.04	0.04	0.02
Products	235.8	237.3	235.0	234.7	234.7	211.5	204.7	236.9	0.02	-0.03	0.00	-0.01
Pacific												
Crude	382.2	381.5	381.5	381.5	381.5	382.8	382.5	380.5	-0.01	-0.01	0.00	0.01
Products	11.8	11.8	11.8	11.8	11.8	10.7	11.0	11.3	0.00	0.00	0.00	0.00
Total OECD												
Crude	1244.6	1243.9	1244.8	1244.8	1244.9	1170.4	1219.3	1233.3	-0.10	0.04	0.06	0.03
Products	249.7	251.2	248.8	248.5	248.5	224.2	217.8	250.2	0.02	-0.04	0.01	-0.01
Total[4]	1495.3	1496.0	1494.6	1494.3	1494.4	1395.5	1438.1	1484.5	-0.08	0.01	0.07	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 September 2005		End December 2005		End March 2006		End June 2006		End September 2006 [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	168.4	76	178.1	82	169.7	79	169.7	74	180.6	-
Mexico	52.8	25	43.9	21	41.7	21	42.1	21	47.0	-
United States[4]	1706.3	82	1699.6	83	1693.7	83	1731.6	83	1788.3	-
Total[4]	1949.6	77	1943.7	78	1927.2	77	1965.5	77	2037.9	79
Pacific										
Australia	34.1	37	32.7	36	35.5	39	38.9	42	35.3	-
Japan	637.9	117	612.1	103	620.1	130	627.2	130	649.1	-
Korea	145.4	65	134.9	59	137.4	68	155.4	77	160.5	-
New Zealand	7.9	48	7.2	44	6.8	45	6.7	46	6.9	-
Total	825.3	94	786.8	85	799.8	102	828.2	105	851.9	97
Europe[5]										
Austria	19.8	68	20.4	72	18.7	66	19.2	67	19.6	-
Belgium	30.3	51	28.6	45	27.3	52	30.4	57	30.5	-
Czech Republic	16.7	78	18.8	98	19.6	90	19.5	88	19.3	-
Denmark	20.5	111	20.3	102	19.5	99	20.4	106	21.1	-
Finland	27.3	123	25.1	113	26.7	120	30.5	136	26.8	-
France	191.4	97	195.6	93	196.2	104	188.7	97	187.5	-
Germany	275.8	105	282.6	111	279.9	110	281.4	104	278.5	-
Greece	34.6	75	33.1	69	35.4	93	34.9	86	38.2	-
Hungary	17.1	104	17.6	120	20.8	127	17.6	110	17.4	-
Ireland	13.2	65	11.6	55	13.1	72	12.6	71	14.0	-
Italy	137.0	77	132.0	71	131.5	81	126.0	76	134.1	-
Luxembourg	0.8	13	0.8	11	0.9	15	1.0	17	0.9	-
Netherlands	115.7	115	116.4	116	120.5	121	123.1	119	125.0	-
Norway	30.2	108	30.7	123	21.9	91	21.8	90	29.4	-
Poland	33.8	69	35.2	79	35.5	74	35.7	67	37.3	-
Portugal	26.8	82	25.7	78	24.7	83	24.7	81	23.8	-
Slovak Republic	5.1	59	6.5	83	8.3	102	7.7	89	7.4	-
Spain	131.7	84	128.6	79	130.2	84	129.2	82	133.9	-
Sweden	34.6	95	38.0	102	38.4	109	39.6	113	38.6	-
Switzerland	38.9	137	37.7	128	37.7	144	39.3	141	38.9	-
Turkey	50.9	77	51.1	100	51.6	79	51.6	78	53.7	-
United Kingdom	104.7	57	95.2	50	97.4	54	99.0	56	97.4	-
Total	1356.9	86	1351.2	86	1355.9	90	1353.8	88	1373.3	88
Total OECD	4131.8	83	4081.7	82	4082.9	85	4147.5	85	4263.1	85
DAYS OF IEA Net Imports[6]	-	116	-	114	-	115	-	116	-	119

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 2006 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. 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]*		
3Q2003	3983	1383	2600	80	28	53
4Q2003	3928	1411	2517	79	28	50
1Q2004	3888	1423	2465	81	30	51
2Q2004	3974	1429	2545	81	29	52
3Q2004	4016	1435	2581	80	29	51
4Q2004	3998	1450	2547	79	29	50
1Q2005	4005	1462	2542	82	30	52
2Q2005	4116	1494	2623	84	30	53
3Q2005	4132	1494	2638	83	30	53
4Q2005	4082	1487	2595	82	30	52
1Q2006	4083	1487	2596	85	31	54
2Q2006	4148	1493	2654	85	31	54
3Q2006	4263	1495	2768	85	30	55

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 3Q2006 (when latest forecasts are used).

Table 6

IEA Member Country Destinations of Selected Crude Streams[1]

(million barrels per day)

	2003	2004	2005	4Q05	1Q06	2Q06	3Q06	Aug 06	Sep 06	Oct 06	Year Earlier Oct 05	Year Earlier change
Saudi Light & Extra Light												
North America	0.64	0.55	0.46	0.52	0.51	0.68	0.62	0.69	0.55	0.56	0.44	0.12
Europe	1.00	1.03	0.90	0.91	0.83	0.80	0.72	0.76	0.63	0.87	0.92	-0.05
Pacific	1.18	1.24	1.31	1.37	1.40	1.33	1.29	1.30	1.28	1.30	1.28	0.02
Saudi Medium												
North America	0.83	0.80	0.81	0.81	0.65	0.61	0.68	0.61	0.75	0.55	0.60	-0.06
Europe	0.11	0.11	0.16	0.16	0.17	0.14	0.14	0.13	0.16	0.14	0.16	-0.02
Pacific	0.24	0.23	0.26	0.32	0.38	0.35	0.35	0.35	0.33	0.33	0.28	0.05
Saudi Heavy												
North America	0.30	0.22	0.17	0.16	0.21	0.21	0.21	0.24	0.21	0.20	0.14	0.06
Europe	0.19	0.23	0.23	0.26	0.14	0.22	0.21	0.18	0.23	0.19	0.32	-0.13
Pacific	0.16	0.15	0.25	0.29	0.25	0.20	0.22	0.24	0.22	0.25	0.23	0.02
Iraqi Basrah Light[2]												
North America	0.44	0.71	0.60	0.59	0.44	0.60	0.60	0.60	0.60	0.45	0.65	-0.20
Europe	0.09	0.21	0.23	0.31	0.24	0.29	0.40	0.42	0.41	0.38	0.30	0.09
Pacific	0.03	0.12	0.06	0.06	0.08	0.09	0.10	0.13	0.13	0.06	0.06	0.00
Iraqi Kirkuk												
North America	0.06	0.02	..	..	..	..	0.01	0.03	..	..	..	..
Europe	0.12	0.08	0.05	0.03	..	..	0.04	0.03	0.04	0.02	0.04	-0.03
Pacific	..	..	..	..	..	..	..	..	..	..	..	..
Iranian Light												
North America	..	..	..	..	..	..	..	..	..	..	..	..
Europe	0.19	0.24	0.20	0.22	0.20	0.27	0.31	0.26	0.27	0.29	0.23	0.06
Pacific	0.17	0.16	0.15	0.15	0.19	0.12	0.10	0.08	0.14	0.08	0.15	-0.07
Iranian Heavy[3]												
North America	..	..	..	..	..	..	..	..	..	..	..	..
Europe	0.59	0.57	0.63	0.57	0.48	0.57	0.67	0.54	0.72	0.51	0.56	-0.05
Pacific	0.69	0.65	0.62	0.63	0.64	0.48	0.51	0.49	0.54	0.58	0.54	0.04
Venezuelan Light & Medium												
North America	0.69	0.67	0.82	0.81	0.76	0.68	0.62	0.53	0.69	0.65	0.77	-0.12
Europe	0.02	0.01	0.04	0.07	0.12	0.15	0.08	0.10	0.10	0.07	0.01	0.05
Pacific	0.00	..	..	..	..	..	..	..	..	..	..	..
Venezuelan 22 API and heavier												
North America	0.60	0.88	0.72	0.56	0.72	0.72	0.74	0.81	0.72	0.60	0.51	0.09
Europe	0.06	0.05	0.06	0.06	0.08	0.05	0.06	0.07	0.04	0.03	0.07	-0.04
Pacific	..	..	..	..	..	..	..	..	..	..	..	..
Mexican Maya												
North America	1.32	1.36	1.27	1.25	1.26	1.24	1.30	1.35	1.23	1.24	1.13	0.11
Europe	0.16	0.16	0.17	0.18	0.13	0.20	0.16	0.19	0.11	0.20	0.25	-0.05
Pacific	0.00	0.00	..	..	..	..	..	..	..	..	..	..
Mexican Isthmus												
North America	0.00	..	0.03	0.10	0.09	0.03	0.01	0.00	0.01	0.02	0.10	-0.08
Europe	0.00	0.01	0.03	0.05	0.01	0.00	0.00	..	0.01	0.03	0.09	-0.07
Pacific	0.00	0.00	..	..	..	..	..	..	..	..	..	..
Russian Urals												
North America	0.14	0.12	0.13	0.09	..	0.16	0.16	0.25	0.14	0.02	0.18	-0.16
Europe	1.62	1.86	1.77	1.69	1.68	1.83	1.66	1.73	1.62	1.40	1.82	-0.42
Pacific	0.00	0.01	0.00	..	..	..	0.01	..	..	..	..	..
Nigerian Light[4]												
North America	0.63	0.80	0.90	0.90	0.87	0.79	0.78	0.85	0.64	0.78	0.85	-0.08
Europe	0.41	0.28	0.35	0.41	0.28	0.27	0.39	0.46	0.26	0.38	0.34	0.04
Pacific	0.08	0.11	0.05	0.02	0.09	0.03	0.02	..	0.03	0.03	0.06	-0.03
Nigerian Medium												
North America	0.17	0.23	0.17	0.15	0.19	0.17	0.16	0.02	0.25	0.19	0.02	0.17
Europe	0.06	0.04	0.07	0.07	0.08	0.08	0.08	0.10	0.10	0.08	0.07	0.00
Pacific	0.01	0.01	0.01	..	..	..	0.01	0.03	..	..	..	..

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, Poland and the Slovak Republic.
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)

	2003	2004	2005	4Q2005	1Q2006	2Q2006	3Q2006	Aug-06	Sep-06	Oct-06	Year Earlier Oct-05	Year Earlier % change
Crude Oil												
North America	8069	8431	8384	8101	7740	8265	8690	8605	8997	8134	7990	2%
Europe	9096	9478	9792	9954	9398	9753	10166	10136	10031	9864	10142	-3%
Pacific	6711	6659	6801	6967	7399	6509	6683	6768	6655	6205	7041	-12%
Total OECD	23876	24569	24978	25022	24537	24526	25538	25508	25684	24203	25173	-4%
LPG												
North America	27	24	18	30	8	8	12	20	1	14	32	-56%
Europe	193	225	248	249	280	242	210	223	200	227	216	5%
Pacific	541	541	527	486	651	575	593	643	591	492	358	37%
Total OECD	760	790	793	764	938	825	815	886	792	733	605	21%
Naphtha												
North America	67	99	110	76	41	49	64	74	71	114	62	82%
Europe	305	282	273	281	352	276	303	361	303	317	253	25%
Pacific	770	769	746	760	692	731	810	797	802	738	828	-11%
Total OECD	1142	1150	1129	1116	1084	1056	1177	1233	1176	1169	1144	2%
Gasoline[3]												
North America	669	794	1016	1148	1113	1365	1166	1370	1002	928	1416	-34%
Europe	150	137	165	120	194	149	122	51	138	146	128	14%
Pacific	70	105	102	90	86	145	74	68	61	96	65	48%
Total OECD	888	1035	1283	1358	1393	1658	1363	1489	1201	1169	1609	-27%
Jet & Kerosene												
North America	97	101	130	268	79	191	204	235	201	142	302	-53%
Europe	271	293	375	371	313	382	398	429	435	419	350	20%
Pacific	102	77	66	49	131	39	43	40	45	66	51	30%
Total OECD	470	471	571	687	523	612	645	704	681	627	702	-11%
Gasoil/Diesel												
North America	126	123	142	267	210	173	181	190	196	140	304	-54%
Europe	652	751	845	867	1078	947	900	747	1002	965	758	27%
Pacific	73	74	79	83	80	94	65	66	66	69	53	31%
Total OECD	850	947	1066	1217	1368	1213	1147	1003	1264	1175	1115	5%
Heavy Fuel Oil												
North America	326	453	525	610	481	320	309	325	283	273	655	-58%
Europe	398	405	490	473	520	479	421	407	363	497	426	17%
Pacific	88	76	85	82	122	105	76	93	44	65	61	6%
Total OECD	812	935	1100	1166	1122	904	806	825	690	835	1142	-27%
Other Products												
North America	680	872	1005	1049	972	1162	1297	1332	1281	1039	1370	-24%
Europe	690	676	781	787	891	863	912	912	883	943	833	13%
Pacific	235	256	247	263	271	208	225	263	139	272	229	19%
Total OECD	1605	1805	2033	2099	2134	2233	2434	2508	2302	2253	2433	-7%
Total Products												
North America	1991	2466	2947	3447	2903	3268	3233	3547	3034	2650	4142	-36%
Europe	2657	2767	3177	3148	3628	3337	3266	3131	3325	3514	2964	19%
Pacific	1879	1898	1852	1812	2032	1896	1886	1970	1748	1797	1644	9%
Total OECD	6527	7132	7976	8407	8563	8501	8386	8648	8107	7962	8750	-9%
Total Oil												
North America	10061	10897	11332	11548	10643	11533	11923	12151	12031	10785	12133	-11%
Europe	11753	12246	12969	13102	13026	13090	13432	13267	13356	13379	13106	2%
Pacific	8590	8558	8653	8779	9431	8404	8568	8738	8403	8002	8685	-8%
Total OECD	30403	31700	32954	33429	33100	33027	33924	34156	33791	32165	33923	-5%

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

OIL MARKET REPORT CONTACTS

Editorial Enquiries

Editor — Lawrence Eagles
Head, Oil Industry & Markets Division
(+33) 0*1 40 57 65 90
e-mail: lawrence.eagles@iea.org

Demand — Eduardo Lopez
(+33) 0*1 40 57 65 93
e-mail: eduardo.lopez@iea.org

Supply — David Fyfe
(+33) 0*1 40 57 65 94
e-mail: david.fyfe@iea.org

Prices/OECD Stocks — Julius Walker
(+33) 0*1 40 57 65 22
e-mail: julius.walker@iea.org

Refinery Activity — David Martin
(+33) 0*1 40 57 65 95
e-mail: david.martin@iea.org

OECD Stocks/Trade — Toril Ekeland Bosoni
(+33) 0*1 40 57 66 36
e-mail: toril.bosoni@iea.org

Statistics/Freight/Trade — James Ryder
(+33) 0*1 40 57 66 18
e-mail: james.ryder@iea.org

End-User Prices/Statistical Support — Miklos Bankuti
(+33) 0*1 40 57 67 76
e-mail: miklos.bankuti @iea.org

Administrative Support — Anne Mayne
(+33) 0*1 40 57 65 96
e-mail: anne.mayne@iea.org

Fax: *(+33) 0*1 40 57 65 99/40 57 65 09*

* 0 only within France

Media Enquiries

Press Office — Gwyn Darling
(+33) 0*1 40 57 65 54
e-mail: ieapressoffice@iea.org

Subscription and Delivery Enquiries

Oil Market Report Subscriptions (Attn: Ms. Sandra Coleman)
International Energy Agency
BP 586-75726 PARIS Cedex 15, France

Tel. +33 (0) 1 40 57 65 57
Fax. +33 (0) 1 40 57 65 59
e-mail: sandra.coleman@iea.org

Users' Guide to the IEA Oil Market Report

Readers are referred to the *Users' Guide*, published in conjunction with the *Annual Statistical Supplement* (current issue dated 11 August 2006), for information on the data sources, definitions, technical terms and general approach used in preparing the Report. 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 (© 2007 Platts - a division of McGraw-Hill Inc.).

INTERNATIONAL ENERGY AGENCY/AGENCE INTERNATIONALE DE L'ENERGIE

OIL MARKET REPORT

A MONTHLY OIL MARKET AND STOCKS ASSESSMENT

www.oilmarketreport.org

INTERNATIONAL ENERGY AGENCY

AGENCE INTERNATIONALE DE L'ENERGIE

13 February 2007

HIGHLIGHTS

- **Oil prices** rebounded to $60/bbl from mid-January on colder weather and higher implied demand, tighter OPEC supply and increased geopolitical tensions. Product prices benefited from the onset of seasonal refinery maintenance, with naphtha and fuel oil cracks gaining due to tighter supplies.

- **Total OECD industry oil inventories** fell by 40.2 mb in December, as the fall in crude exceeded product stock builds despite a temperate start to winter in the US and Europe. Forward demand cover fell by one day from end-November to 53 days, but remains one day higher on the year.

- **Global oil product demand** is raised by 111 kb/d in 2006 to 84.5 mb/d and by 273 kb/d in 2007 to 86.0 mb/d following revisions to China. Despite a milder-than-normal start to winter, 4Q06 world demand was 1.3 mb/d higher than a year earlier.

- **Chinese apparent demand** reaches 7.1 mb/d in 2006 and 7.6 mb/d in 2007 after incorporation of annual data for 2005 and more comprehensive refinery data. This lifts non-OECD demand growth to 3.6% in 2006 and 3.2% in 2007.

- **World oil supply** grew by 175 kb/d in January to 85.5 mb/d, with higher output in the FSU and other non-OECD producers. Non-OPEC supply growth (+ OPEC NGLs but excluding Angola) amounts to 0.7 mb/d in 2006 and 1.2 mb/d in 2007 amid lower expectations for the Americas and China.

- **January OPEC crude supply** fell by 180 kb/d from December to 30.2 mb/d (adjusted for Angola). The 'call on OPEC crude and stock change' is revised up to 30.6 mb/d for 2007 versus 30.3 mb/d in 2006 and remains above existing OPEC production. Additional OPEC-10 supply cuts could markedly tighten the market.

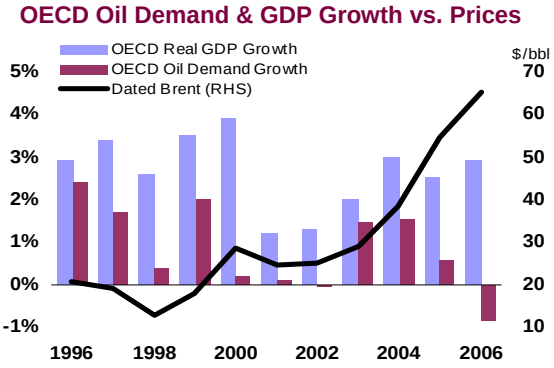
- **Economic refinery run** cuts tempered seasonal gains in OECD throughputs, which averaged 39.6 mb/d in December, up 0.7 mb/d on the month. Seasonal maintenance cuts OECD refinery runs to an estimated 39.0 mb/d in January and an average of 38.4 mb/d in February and March.

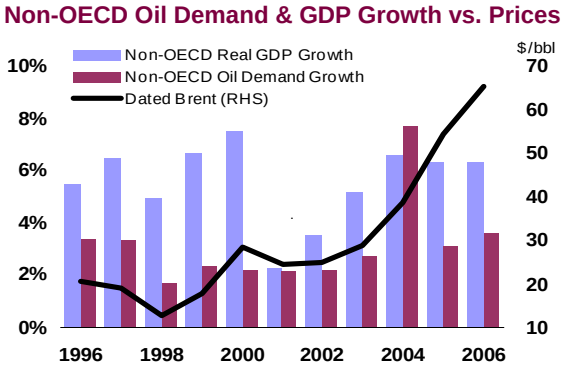
Next Issue: 13 March 2007

CONTENTS

SOFTER DEMAND GROWTH MASKING THE TREND

For the first time since 1985, OECD oil demand recorded its first significant drop - no doubt a reaction to high prices, but the drop does not imply a change in the longer-term trend.



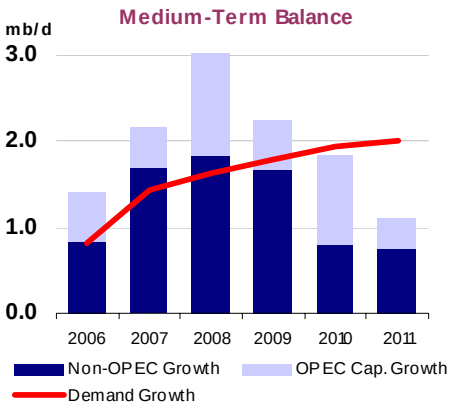


While OECD oil demand growth has fallen, in non-OECD it has been robust. Exclude the strong demand from China and the Middle East though and elsewhere demand growth has been less inspiring. However, with a number of highly populous countries making the transition between subsistence and consumer status, the point where energy demand typically accelerates, this lull in demand growth is only temporary.

It should come as no surprise that high prices have accelerated the structural global decline in domestic heating oil and fuel oil in power generation. China has been aggressively switching to non-oil power generation capacity, while the US and Europe have continued the shift towards natural gas, and to some extent coal. However, there have also been shifts in the transportation sector.

Japanese gasoline demand declined in 2006, and across the OECD as a whole in the past two years, transportation fuel demand growth has fallen to 1.3% from 1.8% between 1996 and 2004 - despite constant average real rates of GDP growth. In Japan, there has been a clear switch towards smaller, more efficient vehicles and while it may be some time before the average US commuter drives around in a 'super mini', a shift away from some of the light truck-based SUVs has been seen.

Many countries have power plants with dual-fuel capabilities, or spare capacity that can use fuel oil, which makes it the ideal fuel in the event of sudden demand spikes, price shifts (of natural gas), or supply disruptions. Examples of this are manifold: in Japan following the nuclear shutdown in 2003, in the US following Hurricanes Katrina and Rita and in Italy after the Russia/Ukraine dispute in early 2006. Much of China's oil demand surge in 2004 came from utilities in an effort to fill a severe domestic power shortage.



In Europe (and other countries), there is growing competition for limited, and possibly falling, gas supplies from Russia. Fuel oil could fill this gap, either providing supplementary support for power generation, or (more likely) Russia will burn more fuel oil to displace domestic gas consumption - either way more fuel oil could be used at some point in the future. Furthermore, fuel oil's structural decline has masked a higher underlying growth rate in transport - without fuel oil's decline, oil demand growth would be much higher.

On the transportation side, if prices do not keep on rising, many consumers will quickly acclimatise to the new levels, possibly rolling back some of the marginal economy measures seen recently. This, however, can be offset if government policies maintain the recent trend towards more fuel-efficient cars.

Ultimately, the recently published update to the *Medium-Term Oil Market Report* forecasts that oil demand growth in OECD countries will average 420 kb/d over the next five years, but will be three times faster in non-OECD countries. And, barring a global slowdown, in just three years the rate of oil demand growth will once more outstrip the growth of new oil supplies. Without stronger policies to stem demand growth (including effective implementation of those announced by the EU and US) or more rapid growth of oil capacity, the slim respite from tight spare capacity may prove very brief.

DEMAND

Summary

- **Global oil product demand** has been revised upwards by 111 kb/d in 2006, to 84.5 mb/d, and by 273 kb/d in 2007, to 86.0 mb/d. However, given revisions to the 2005 baseline, particularly in China, the annual growth rate for 2006 remains virtually unchanged at +1.0%, while that of 2007 is increased to +1.8%.

Global Oil Demand from 2005 to 2007

	1Q05	2Q05	3Q05	4Q05	2005	1Q06	2Q06	3Q06	4Q06	2006	1Q07	2Q07	3Q07	4Q07	2007
Demand (mb/d)	84.66	82.48	83.39	84.25	83.69	85.03	83.27	84.12	85.54	84.49	86.25	84.55	85.96	87.40	86.04
Annual Change (%)	2.8	1.7	1.7	0.2	1.6	0.4	1.0	0.9	1.5	1.0	1.4	1.5	2.2	2.2	1.8
Annual Change (mb/d)	2.32	1.34	1.40	0.21	1.31	0.37	0.79	0.73	1.29	0.80	1.22	1.28	1.84	1.86	1.55
Changes from last month's report (mb/d)	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	-0.2	0.1	0.2	0.3	0.7	-0.1	0.3

- **OECD oil product demand** has been lowered by 97 kb/d in 2006, as a result of large revisions, notably to US data, and continuing mild temperatures throughout December that curbed heating and residual oil demand. Oil product demand in the region is expected to decline by 0.8% in 2006 on an annual basis, but should rebound by 0.8% in 2007.

Global Oil Demand by Region
(million barrels per day)

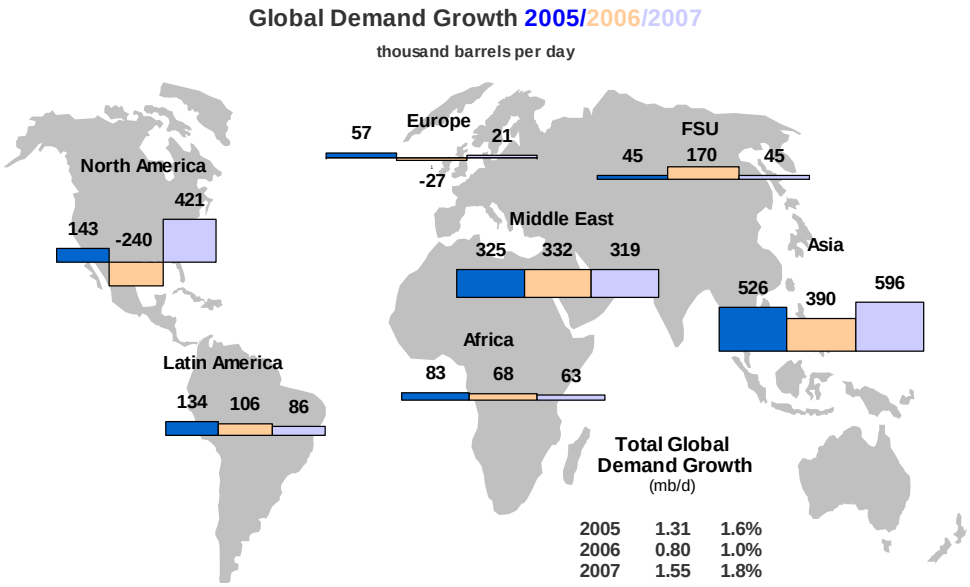
	Demand		Annual Change			Annual Change (%)		
	2006	2007	2005	2006	2007	2005	2006	2007
North America	25.28	25.70	0.14	-0.24	0.42	0.6	-0.9	1.7
Europe	16.20	16.22	0.06	-0.03	0.02	0.4	-0.2	0.1
OECD Pacific	8.45	8.44	0.10	-0.14	-0.01	1.2	-1.6	-0.1
China	7.12	7.56	0.27	0.43	0.44	4.2	6.4	6.1
Other Asia	8.88	9.05	0.16	0.10	0.17	1.8	1.1	1.9
Subtotal Asia	24.45	25.05	0.53	0.39	0.60	2.2	1.6	2.4
FSU	3.97	4.02	0.04	0.17	0.05	1.2	4.5	1.1
Middle East	6.45	6.77	0.32	0.33	0.32	5.6	5.4	5.0
Africa	2.94	3.01	0.08	0.07	0.06	3.0	2.4	2.2
Latin America	5.20	5.28	0.13	0.11	0.09	2.7	2.1	1.7
World	84.49	86.04	1.31	0.80	1.55	1.6	1.0	1.8

- **Non-OECD oil product demand** has been adjusted upwards in 2005, 2006 and 2007, due to a reappraisal of Chinese apparent demand, which is now seen to reach 7.1 mb/d in 2006 and 7.6 mb/d in 2007. As such non-OECD oil product consumption is forecast to grow by 3.6% and 3.2% in 2006 and 2007, respectively.

Worldwide Overview

Despite milder-than-expected temperatures and given a large revision to China's apparent demand estimates, we have revised upwards our global demand forecast for 2006. The Chinese revisions and new preliminary data have also led to upward changes in our 2007 estimates. In volumetric terms, we expect demand to average 84.5 mb/d in 2006 and 86.0 mb/d in 2007. In percentage terms, demand growth remains virtually unchanged in 2006 at +1.0% given the change of China's 2005 baseline, and increases to +1.8% in 2007 (compared with +1.6% in our previous report).

The world economy is poised to weaken only marginally this year, despite the much-trumpeted slowdown of the US economy. Although the evidence is still patchy, some economists argue that the effects of the weaker housing market may be fully felt only by the middle of 2007. In the meantime, we have maintained our assumption of 2.4% for US GDP growth in 2007.



With respect to China, economic activity should be robust this year. Although China generates a large share of GDP from exports, some analysts feel a slowdown in its major trading partners may lead to further cost cutting, thereby benefiting outsourcing operations in low-cost countries. Nevertheless, while many other Asian countries offer low-cost manufacturing, China arguably has important technological strengths that would probably shield it from falling external demand.

OECD

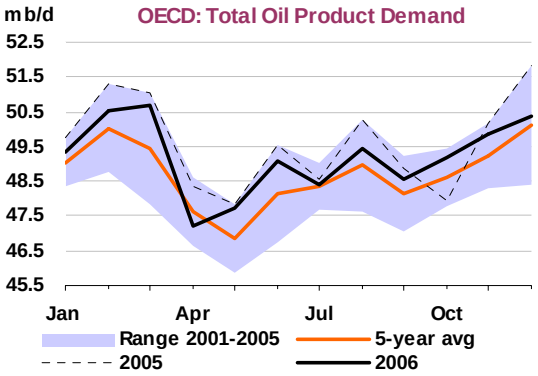
Total OECD demand growth was negative in December (-2.8% versus levels of a year ago) across all regions. North American demand fell by 2.5%, given a sharp decline in both heating and fuel oil as a result of continuing mild temperatures. In the Pacific, demand contracted even more (-3.5%), also because of benign weather. The climate story repeated itself in Europe, where total deliveries contracted by 2.8%.

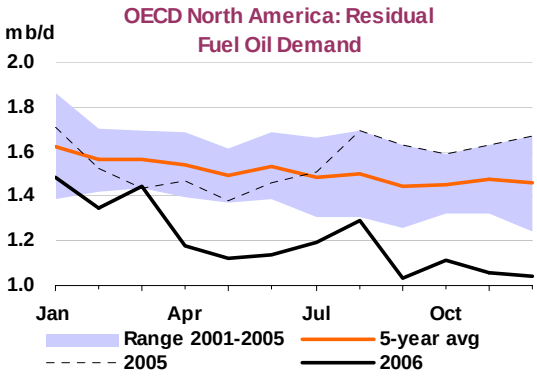
OECD Demand based on Adjusted Preliminary Submissions - December 2006
(million barrels per day)

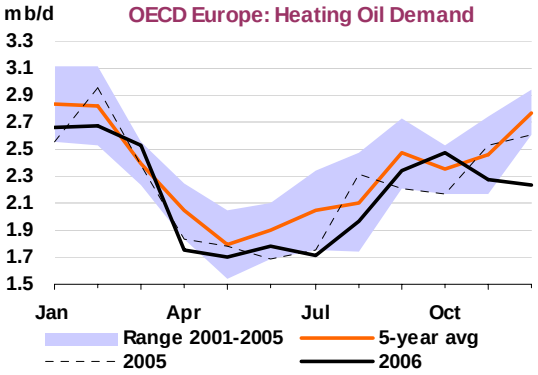
	Gasoline		Jet/Kerosene		Diesel		Other Gasoil		RFO		Other		Total Products	
	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa
OECD North America	**10.84**	**0.5**	**1.91**	**-6.6**	**3.66**	**6.3**	**1.49**	**-20.7**	**1.04**	**-37.8**	**6.56**	**3.51**	**25.49**	**-2.5**
USA*	9.31	0.1	1.69	-8.3	3.19	6.8	0.96	-28.9	0.51	-50.7	5.15	3.1	20.80	-3.2
Canada	0.71	2.3	0.12	5.7	0.17	6.8	0.39	0.1	0.21	6.7	0.70	15.8	2.30	6.6
Mexico	0.76	4.0	0.07	20.3	0.26	1.2	0.11	1.2	0.25	-34.1	0.66	-3.8	2.10	-4.9
OECD Europe	**2.56**	**-0.3**	**1.27**	**1.3**	**3.90**	**4.3**	**2.23**	**-14.4**	**1.83**	**-5.9**	**3.56**	**-3.3**	**15.34**	**-2.8**
Germany	0.54	7.0	0.17	7.8	0.61	13.5	0.41	-18.3	0.19	-0.8	0.59	-0.4	2.51	1.0
UK	0.44	-4.6	0.39	-3.4	0.40	3.8	0.15	-6.3	0.09	5.7	0.37	-1.3	1.84	-1.6
France	0.22	-4.9	0.15	2.3	0.63	2.0	0.32	-27.0	0.13	-14.4	0.42	-4.2	1.87	-7.7
Italy	0.30	-7.0	0.08	5.0	0.51	-2.0	0.16	-20.0	0.26	-20.0	0.36	-7.5	1.68	-8.9
Spain	0.16	-2.6	0.11	1.7	0.48	1.2	0.26	-7.7	0.24	4.4	0.35	-2.1	1.61	-0.9
OECD Pacific	**1.71**	**-0.5**	**1.45**	**-15.6**	**1.29**	**-0.8**	**0.67**	**-15.0**	**1.06**	**-8.2**	**3.39**	**4.7**	**9.56**	**-3.5**
Japan	1.13	-1.1	1.05	-17.0	0.66	-3.3	0.51	-18.0	0.53	-15.0	2.06	4.3	5.94	-5.9
Korea	0.17	6.1	0.27	-16.8	0.31	1.8	0.15	-2.6	0.50	0.6	1.11	7.5	2.52	1.5
Australia	0.35	-0.7	0.10	0.5	0.28	2.5	0.00	-42.3	0.02	-6.6	0.19	-6.6	0.94	-1.1
OECD Total	**15.10**	**0.3**	**4.62**	**-7.7**	**8.85**	**4.3**	**4.39**	**-16.7**	**3.93**	**-17.6**	**13.50**	**1.9**	**50.39**	**-2.8**

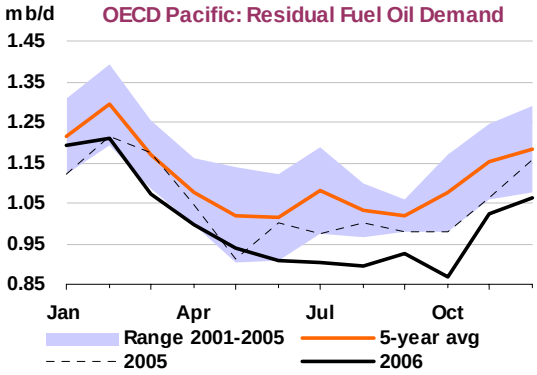
* Fifty States Only

Newly submitted data suggest that warmer-than-normal temperatures reduced total consumption in the OECD by much more than had been anticipated based on normal weather patterns. Our 4Q06 OECD demand estimate has thus been lowered by 370 kb/d. However, with a large miscellaneous-to-balance for the fourth quarter, we are aware that significant shifts could occur when more accurate official submissions are received. As such, OECD demand has been reduced by 97 kb/d to 49.2 mb/d in 2006; for the year as a whole, we foresee regional demand falling by 0.8% on an annual basis. In 2007, consumption should increase by 0.8%, provided that winter temperatures are close to the historical 10-year average.









Total OECD Demand by Product
(million barrels per day)

	2005	2006	4Q05	1Q06	2Q06	3Q06	Sep 06	Oct 06	Nov 06*	Latest month vs. Oct 06	Latest month vs. Nov 05
LPG & Ethane	4.74	4.63	4.79	5.03	4.44	4.36	4.11	4.31	4.62	0.31	-0.14
Naphtha	3.22	3.18	3.09	3.22	2.94	3.13	3.13	3.28	3.37	0.09	0.24
Motor Gasoline	14.84	14.88	14.76	14.35	14.96	15.27	14.88	14.90	14.79	-0.12	0.07
Jet & Kerosene	4.25	4.18	4.40	4.48	3.99	3.98	3.99	4.04	4.22	0.18	-0.02
Gas/Diesel Oil	13.06	13.20	13.41	13.74	12.64	12.87	13.42	13.75	13.77	0.02	0.15
Residual Fuel Oil	4.44	4.02	4.50	4.64	3.79	3.81	3.69	3.69	3.87	0.18	-0.63
Other Products	5.06	5.09	5.02	4.73	5.23	5.38	5.37	5.21	5.23	0.02	0.00
Total Products	**49.61**	**49.20**	**49.99**	**50.19**	**47.99**	**48.80**	**48.58**	**49.18**	**49.86**	**0.68**	**-0.32**

* Latest official OECD submissions (MOS)

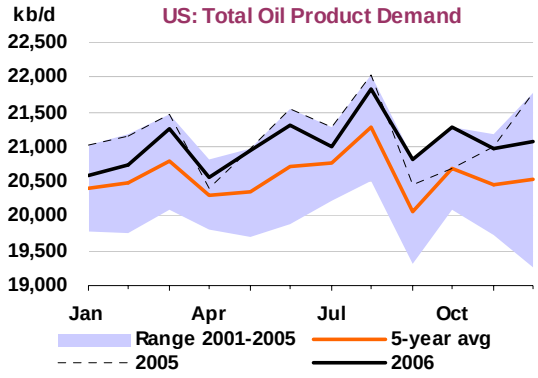
North America

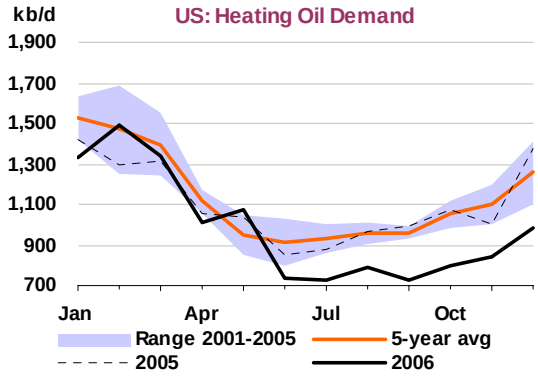
According to preliminary data, December's inland deliveries in the **United States** – a proxy of demand – of all product categories bar naphtha, diesel and 'other products' fell compared with year-ago levels. Overall, total US petroleum deliveries shrank by 3.2% versus December 2005. Revisions, meanwhile, stood at -213 kb/d in 4Q06, due to significant downward corrections to jet/kerosene, diesel and heating oil demand (as a result of a reappraisal of exports figures), which offset upward changes in other categories.

Heating and fuel oil demand in 4Q06 was extraordinarily weak, despite the fact that relatively modest growth had been expected – since demand for both products, and particularly for fuel oil, had been boosted by the 2005 hurricanes, which limited natural gas supplies. Indeed, the number of 'heating-degree days' or HDDs in December was about 12% lower than the 10-year average. The unusually warm weather not only eroded demand for both oil product categories, but it also encouraged further shifts to gas by industrial and utility users by moderating natural gas prices.

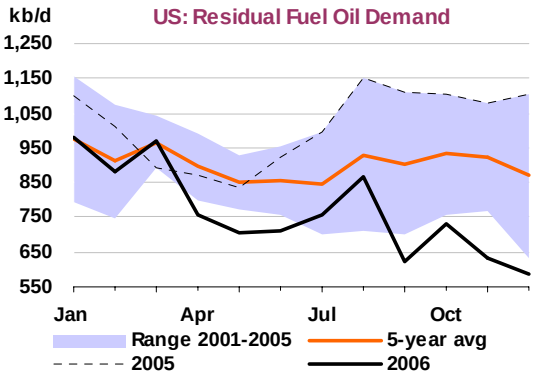
In his recent State of the Union address, President Bush announced ambitious goals to promote the use of ethanol and other renewable fuels as gasoline blending components, in order to significantly curb US gasoline consumption and hydrocarbon dependence over the next decade. The idea is to raise the Federal Renewable Fuels Standard (RFS), which mandates the volume of renewable fuels in use, to 35 billion gallons or 2.3 mb/d by 2017, compared with the current target of 7.5 billion gallons

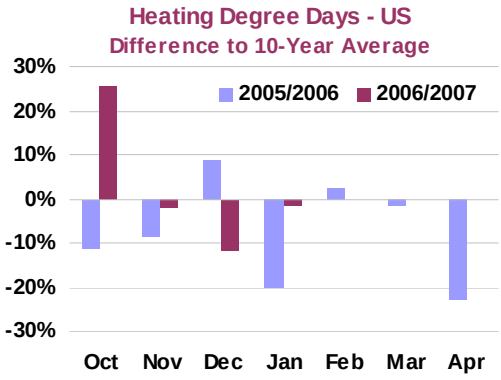
or roughly 490 kb/d by 2012. The plan also assumes that mileage standards (the Corporate Average Fuel Economy or CAFE) will increase by some 4% per year starting in 2010 for cars (2012 for SUVs and light trucks). Overall, the policy would entail a reduction of about 20% of projected gasoline demand by 2017.





However, until concrete policy measures (both in terms of renewables and CAFE) have been established, it is difficult to assess the full impact of these goals. Ethanol is currently blended with only some 3 mb/d (roughly 30%) of all gasoline consumed in the US, and contains around 33% less energy than gasoline on a volumetric basis. At first glance, gasoline demand should be inflated by a similar proportion, but that can be misleading. Indeed, the replacement of MTBE with ethanol in 2006 will have resulted in a net 1.5% loss of energy content per gallon of gasoline, a much lower loss than implied by the ethanol energy content alone. Nevertheless, it is possible that the energy loss will be larger in future, but this will again depend on the precise fuel substitution that takes place.





On 1 January 2007, **Mexico** rolled over price controls on LPG, a policy which has been in place since 2001. Under the scheme, LPG prices will increase every month by 0.3%, starting at roughly $0.85/kg in January – about +2% for the entire year. Distribution companies complain that this will further erode their profit margins – since inflation is expected to run at some 4-5% in 2007 – but the government is unlikely to change course. Even though LPG demand has been subdued (falling by

1.9% in 2006 versus the previous year), mostly as a result of natural gas penetration, this product is still the fuel of choice for cooking for most Mexican households, particularly in urban areas (it accounts for almost 21% of total oil product demand). Removing price caps would thus be socially and politically sensitive, but would help improve the profitability of a refinery sector that needs to be urgently upgraded.

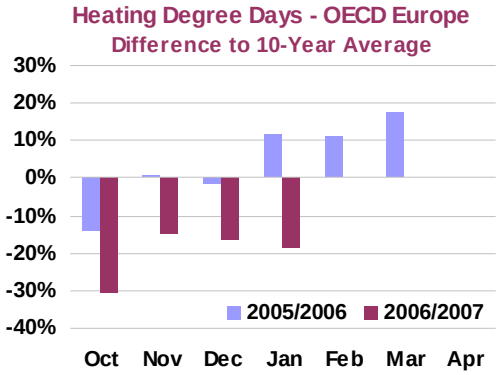
OECD North America Demand by Product
(million barrels per day)

	2005	2006	4Q05	1Q06	2Q06	3Q06	Sep 06	Oct 06	Nov 06*	Latest month vs. Oct 06	Latest month vs. Nov 05
LPG & Ethane	2.82	2.79	2.83	2.98	2.65	2.66	2.56	2.69	2.84	0.16	0.06
Naphtha	0.46	0.45	0.31	0.37	0.41	0.45	0.51	0.48	0.50	0.02	0.21
Motor Gasoline	10.59	10.73	10.60	10.35	10.80	11.00	10.70	10.80	10.67	-0.13	0.11
Jet & Kerosene	1.97	1.92	1.99	1.87	1.95	1.94	1.94	1.91	1.89	-0.03	-0.09
Gas/Diesel Oil	5.09	5.17	5.15	5.35	5.01	5.06	5.10	5.33	5.27	-0.06	0.19
Residual Fuel Oil	1.56	1.20	1.63	1.43	1.15	1.17	1.03	1.12	1.06	-0.06	-0.57
Other Products	3.02	3.02	3.00	2.78	3.14	3.18	3.16	3.11	3.06	-0.05	-0.06
Total Products	**25.52**	**25.28**	**25.51**	**25.12**	**25.09**	**25.47**	**25.02**	**25.44**	**25.30**	**-0.14**	**-0.14**

* Latest official OECD submissions (MOS)

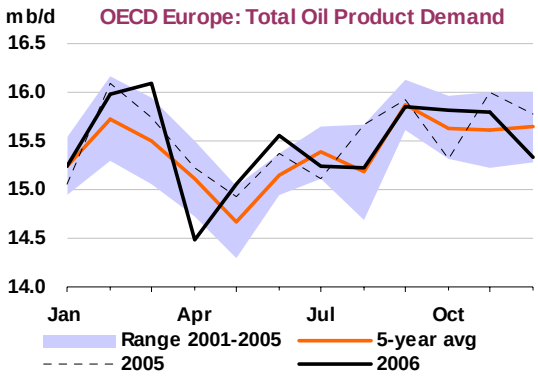
Europe

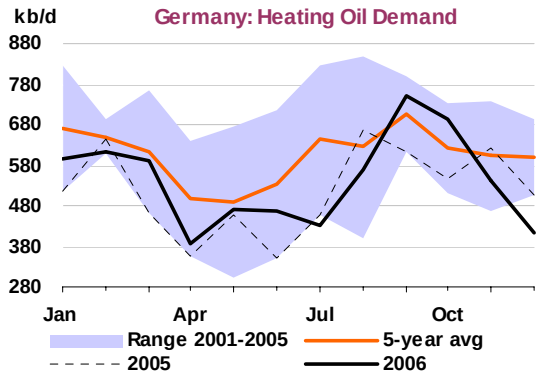
In December, oil product demand in Europe declined by 2.8% compared with the same month in 2005, dragged down mostly by heating oil (-14.4%). The conditions that prevailed in November continued throughout December: mild temperatures (HDDs were some 16% lower than normal), which depressed heating oil demand; low gas prices in the United Kingdom, which encouraged substitution away from fuel oil for power generation (in most of continental Europe natural gas prices are usually linked to oil prices); and plentiful stocks of heating oil in the continent's main market, Germany. Only jet fuel and diesel recorded relatively strong growth, following the traditional holiday season demand surge across the continent.

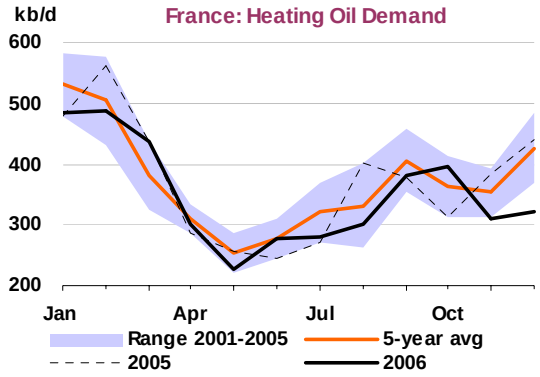


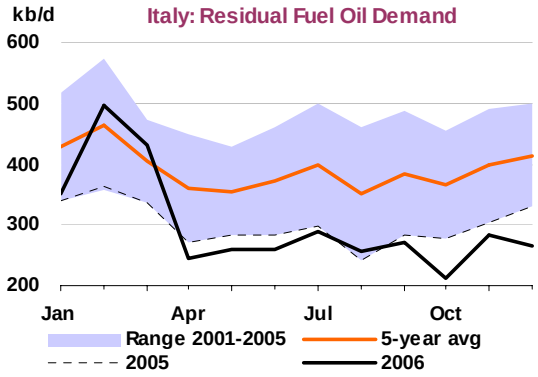
By contrast to November, **Germany's** December demand figures were revised only slightly upwards (+42 kb/d), mostly because of a reappraisal of preliminary diesel and heating oil consumption. Moreover, preliminary December data suggest that heating oil deliveries plummeted by 18.3%, with persistent mild weather and consumer stocks still relatively plentiful (with domestic storage tanks filled at around 64% of capacity by the end of the month, four percentage points less than in November and slightly below last year's level). Meanwhile, wholesale product purchases ahead of the January VAT rise – notably of transportation fuels – continued throughout December. Gasoline, jet/kerosene and diesel deliveries jumped by 7.0%, 7.8% and 13.5%, respectively, on an annual basis.

In both **France** and **Italy**, deliveries of heating oil were also quite weak (-27.0% and -20.0%, respectively, compared with December 2005), again because of abnormally warm temperatures. The mild weather also reduced the demand for electricity and hence for fuel oil (-14.4% in France and -20.0% in Italy). In Italy, in particular, relatively cheap natural gas also helped maintain the momentum for fuel substitution observed in the past few months.





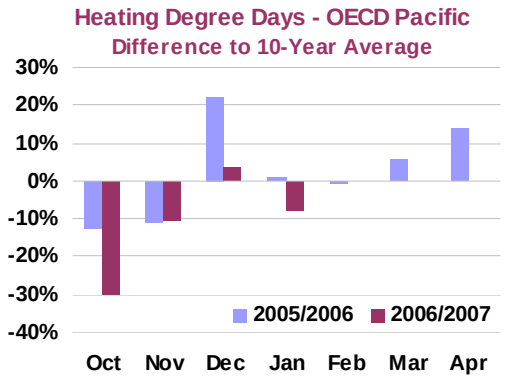




It should be noted that fuel oil consumption in Italy – which is much more dependent than France on thermal power generation – would have fallen even more had it not been for reduced hydro-power generation as a result of lower-than-normal rainfall.

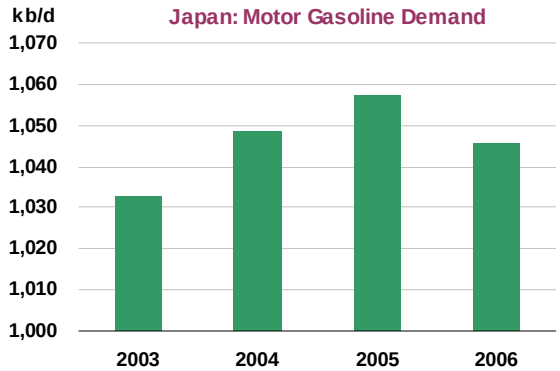
Pacific

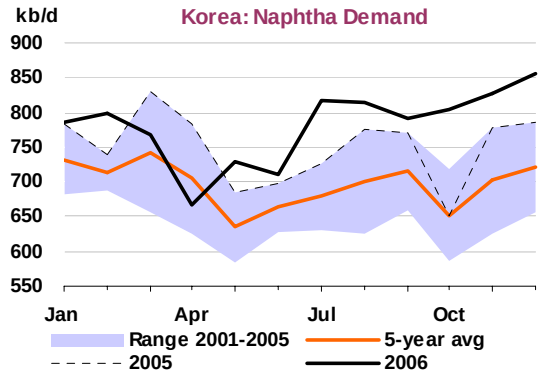
According to December's preliminary data, oil product demand in **Japan** continued its decline (-5.9% compared with December 2005). This was primarily because of weak inland deliveries of gasoline and kerosene, despite temperatures more in line with normal winter conditions (HDDs in the Pacific were about 4% higher than the 10-year average) and only modest rise in residual fuel oil resulting from increased consumption by oil-fired power plants. However, as this report has previously argued, structural forces – such as adoption of mini-vehicles and hybrid cars as a result of high oil prices, the switch to electricity and natural gas (from LNG trains) for heating, and more generally conservation and efficiency efforts – are behind Japan's falling oil product demand. Indeed, in 2006 gasoline consumption declined for the first time since the 1974 oil shock (by 1.1% versus 2005); on an annual basis, total oil product demand shrank by 2.5% last year.



Nevertheless, Japanese oil demand could rebound again if the country sees a repeat of nuclear power generation stoppages, as in 2003-2004. There have been some indications that this may be already occurring, but its effects remain to be evaluated.

Naphtha demand in **Korea** continued to grow strongly in December (+8.8% compared with the same period of the previous year). Combined with sustained growth in transportation fuels, notably gasoline, it contributed to raise the country's total oil product demand by 1.5% on a yearly basis. Naphtha is expected to remain the driving force behind the country's oil product consumption growth as major petrochemical companies – notably Yeochun Naphtha Cracking Center (Korea's largest ethylene maker), Lotte Daesan Petrochemical, Samsung Total Petrochemicals and LG Chem – collectively increase production capacity by some 1.1 million tonnes per year. As such, in 2007 naphtha demand should grow by 3.2% on an annual basis after an estimated 4.0% rate in 2006.





OECD Pacific Demand by Product
(million barrels per day)

	2005	2006	4Q05	1Q06	2Q06	3Q06	Sep 06	Oct 06	Nov 06*	Latest month vs. Oct 06	Latest month vs. Nov 05
LPG & Ethane	0.89	0.89	0.88	0.92	0.84	0.87	0.81	0.79	0.91	0.12	0.01
Naphtha	1.58	1.62	1.58	1.65	1.48	1.60	1.55	1.68	1.73	0.05	0.10
Motor Gasoline	1.61	1.59	1.61	1.57	1.56	1.63	1.56	1.56	1.57	0.02	-0.03
Jet & Kerosene	1.04	0.98	1.19	1.42	0.75	0.67	0.67	0.79	1.06	0.27	-0.01
Gas/Diesel Oil	1.87	1.82	1.91	1.92	1.79	1.69	1.70	1.77	1.91	0.15	-0.02
Residual Fuel Oil	1.05	1.00	1.07	1.16	0.95	0.91	0.93	0.87	1.02	0.16	-0.04
Other Products	0.55	0.55	0.55	0.67	0.50	0.52	0.49	0.47	0.56	0.09	0.00
Total Products	**8.59**	**8.45**	**8.79**	**9.30**	**7.87**	**7.90**	**7.71**	**7.92**	**8.76**	**0.84**	**0.02**

* Latest official OECD submissions (MOS)

Non-OECD

China

As flagged in the *Oil Market Report* dated 18 January 2007, China's demand figures since 2005 have been revised. Overall, these revisions – some of which were published in early February's update to our *Medium-Term Oil Market Report* – have increased our estimates of China's apparent demand in 2005 (+90 kb/d), 2006 (+147 kb/d) and 2007 (+206 kb/d). The respective annual growth rates now stand at +4.2%, +6.4% and +6.1%. But, as we have cautioned in the past, we may further adjust our series if we obtain better information regarding those areas where uncertainty still prevails, such as smuggling, direct crude burning, or crude and oil product stock building.

Solving the Demand Riddle: China's Refining Sector

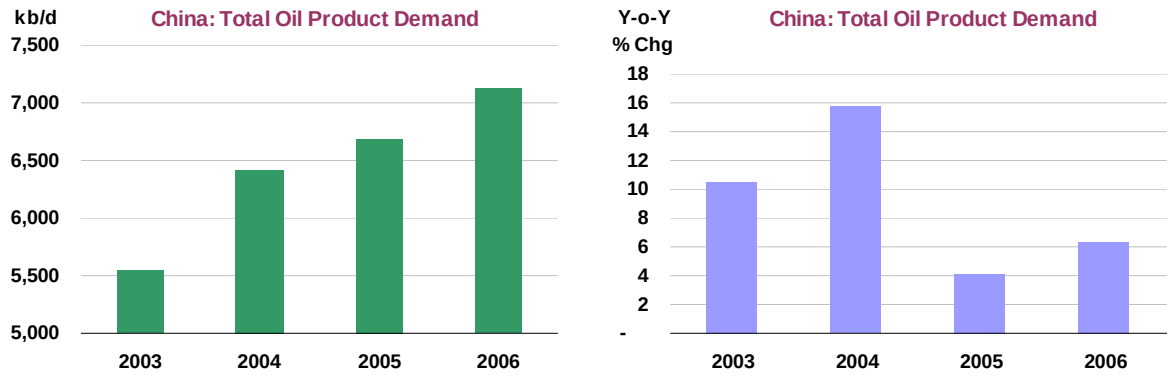
Our revision of China's demand figures since 2005 was prompted by a reappraisal of the preliminary 2005 baseline in light of newly submitted annual data and by more detailed throughput data by type of refinery. Greater disaggregation of refinery runs and product output has allowed us to fine-tune our estimates of apparent demand – defined as refinery output plus net oil product imports, adjusted for fuel oil and direct crude burning, smuggling and stock changes – as well as our forecast for 2007.

It is important to note that we attempt to track demand on a product-by-product basis, as opposed to calculating an aggregate demand figure based on crude production and net imports of crude and products. This latter methodology has some benefits, but with the onset of strategic stock building and a growing economy, it tends to overstate demand (sometimes significantly) since it counts crude stocks as actual consumption. Our product-led approach is far from perfect and necessitates a good understanding of China's refining sector, but ultimately reveals more about total and disaggregated demand trends, which can be hidden in a crude-led assessment.

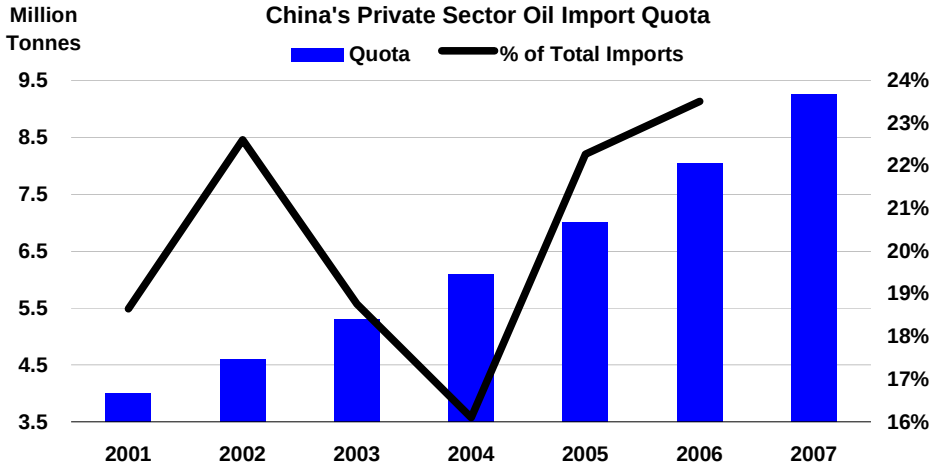
Chinese refineries can be classified into three main categories: a) those belonging to Sinopec and CNPC, which account for almost 90% of total capacity (the "Big Two"), b) state-owned "independents" (relatively large refineries owned by local governments or joint ventures with international oil companies), and c) "teapots" (small and unsophisticated units usually close to supply sources, either domestic production or imports).

Our data suggest that independent and teapot output grew relatively rapidly in 2H06, due both to higher capacity (from independents) and a more benign price environment (for teapots). In particular, teapots (which tend to use fuel oil as refinery feedstock to produce mostly off-spec gasoil, residual fuel oil and bitumen) were encouraged to increase their runs as the price of imported fuel oil fell relative to domestic gasoil prices (which remained virtually unchanged over that period). However, if late January's rebound in international oil prices continues, teapot runs could be once again curtailed.

In December, net crude imports fell to 2.5 mb/d, roughly 700 kb/d below November's surge. With refinery runs flat on a month-on-month basis, this suggests that China probably slowed down somewhat its crude stock building. Still, as we noted in our previous report, given the lack of a clear definition of stock ownership and control and non-availability of stock data, the potential use of the country's strategic petroleum reserve is subject to debate. Recent estimates put stocks at the Zhenhai base at 25 million barrels by end-January, but other reports suggest they could be much higher.



In early January, China's Ministry of Commerce issued the 2007 oil product import quota for private companies. The quota, which applies to gasoline, jet fuel, diesel, naphtha, fuel oil and low-sulphur waxy residue, will be 15% higher than last year, with roughly three-quarters allocated to state-owned companies.



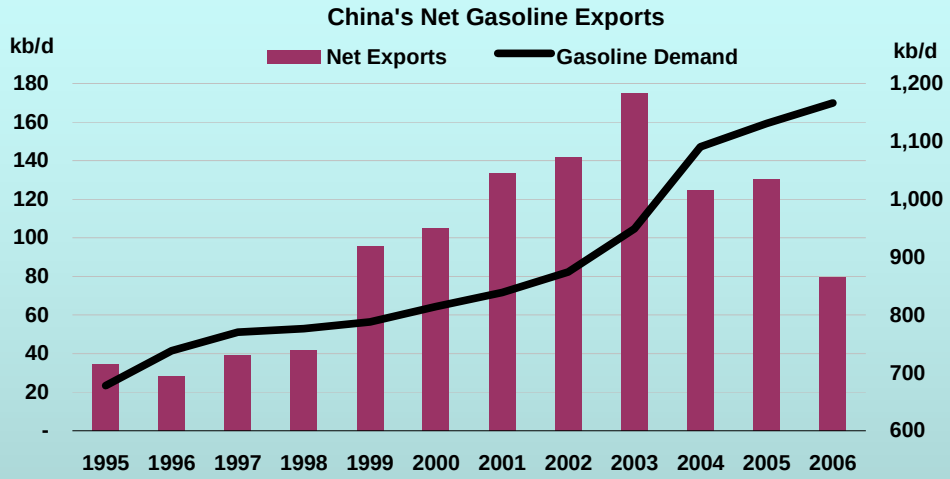
A limited reform of the oil product pricing regime was announced at the end of January, after an inter-ministry meeting held by the National Development and Reform Commission (NDRC). The new regime follows the lines we discussed in our last report, namely linking retail fuel prices to the cost of a basket of crudes (Brent, Dubai and Minas) and including an (as yet) unspecified margin, intended to temper refiners' losses (the so-called 'crude cost plus margin formula'). The new policy was confirmed by the NDRC's General Secretary, Han Yongwen. Ultimately, this is a partial move towards deregulation, and could be sustained for some time if combined with trade restrictions, but it will still mean that the refining sector will not receive the same market signals as other Asian refiners. Its effectiveness will once again depend upon the frequency of price changes, and in a rising price environment would encourage refiners to keep crude stocks to a minimum and hold back product stocks ahead of a pending price change.

China Demand by Product
(thousand barrels per day)

	Demand			Annual Change		Annual Change (%)	
	2005	**2006**	**2007**	**2006**	**2007**	**2006**	**2007**
LPG & Ethane	649	635	643	-15	8	-2.2	1.3
Naphtha	707	823	907	116	84	16.4	10.3
Motor Gasoline	1131	1166	1225	35	59	3.1	5.1
Jet & Kerosene	246	280	299	34	19	13.8	6.8
Gas/Diesel Oil	2239	2315	2458	76	144	3.4	6.2
Residual Fuel Oil	778	594	569	-184	-25	-23.6	-4.2
Other Products	943	1310	1457	367	147	38.9	11.2
Total Products	**6693**	**7123**	**7559**	**430**	**436**	**6.4**	**6.1**

Towards Chinese Gasoline Imports?

Over the past few weeks, following the release of Chinese oil product trade data, many analysts are wondering whether China will cease to be a gasoline exporter in the medium-term. Indeed, China's net exports of gasoline shrank by almost 39% in 2006 to 80 kb/d, the largest fall in percentage terms since the 2003 peak (imports are currently negligible, representing less than 2% of exports). As such, the country is no longer Asia's largest gasoline exporter (it has been already overtaken by Taiwan, and could also be surpassed by India, possibly this year).



Most observers attribute this fall to China's voracious appetite for gasoline, estimated at almost 1.2 mb/d in 2006. Vehicle sales rose by 25% to a record of 7.2 million units in 2006, and are expected to increase at a similar rate this year. Undoubtedly, China's expanding fleet is a key factor behind gasoline's export weakness, which has clearly coincided with the acceleration of gasoline demand observed in 2004. However, refining decisions have also played an important role, as Chinese refiners maximize or minimize the production of certain products depending on demand, prices and government pressures. For example, in 2006 the government sought to avoid a repeat of the previous year's diesel shortages and prompted local refiners to boost diesel production over jet fuel output, even though the latter was more lucrative (since it could be exported at international prices). Also in 2006, refiners prioritised naphtha over gasoline production, given the sharp increase in the country's petrochemical capacity.

Therefore, to conclude that China will inexorably become a net gasoline importer may be premature. In addition to refining shifts, a variety of policy measures could help nurture efficiency gains and hence tame the relentless rise in domestic demand. Taxes on big cars are relatively high, presumably aimed at encouraging the expanding Chinese middle class to purchase more fuel-efficient vehicles. In the same vein, the government may reform its pricing mechanism to better account for supply costs and environmental externalities. Moreover, two organizations (the National Clean Vehicle Co-ordination Leading Group Office and the China Automotive Technology and Research Centre) are expected to launch a programme to research and promote the use of CNG as a vehicle fuel in order to address the soaring traffic jams and air pollution. Currently there are only about 300,000 gas-powered vehicles in China, including those burning LPG and CNG. Finally, cultural patterns may also play a role. For example, the Chinese are more likely to fly or take the train when travelling to the country's heartland.

In December 2006, for example, domestic ex-refinery prices for gasoline and diesel stood at about Rmb 5,200 and Rmb 4,570 per tonne, respectively, compared with Singapore's Rmb 5,509 and Rmb 5,352 – a price gap of Rmb 309 (6% higher than the domestic price) and Rmb 782 (17%). It remains to be seen whether the average gap between domestic and international prices narrowed in January, given the rebound in international crude prices and the government's retail price cut. If so, retail margins, particularly of gasoline, may have improved over the past month.

China Crude & Product Trade
(thousand barrels per day)

	2005	2006	1Q2006	2Q2006	3Q2006	4Q2006	Oct 06	Nov 06	Dec 06	Latest month vs. Nov 06	Latest month vs. Dec 05
Net Imports/(Exports) of:											
Crude Oil	2386.8	2786.8	2878.3	2820.5	2756.6	2694.1	2362.6	3219.7	2516.8	-702.9	164.7
Products & Feedstocks	479.4	607.2	511.7	765.3	707.3	444.3	513.7	417.6	400.7	-16.8	-200.9
Gasoil/Diesel	-19.2	-1.4	-9.7	-13.9	-6.5	24.0	6.1	29.0	37.1	8.1	48.9
Gasoline	-130.4	-79.7	-107.2	-56.4	-63.4	-92.3	-85.9	-103.4	-88.0	15.4	-22.3
Heavy Fuel Oil	418.3	448.3	406.2	522.3	574.5	290.1	357.5	281.7	230.8	-50.9	-222.9
LPG	194.3	165.5	145.8	227.0	124.6	165.0	134.0	196.2	165.8	-30.4	-5.0
Naphtha	-34.9	-22.8	-15.4	-36.1	-30.6	-9.0	9.4	-33.1	-4.0	29.1	-27.7
Jet & Kerosene	10.9	38.5	43.2	32.9	43.3	34.7	75.8	27.9	0.4	-27.5	-23.6
Other	40.3	58.8	48.8	89.5	65.3	31.7	16.9	19.2	58.6	39.4	51.8
Total	2866.2	3394.0	3390.0	3585.8	3463.9	3138.4	2876.3	3637.3	2917.6	-719.7	-36.2

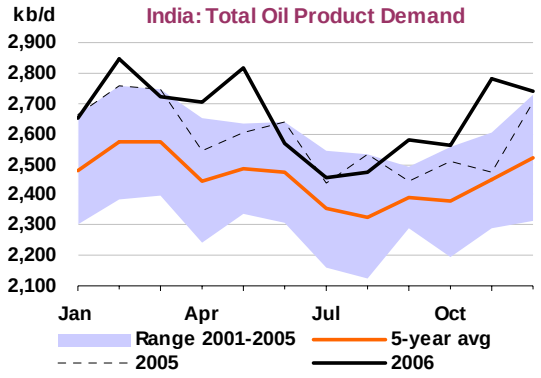
Sources: China Oil, Gas and Petrochemicals plus IEA estimates.

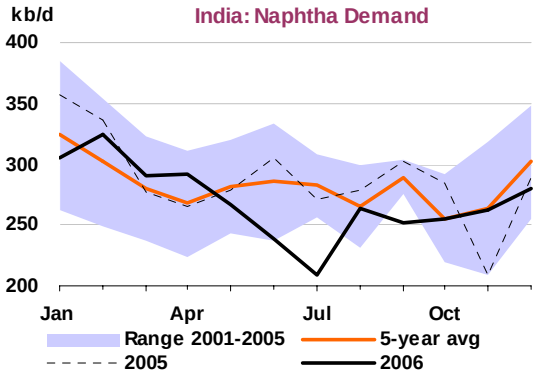
Other Non-OECD

According to preliminary data, **India's** oil product demand rose by a modest 1.4% year-on-year in December, as strong gains in transportation fuel (gasoline sales rose by 6.8%, jet/kerosene by 9.7% and gasoil by 7.8%) were offset by declines in residual fuel (-10.2%) and other products (-9.1%).

The strength of transportation fuels sales is arguably related to stock building, since retailers kept November's inventories low in anticipation of that month's retail price cut. In addition, a court ruling banning truck overloading came into force in December, resulting in more vehicles on India's roads. Nevertheless, we estimate that India's oil product demand rose by 2.7% in 2006, virtually unchanged versus our last report.

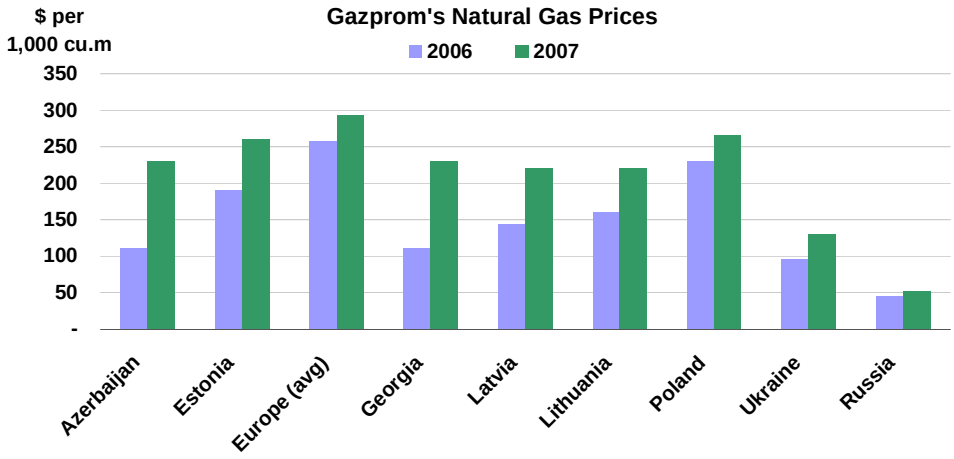
It should be noted that November's naphtha demand growth rate for 2006 has been revised downwards to +25.6%, instead of the preliminary +47.6%. Nevertheless, these figures reflect the insufficient – albeit somewhat unexpected – availability of natural gas in late 2006, which forced petrochemical plants and domestic utilities to use naphtha as a feedstock to respectively produce fertilisers and generate electricity. The scarcity appears to have extended into January, since once of the main sources of LNG imports, Qatar's RasGas 2 plant, declared *force majeure* on deliveries and deferred two cargo loadings contracted by India's Petronet until late in the month. According to reports, industrial customers in western and northern India were severely affected by this shipment delay.





FSU apparent demand – defined as domestic crude production minus net exports of crude and oil products – was revised upwards by 176 kb/d in 4Q06. In general terms, this adjustment – explained by higher-than-expected crude production from Caspian countries, coupled with lower-than-expected net crude exports and flat net oil product exports – almost offsets the one we made last month and highlights the erratic quality of the region's data on oil production and trade. For 2006, this revision translates into a 60 kb/d upward adjustment, bringing the region's annual growth rate to 4.5%.

Following legislation approved last November, **Russia's** domestic natural gas prices for industrial consumers went up by 15% in early January. This was the first step to gradually bring into line domestic and international prices. The stated goal is to double prices by 2011, which implies staged increases of 13-14% over the next two years (a period of crucial electoral activity) and by as much as 25% per year afterwards. Still, domestic prices are well below those of Russia, via state-owned Gazprom, charges to its neighbours. As such, it remains to be seen whether these gradual hikes will

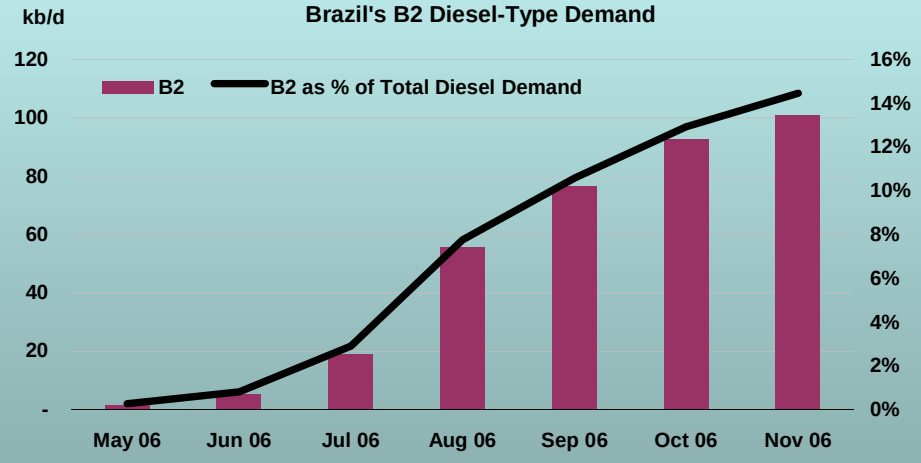


help reduce the inefficient use of natural gas in Russia, and more importantly, whether they will lead to a market-driven, as opposed to mandated, rise in domestic fuel oil consumption in order to free valuable gas volumes for export. The IEA noted in its update to the *Medium-Term Gas Market Review* a pending gap between European demand and Russian supplies, which would have to be met through increased use of other fuels in Europe to offset lower supply, or in Russia to free-up more gas for export.

Brazil's Relentless Biofuels Drive

The drive towards the widespread use of biofuels in Brazil has been boosted by the rapid adoption of B2, composed of 98% conventional diesel and 2% biodiesel. B2 was approved in December 2004 by the country's oil sector regulator the ANP. BR Distribuidora, Petrobras' distribution arm and the largest player in the sector, is already selling B2 in some 3,800 out of the company's 6,000 service stations – compared with only three outlets eight months ago. It has also adapted most of its operating bases and major terminals to receive the new fuel.

As such, B2 now accounts for almost 15% of all diesel sold in Brazil, from virtually none until mid-2006. In practice, though, biodiesel content represents only about 2 kb/d. By the end of the year BR Distribuidora should also be selling B30 and B100 (with 30% and 100%, respectively, of biodiesel content). B100, in particular, will be geared towards electricity generation and waterborne and urban public transportation.



In addition, the government is expected to raise the ethanol content in gasoline to 25% over the next few months, following a previous hike from 20% to 23% last November. The government's move would follow the rapid growth of flex-fuel vehicles (which can run on any combination of sugar-cane ethanol or conventional gasoline). The flex-fuel fleet expanded by almost 1 million units in 2006, and this type of vehicles accounts for approximately 80% of all new sales.

SUPPLY

Summary

- **World oil supply** increased by 175 kb/d in January, reaching 85.5 mb/d. Increments in January centred on the FSU, China and Latin America. Counting Angola within the OPEC category, total OPEC supply (crude and NGLs) fell by 155 kb/d. Estimates for November and December global supply were reduced by 65 kb/d and 120 kb/d respectively, as upward revisions to OPEC crude supply failed to offset weaker-than-expected output from the Americas.

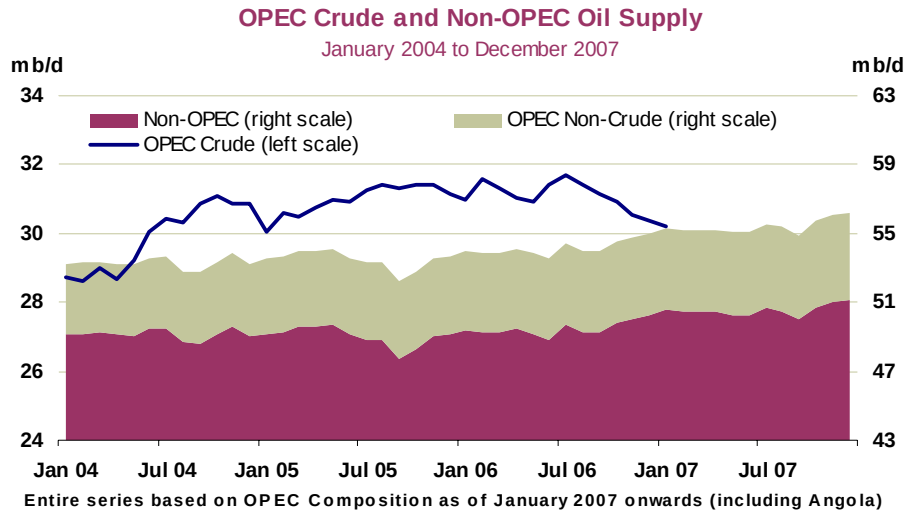
- **Non-OPEC supply** is adjusted down by 70 kb/d for 2007, to 50.5 mb/d (aside from the one-off, 1.7 mb/d adjustment following the reclassification of Angola within OPEC). Growth in 2007 is expected to amount to 1.1 mb/d (2.2%). This follows a non-OPEC increment of 0.6 mb/d (1.2%) in 2006 (0.4 mb/d if Angola is excluded). Downward revisions for 2007 are focussed on North America (largely restricted to 1Q), China, Ecuador and Argentina. FSU supply is revised up by 35 kb/d for 2007, although 1Q output is revised down on scheduled power supply work in Russia.

- **Total OPEC crude supply** reached 30.2 mb/d in January. Some 1.5 mb/d of this represents production from new member Angola, which joined OPEC on 1 January 2007. Including Angola for both months, OPEC crude supply was down by 180 kb/d versus December following lower supply from Iraq, Venezuela, Nigeria, Libya and Kuwait. Spare capacity remained unchanged at around 2.5 mb/d on an effective basis.

- **OPEC-10 (excluding Angola and Iraq) output** fell by 100 kb/d to 27.0 mb/d last month. Although individual production targets have little relevance, collectively OPEC-10 have been working towards a 26.3 mb/d target since November, with a further cut of 500 kb/d scheduled from 1 February. Angola, like Iraq, is currently exempt from production cuts.

- **While further cuts in actual supply from February** have been flagged by Saudi Arabia, Venezuela, Nigeria, the UAE and Algeria amongst others, this next phase moving towards an apparent 25.8 mb/d target could take OPEC supply below the likely range for the 2Q 'call'.

- **The 'call on OPEC crude and stock change',** adjusted to incorporate Angola within OPEC, now shows modest growth for 2007, averaging 30.6 mb/d compared with 30.3 mb/d last year. The first quarter call stands at 31.0 mb/d, up 0.4 mb/d on last month's equivalent due to weaker non-OPEC supply and stronger demand. 2Q and 3Q07 levels are also revised up by an average 0.5 mb/d, to 29.4 mb/d and 30.7 mb/d respectively, on the strength of higher demand expectations.



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. 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. These aside, no contingency allowance for random events is subtracted from the supply forecast. While upside variations can occur, experience in recent years indicates that the random events listed above may cause supply losses of between 300 kb/d and 400 kb/d for non-OPEC supply each year.

OPEC

OPEC crude supply averaged 30.2 mb/d in January, including 1.5 mb/d from the organisation's newest member Angola, which joined on 1 January after being admitted at the December OPEC meeting in Abuja. A like-for-like comparison for the new OPEC-12 shows supply down by 180 kb/d versus December. Iraq and Nigeria saw supply reduced by a combined 160 kb/d, although more due to renewed disruptions than deliberate production restraint. Meanwhile, Venezuela is assessed to have cut supply by some 60 kb/d and Kuwait and Libya by 10-20 kb/d each. Saudi Arabian supply was unchanged in January at the downward-revised December level of 8.7 mb/d. Increased supplies compared with December came from Angola (40 kb/d), Iran (25 kb/d) and Indonesia (5kb/d).

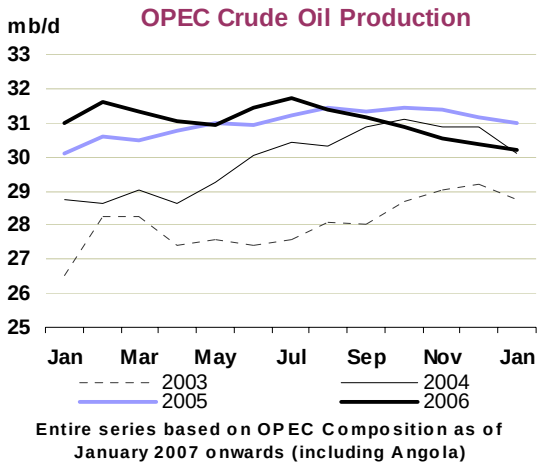
OPEC Crude Production[1]
(million barrels per day)

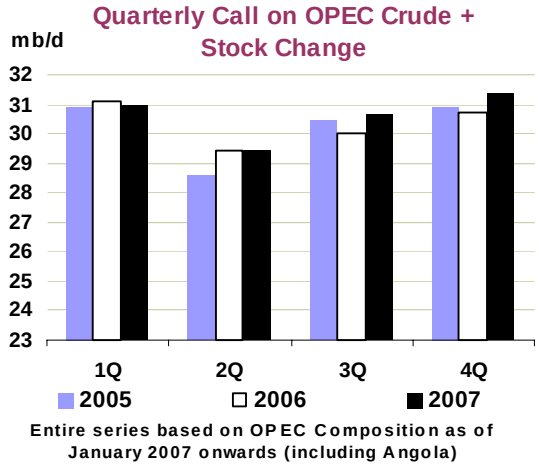
	1 July 2005 Target[2]	1 November 2006 Target[2]	January 2007 Production	Sustainable Production Capacity[3]	Spare Capacity vs Jan 2007 Production
Algeria	0.89		1.34	1.39	0.05
Indonesia	1.45		0.86	0.95	0.09
Iran	4.11		3.90	3.90	0.00
Kuwait[4]	2.25		2.46	2.60	0.14
Libya	1.50		1.71	1.75	0.04
Nigeria[5]	2.31		2.15	2.47	0.32
Qatar	0.73		0.82	0.85	0.04
Saudi Arabia[4]	9.10		8.70	10.80	2.10
UAE	2.44		2.60	2.70	0.11
Venezuela[6]	3.22		2.49	2.70	0.21
Subtotal	**28.00**	**26.30**	**27.02**	**30.11**	**3.09**
Angola[1]			1.51	1.51	0.00
Iraq			1.65	2.50	0.85
Total			**30.18**	**34.12**	**3.94**
(excluding Iraq, Nigeria, Venezuela., Indonesia					*2.47)*

1 Angola joins OPEC effective 1 January 2007.
2 Target production levels superseded by decision to cut output by 1.2 mb/d from 1 November 2006 and 0.5 mb/d from 1 February 2007. Implied aggregate production targets around 26.3 mb/d from November and 25.8mb/d from February.
3 Capacity levels can be reached within 30 days and sustained for 90 days.
4 Includes half of Neutral Zone Production.
5 Nigeria excludes some 545 kb/d of shut-in capacity.
6 Includes Orinoco extra-heavy oil assumed at 580 kb/d in January.

Progress by the OPEC-10 in reducing supply towards the collective target of 26.3 mb/d appears to have been patchy, as OPEC-10 output stood close to 27.0 mb/d in January. However, further cuts in supply from February have been flagged by Saudi Arabia, Venezuela, Nigeria, the UAE and Algeria amongst others. As we note below, the next phase of cuts to 25.8 mb/d from February may be unnecessary if this report's expectations for a likely range in the 'call on OPEC' are realised.

Spare capacity among OPEC members reached 3.9 mb/d in January, albeit 1.5 mb/d of this was located in Iraq, Nigeria, Venezuela and Indonesia where long-standing impediments to raising actual production render this portion of spare capacity inaccessible. The more realistic measure of 'effective' spare capacity is therefore measured at 2.5 mb/d, with Saudi Arabia holding around 2.1 mb/d of the total. Although the margin of effective capacity remains slim in historical terms, it is nonetheless at its highest level since December 2002, as OPEC members ramped up production after the Venezuelan oil workers strike, but before the further narrowing seen in early 2003 due to Nigerian outages and the Iraq war.

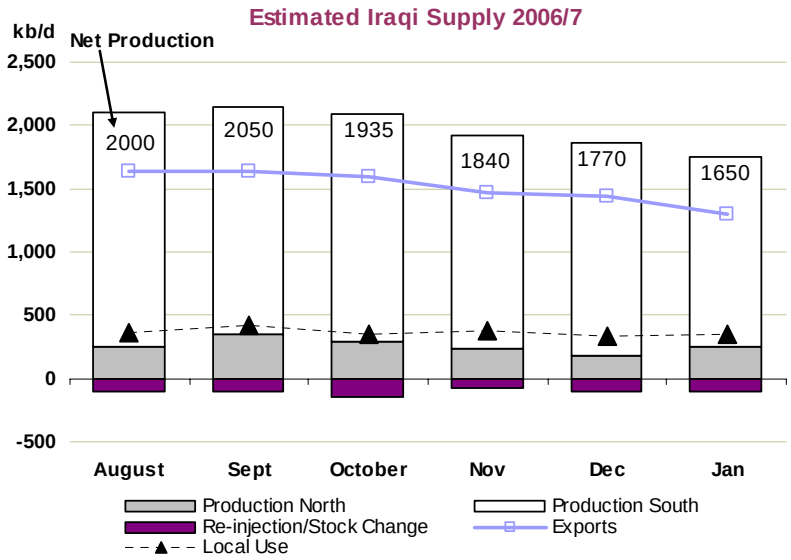




Nigerian supply fell further, to 2.15 mb/d in January. We estimate some 620 kb/d of production remained shut-in on an average monthly basis due to security concerns and attacks on flow stations. Estimates of lower supply on a wellhead production basis were backed up both by lower export levels, and the fact that all three Nigerian refineries were out of operation for the bulk of January (although Port Harcourt had resumed operations in early February). State oil company NNPC announced it would cut previously scheduled February export loadings of 2.4 mb/d by 250 kb/d, with expected March levels of 2.5 mb/d to be cut by 300 kb/d. This was reportedly being done in order to meet OPEC commitments to reduce supply. Bearing in mind that Nigeria had pledged cuts totalling less than 150 kb/d for November and February combined, market sources suggested the higher announced cuts merely reflected the intensifying problems the country faces in sustaining production.

The recent February 2007 update to the *Medium-Term Oil Market Report (MTOMR)*, had in fact stripped out long-term shuttered production of some 550 kb/d from capacity projections throughout 2007. This followed not only a perception that the security situation could worsen in the run-up to April Presidential elections, but also specific statements from operator Shell that it was not planning on the basis of this capacity being reinstated before 2008. That said, a modest piece of good news emerged on 7 February when Chevron announced that it had restored some 13 kb/d of Escravos production at the Makaraba flow station. This was part of some 140 kb/d of output closed by community unrest in early 2003, of which some 85 kb/d has now been restored.

Iraqi crude supply (net of field reinjection and deliveries into storage) fell by 120 kb/d in January to 1.65 mb/d. Exports fell to their lowest level since January 2006 at 1.3 mb/d, while domestic crude use in refineries and for power generation remained constrained at 355 kb/d. A more significant increase in crude runs failed to materialise, as utilisation rates at the 300 kb/d Baiji refinery remained low in light of recent power outages, sabotage and threats against workers.



Abuja: A Cut Too Far?

OPEC risks over-compensating in its attempts to rebalance fundamentals and to support prices above what, increasingly, looks like a preferred floor of $50-$55/bbl. The Doha meeting's reduction in OPEC-10 target to 26.3 mb/d from November was augmented by an agreement to curb supply by (apparently) a further 500 kb/d from February. But any concerns within OPEC over compliance with the latest target may prove unfounded. Upward demand revisions, a now-weaker non-OPEC growth trend and declining Iraqi production all point to markedly tighter global balances. The OMR now sees a 2007 'call on OPEC crude and stock change' oscillating in a 29.4-31.4 mb/d range, averaging 30.6 mb/d for the year overall.

Theoretical 'Call ' on OPEC-10 Crude for 2007

(thousand barrels per day)

		2007			
		1Q	2Q	3Q	4Q
1	Call on OPEC Crude + Stock Change	31.0	29.4	30.7	31.4
2	Angola (pre-OPEC OMR forecast)	1.5	1.6	1.8	1.9
3	Iraq (average six months Aug 06-Jan 07)	1.9	1.9	1.9	1.9
4	Iraq (January production)	1.7	1.7	1.7	1.7
5	Misc to balance & non-OPEC downside risk	1.0	1.0	1.0	1.0
1-2-3	Implied "Minimum" Call on OPEC-10	27.6	25.9	27.0	27.6
1-2-4-5	Implied "Maximum" Call on OPEC-10	28.8	27.1	28.2	28.8
	Apparent target from 1 February 2007	25.8			
	January OPEC-10 Crude Production	27.0			

The actual production level that OPEC-10 decide upon relative to the latest target will partly depend on supply from OPEC's two 'freelance' members. This report's Angolan forecast, made before OPEC membership came into effect, saw output rising from 1.5 mb/d currently to 1.9 mb/d by the end of the year. Progressive increments from the deepwater Dalia, BBLT and Greater Plutonia fields account for the increase. Angola for now remains outside any OPEC agreements to curb production. Iraq meanwhile has struggled in recent months to sustain 2.0 mb/d, let alone nameplate capacity of 2.5 mb/d. Sources within Iraq suggest that wellhead capacity could indeed regain the higher level, but that severely disrupted access to export capacity and local refineries will constrain Iraqi supply for some time to come. We therefore present two Iraqi supply scenarios – the recent six-month average of 1.9 mb/d, or more pessimistically, a continuation of the 1.7 mb/d seen in January, amid more serious export and refining disruptions.

Acknowledging the raft of uncertainties that underpin this outline, OPEC-10 may already be producing below the habitual seasonal product demand 'low' of the second quarter. Including non-OPEC forecast risks (350 kb/d) and the *OMR* miscellaneous-to-balance (600 kb/d), the underlying 'call' for OPEC-10 in 2Q could be as high as 27 mb/d, or as low as 26 mb/d. January OPEC-10 production had already fallen to 27.0 mb/d. Bearing in mind the tendency for OECD refiner crude demand to move higher in 2Q, unlike product demand, attempts to move towards the more stringent 25.8 mb/d target could significantly erode stocks ahead of peak summer demand, markedly tightening market sentiment. Of course, it may turn out that the Abuja pledge was more an expedient move to prop up prices than a statement of actual production intent. Either way, our balances also suggest that the tricky task for OPEC of reaching agreement on a production ceiling for Angola can probably be left aside for now.

A January export schedule of 1.46 mb/d had always appeared ambitious, given that the delayed installation of metering equipment at Basrah was due to disrupt loadings for several days around mid-month. However, weather-related loading delays further crimped southern exports via the Gulf. In the event, shipments from Basrah and Khor al-Amaya are thought to have slid to 1.2 mb/d from 1.4 mb/d in December. However, some 3 mb of Kirkuk crude was lifted from Ceyhan in Turkey between 25 and 31 January by Cepsa, ERG and Total. This added 97 kb/d to the January export total, alongside 13 kb/d of cross-border shipments into Syria. It was unclear at the time of writing whether northbound pipeline shipments from Kirkuk to Ceyhan had recommenced after further sabotage, but no further liftings from Ceyhan are imminent as stocks are believed to be only around 1 mb.

The **Saudi Arabian** crude supply estimate for December was revised down by 100 kb/d to 8.7 mb/d in light of updated tanker data and reported production levels. January supply is assessed unchanged, although Aramco has signalled to Asian term buyers that exports will be curbed by between 10-13% in February compared with 8-9% in January. Moreover, steep price increases for March exports suggest supply remaining constrained next month.

Estimates for **Iranian** supply in December have been revised up from 3.75 mb/d to 3.88 mb/d on the basis of more detailed tanker sailings data. Output is thought to have remained close to 3.9 mb/d in January. However, evidence of rising supplies may not translate into volumes immediately available to the market. There have been reports that NIOC has been storing heavy, sour crude again offshore in the vicinity of Kharg island, with most recent estimates suggesting around 14 mb on seven VLCCs. It would appear therefore that Iranian moves to comply with supply cuts totalling some 250 kb/d for November and February have been focused on building floating storage rather than cutting loadings and wellhead production.

Announcing modified terms for buyback contracts under which cooperation with foreign upstream companies will be governed, NIOC signalled that production sharing remains off the agenda. Foreign companies, while in favour of the extended duration of the new deals, and more flexible capital expenditure ceilings, saw little to suggest the new technical service contracts were a fundamental departure from the old model. Foreign companies are still obliged to relinquish operatorship to NIOC for the production phase, but they may be retained in an advisory capacity. The absence of economically attractive upstream terms is seen by many as a barrier to Iran attaining its medium-term plans to expand liquids production capacity in excess of 5 mb/d.

Recent reports suggest that **Venezuela** is now curbing output in response to the cuts agreed in Doha. Conversely, it appears that output, after falling initially in November due to maintenance at a heavy crude upgrader unit, may have rebounded in December. Our Venezuelan supply estimate for December is therefore revised up from 2.5 mb/d to 2.55 mb/d. Mid January saw widespread reports that operators of the country's four Orinoco joint ventures, based on 630 kb/d of heavy Orinoco crude production, were curbing supply, with the Cerro Negro operators announcing force majeure on exports. The Energy Ministry allocated some 106 kb/d of a pledged 138 kb/d cut due from last November to the four Orinoco projects, suggesting the remaining 32 kb/d might come in part from PDVSA's heavy Boscan crude. By implication, the cuts were not fully in place in mid-January although the Minister said they would be by the end of January. Overall January supply is estimated at 2.49 mb/d. It is uncertain how a further 57 kb/d cut due in February is to be allocated.

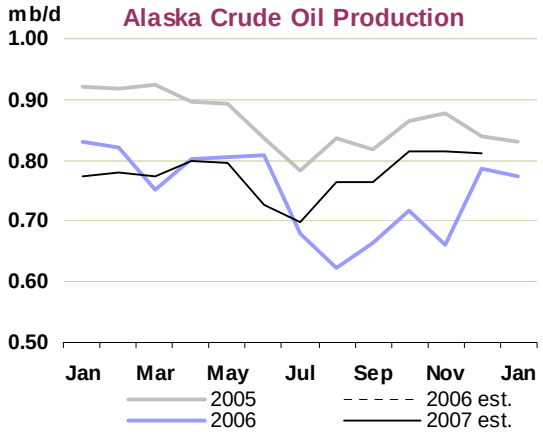
Progress toward the widespread renationalisation of Venezuelan energy assets gathered pace in January and early February. President Hugo Chavez said that state PDVSA would assume a minimum 60% stake in the four heavy oil projects by 1 May 2007, bypassing earlier attempts at a negotiated transfer of ownership. PDVSA stakes currently amount to around 40% on average. This came just after the Venezuelan Congress granted the president powers to rule by decree. The moves are widely seen as threatening existing plans to expand capacity at the four units. PDVSA had previously increased royalty and income tax rates for foreign operators and switched service contracts governing a further 500 kb/d of crude production to mixed companies with majority state control.

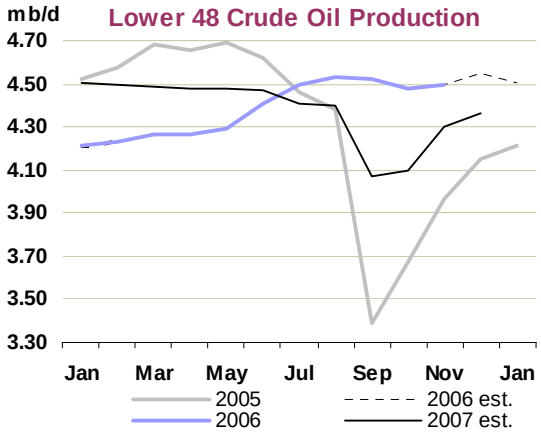
OECD

North America

US – Alaska January actual, others estimated: Aggregate monthly data for November, and weekly indications for December and January, drag down the US supply baseline. Total January liquids supply is estimated at 7.6 mb/d, of which 5.3 mb/d is crude oil. Total US supply is now expected to grow by 115 kb/d in 2007 to 7.5 mb/d, after only modest 2006 recovery of 60 kb/d following 2005's extensive hurricane outages. However, the bulk of this year's growth is expected to come from NGL and ethanol rather than crude oil.

With Californian and Alaskan production remaining largely unchanged for November, downward adjustments from aggregate supply data centre on the Gulf of Mexico (GOM) and other lower-48 states. Alaskan January supply also lagged expectations at 774 kb/d of crude, as a lack of storage at the southern port of Valdez backed up North Slope production. First quarter Alaskan production has been revised down by 45 kb/d due to these January delays and expectations that further disruption will result from work by BP on replacing feeder pipelines affected by last year's leaks.

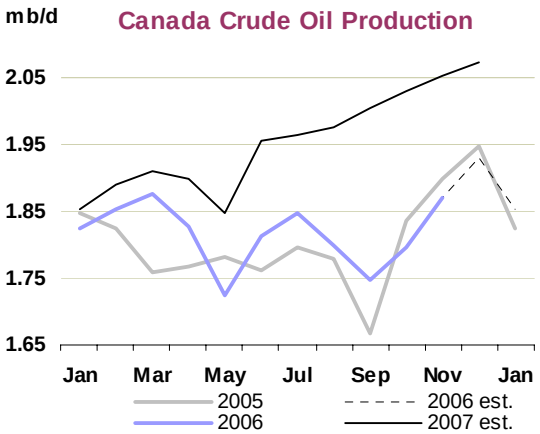


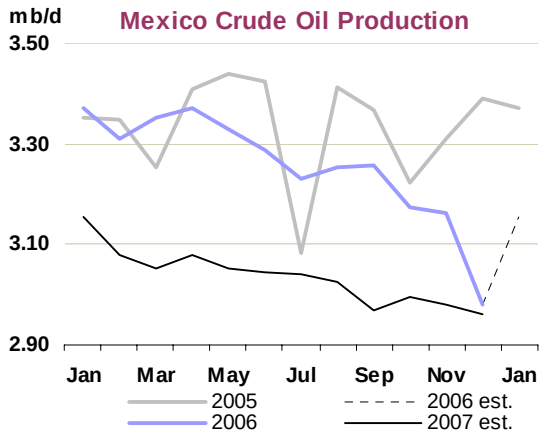


US crude oil prospects for 2007 remain undermined by the sluggish picture anticipated for both the GOM and Alaska. GOM supply is now expected to grow by only some 30 kb/d in 2007, to 1.42 mb/d. This follows news that BP has again deferred likely start up of its 200 kb/d Atlantis project to late 2007 from mid-year. Next year's key increment, Thunder Horse, has also been pushed back to late-year start-up. Aside from the ongoing risk of project slippage, the key driver of GOM output in 2007 may again prove to be the level of hurricane-related outages. This report assumes around 190 kb/d of production offline in the second half of 2007, consistent with the observed five-year average. Deviations from our forecast will depend on whether the 2007 Atlantic storm season more closely resembles 2005 (580 kb/d of lost 3Q and 4Q output) or 2006 (zero outages).

Canada – November actual: Sharply lower expectations for Canadian supply in the first half of 2007 are in part balanced by a 100 kb/d upward revision for the third quarter. This results in a downward adjustment for 2007 as a whole of 20 kb/d. Total oil production rises from 3.2 mb/d in 2006 to 3.35 mb/d in 2007, with growth concentrated on Albertan bitumen supply and offshore east coast production. Synthetic crude output growth levels off temporarily in 2007, with only the recent Syncrude Canada Ltd. expansion to 350 kb/d capacity providing scope for year-on-year increment. All three Albertan synthetic crude units have been subject to prolonged and unscheduled outages in the past two years, although a repeat of this trend is not included in the forecast.

A diluent unit fire at the Suncor heavy oil upgrading plant in Alberta cuts January and February supply by some 50 kb/d below capacity. Meanwhile, planned maintenance at the plant is now scheduled for 2Q rather than a previously-assumed 3Q. Power generator problems and a plan to bring forward September maintenance to February/March cut expected first quarter supply at the Hibernia field offshore Newfoundland, to around 100 kb/d, from a prevailing 190 kb/d. Both incidents combined, however, lead to a corresponding increase of around 100 kb/d in September production compared with last month's forecast. We have also increased supply from the offshore White Rose field on news that a seventh well due onstream at mid-year will raise capacity above 135 kb/d.



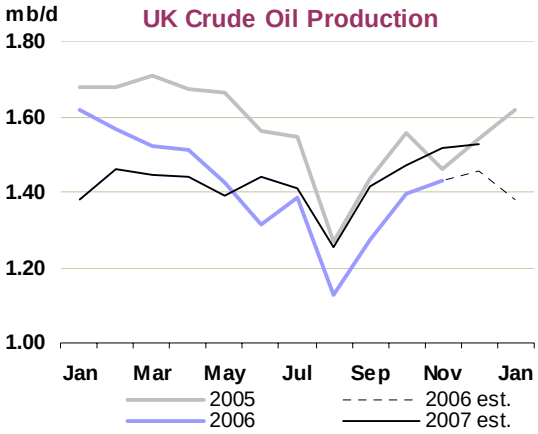


Mexico – December actual: Evidence continued to emerge in January supporting a weakening Mexican supply profile in 2007. Pemex said it expected baseload Cantarell field production to drop by some 15% in 2007, close to this report's estimate. Total December Mexican production came in

almost 200 kb/d below expectation at 2.98 mb/d of crude and 0.41 mb/d of NGL. However, this was due in part to a computer outage at a gas lift plant at Cantarell, and January output is reported to have rebounded. Nonetheless, the lower 4Q06 baseline lowers 2007 production by 20 kb/d to 3.48 mb/d (of which 3.04 mb/d is crude oil), some 200 kb/d less than in 2006. Both the new Pemex management team and the new government have ruled out any change in the country's constitution which would allow foreign companies access to the upstream sector on a production share basis.

North Sea

UK – November actual: Despite a number of downward field revisions (Alba, Clair) and deferrals (both Brodgar/Callanish and Brenda/Nicol are pushed back from late 2006 start-up to spring 2007), UK supply is revised up by 20 kb/d for 2007. Baseline field by field data suggest higher output from the Forties and West of Shetlands systems, and these are extended through the forecast. Offshore crude supply is seen levelling off temporarily in 2007 at 1.43 mb/d, after declining consistently so far this decade.



The 200 kb/d Buzzard field within the Forties system is instrumental in flattening off the UK production profile. Having entered service in the first week of January, production levels have fluctuated since then during facility testing. Field operator Nexen sees production capacity of 200 kb/d being attained by mid-year. We have, for now, retained a more conservative forecast that sees plateau output for Buzzard being attained in 4Q, although this is subject to revision if Nexen's ramp-up target is met. Forties pipeline operator BP envisages Buzzard lowering the blend's API by 2.9° in 2007, and by 3.5° in 2010 from a current level of 44.6° API.

Former Soviet Union (FSU)

Russia – December actual, January provisional: December Russian liquids production data showed little change from last month's provisional indications, with supply coming in at 9.84 mb/d, some 2% above December 2005. Although Gazprom output came in slightly lower-than-expected, smaller producers performed slightly ahead of preliminary indications. There were also signs of a long-expected, but belated surge in supply from the Exxon-operated Sakhalin 1 project in Russia's far east, where output reached 160 kb/d, up from 97 kb/d in November.

January's Sakhalin 1 production seems to have reached some 200 kb/d, with further increases towards 250 kb/d expected in months to come. All in all, January provisional data suggest a further rise in Russian supply to 9.89 mb/d, 400 kb/d higher than last year when low temperatures curbed supply. First quarter estimates for Rosneft and Surgutneftegaz have been cut after news that production will be curbed while repairs to power lines are made in the Surgut region. However, this reduction is offset for 2007 as a whole by higher than expected baseline output from Lukoil and Tatneft which is carried through the forecast. Annual growth of 2.2% in 2006 is expected to be replicated in 2007, Some 73% of an expected 225 kb/d increment in 2007 Russian supply is expected to come from Sakhalin 1, highlighting the increasing concentration of growth compared with more broad-based expansion seen early in the decade. However, the forecast also assumes a modest increase in supply from Lukoil and a levelling off in the recent decline from Yukos assets.

However, concerns remain over the prospects for continued upstream investment by foreign operators. Press reports in January suggested that Russia's Energy and Natural Resources Ministries have proposed to President Putin that all future offshore exploration blocks be allocated to state producers Gazprom and Rosneft via closed tenders, compared with the existing open auction process. Further, a proposed amendment to the Law on Mineral Resources will recommend that oilfields containing in excess of 70 million tonnes of oil (510 million bbls) should be classified as strategic and that foreign companies will be precluded from taking controlling stakes during their development.

An anticipated rise in December **net FSU exports** came in less than expected, with products shipments levelling off at 2.4 mb/d, while crude flows increased by 160 kb/d. Rising Baltic, Druzhba pipeline and Far East crude exports (including Sakhalin) offset a decline in Black Sea and BTC

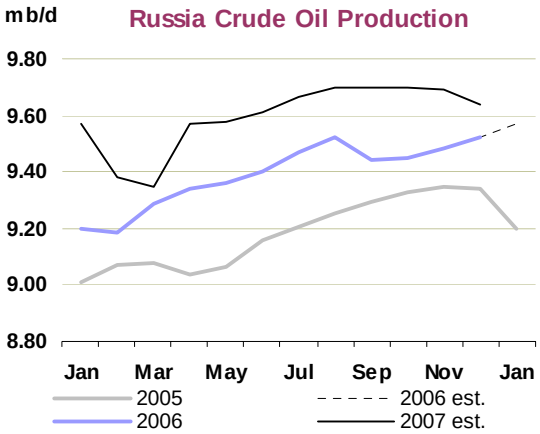
shipments. A sharp rise in scheduled January Russian crude exports is likely to have been partly offset by disrupted Druzhba pipeline shipments to central Europe and power outages which curtailed pumping to Primorsk on the Baltic. Delays transiting the Turkish Straits also increased in January. Seaborne Russian crude exports are due to fall in February by as much as 170 kb/d, with the key ports of Novorossiysk (Black Sea) and Primorsk (Baltic) feeling the brunt of the reductions. This is despite a further fall in Russian crude export duties to some $180/tonne from 1 February. Duties have fallen by over 20% from autumn 2006 highs.

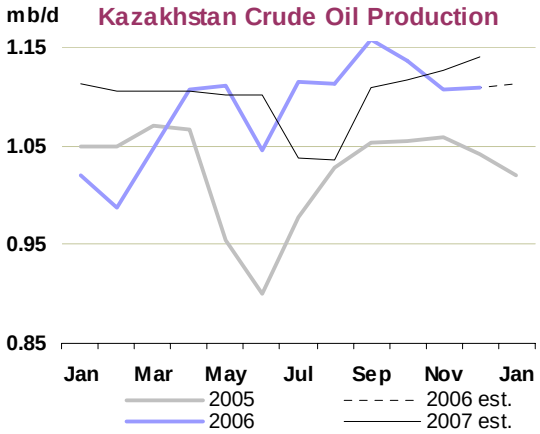
FSU Net Exports of Crude & Petroleum Products
(million barrels per day)

	2005	2006	1Q2006	2Q2006	3Q2006	4Q2006	Oct 06	Nov 06	Dec 06	Latest month vs. Nov 06	Latest month vs. Dec 05
Crude											
Black Sea	2.27	2.22	2.25	2.26	2.27	2.08	2.14	2.12	2.00	-0.12	-0.32
Baltic	1.59	1.55	1.54	1.73	1.49	1.43	1.34	1.36	1.59	0.23	0.00
Arctic/FarEast	0.19	0.15	0.10	0.11	0.20	0.20	0.21	0.17	0.22	0.05	0.01
BTC	0.00	0.00	0.00	0.01	0.22	0.38	0.25	0.46	0.42	-0.04	0.42
Crude Seaborne	4.05	4.07	3.89	4.11	4.18	4.09	3.94	4.11	4.23	0.12	0.11
Druzhba Pipeline	1.15	1.20	1.20	1.16	1.23	1.19	1.12	1.20	1.25	0.05	0.12
Other Routes	0.25	0.38	0.31	0.38	0.38	0.47	0.46	0.48	0.47	-0.02	0.22
Total Crude Exports	5.45	5.65	5.39	5.65	5.80	5.75	5.53	5.79	5.94	0.16	0.45
Of Which: Transneft	4.04	4.09	4.05	4.23	4.16	3.94	3.78	3.88	4.15	0.26	0.05
Products											
Fuel oil	0.93	0.95	0.87	1.05	0.94	0.95	0.95	0.94	0.95	0.02	-0.01
Gasoil	0.87	0.95	1.01	0.95	0.94	0.91	0.92	0.92	0.89	-0.03	0.07
Other Products	0.58	0.61	0.60	0.70	0.63	0.53	0.52	0.54	0.54	0.00	0.00
Total Product	2.38	2.51	2.47	2.69	2.50	2.39	2.40	2.40	2.39	-0.01	0.05
Total Exports	7.83	8.16	7.87	8.34	8.30	8.15	7.92	8.18	8.33	0.15	0.50
Imports	0.02	0.04	0.03	0.03	0.05	0.04	0.04	0.04	0.05	0.01	0.02
Net Exports	7.81	8.13	7.84	8.31	8.25	8.10	7.88	8.14	8.28	0.14	0.48

Sources: Petro-Logistics, IEA estimates
Note: Transneft data has been revised to exclude Russian CPC volumes.

After initially rescinding crude transit fees in light of January's export dispute with Russia, Belarus has now said that these may now be reimposed. In a perhaps related development, reports emerged in January that Russia is considering building a 1.0 mb/d pipeline link from the Druzhba line to Primorsk on the Baltic that would bypass Belarus. Russian government sources also stressed during January that in the longer run the country plans to rely increasingly on refined products rather than crude oil exports, either through new domestic refineries or by Russian producer companies forming strategic alliances with refiners overseas.





Kazakhstan – December actual: An upward revision of 35-40 kb/d to 2006 Kazakh production from annual data released at the end of the year carries lifts the 2007 forecast to 1.37 mb/d, from 1.33 mb/d in 2006. Crude oil accounts for some 80% of the total, with the remaining 270 kb/d of 2007 production classified as condensate from the Karachaganak field.

The availability of sufficient export infrastructure has long been seen as a binding constraint on Kazakh oil production. Delays in expanding the CPC pipeline to Russia's Black Sea port of Novorossiysk in particular risk delaying progress in expanding the Tengiz field and developing the

Kashagan field. Addressing this issue, state company Kazmunaigaz announced it had signed a deal with Tengiz and Kashagan operators to set up the Kazakh Caspian Transport System (KCTS), comprising a pipeline to Kuryk on the Caspian coast and facilities to enable shuttle tankers then to move crude across the Caspian to Baku. From there, crude would feed the existing 1.0 mb/d BTC pipeline to the Mediterranean. Initial KCTS capacity from 2010/2011 is seen at 500 kb/d, rising later to 760 kb/d.

Revisions to Other Non-OPEC Estimates

Downward revisions to non-OPEC supply for 2007 amount to 70 kb/d, after allowing for the shift of Angola into the OPEC fold. Some 75 kb/d worth of downward adjustments for North America counter a combined upward revision of 65 kb/d for the FSU and Europe. All of these revisions have been discussed above. In addition, **Chinese** production for 2007 is revised down by 25 kb/d, based on lower baseline supply for the end of 2006. Recent production levels suggest there may be further downside adjustment to come for the Daqing field, but this could be offset by higher levels than we

Revisions to Non-OPEC Oil Supply
(million barrels per day)

	Last Month's OMR				This Month's OMR				This Month vs. Last Month			
	2006	2007	06 v 05	07 v 06	2006	2007	06 v 05	07 v 06	2006	2007	06 v 05	07 v 06
North America	14.30	14.39	0.16	0.09	14.26	14.32	0.12	0.06	-0.04	-0.07	-0.04	-0.04
Europe	5.20	5.13	-0.41	-0.07	5.20	5.15	-0.40	-0.05	0.01	0.03	0.01	0.02
Pacific	0.57	0.66	-0.01	0.08	0.57	0.66	-0.01	0.09	0.00	0.00	0.00	0.00
Total OECD	**20.07**	**20.17**	**-0.26**	**0.11**	**20.03**	**20.13**	**-0.30**	**0.10**	**-0.03**	**-0.04**	**-0.03**	**-0.01**
Former USSR	12.06	12.56	0.42	0.49	12.10	12.59	0.46	0.49	0.04	0.03	0.04	0.00
Europe	0.15	0.13	-0.01	-0.01	0.15	0.13	-0.01	-0.01	0.00	0.00	0.00	0.00
China	3.68	3.74	0.07	0.05	3.67	3.71	0.06	0.04	-0.01	-0.02	-0.01	-0.01
Other Asia	2.71	2.74	0.03	0.04	2.70	2.74	0.02	0.04	0.00	0.00	0.00	0.00
Latin America	4.41	4.58	0.12	0.17	4.40	4.54	0.11	0.14	-0.01	-0.04	-0.01	-0.03
Middle East	1.74	1.69	-0.12	-0.05	1.74	1.69	-0.12	-0.05	0.00	0.00	0.00	0.00
Africa*	2.58	2.73	0.11	0.15	2.58	2.73	0.11	0.15	0.00	0.00	0.00	0.00
Total Non-OECD*	**27.33**	**28.17**	**0.61**	**0.84**	**27.34**	**28.14**	**0.63**	**0.80**	**0.02**	**-0.03**	**0.02**	**-0.05**
Processing Gains	1.90	1.92	0.04	0.02	1.90	1.92	0.04	0.02	0.00	0.00	0.00	0.00
Other Biofuels	0.17	0.34	0.06	0.16	0.18	0.34	0.06	0.17	0.01	0.01	0.01	0.00
Total Non-OPEC*	**49.47**	**50.60**	**0.44**	**1.13**	**49.46**	**50.53**	**0.43**	**1.08**	**-0.01**	**-0.07**	**-0.01**	**-0.06**

OMR = Oil Market Report
* adjusted to exclude Angola

are currently showing from the westerly Changqing area and from coal-to-liquids supply. Latin American supply is also reduced by 40 kb/d for 2007, following lower late-2006 production from **Argentina**. In addition, we have adjusted **Ecuadorean** production in line with a new Energy Ministry forecast, which envisages 2007 output dropping to some 505 kb/d from last year's 535 kb/d. Prospects for foreign upstream investment in Ecuador have been affected by moves to strengthen the role of state Petroecuador and potentially to rejoin OPEC, which Ecuador left in 1992.

OECD STOCKS

Summary

- **Total OECD industry oil stocks fell by 40.2 mb in December**, as crude stock draws in all three regions outweighed product stock builds in North America and Europe. Unusually warm weather meant less heating fuel demand, while crude imports were reduced in anticipation of lower refinery throughputs. The warm weather was not as pronounced in the OECD Pacific, where total product stocks fell strongly in December. Nevertheless, despite the monthly stock draw, total end-December OECD stocks were 78.5 mb higher year-on-year. Preliminary data for January indicate a net increase in oil stocks, as product inventory gains outweigh crude draws.

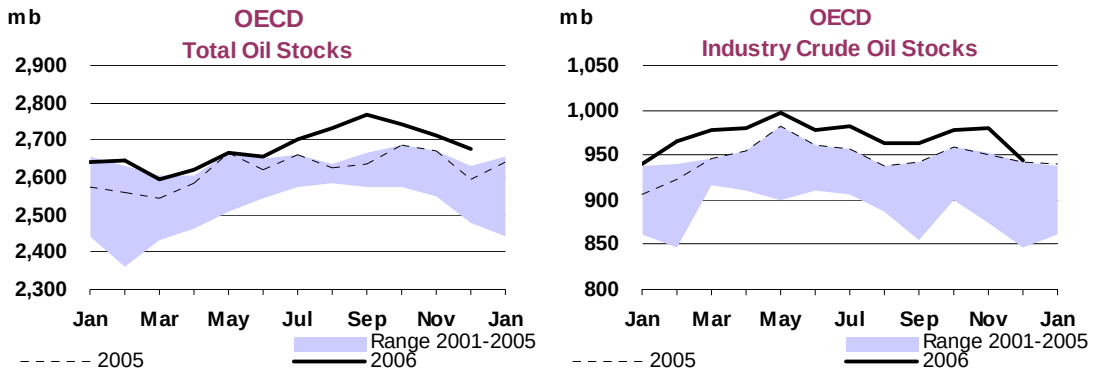
Preliminary Industry Stock Change in December 2006 and Fourth Quarter 2006

(million barrels per day)

	December (preliminary)				*Fourth Quarter 2006*			
	North America	Europe	Pacific	Total	North America	Europe	Pacific	Total
Crude Oil	**-0.84**	**-0.10**	**-0.19**	**-1.14**	**-0.24**	**0.03**	**0.02**	**-0.20**
Gasoline	0.36	0.03	-0.05	0.35	0.00	0.07	-0.01	0.06
Distillates	0.26	0.25	-0.32	0.19	-0.08	-0.01	-0.14	-0.23
Residual Fuel Oil	0.00	0.04	0.02	0.06	-0.02	0.02	-0.01	-0.02
Other Products	-0.44	-0.01	-0.22	-0.67	-0.30	-0.02	-0.13	-0.45
Total Products	**0.18**	**0.32**	**-0.56**	**-0.06**	**-0.40**	**0.06**	**-0.29**	**-0.64**
Other Oils[1]	-0.03	-0.03	-0.04	-0.10	-0.11	-0.06	-0.01	-0.18
Total Oil	**-0.69**	**0.19**	**-0.80**	**-1.30**	**-0.75**	**0.03**	**-0.29**	**-1.01**

1 Other oils includes NGLs, feedstocks, and other hydrocarbons.

- **OECD crude oil stocks fell by 35.3 mb in December**, on draws in all three regions. The rapid decline leaves stocks only 2.1 mb higher than at the end of 2005, compared with a year-on-year difference of +29.4 mb for end-November stocks. The drawdown was most pronounced in North America, where crude stocks fell by 26.1 mb, largely in the US. In the Pacific and Europe, crude stocks fell by 6.0 mb and 3.2 mb respectively.
- **Total product inventories fell by a marginal 1.8 mb in December**, and remain 66.1 mb higher year-on-year. In Europe and North America, product stocks increased by 10.1 mb and 5.6 mb respectively, but were offset by a hefty fall in Pacific product stocks of 17.5 mb. The unusually warm winter temperatures reversed the normal seasonal decline in heating oil stocks, with combined European and North American middle distillate inventories building by 15.9 mb. In contrast, middle distillates in the Pacific fell by 9.9 mb. However, according to weekly data from the Petroleum Association of Japan (PAJ), despite a further draw in January, crucial heating fuel kerosene stocks now stand around 44% higher than the four-year average.
- **The total fourth-quarter OECD industry stock draw amounted to 1.0 mb/d**, the strongest since 2002 for that period. The drawdown is slightly lower than anticipated in last month's report (based on preliminary weekly data), when we estimated 1.1 mb/d. However, it should be noted that the quarterly miscellaneous-to-balance is high at 1.4 mb/d – only part of which can be attributed to anecdotal reports of Chinese stock building.
- **Forward demand cover for total OECD industry stocks stood at 53 days** at the end of December, one day lower than at end-November, but one day higher year-on-year.
- **Finalised data for November show a net upward revision of 2.3 mb** for total industry stocks. Total product stocks were revised upwards by 13.6 mb, offsetting downward revisions in crude (-7.2 mb) and 'other oils' (-4.1 mb).

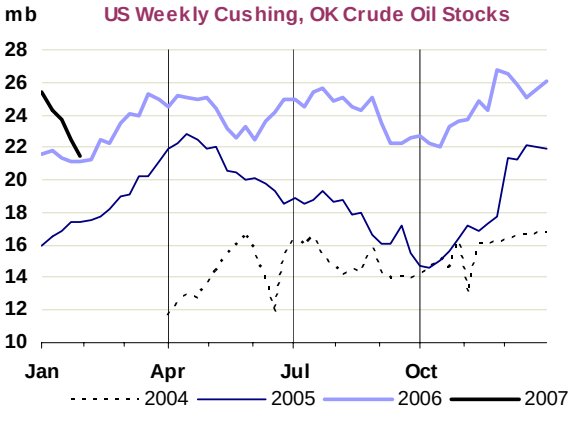


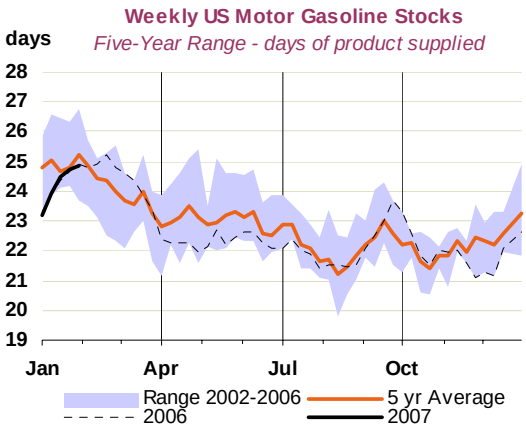
OECD Industry Stock Changes in December 2006

OECD North America

North American crude oil inventories fell 26.1 mb in December. This was predominantly due to US refiners importing less crude ahead of 1Q07 seasonal maintenance and end-year tax considerations, leading to a 22.1 mb stock draw. This left US crude stocks 13.6 mb down on the year, while total North American crude stocks were 19.2 mb lower than at the end of 2005. Mexican crude stocks also fell by 4.0 mb in December.

In January, weekly data showed US crude stocks rising by 6.4 mb, as some refiners shut down or reduced runs for maintenance, and a spate of refinery problems was reported. At the end of January, crude stocks stood at 324.6 mb, 29.5 mb above the five-year average for this time of year. However, regionally, there were quite different developments. A 10.5 mb crude build in PADD 3, the Gulf Coast, accounted for most of the upward shift, in addition to a 1.5 mb increase in PADD 5, the West Coast. Crude levels were down by 4.4 mb in PADD 2, the Midwest, as well as by approximately 600 kb each in PADD 1 and PADD 4. Notably, crude stocks fell by 4.1 mb in Cushing, Oklahoma, the delivery point for NYMEX WTI, which perhaps contributed to price gains in the second half of January. Crude inventories there had previously been high and growing, due to increased crude flowing in from Canada.





North American product stocks rose by 5.6 mb in December, on increased gasoline and middle distillate stocks. US mogas and middle distillate inventories alone rose by 11.1 mb and 7.4 mb respectively, offsetting a drop in 'other products' of 13.6 mb. Mexican product stocks meanwhile were virtually unchanged at 24.4 mb. Total North American product stocks at the end of December were 29.1 mb higher year-on-year.

Total US product stocks rose by 2.3 mb, in January, but appeared to have reached a seasonal peak by mid-month when cold weather finally hit the US. Over the course of January, heating oil stocks fell by 4.3 mb, but this was more than offset by a 4.6 mb build in diesel. Meanwhile, given the warm weather in the first half of the month, refiners were able to focus on building gasoline stocks ahead of the summer, and inventories rose by 15.9 mb to 226.5 mb. Residual fuel, 'other' and unfinished oil levels meanwhile remained more or less flat.

In terms of forward demand, gasoline stocks stood at 25 days at the end of January, two days higher month-on-month. This puts cover more or less back in line with the five-year average, a more comfortable position ahead of spring and summer driving. Distillate stock cover fell by four days to 30 days in the same period.

OECD Europe

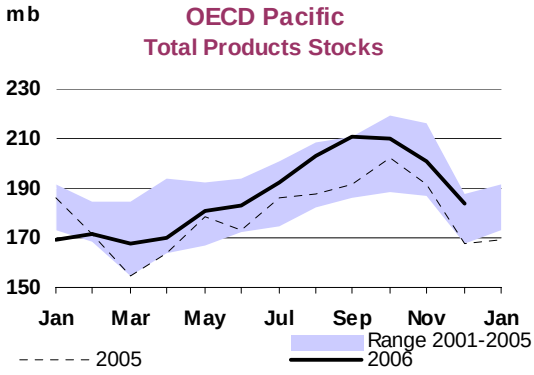
European crude oil stocks fell by 3.2 mb in December to 329.7 mb – 1.8 mb higher year-on-year. This was despite a slight reduction in refinery crude throughput of 100 kb/d. Crude stocks fell in the UK (-3.5 mb), Germany (-1.5 mb), the Netherlands and Italy (each -0.7 mb). Of the large consuming countries, only France saw crude stocks rise, by 1.1 mb. US benchmark crude WTI spent most of December at a discount to Dated Brent, in theory discouraging the flow of North Sea and other crudes priced off Brent across the Atlantic, and as mentioned above, US refiners imported less crude in December.

European product inventories rose by 10.1 mb on a middle distillate stock build of 7.9 mb. Residual fuel oil and gasoline stocks increased by 1.3 mb and 1.0 mb respectively. Total product stocks at the end of December were 20.8 mb higher year-on-year. Middle distillate levels rose in the Netherlands (+2.4 mb), France (+1.7 mb) and the UK (+1.4 mb), offsetting a draw in Germany (-0.8 mb). Gasoline stocks meanwhile grew by 800 kb in Italy, and by 500 kb each in the Netherlands and the UK.

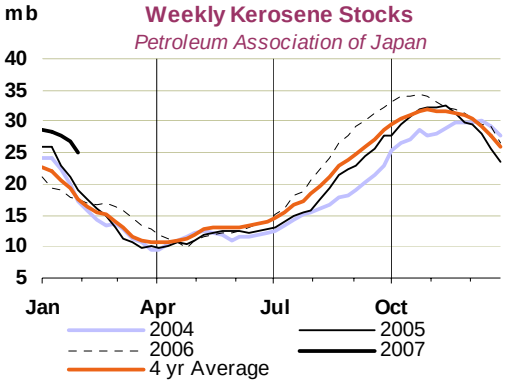
Preliminary Euroilstock January data for the EU-16 showed a total stock draw of 4.4 mb, as a fall in crude levels of 14.0 mb outweighed a product build of 9.6 mb. The drop in crude inventories – if confirmed next month – is likely due to a number of factors including the Druzhba problems in early January, slightly lower North Sea output, open arbitrages for Atlantic Basin crude to both east and west, and marginally lower OPEC supply. European seasonal refinery maintenance meanwhile is only due to kick off in February. Product stock builds stem from increases in all categories, but foremost middle distillates, which increased by 4.2 mb on the warm weather.

OECD Pacific

In the Pacific, crude oil stocks fell by 6.0 mb in December, but remain 19.5 mb higher on the year. The decline was prompted by a net 210 kb/d increase in throughputs from November and was evenly spread between Japan and Korea, with each seeing a stock draw of around 3 mb. Weekly data from PAJ show that Japanese onshore crude stocks fell by a further 2.7 mb in January despite refinery runs inching up.



Pacific product inventories fell by 17.5 mb in December, with draws of 11.6 mb and 6.0 mb respectively in Japan and Korea. Temperatures in Northeast Asia were not as unseasonably warm as in North America and Europe, and middle distillate stocks fell by 9.9 mb. Gasoline inventories fell too, by 1.4 mb, while 'other products' drew by 6.8 mb. Total product stocks at the end of December were 16.1 mb higher year-on-year. In Japan, monthly draws were greatest in 'other products' (-5.9 mb) and middle distillates (-5.7 mb), while in Korea, middle distillates fell by 3.8 mb.



In contrast to December, weekly PAJ data for January show that total finished product stocks in Japan rose by 2.2 mb. Gasoil and jet fuel inventories rose by 2.0 mb and 710 kb respectively, while heating fuel kerosene fell by 1.1 mb. Nevertheless, at 25.8 mb, end-January stocks of the latter remain an unusually high 8 mb or nearly 50% above the four-year average for this time of year.

OECD Inventory Position at End-December and Revisions to Preliminary Data

OECD total industry stocks finished 2006 at 2,673.8 mb, down 40.2 mb on November, but 78.5 mb higher than at the end of 2005. Compared with last month's report, the year-on-year difference thus has almost doubled from 41 mb. Total crude stocks ended the year at 944.3 mb, 35.3 mb lower month-on-month, and now only 2.1 mb higher than one year ago. Total product stocks, meanwhile, fell by a marginal 1.8 mb in December, and at 1,436.7 mb, were 66.1 mb higher than at the end-2005. On a regional basis, total OECD Pacific industry stocks ended 2006 38.6 mb higher on the year, while North American inventories were 20.0 mb higher and OECD Europe levels were up 19.9 mb.

The latest preliminary data peg the total fourth-quarter OECD industry stock draw at 1.0 mb/d, the largest seasonal fall since 2002. A further 0.6 mb/d fall for 'oil on water and floating storage' magnifies that decline. However, the fourth-quarter statistical error (miscellaneous-to-balance) is also high at 1.4 mb/d. A positive balancing item either reflects underreported demand, overreported supply or unreported stock builds. While we have noted that in recent years that there appears to have been a systemic underreporting of demand, the recent high volatility in our miscellaneous-to-balance

number appears to be the result of large price fluctuations in 2006. Although some of this may be attributable to unreported stock building in China, stock shifts elsewhere could be to blame. Regardless of the cause, a high miscellaneous-to-balance implies a greater potential for data to be revised.

Revisions versus 18 January 2007 Oil Market Report

(million barrels)

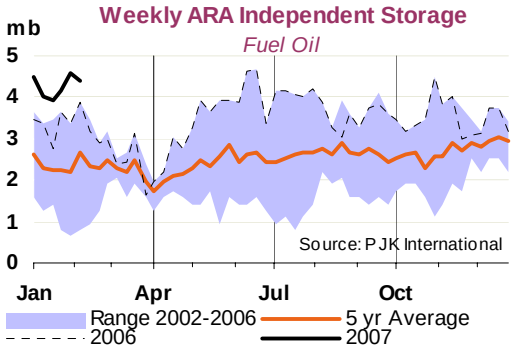
	North America		*Europe*		*Pacific*		*OECD*	
	Oct 06	Nov 06	Oct 06	Nov 06	Oct 06	Nov 06	Oct 06	Nov 06
Crude Oil	**-1.0**	**-7.6**	**-1.5**	**-3.4**	**0.0**	**3.8**	**-2.6**	**-7.2**
Gasoline	0.0	5.7	0.8	3.7	0.0	0.1	0.8	9.5
Distillates	0.0	2.7	1.2	3.6	0.0	0.0	1.2	6.3
Residual Fuel Oil	0.0	-0.7	1.0	-0.1	0.0	0.0	1.0	-0.9
Other Products	0.0	-2.8	0.1	1.6	0.0	0.0	0.1	-1.2
Total Products	**0.0**	**4.8**	**3.1**	**8.7**	**0.0**	**0.1**	**3.1**	**13.6**
Other Oils[1]	-0.5	-5.0	-1.2	0.9	0.0	0.0	-1.8	-4.1
Total Oil	**-1.6**	**-7.8**	**0.3**	**6.2**	**0.0**	**3.9**	**-1.3**	**2.3**

1 Other oils includes NGLs, feedstocks, and other hydrocarbons.

Revisions to November stock data show a small increase in total commercial stocks of 2.3 mb. The total products inventory figure was revised up by 13.6 mb, offsetting downward revisions of 7.2 mb in crude and 4.1 mb in 'other oils'. A downward revision of North American crude stocks by 7.6 mb in November made up most of the difference there, but was largely offset by an upward revision to total European product stocks by 8.7 mb.

Recent Developments in ARA Independent Storage

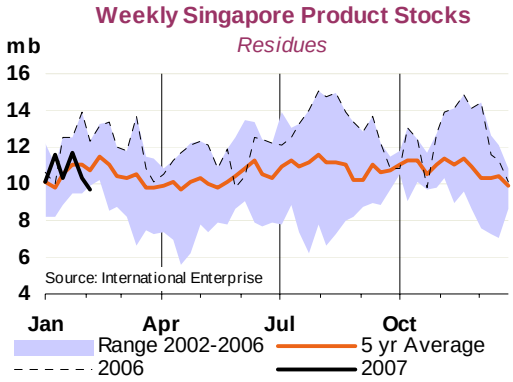
Total oil product inventories held in independent storage in the Amsterdam-Rotterdam-Antwerp (ARA) area rose by 3.2 mb in January. Gasoil stocks rose by a hefty 2.2 mb to well above the five-year average range, in part due to the warm weather in large parts of Europe, at least in the first half of January. Fuel oil stocks also increased by 760 kb, remaining above their five-year average range. Reports of some recent fixings to Asia might lower this level slightly in weeks to come. Meanwhile, jet/kerosene stocks added 370 kb, naphtha remained unchanged, and gasoline inventories drew 200 kb.



Recent Developments in Singapore Stocks

According to weekly data from International Enterprise, total oil product stocks held in Singapore rose 2.3 mb in January. Levels of all three product categories rose, but the largest build was seen in light distillates, which increased by 1.5 mb. This, and an increase in middle distillates of 570 kb, put the two groups at the top of their five-year average range for this time of year. However, residual fuel stocks, after rising 210 kb in January, are at the bottom of their five-year range, which is in sharp contrast to November and December, when levels consistently trended at the top of the range.

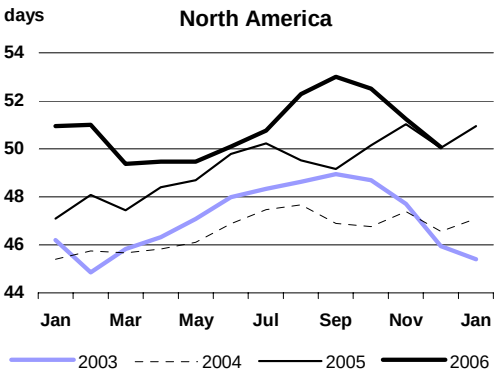
Lower fuel oil stocks may in part reflect OPEC cuts of heavier, residue-rich crudes sent to Asia, which could be one explanation for a rise in high-sulphur fuel oil (HSFO) prices in Singapore, which have shot up to their highest level since August last year. A steady increase in HSFO Singapore over Rotterdam prices has attracted imports, though news reports indicate that some of these shipments have been delayed, sustaining lower stock levels and higher prices.

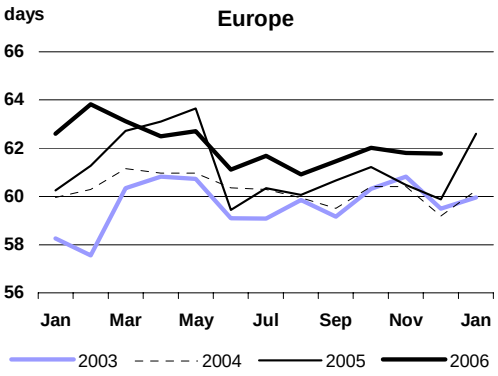


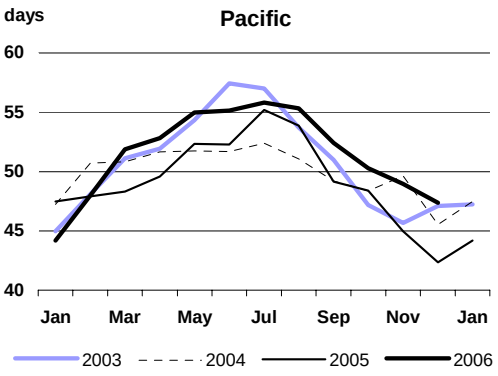
Regional OECD End-of-Month Industry Stocks

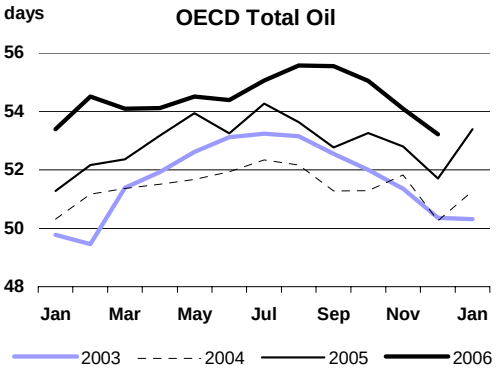
(in days of forward demand and millions barrels of total oil)

Days[1]

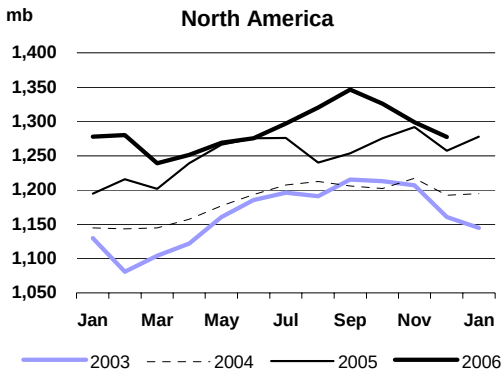


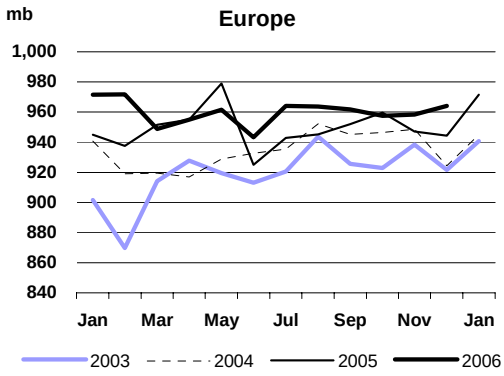


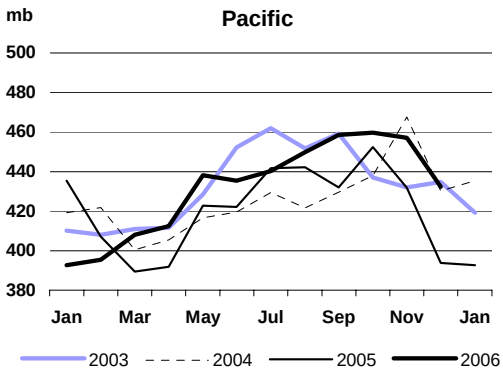


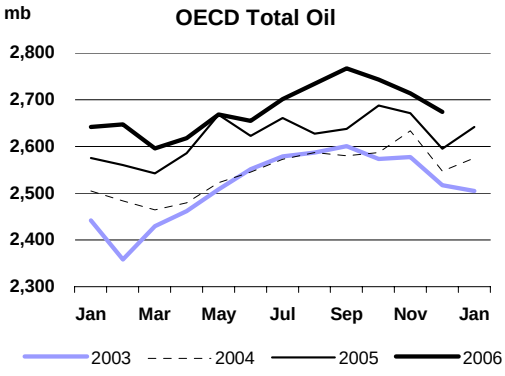


Million Barrels









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

PRICES

Summary

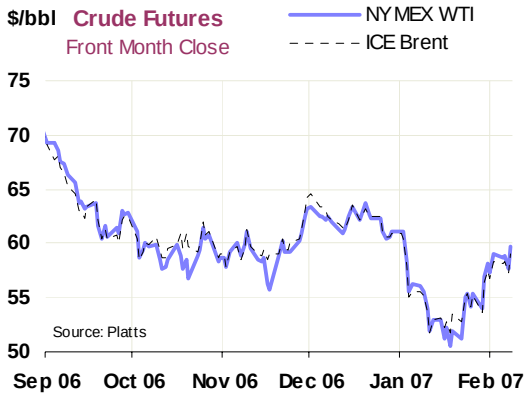
- **Oil prices fell to nearly $50/bbl in mid-January, only to rebound to $60/bbl** on colder northern hemisphere weather and higher implied demand, signs of tighter OPEC supply and increased geopolitical tensions. Indications of stronger US economic growth and the strength of product markets ahead of seasonal refinery maintenance provided a further contribution to the rebound.

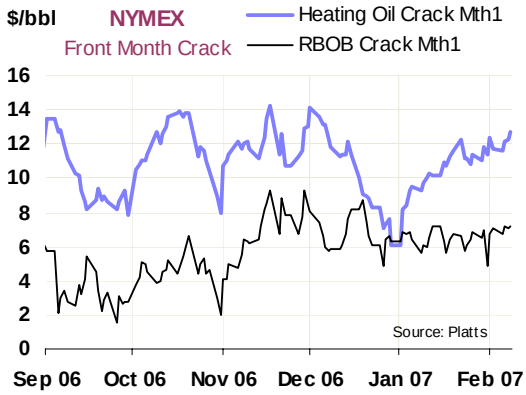
- **Crude price gains reflected futures**, though once again, gasoline-rich grades profited from strong interest by refiners. Also, tighter OPEC supplies appear to have benefited crudes with a high fuel oil yield. With refinery maintenance increasing in February and March, this situation could be further exacerbated.

- **Refining margins rose in January** as crude prices fell more than refined products. Margins are particularly strong on the US West Coast, which has experienced several unplanned refinery outages. Higher fuel oil values boosted hydroskimming margins, which swung into positive territory in Singapore in early February – the first time since May last year.

- **The cold weather gave distillate prices a boost**, though naphtha and fuel oil cracks showed the most dramatic gains, both due to tighter supplies. Gasoline cracks were virtually unchanged, but interest in gasoline-rich crudes for seasonal stock building was evident.

- **Freight rates for large tankers from the Middle East Gulf plunged to nominal three-year lows** in mid-January before rising later in the month. Colder temperatures supported spot vessel demand in the Atlantic basin, boosting dirty rates in the second half of January. Comfortable Asian product stocks continued to undermine clean product tanker rates for east of Suez trading in January.





Overview

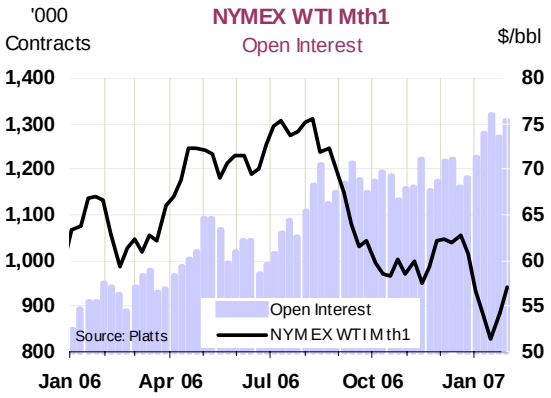
After falling almost $10/bbl from the beginning of the year, and touching $50/bbl, benchmark oil prices have since rebounded, and spent early February trading just below $60/bbl. The upswing came after a confluence of factors changed sentiment, and investors returned to the buy side.

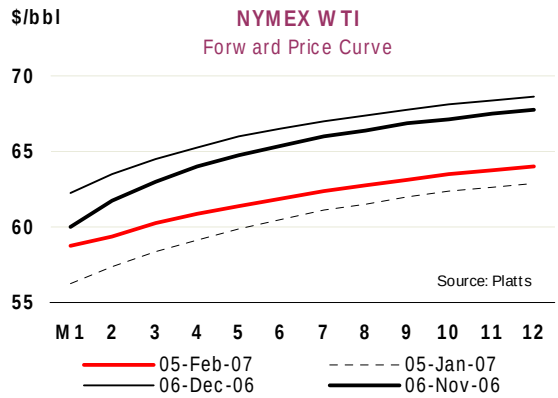
The most obvious reason for the turnaround was that the weather in the US (and to some degree, Europe) swung from unusually warm to seasonally cold, boosting sales of heating fuel and natural gas. Winter temperatures had been some of the warmest on record in December and early January, but have subsequently been much colder. Though oil product inventories are almost certainly ample to cover winter demand, the swing in temperatures seemed to catch markets by surprise.

Almost concurrently, the market factored in some additional implied demand, as President George W. Bush set forth his vision that the US Strategic Petroleum Reserve (SPR) should be doubled in size, in his annual State of the Union address. While stocks are technically regarded as separate to demand, when a strategic reserve is built, these stocks are often amortised for some time, and when lent to the market they are usually replenished. So, to all intents and purposes, strategic stock filling is a boost to global demand. We are currently examining ways in which this can be better reflected in our balances.

Currently at 689 mb, the US SPR was already set to be restocked to its full capacity of 727 mb. Both this short-term filling, as well as a long-term increase to a full 1,500 mb by 2027, as Bush is suggesting, would imply additional 'demand' of around 110 kb/d. In addition, the focus of the State of the Union Address on energy security appeared to be interpreted by the markets as a sign of increased geopolitical risk.

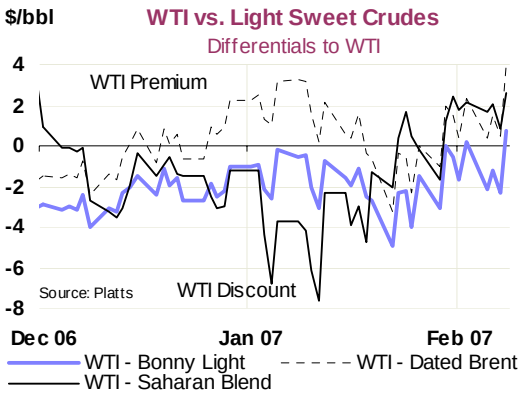
Indeed geopolitical tensions, particularly in the Middle East, appear to have risen in the second half of January. Protests in Lebanon heightened civil tensions, while a similar fracture has bedevilled internal Palestinian politics (though at the time of writing, a new unity government was announced). The Iranian nuclear standoff has been prominent, as the US and others strive for tighter sanctions, while Iran itself, according to some news reports, has intensified its nuclear activities. The US has also begun to take a more hard-line stance on what it sees as Iran's alleged influence in the ongoing problems in Iraq.

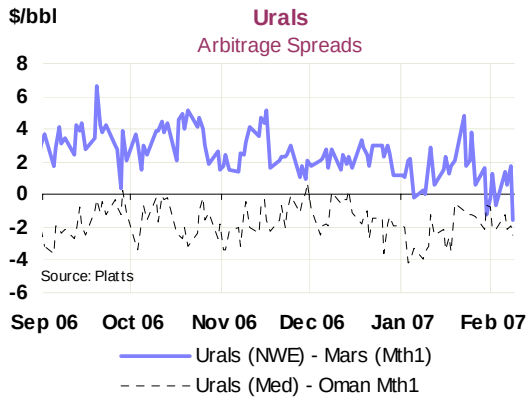




Lastly, there is anecdotal evidence that funds and speculators had returned to the buy side of the markets. As regards the little hard data available, *Commitments of Traders* numbers from US watchdog *CFTC* show that non-commercials retained net-short positions in NYMEX WTI throughout January – despite the run-up in prices.

Although OPEC countries have not specifically named a price target an emerging market consensus suggests it is close to $50/bbl (WTI). OPEC became noticeably more vocal when prices were falling rapidly in early January, but once prices rose again, talk of an emergency OPEC meeting ahead of its scheduled gathering in mid-March dissipated. There are signs of possible additional tightening in line with the further 500 kb/d cut, which officially came into effect from 1 February. While crude differentials suggest a tightening market, there have been reports that some OPEC producers may be increasing volumes to refiners in March.





But while there are signs of some market tightening prices have not (so far) risen above $60/bbl, a level last seen on 29 December (NYMEX WTI) and not all factors in the market are bullish. For example, total stocks in the US and Japan have risen again in January, based upon weekly data. Narrowing forward spreads in both benchmark crude futures are an indication of a tightening market. M1 to M12 WTI spreads have narrowed from almost -$6/bbl to around -$4.75/bbl since the beginning of the year. That this has occurred during a period when Cushing, Oklahoma, stocks have tightened,

while overall US stocks have risen, is testimony to the influence of the NYMEX crude delivery point in determining forward prices. Further, that the spread has narrowed and total open interest has continued to climb, may represent an argument that fundamentals, rather than funds are determining forward prices.

Spot Crude Oil Prices

Over the course of the last month, most crude prices increased in line with benchmark futures, but gains were greatest for light sweet crudes with a high gasoline yield. Despite the recent swing to cold temperatures, it would appear that the market, particularly in the US, is already focusing on gasoline production ahead of the summer – despite higher distillate cracks. Conversely, the ones to fall were Middle Eastern crudes usually sought in Asia for kerosene production, but which are now suffering from unusually high heating fuel stocks in Japan.

Thus, Dated Brent was one of the crudes to gain most when prices rose again, also taking support from slightly lower production in January. At the other end of the spectrum, OPEC cuts are more likely to come from predominantly heavy sour grades. This has given fuel oil a boost, most noticeably in Asia and in turn supports residue-rich Dubai prices. As a consequence, Brent/Dubai spreads – though highly volatile – have been around $2.50/bbl on average over the past 30 days, lower than previously and at a level that encourages movement of Atlantic Basin crudes to the east.

At the same time, concurrent with sharply falling stocks at its delivery point Cushing, Oklahoma, in January, WTI has gained relative to Dated Brent, creating an incentive to send similar crudes across the Atlantic. WTI's premium over Algerian sweet Saharan Blend is particularly noteworthy in this context, despite the latter arguably benefiting from ongoing threats to Nigerian exports due to violence and disruptions.

While Middle Eastern distillate-rich grades such as Murban suffered in early January, they have since picked up. Meanwhile, crudes with a high fuel oil yield, such as Dubai or Oman, have benefited from strong Asian residual prices. To a lesser extent the same is true of Russian Urals, which has seen a narrowing of its premium to Dated Brent in the latter half of January. Relative to both medium sour Mars in the US and competitor Oman in Asia, the Russian crude now looks quite attractive. This is despite loading problems in the Black Sea and severe congestion in the Turkish Straits, as well as slightly higher Russian crude production in January.

Looking ahead, besides daily fluctuations in oil futures, the fundamental issue for crude prices is how refinery maintenance develops in the various regions. From an estimated total shutdown volume of 1.6 mb/d in January, our calculations show offline capacity increasing by 600 kb/d in February. A prolonged cold spell could boost distillate-rich crudes in the short term, but in that eventuality, higher heating oil demand is more likely to be met through stock draws than ramped up distillate production. Given the high level of refinery capacity offline and gasoline production ramping up, support for light sweets seems more likely.

Spot Crude Oil Prices and Differentials

(monthly and weekly averages, $/bbl)

	Nov	Dec	Jan	Jan-Dec		Week Commencing:				
				Avg Change	%	08 Jan	15 Jan	22 Jan	29 Jan	05 Feb
Crudes										
Dated Brent	58.92	62.32	53.68	-8.64	-13.9	52.00	51.43	54.95	56.01	57.25
Brent (Asia) Mth1 adjusted	59.15	62.31	54.38	-7.93	-12.7	54.26	52.44	54.11	55.71	58.32
WTI (Cushing) Mth1 adjusted	59.03	61.96	54.14	-7.82	-12.6	54.07	51.45	53.65	57.03	58.82
Urals (Mediterranean)	55.95	57.95	50.12	-7.83	-13.5	49.53	47.71	50.43	51.81	53.72
Dubai Mth1 adjusted	56.72	58.68	51.69	-6.99	-11.9	51.77	49.75	51.27	53.15	55.49
Tapis (Dated)	61.72	65.54	58.88	-6.66	-10.2	58.57	56.67	58.96	61.46	64.06
Differential to Dated Brent										
WTI (Cushing) Mth1 adjusted	0.11	-0.37	0.46	0.82		2.07	0.02	-1.30	1.02	1.57
Urals (Mediterranean)	-2.97	-4.38	-3.56	0.82		-2.47	-3.72	-4.52	-4.20	-3.53
Dubai Mth1 adjusted - Dated Brent	-2.20	-3.64	-1.99	1.65		-0.23	-1.68	-3.69	-2.86	-1.76
Tapis (Dated)	2.80	3.22	5.20	1.98		6.57	5.24	4.01	5.45	6.82
Prompt Month Differential										
Forward Cash Brent Mth1-Mth2 adj.	-1.11	-0.55	-0.59	-0.04		-0.96	-0.24	-0.21	-0.62	-0.71
Forward WTI Cushing Mth1-Mth2 adj	-1.81	-0.96	-0.94	0.01		-0.98	-1.08	-0.91	-0.70	-0.56

Source: Platts

Delivered Crude Prices in November

Average crude oil delivery prices in IEA member countries continued to decline in November although at lower marginal decline rates than in September and October. The average crude CIF import price in the IEA stood at $55.89/bbl. European delivery prices were at $56.78/bbl, only 2 cents lower than in October. The November delivery price in North America dropped by 2% to $53.18/bbl, a marginal change that is significantly lower than the 10% declines in September and October. The average CIF import price for the OECD Pacific dropped by $3.19 or 5.2% to $58.39/bbl.

Refining Margins

Refining margins in January mostly rose as the average fall in crude prices in January outpaced that of refined products. Margins remain by far the highest on the US West Coast, which experienced some unplanned refinery outages, keeping product markets tight. Gasoline cracks rose, which particularly benefited sophisticated full conversion refineries, and Kern coking margins at a January average of $17.76/bbl remain by far the highest in our selection of representative regional margin calculations. In the US Gulf, it was distillate margins that gained most, taking support from heating oil demand in the US Northeast, which is mostly supplied from the Gulf. Widening jet and fuel oil cracks also helped margins increase.

Asian refining margins saw the greatest gains in January, though most of our assessments remain negative. In Singapore, all product cracks except jet/kerosene increased, with the greatest gains seen in fuel oil and gasoil. Indeed, after strong rises in January, early February calculations showed that Dubai hydroskimming had moved into positive territory for the first time since May last year – a clear testimony to fuel oil's strength in Asia. In Europe, all margins increased on the back of rising gasoline and fuel oil cracks. But the pattern of negative hydroskimming and positive cracking margins remains.

Selected Refining Margins in Major Refining Centres

($/bbl)

		Monthly Average			Change	Average for week ending:				
		Nov 06	Dec 06	Jan 07	Jan 07-Dec 06	05 Jan	12 Jan	19 Jan	26 Jan	02 Feb
NW Europe	Brent (Cracking)	2.25	0.30	2.34	2.05	2.80	3.93	1.94	0.85	2.13
	Urals (Cracking)	4.24	4.15	5.14	0.99	5.43	5.69	4.66	4.66	5.01
	Brent (Hydroskimming)	-2.61	-5.33	-2.39	2.94	-2.42	-0.62	-2.47	-3.84	-2.79
	Urals (Hydroskimming)	-1.95	-3.04	-1.18	1.86	-1.47	-0.40	-1.23	-1.60	-1.48
Mediterranean	Es Sider (Cracking)	2.57	1.42	2.32	0.90	1.51	2.72	2.17	2.21	3.34
	Urals (Cracking)	3.80	3.64	4.83	1.19	4.35	5.21	4.86	4.65	5.06
	Es Sider (Hydroskimming)	-3.14	-4.95	-3.03	1.92	-4.20	-2.40	-2.81	-3.20	-2.27
	Urals (Hydroskimming)	-3.04	-4.03	-1.42	2.61	-2.57	-0.78	-0.92	-1.63	-1.24
US Gulf Coast	Bonny (Cracking)	-0.29	-2.48	-2.19	0.29	-2.84	-2.30	-2.11	-2.31	-1.07
	Brent (Cracking)	-0.83	-3.31	-2.63	0.68	-2.84	-2.22	-2.78	-3.39	-1.72
	LLS (Cracking)	1.38	-0.55	-0.41	0.14	-1.14	-0.78	-0.64	0.40	0.09
	Mars (Cracking)	0.79	-0.11	0.61	0.73	0.24	0.55	0.73	1.24	-0.21
	Mars (Coking)	7.39	6.78	6.29	-0.48	6.46	5.69	6.08	7.11	5.65
	Maya (Coking)	9.73	9.59	9.06	-0.53	9.37	8.55	8.99	9.33	8.62
US West Coast	ANS (Cracking)	7.72	5.19	7.48	2.29	6.66	6.07	6.02	9.26	10.50
	Kern (Cracking)	7.20	3.91	8.80	4.88	5.80	6.35	8.82	11.34	13.22
	Oman (Cracking)	1.34	1.09	3.79	2.70	2.41	2.10	1.96	5.59	8.68
	Kern (Coking)	17.90	15.71	17.76	2.05	17.92	16.63	14.81	19.31	21.77
Singapore	Dubai (Hydroskimming)	-4.05	-4.47	-0.90	3.57	-3.52	-0.63	-0.14	-0.10	0.39
	Tapis (Hydroskimming)	-4.84	-5.92	-4.28	1.64	-5.91	-4.02	-3.34	-3.93	-4.44
	Dubai (Hydrocracking)	0.29	0.49	2.86	2.37	0.89	2.92	3.35	3.60	3.82
	Tapis (Hydrocracking)	-0.94	-2.05	-0.80	1.25	-2.17	-0.58	-0.10	-0.41	-1.10
China	Cabinda (Hydroskimming)	-6.57	-7.02	-3.75	3.26	-5.46	-3.10	-2.08	-4.15	-4.11
	Daqing (Hydroskimming)	-8.25	-10.63	-7.99	2.63	-11.64	-7.95	-6.26	-6.99	-6.41
	Dubai (Hydroskimming)	-4.38	-4.76	-1.31	3.44	-3.80	-0.97	-0.64	-0.59	-0.11
	Daqing (Hydrocracking)	-2.23	-4.02	-2.41	1.61	-5.31	-2.43	-1.18	-1.38	-1.29
	Dubai (Hydrocracking)	0.00	0.21	2.41	2.20	0.57	2.53	2.81	3.08	3.27

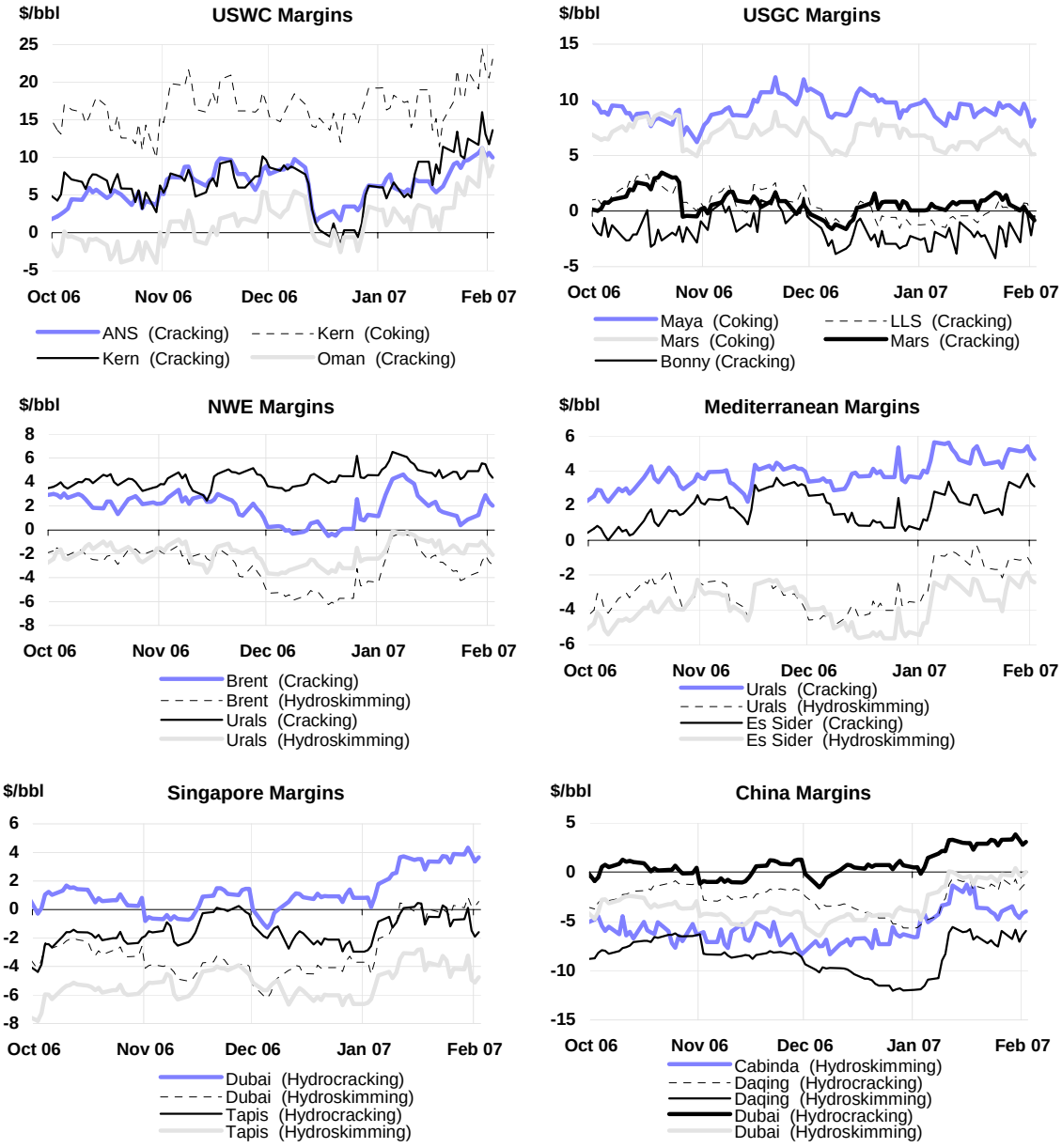
For the purposes of this report, refining margins are calculated for various complexity configurations, each optimized for processing the specific crude in a specific refining centre on a 'full-cost' basis. Consequently, reported margins should be taken as an indication, or proxy, of changes in profitability 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 collaboration with Purvin & Gertz Inc., we have completed the annual overhaul of our refining margin calculations. This has resulted in relatively minor changes in our margin estimates, which should now more closely reflect market conditions. We have updated the Worldscale (WS) freight rate indexes and some fixed-cost factors such as wage and capital costs to more closely reflect the cost pressures facing refiners. The main changes however, concern the US. Here we have back-dated the introduction of ultra-low-sulphur diesel (ULSD) to last June concurrent with the introduction of the tighter specifications and changed light sweet cracking margins to reflect a more representative low-sulphur fuel oil (LSFO) price quote. Furthermore we have introduced Bonny Light instead of Brent as the main US Gulf Coast foreign sweet margin indicator. Declining Brent production volumes and the sharp drop of shipments of Brent to the US Gulf have reduced the significance of this margin calculation. We have also fine-tuned our LPG calculations and reintroduced an oil spill tax cost. A full review of changes will be included in our Annual Statistical Supplement, published in August.

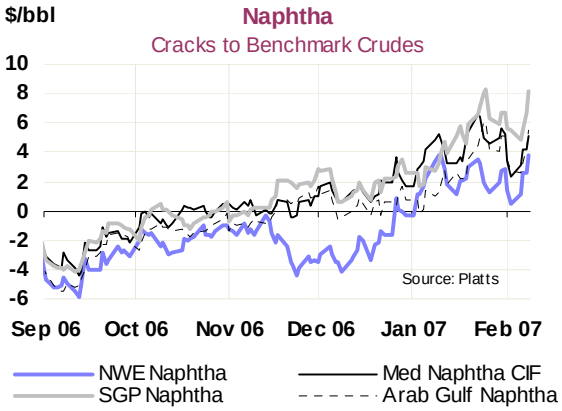
Regional Full-Cost Refining Margins

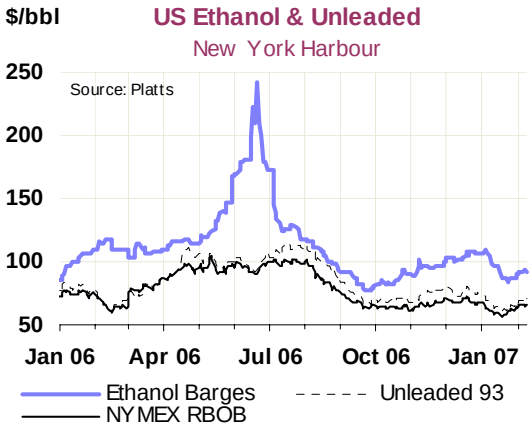


Spot Product Prices

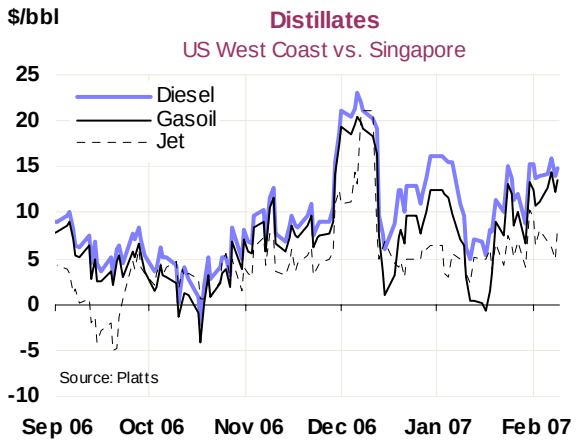
Heating oil cracks rose on the cold weather, especially on the US East Coast. Spreads of other distillates were relatively flat over the month, with jet spreads remaining virtually unchanged. In Asia, unusually high Japanese kerosene inventories throughout January have kept purchases low. Current low jet prices in Asia have kept the arbitrage to the US West Coast open, and some 150,000 tonnes were reportedly being shipped trans-Pacific this month. Lower volumes of jet fuel look set to be exported from the Middle East, as Saudi Arabia is offering far lower term volumes this year citing higher domestic and regional consumption. News reports also indicate significantly higher US military purchases for 2007.

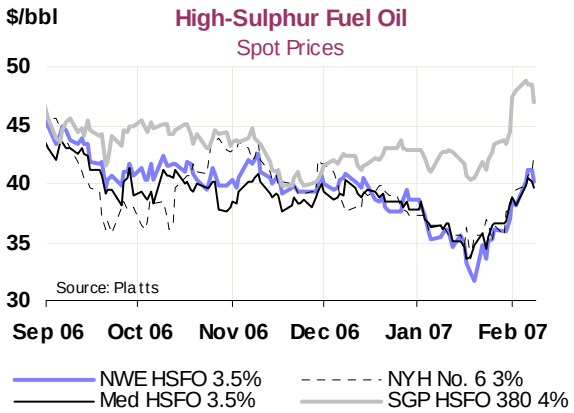
As regards gasoline, strength came perhaps just as much from refinery maintenance and unscheduled outages, and stock building, as actual demand strength. This was as much true on the US West Coast as Northwest Europe. On the US East Coast, additional support for gasoline came from high ethanol prices. Naphtha cracks, particularly in Asia, soared on strong demand from the petrochemical industry, notably from Korea. Indian naphtha supplies remain reduced on high domestic consumption.





Fuel oil prices saw some of the most dramatic developments over the past month. Boosted by OPEC cuts of fuel-oil-rich grades and concurrent additional demand due to the colder temperatures, price gains were particularly marked in Asia. High-sulphur fuel oil (HSFO) in Singapore reached levels not seen since August last year, with additional support coming from strong buying by Indonesia and China ahead of the Lunar New Year celebrations. In terms of supply, Korean refiners were reportedly exporting some 12% less in February overall as domestic utilities hiked fuel oil use. High prices continue to attract an influx of fuel oil from Russia and Europe, with around 2.2 million tonnes set to arrive in March. Rotterdam stocks of fuel oil remain above average, while levels in Singapore fell to below average in January. Imports from the west apparently suffered some delays, further supporting prices.





Spot Product Prices

(monthly and weekly averages, $/bbl)

	Nov	Dec	Jan	Jan-Dec		Week Commencing:					Nov	Dec	Jan
				Change	%	08 Jan	15 Jan	22 Jan	29 Jan	05 Feb			
Rotterdam, Barges FOB											**Differential to Brent**		
Premium Unleaded	62.63	66.10	58.95	-7.15	-10.8	58.61	56.04	58.89	60.49	62.78	3.71	3.78	5.28
Naphtha	56.71	60.16	56.03	-4.13	-6.9	55.15	53.55	57.27	57.91	59.77	-2.20	-2.17	2.35
Jet/Kerosene	74.01	78.49	70.98	-7.51	-9.6	70.74	68.86	71.47	72.54	74.07	15.09	16.16	17.30
ULSD	74.53	75.60	67.79	-7.80	-10.3	66.97	65.60	68.38	70.63	72.58	15.61	13.27	14.11
Gasoil .2%	71.44	72.64	65.01	-7.64	-10.5	64.38	62.70	65.43	67.43	69.61	12.53	10.32	11.33
LSFO 1%	40.23	38.81	37.47	-1.33	-3.4	38.01	36.75	36.97	36.08	38.35	-18.68	-23.52	-16.21
HSFO 3.5%	40.35	39.43	35.25	-4.18	-10.6	35.57	33.51	34.96	37.09	40.65	-18.57	-22.90	-18.43
Mediterranean, FOB Cargoes											**Differential to Urals**		
Premium 50 ppm	62.83	65.70	57.73	-7.96	-12.1	57.21	54.19	57.69	59.80	61.99	6.88	7.75	7.61
Naphtha	55.78	59.03	54.40	-4.64	-7.9	53.55	51.91	55.74	56.39	58.27	-0.17	1.08	4.27
Jet Aviation fuel	72.71	76.84	68.77	-8.08	-10.5	68.75	66.50	68.85	70.07	71.72	16.76	18.89	18.64
Gasoil .2%	71.78	73.32	64.71	-8.61	-11.7	64.34	62.47	64.64	66.70	69.25	15.83	15.37	14.58
LSFO 1%	39.81	39.95	36.01	-3.94	-9.9	36.28	33.79	35.91	37.10	40.07	-16.14	-18.00	-14.12
HSFO 3.5%	39.09	38.96	35.96	-3.00	-7.7	36.17	34.32	35.71	37.75	40.05	-16.86	-18.99	-14.16
New York Harbour, Barges											**Differential to WTI**		
Super Unleaded	74.89	76.21	65.54	-10.67	-14.0	66.21	61.87	64.53	67.15	68.96	15.86	14.25	11.40
Unleaded	66.79	69.83	59.73	-10.10	-14.5	59.50	56.39	59.23	62.55	64.51	7.76	7.87	5.59
Jet/Kerosene	74.38	77.63	70.48	-7.14	-9.2	68.73	70.32	71.23	72.14	73.41	15.35	15.67	16.35
No. 2 (Heating Oil)	69.30	70.46	63.77	-6.69	-9.5	62.28	61.37	65.06	68.76	70.95	10.28	8.50	9.63
LSFO 1%	42.48	40.05	37.23	-2.82	-7.0	36.42	36.66	38.04	38.89	41.21	-16.55	-21.91	-16.91
No. 6 3%	41.29	38.88	36.07	-2.81	-7.2	36.01	35.04	36.14	37.89	40.99	-17.74	-23.08	-18.06
Singapore, Cargoes											**Differential to Dubai**		
Premium Unleaded	62.89	68.16	61.59	-6.57	-9.6	61.73	59.08	61.44	63.25	65.07	6.17	9.48	9.90
Naphtha	57.66	60.54	56.79	-3.75	-6.2	55.48	55.06	58.51	59.23	61.80	0.95	1.85	5.09
Jet/Kerosene	73.63	77.42	69.66	-7.76	-10.0	70.03	68.02	69.38	70.43	71.73	16.91	18.74	17.97
Gasoil .5%	69.99	69.76	66.08	-3.69	-5.3	66.05	64.66	66.03	69.34	71.80	13.27	11.08	14.38
LSWR Cracked	39.31	42.94	39.37	-3.57	-8.3	38.90	38.73	39.39	42.11	44.51	-17.41	-15.74	-12.32
HSFO 180 CST	42.02	42.90	41.91	-0.99	-2.3	42.05	40.82	42.28	45.05	47.69	-14.70	-15.78	-9.78
HSFO 380 CST 4%	41.76	42.29	42.17	-0.11	-0.3	42.71	41.03	42.22	45.41	48.19	-14.95	-16.40	-9.52

Source: Platts

As regards low-sulphur fuel oil (LSFO), it is too early to say if the investigations by Japanese officials into possible misreporting during safety inspections at nuclear power will have any impact on demand. In 2003 false reports resulted in nuclear power plants shutting down and a significant increase in fuel oil demand. At the same time, exports of Indonesian low-sulphur waxy residue (LSWR), which Japanese power utilities like to burn due to its low sulphur content, are set to be slashed this year, as the country's refineries switch to producing more badly needed diesel.

End-User Product Prices in January

Consumers in IEA countries saw lower petroleum product prices in January than in December. In Europe, the ex-tax price of gasoline in US dollars declined on average by more than 2%. In North America, the decline was even more significant, as the US dollar price for gasoline before tax dropped by 7.5% in Canada and 2.8% in the US. The mild start to the winter affected domestic heating oil prices in OECD countries as the ex-tax price of heating oil in US dollars dropped by over 8% in Europe, 3.2% in Japan, and 1.3% in Canada. The ex-tax retail price of fuel oil in Europe declined by 6% on average, following a 3% drop in December.

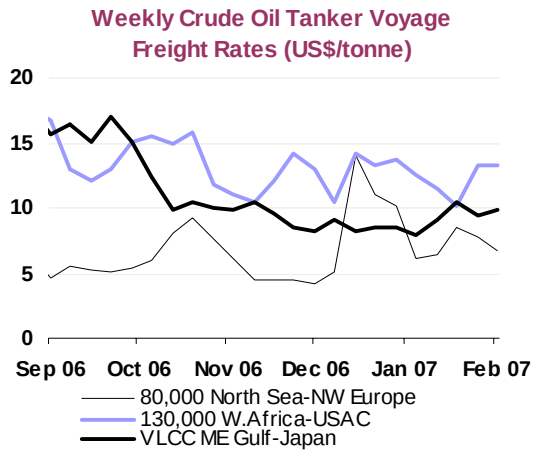
Freight

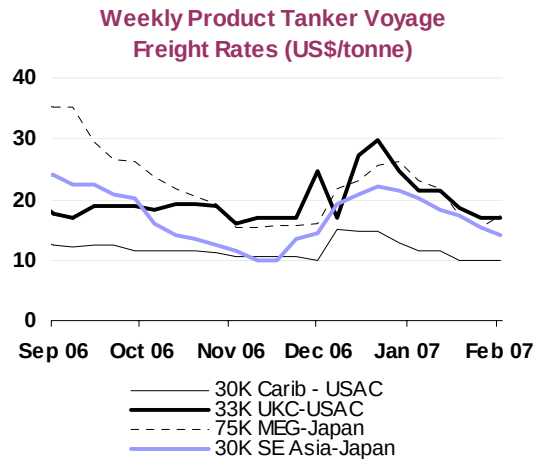
Freight rates for VLCCs from the Middle East Gulf continued to trend at the bottom of the five-year range in January, despite rising mid-month. In the Atlantic basin, dirty rates increased in the second half of January as the cold snap boosted spot vessel demand. Clean tanker rates continued to fall in January, as comfortable regional product stock levels dampened demand for imports on product tankers.

By mid-January, prospective first-quarter OPEC export reductions had caused VLCC rates from the Middle East Gulf to the US Gulf to sink to a low of WS45, equating to around $14/tonne. At the same time, Japan-bound routes bottomed out at WS50, under $9/tonne. This represented a nominal three-year low, in Worldscale terms, although was less historically significant in $/tonne terms, especially given the new, higher 2007 base rates released by the Worldscale association. This highly counter-seasonal trough has prompted talk of a global vessel glut, especially given today's large order

book, and has brought the economics of scrapping back into focus. However, it is worth remembering that rates have been hit by OPEC cuts and an unusually warm winter. Recent announcements of expansion plans at Primorsk serve as a reminder that there remain many areas of potential growth of seaborne trade in the short and medium term, in both dirty and clean sectors.

Vessel interest in the Middle East Gulf increased in the second half of January, as confirmed by tanker movement reports which show an uptick in regional sailings. VLCC rates rebounded as a result, ending January near $18/tonne to US Gulf and $11/tonne to Japan. Reports of increased Iranian floating storage are probably more relevant to analysis of oil fundamentals and OPEC compliance than freight rates, given current ample spare vessel capacity.





West Africa to US million-barrel rates rose by $3/tonne in the second half of January, ending the month at $16/tonne. In the first half of January, regional sweet crudes such as Girassol and Bonny Light had lost value relative to other Atlantic Basin grades. Consequently, they represented good value on the spot market when US and European temperatures dropped suddenly mid-month. The cold snap spurred refiner interest in buying and moving distillate-rich crudes, from short haul suppliers. This quickly eroded regional vessel availability, boosting Suezmax and VLCC rates. A narrowing of the premium of Brent over Dubai crude prices in late January also improved economics for eastbound Atlantic Basin sailings, adding further competition for vessels.

Shipping delays plagued the Turkish Straits once again in mid-January but dissipated later in the month. Black Sea to Mediterranean Aframax rates were supported at $21/tonne mid-month but had dropped to $11/tonne two weeks later.

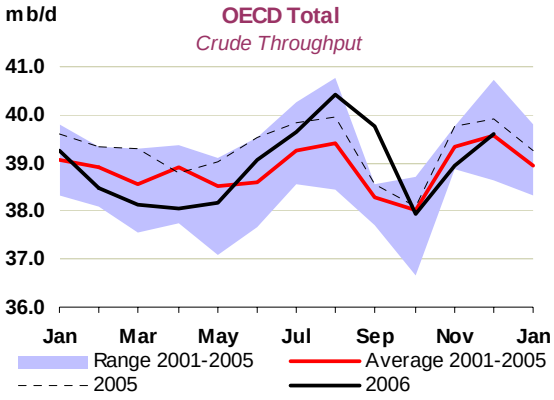
Clean tanker rates declined throughout January. Asian stocks of kerosene, used for heating, remain historically high despite falling temperatures, limiting import needs. High Asian naphtha prices may have opened arbitrages from the West. However, this failed to stem the decline in clean rates for east of Suez trading, suggesting a surplus of vessels in the region. Rates for 30,000-tonne cargoes moving from Singapore to Japan fell from over $20/tonne on 1 January to $14/tonne in early February.

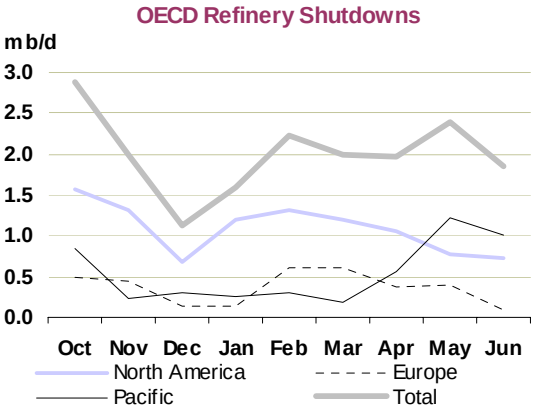
REFINING

Summary

- **Economic run cuts in December** tempered seasonal gains in OECD refinery throughputs due to negative hydroskimming margins and high kerosene stocks in the Pacific. December crude throughputs rose by 0.7 mb/d to 39.6 mb/d as refiners in the US and Japan increased runs by a combined 0.8 mb/d, but total OECD throughput was 0.3 mb/d below the level of December 2005.

- **January OECD refinery runs** were reduced by the start of seasonal refinery maintenance. They are estimated to have fallen to 39.0 mb/d and average 38.4 mb/d in February and March. Maintenance work, already underway in North America and Europe, is in addition to run cuts in Japan and Korea of 250 kb/d in February. However, stronger hydroskimming margins may moderate the decline.





- **OECD refinery yield data** for November show that distillate yields reached the highest level in 12 years, reflecting the strong incentive to maximise diesel production at the expense of gasoline. In the Pacific, Japanese kerosene yields increased despite high stocks as refiners reduced gasoline yields from October's level. November refinery yields have been calculated under a revised methodology to reflect gross refinery output compared with total crude, NGL and feedstock input.

- **Offline refinery capacity in the OECD** is revised up for the first quarter by 0.3 mb/d, to an average of 1.9 mb/d. Increased estimates for the US, following unplanned outages and more detailed information on planned maintenance, underpin the increase. In the Pacific, we have revised up our estimates for voluntary run cuts. Global refinery outages are expected to peak in March as Atlantic Basin maintenance peaks, just ahead of the start of seasonal work in the Pacific. However, total outages for the 1H07 are expected to be 0.4 mb/d lower than a year ago.

Refinery Throughput

OECD refinery crude runs in December increased by 0.7 mb/d, to an estimated 39.6 mb/d, as crude throughputs reached their seasonal peak. The increase from November's downwardly revised (-181 kb/d) figure of 39.0 mb/d was driven by increases in Japan and the US, only partly offset by a 99 kb/d decline in Europe. Despite the increase in crude runs they remain 292 kb/d below the December 2005 level, as weak refining margins in Europe and, in the Pacific, high product stocks curtailed throughputs at refineries in Japan, Korea. The higher throughputs result in average OECD capacity utilisation of 87.9% in December, up from November's 86.4%, but still below December 2005's 89.2%.

Crude runs in the OECD regions are expected to have fallen to 39.0 mb/d in January and will average around 38.4 mb/d in February and March. The restart of maintenance work in the US in early January, and more recently in Europe, has curtailed runs. Weekly US data indicate that crude runs fell over the course of January, to a low of 14.8 mb/d late in the month. February runs are expected to remain below 15 mb/d as planned work increases on the Gulf and West Coasts. Weekly Japanese data indicate that crude runs were flat in January compared with December and only minimal planned outages are expected ahead of the second-quarter turnaround season.

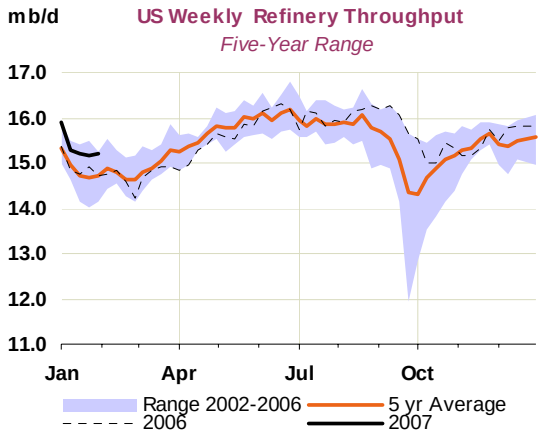
Refinery Crude Throughput and Utilisation in OECD Countries

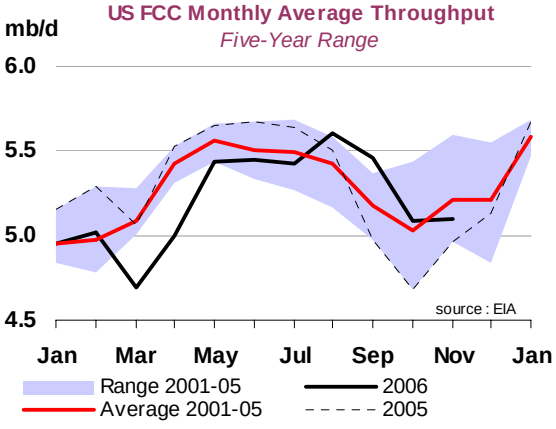
	million barrels per day						*Change from*		Utilisation rate[2]	
	Jul 06	Aug 06	Sep 06	Oct 06	Nov 06	Dec 06	*Nov 06*	*Dec 05*	Dec 06	Dec 05
OECD North America										
US[3]	15.67	15.79	15.74	15.00	15.01	15.51	0.50	0.48	89.20	87.72
Canada	1.88	1.90	1.85	1.76	1.85	1.82	-0.03	0.03	90.29	88.78
Mexico	1.25	1.22	1.18	1.14	1.24	1.31	0.07	-0.01	77.66	71.96
Total	18.79	18.92	18.77	17.90	18.10	18.64	0.54	0.50	88.38	87.04
OECD Europe										
France	1.72	1.81	1.86	1.74	1.81	1.80	-0.01	-0.02	91.01	93.38
Germany	2.37	2.45	2.18	2.19	2.41	2.32	-0.09	-0.10	95.53	98.44
Italy	1.87	1.93	1.88	1.95	1.98	1.88	-0.11	-0.02	80.71	81.56
Netherlands	0.94	0.98	1.03	1.02	1.04	1.03	-0.01	-0.01	84.63	85.43
Spain	1.19	1.24	1.22	1.17	1.11	1.18	0.07	-0.02	92.44	94.29
UK	1.61	1.68	1.64	1.35	1.50	1.46	-0.05	-0.23	77.53	92.19
Other OECD Europe	4.19	4.19	4.11	4.04	3.90	3.99	0.10	-0.13	82.79	88.23
Total	13.90	14.27	13.92	13.45	13.76	13.66	-0.10	-0.53	85.74	90.21
OECD Pacific										
Japan	3.84	4.09	3.92	3.44	3.87	4.17	0.30	-0.14	89.26	91.53
Korea	2.43	2.41	2.46	2.42	2.51	2.47	-0.04	-0.07	95.75	98.41
Other OECD Pacific	0.70	0.72	0.70	0.72	0.72	0.67	-0.05	-0.06	83.24	85.37
Total	6.97	7.22	7.08	6.59	7.10	7.31	0.21	-0.27	90.74	93.06
OECD Total	39.66	40.41	39.77	37.94	38.95	39.60	0.66	-0.29	87.87	89.25

1 Estimate
2 Based on crude throughput and current operable refining capacity
3 US50

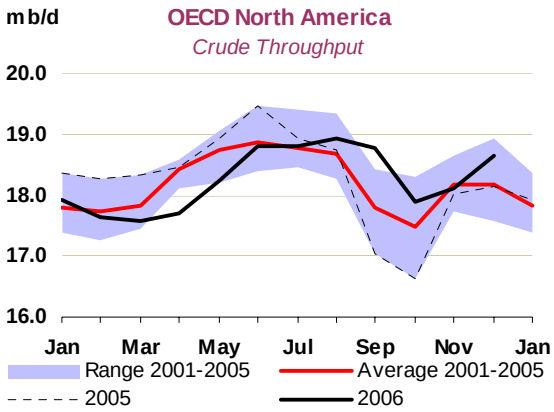
OECD North America

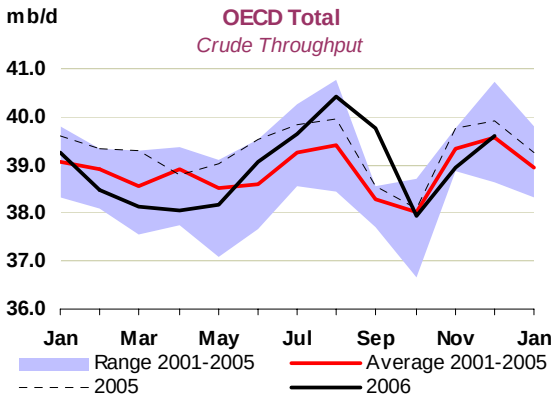
North American crude throughputs in December are estimated to have averaged 18.6 mb/d, their highest level since September. The increase of 543 kb/d from November's downwardly revised (-134 kb/d) level of 18.1 mb/d was almost entirely driven by higher runs in the US. Mexico's 5% increase in crude runs was partly offset by Canada's estimated decline. Crude throughputs were 504 kb/d above December 2005's level largely as a result of hurricane disruption to throughputs in late 2005. North American capacity utilisation was 88.4% in December, up from November's 85.8% and above December 2005's 87.0% utilisation rate.





Despite the absence of planned maintenance, problems at several Canadian refineries contributed to a 26 kb/d decline in Canadian crude runs to 1.8 mb/d in December. Little scheduled maintenance work is slated for January and February which, with only minor disruptions so far, suggests runs may edge up from December's level. Historical revisions lift Canada's September crude runs by 19 kb/d, while October's were trimmed by 54 kb/d. Mexican crude runs in December were reported at 1.3 mb/d, an increase of 68 kb/d from November and flat versus December 2005.

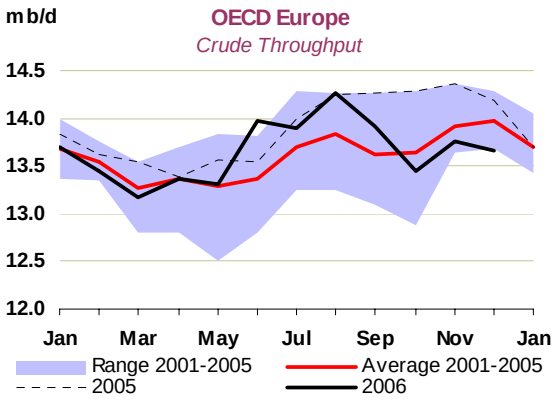


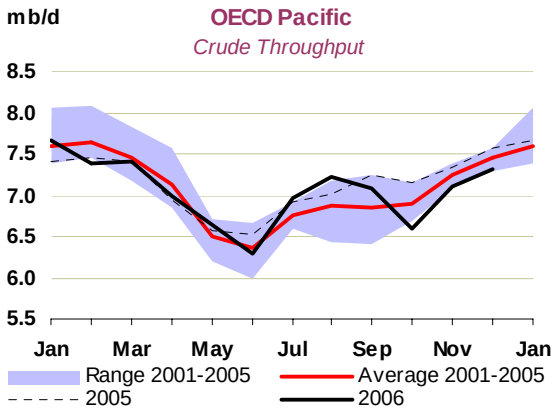


Weekly data for the US indicate that January average crude throughputs fell by 0.5 mb/d from December to the lowest levels since April 2005. Declines were particularly heavy on the West and Gulf Coasts as refiners made an early start to maintenance work. West Coast refiners reported to be undertaking work include Tesoro, BP and Chevron, with a combined nameplate capacity of around 650 kb/d. Consequently, February crude runs on the West Coast are not expected to recover immediately with work continuing at these locations. Additional unscheduled problems were also reported at other West Coast locations in late January and reports have also emerged of planned work at ExxonMobil's Torrance refinery during February. Gulf Coast crude runs should also remain subdued in February, as maintenance work peaks.

OECD Europe

European crude throughputs averaged 13.7 mb/d in December, 99 kb/d lower than November's upwardly revised (+21 kb/d) level of 13.8 kb/d. December crude runs increased by 165 kb/d in Belgium, following the return of ExxonMobil's Antwerp refinery from maintenance, and in Spain and Greece, but were more than offset by lower runs elsewhere, particularly Italy and Germany. Consequently, crude runs were below the level of December 2005, by 526 kb/d, continuing the trend seen in October and November. The weaker margin environment than a year ago (when refiners were still struggling to meet global demand in the wake of hurricane-related outages) and heavier maintenance schedules account for the drop. European capacity utilisation was 85.7% in December, down from November's 86.4% and below December 2005's 90.2%.



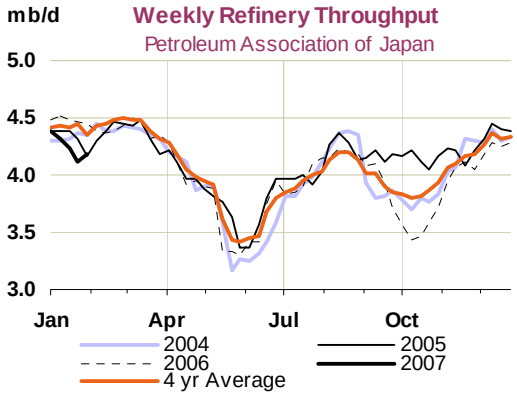


The decline in UK fourth-quarter crude runs was particularly steep. Runs averaged 1.4 mb/d, a drop of 240 kb/d, from the fourth quarter 2005. While maintenance work at Chevron's Pembroke plant and ExxonMobil's Fawley refinery explain part of the decrease, the balance is probably the result of less sophisticated refineries curtailing runs due to the weak margin environment. For 2006 as a whole UK crude runs were 112 kb/d below the previous year, only registering a year-on-year gain in June albeit of 11 kb/d.

OECD Pacific

Crude throughputs in the OECD Pacific region increased by 211 kb/d in December, but as in Europe, remain below the December 2005 level. Runs averaged 7.3 mb/d during the month, 3% above November's downwardly revised (-67 kb/d) level of 7.1 mb/d. The increase was predominantly in Japan where runs increased by 299 kb/d. Crude runs could have been greater given that refiners were unfettered by maintenance. However, poor hydroskimming economics and high kerosene stocks capped runs.

Korean runs also fell by 41 kb/d to average 2.5 mb/d, largely the result of economic run cuts that were self-imposed by refiners, and warmer weather compared with December 2005. Nevertheless, Korea's capacity utilisation rate remained a respectable 95.8% in December. Overall refinery throughput in Korea and Australia/New Zealand fell by a combined 88 kb/d. Despite these decreases the Pacific capacity utilisation increased to 90.7%, from November's 88.1%, due to Japan's higher runs, but the region is still operating below December 2005's 93.1%.

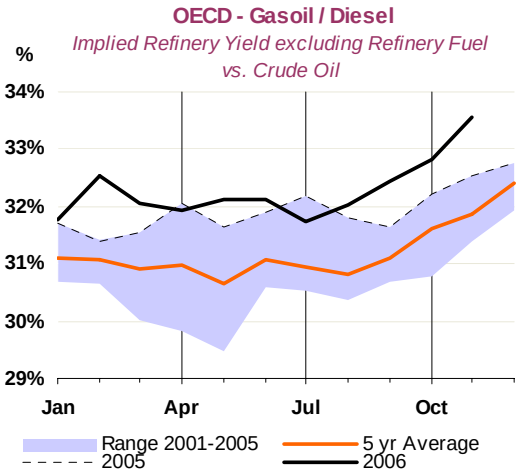


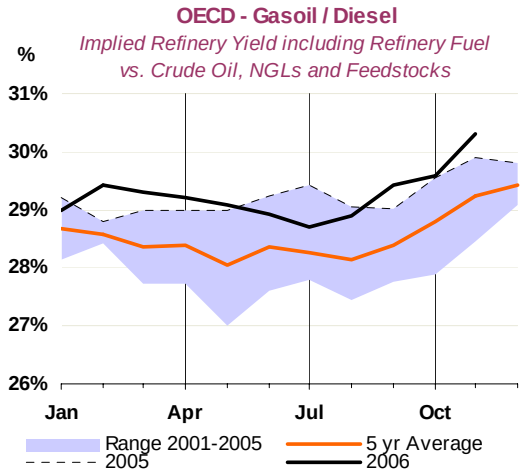
Weekly data from the Petroleum Association of Japan show that crude runs in January were broadly unchanged from December at 4.2 mb/d. Nippon Oil reported that its January run cuts were around 150 kb/d or 13% of capacity - significantly higher than our expectations. In February Nippon Oil anticipated that continued run cuts of around 140 kb/d would be necessary in addition to exports of kerosene to contain kerosene inventories. Korean refiners have also continued with run cuts in January with a net decrease in runs of around 20 kb/d month-on-month.

OECD Refinery Yields

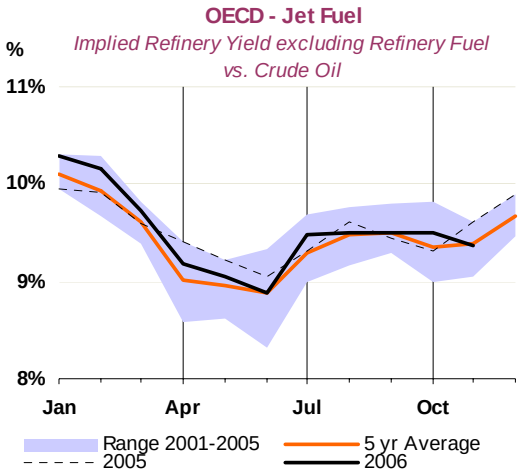
This month we are introducing a revised methodology for the refinery yield section. The revisions are intended to give a better picture of how refineries are responding to the changing economics and drivers presented to them (see '*Holistic yields*' for further information).

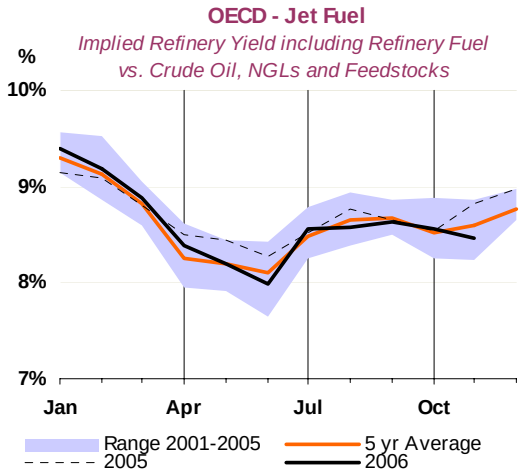
OECD refinery yield data show refiners responded to strong demand and high distillate cracks by raising diesel/gasoil yields to the highest level for 12 years in November to 30.3%, up from 29.6% in October. As a consequence, the yields of gasoline and jet/kerosene declined slightly in November to 29.4% and 8.5% respectively.





The strong incentive to produce additional barrels of diesel and gasoil was clearly evident in each of the three regions. Pacific yields recovered from their seasonal third-quarter low, while North American distillate yields continued to increase to 25.6% from 25.4% in October. Europe though remains the outright leader in distillate yields with an average yield of 37.7% in November, up 1% from October.





Japanese jet/kerosene yields increased to 15.8% in November and, despite the concerns expressed by refiners at the time about rising kerosene stocks, gross inland deliveries increased 40% to 750 kb/d. Gasoline yields declined during the month, following maintenance in October which forced refiners to increase gasoline yields to meet supply commitments. North America saw the brunt of the decline in jet/kerosene yields as they declined to 7.8% from 8.2% in October and are now at the bottom of the five-year range.

'Holistic Yields'

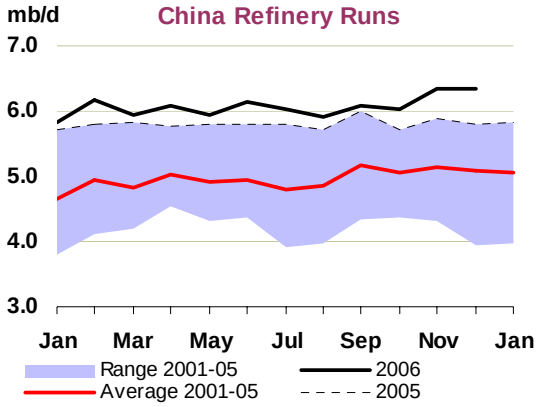
We have revised the methodology for calculating the refinery yields we display in this report. Previously we considered net refinery output as a function of crude inputs. This method has some obvious advantages; it allows comparisons between regions and indeed non-OECD countries who also report refined product output and crude runs. Furthermore, it is consistent with calculating inland deliveries. However, as refiners continue to seek additional value from their operations we expect them to focus on investing in upgrading projects that rely not on crude, but feedstocks such as atmospheric residue, VGO, naphtha or isobutane. Under these circumstances it would be misleading to ignore non-crude inputs from the yield calculation. From this month onwards we will use the total crude, NGL and feedstock input to refineries when calculating refinery yields.

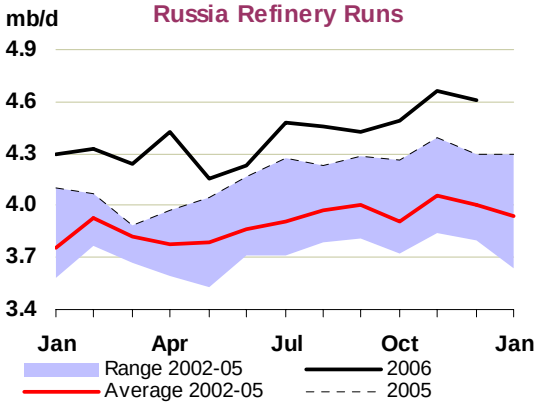
Similarly we have adjusted our methodology to take account of gross refinery output, i.e. before refinery fuel consumption, rather than net refinery output. This change is perhaps more difficult to justify with valid arguments both for and against using the gross measure. However, on balance we feel that considering refinery yields without adjusting for a refinery's fuel efficiency should give a better comparison than the net figure. For comparative purposes we have included in this month's report graphs showing refinery yields as measured both by crude inputs and crude, NGL and feedstocks.

Non-OECD Throughput

Chinese crude runs were flat in December compared with November at 6.4 mb/d. This level of throughputs implies a growth rate of 9.3% from December 2005. January crude runs are anticipated to be slightly lower, in line with the seasonal dip and because of planned maintenance work. Crude runs should increase in February as refiners seek to meet stronger, holiday-related, demand with the Chinese New Year on 18 February. December data indicate that **Indian** crude runs averaged 2.9 mb/d, slightly below the revised November throughput of 3.0 mb/d. Initial reports indicate that the decline was centred on Reliance's Jamnagar refinery, where runs were 70 kb/d lower on the month.

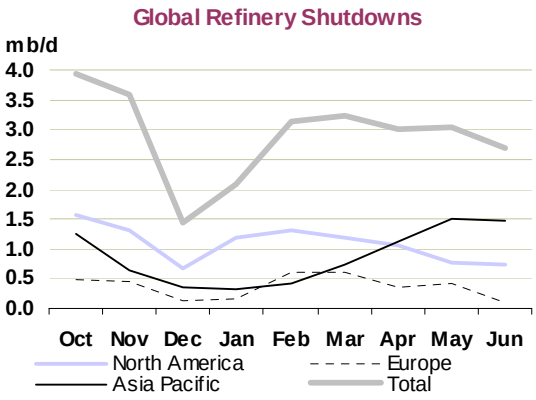
Russian crude runs declined in December to 4.6 mb/d from November's level of 4.7 mb/d. Higher crude runs at Rosneft's Komsomolsk refinery were more-than-offset by declines at Lukoil's Volgograd refinery and Gazprom Neft's Omsk operation.





Offline Refinery Capacity

Global offline capacity is expected to see a 1H07 peak in March at 3.2 mb/d and is forecast to remain above 3 mb/d through until May. Forecast first-quarter offline capacity estimates have been revised upwards by an average of 270 kb/d, as further details of planned maintenance shutdowns have become available. The upward revisions apply to OECD regions with the increase split equally between North America and the Pacific. North American offline capacity is forecast to increase by 120 kb/d in February to 1.3 mb/d, before declining again in March to 1.2 mb/d. European first-quarter maintenance is expected to peak in March at 0.6 mb/d before tailing off gradually during the second quarter. OECD Pacific offline capacity forecasts have been revised up due to higher run-cuts in Japan and Korea, as a result of poor margins and high kerosene stocks. Refinery maintenance in the region is expected to increase rapidly during the second quarter and average 928 kb/d, in line with the second quarter last year.



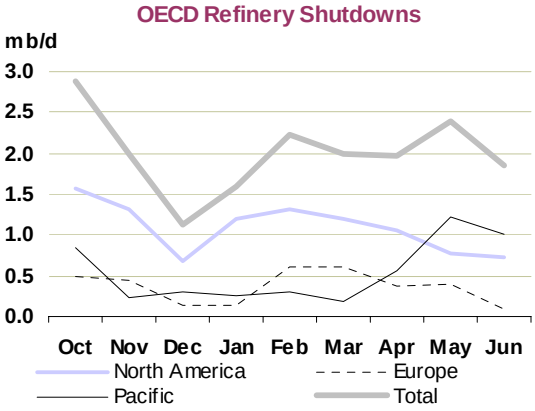


Table 1
WORLD OIL SUPPLY AND DEMAND
(million barrels per day)

	2003	2004	1Q05	2Q05	3Q05	4Q05	2005	1Q06	2Q06	3Q06	4Q06	2006	1Q07	2Q07	3Q07	4Q07	2007
OECD DEMAND																	
North America	24.5	25.4	25.6	25.3	25.6	25.5	25.5	25.1	25.1	25.5	25.4	25.3	25.5	25.3	25.9	26.0	25.7
Europe	15.4	15.5	15.6	15.2	15.6	15.7	15.5	15.8	15.0	15.4	15.6	15.5	15.6	15.1	15.5	15.7	15.5
Pacific	8.6	8.5	9.4	8.1	8.1	8.8	8.6	9.3	7.9	7.9	8.7	8.5	9.1	7.8	8.0	8.9	8.4
Total OECD	48.6	49.3	50.7	48.6	49.2	50.0	49.6	50.2	48.0	48.8	49.8	49.2	50.2	48.2	49.4	50.6	49.6
NON-OECD DEMAND																	
FSU	3.6	3.8	3.8	3.7	3.8	3.9	3.8	3.9	3.7	4.0	4.3	4.0	4.1	3.8	4.0	4.2	4.0
Europe	0.7	0.7	0.8	0.7	0.7	0.7	0.7	0.8	0.7	0.7	0.7	0.7	0.8	0.7	0.7	0.7	0.7
China	5.5	6.4	6.7	6.5	6.7	6.9	6.7	6.9	7.3	7.1	7.1	7.1	7.3	7.7	7.6	7.6	7.6
Other Asia	8.1	8.6	8.9	8.9	8.6	8.7	8.8	8.9	8.9	8.7	9.0	8.9	9.0	9.1	8.9	9.2	9.0
Latin America	4.7	5.0	5.0	5.1	5.2	5.1	5.1	5.1	5.2	5.3	5.2	5.2	5.1	5.3	5.4	5.3	5.3
Middle East	5.4	5.8	6.0	6.1	6.4	6.0	6.1	6.3	6.4	6.7	6.4	6.5	6.6	6.7	7.0	6.7	6.8
Africa	2.7	2.8	2.9	2.9	2.8	2.9	2.9	3.0	3.0	2.9	3.0	2.9	3.0	3.0	2.9	3.0	3.0
Total Non-OECD	30.7	33.1	34.0	33.9	34.1	34.3	34.1	34.8	35.3	35.3	35.7	35.3	36.0	36.4	36.5	36.8	36.4
Total Demand[1]	79.3	82.4	84.7	82.5	83.4	84.2	83.7	85.0	83.3	84.1	85.5	84.5	86.2	84.6	86.0	87.4	86.0
OECD SUPPLY																	
North America	14.6	14.6	14.5	14.7	13.7	13.8	14.1	14.2	14.2	14.3	14.4	14.3	14.5	14.3	14.2	14.3	14.3
Europe	6.3	6.1	5.9	5.7	5.4	5.5	5.6	5.5	5.1	4.9	5.2	5.2	5.2	5.1	5.0	5.3	5.2
Pacific	0.7	0.6	0.5	0.6	0.6	0.6	0.6	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7
Total OECD	21.6	21.2	20.9	21.0	19.7	19.8	20.3	20.2	19.8	19.9	20.2	20.0	20.4	20.0	19.9	20.3	20.1
NON-OECD SUPPLY																	
FSU	10.3	11.2	11.5	11.5	11.7	11.9	11.6	11.8	12.0	12.2	12.4	12.1	12.4	12.6	12.6	12.8	12.6
Europe	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
China	3.4	3.5	3.6	3.6	3.6	3.6	3.6	3.7	3.7	3.7	3.6	3.7	3.7	3.7	3.7	3.8	3.7
Other Asia	2.6	2.7	2.7	2.6	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
Latin America	4.0	4.1	4.2	4.4	4.3	4.3	4.3	4.3	4.4	4.4	4.4	4.4	4.5	4.5	4.5	4.6	4.5
Middle East	2.0	1.9	1.9	1.9	1.9	1.8	1.9	1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
Africa[2]	3.0	3.4	3.5	3.6	3.8	3.9	3.7	3.9	3.9	4.0	4.1	4.0	2.7	2.7	2.7	2.7	2.7
Total Non-OECD	25.6	27.0	27.5	27.7	28.2	28.4	28.0	28.4	28.6	28.9	29.1	28.8	27.9	28.1	28.2	28.4	28.1
Processing Gains[3]	1.8	1.8	1.9	1.9	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
Other Biofuels[4]	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3
Total Non-OPEC[5]	49.1	50.1	50.5	50.6	49.8	50.2	50.3	50.7	50.5	50.8	51.4	50.9	50.5	50.3	50.4	51.0	50.5
Non-OPEC excl. Angola[2]	48.2	49.2	49.3	49.5	48.5	48.8	49.0	49.3	49.2	49.4	50.0	49.5	50.5	50.3	50.4	51.0	50.5
OPEC																	
Crude[6]	27.1	28.9	29.3	29.7	30.0	29.9	29.7	29.9	29.8	30.0	29.2	29.7					
NGLs	3.7	4.2	4.4	4.4	4.5	4.5	4.5	4.6	4.7	4.7	4.7	4.7	4.8	4.8	4.9	5.0	4.9
Total OPEC	30.8	33.1	33.7	34.2	34.5	34.5	34.2	34.5	34.5	34.7	33.9	34.4					
OPEC incl. Angola[2]	31.7	34.1	34.8	35.3	35.8	35.9	35.4	35.9	35.8	36.1	35.3	35.8					
Total Supply[7]	79.8	83.2	84.1	84.8	84.3	84.7	84.5	85.2	84.9	85.5	85.3	85.3					
STOCK CHANGES AND MISCELLANEOUS																	
Reported OECD																	
Industry	0.1	0.1	-0.1	0.9	0.2	-0.5	0.1	0.0	0.6	1.2	-1.0	0.2					
Government	0.2	0.1	0.1	0.3	0.0	-0.1	0.1	0.0	0.1	0.0	0.0	0.0					
Total	0.3	0.2	0.1	1.2	0.2	-0.5	0.2	0.0	0.7	1.2	-1.0	0.2					
Floating Storage/Oil in Transit	0.2	0.0	-0.4	0.1	0.0	0.1	-0.1	0.1	-0.1	0.3	-0.6	-0.1					
Miscellaneous to balance[8]	0.1	0.6	-0.2	1.0	0.8	0.9	0.6	0.0	1.0	-0.1	1.4	0.6					
Total Stock Ch. & Misc	0.6	0.8	-0.5	2.3	0.9	0.5	0.8	0.2	1.7	1.4	-0.2	0.8					
Memo items:																	
Call on OPEC crude + Stock ch.[9]	26.5	28.1	29.8	27.4	29.1	29.5	29.0	29.7	28.1	28.6	29.4	28.9	31.0	29.4	30.7	31.4	30.6
"Call" incl. Angola[2]	27.4	29.1	30.9	28.6	30.4	30.9	30.2	31.1	29.5	30.0	30.8	30.3	31.0	29.4	30.7	31.4	30.6
Total Demand ex. FSU	75.7	78.6	80.8	78.8	79.6	80.4	79.9	81.1	79.5	80.2	81.3	80.5	82.1	80.8	82.0	83.2	82.0
Total demand exc. FSU (% ch10	1.9	3.9	2.6	1.7	1.8	0.4	1.6	0.3	1.0	0.7	1.1	0.8	1.2	1.6	2.3	2.4	1.9

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 With effect from OMR of 13 February 2007, Angolan production will be reclassified within OPEC and excluded from the Non-OPEC and Africa totals, for the period January 2007 onwards. Secondary aggregates allow comparison with previous year totals by including Angola within OPEC retroactively.
3 Net volumetric gains and losses in the refining process (excludes net gain/loss in former USSR, China and non-OECD Europe) and marine transportation losses
4 Biofuels from sources outside Brazil and US.
5 Non-OPEC supplies include crude oil, condensates, NGL and non-conventional sources of supply such as synthetic crude, ethanol and MTBE. No allowance is made in the non-OPEC forecast for exceptional events which have, at certain times historically, reduced non-OPEC supply by 300-400 kbd on an annual basis
6 As of the March 2006 OMR, Venezuelan Orinoco heavy crude production is included within Venezuelan crude estimates. Orimulsion fuel remains within the OPEC NGL & non-conventional category, but Orimulsion production will reportedly cease from January 2007.
7 Comprises crude oil, condensates, NGLs, oil from non-conventional sources and other sources of supply
8 Includes changes in non-reported stocks in OECD and non-OECD areas
9 Equals the arithmetic difference between total demand minus total non-OPEC supply minus OPEC NGLs
10 Year on year % growth in global oil demand excluding FSU

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

(million barrels per day)

	2003	2004	1Q05	2Q05	3Q05	4Q05	2005	1Q06	2Q06	3Q06	4Q06	2006	1Q07	2Q07	3Q07	4Q07	2007
OECD DEMAND																	
North America	-	-	-	-	-	-	-	-	-	-	-0.3	-0.1	-0.1	-0.1	-	-0.1	-
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.1	-
Pacific	-	-	-	-	-	-	-	-	-	-	-0.1	-	-	-	-	-	-
Total OECD	-	-	-	-	-	-	-	-	-	-	-0.4	-0.1	-0.1	-0.1	-	-	-
NON-OECD DEMAND																	
FSU	-	-	-	-	-	-	-	-	-	-	0.2	0.1	0.2	0.1	0.1	0.1	0.1
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	-	0.1	0.2	0.3	0.3	-	0.2
Other Asia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Latin America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Middle East	-	-	-	-	-	-	-	-	-	-	-	-	-0.1	-	0.3	-0.2	-
Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Non-OECD	-	-	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.6	-0.1	0.3
Total Demand	-	-	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	-0.2	0.1	0.2	0.3	0.7	-0.1	0.3
OECD SUPPLY																	
North America	-	-	-	-	-	-	-	-	-	-	-0.1	-	-0.2	-0.1	-	-	-0.1
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total OECD	-	-	-	-	-	-	-	-	-	-	-0.1	-	-0.2	-0.1	0.1	-	-
NON-OECD SUPPLY																	
FSU	-	-	-	-	-	-	-	-	-	-	0.1	-	-	0.1	0.1	0.1	-
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Asia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Latin America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-0.1	-
Middle East	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Africa	-	-	-	-	-	-	-	-	-	-	-	-	-1.5	-1.6	-1.8	-1.9	-1.7
Total Non-OECD	-	-	-	-	-	-	-	-	-	-	-	-	-1.6	-1.6	-1.8	-2.0	-1.8
Processing Gains	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Biofuels	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Non-OPEC	-	-	-	-	-	-	-	-	-	-	-0.1	-	-1.8	-1.7	-1.8	-1.9	-1.8
Non-OPEC excl. Angola	-	-	-	-	-	-	-	-	-	-	-0.1	-	-0.2	-0.1	0.1	-	-0.1
OPEC																	
Crude	-	-	-	-	-	-	-	-	-	-	0.1	-					
NGLs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total OPEC	-	-	-	-	-	-	-	-	-	-	0.1	-					
OPEC incl. Angola	-	-	-	-	-	-	-	-	-	-	0.1	-					
Total Supply	-	-	-	-	-	-	-	-	-	-	-	-					
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	-0.2	-0.2	-0.2							
Total Stock Ch. & Misc	-	-	-0.1	-0.1	-0.1	-0.1	-0.1	-0.2	-0.2	-0.2	0.2	-0.1					
Memo items:																	
Call on OPEC crude + Stock ch.	-	-	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	-0.1	0.1	2.0	2.0	2.4	1.9	2.1
"Call" incl. Angola	-	-	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	-0.1	0.1	0.4	0.4	0.6	-	0.4
Total Demand ex. FSU	-	-	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	-0.4	0.1	-	0.3	0.6	-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

	2004	1Q05	2Q05	3Q05	4Q05	2005	1Q06	2Q06	3Q06	4Q06	2006	1Q07	2Q07	3Q07	4Q07	2007
Demand (mb/d)																
North America	25.37	25.61	25.33	25.61	25.51	25.52	25.12	25.09	25.47	25.41	25.28	25.49	25.32	25.93	26.05	25.70
Europe	15.47	15.62	15.17	15.56	15.69	15.51	15.77	15.03	15.43	15.65	15.47	15.61	15.06	15.53	15.72	15.48
Pacific	8.49	9.45	8.06	8.07	8.79	8.59	9.30	7.87	7.90	8.75	8.45	9.13	7.81	7.95	8.87	8.44
Total OECD	49.33	50.68	48.55	49.25	49.99	49.61	50.19	47.99	48.80	49.81	49.20	50.22	48.18	49.41	50.64	49.61
FSU	3.76	3.82	3.71	3.79	3.89	3.80	3.91	3.73	3.97	4.27	3.97	4.13	3.78	3.98	4.19	4.02
Europe	0.70	0.77	0.71	0.66	0.72	0.72	0.79	0.72	0.67	0.73	0.73	0.80	0.74	0.69	0.74	0.74
China	6.42	6.67	6.51	6.71	6.88	6.69	6.93	7.27	7.14	7.15	7.12	7.29	7.71	7.64	7.59	7.56
Other Asia	8.62	8.90	8.86	8.65	8.72	8.78	8.88	8.93	8.71	8.99	8.88	9.03	9.09	8.90	9.17	9.05
Latin America	4.96	4.96	5.12	5.18	5.10	5.09	5.08	5.21	5.28	5.23	5.20	5.15	5.28	5.39	5.32	5.28
Middle East	5.79	5.96	6.10	6.36	6.05	6.12	6.29	6.43	6.70	6.38	6.45	6.60	6.74	7.03	6.71	6.77
Africa	2.79	2.90	2.91	2.79	2.90	2.88	2.97	2.98	2.86	2.97	2.94	3.04	3.04	2.92	3.04	3.01
Total Non-OECD	33.05	33.98	33.93	34.14	34.26	34.08	34.84	35.28	35.32	35.73	35.29	36.02	36.37	36.55	36.76	36.43
World	82.38	84.66	82.48	83.39	84.25	83.69	85.03	83.27	84.12	85.54	84.49	86.25	84.55	85.96	87.40	86.04
of which:																
US50	*20.73*	*20.84*	*20.65*	*20.92*	*20.79*	*20.80*	*20.49*	*20.60*	*20.86*	*20.75*	*20.68*	*20.79*	*20.74*	*21.24*	*21.23*	*21.00*
Euro4	*8.25*	*8.25*	*7.95*	*8.26*	*8.21*	*8.17*	*8.42*	*7.88*	*8.07*	*8.15*	*8.13*	*8.25*	*7.85*	*8.14*	*8.19*	*8.11*
Japan	*5.29*	*6.00*	*4.94*	*5.03*	*5.46*	*5.35*	*5.96*	*4.78*	*4.81*	*5.34*	*5.22*	*5.71*	*4.67*	*4.81*	*5.40*	*5.15*
Korea	*2.16*	*2.40*	*2.07*	*2.01*	*2.23*	*2.18*	*2.28*	*2.03*	*2.02*	*2.30*	*2.16*	*2.33*	*2.05*	*2.05*	*2.33*	*2.19*
Mexico	*2.00*	*2.04*	*2.11*	*2.06*	*2.10*	*2.08*	*2.08*	*2.02*	*1.99*	*2.03*	*2.03*	*2.08*	*2.05*	*2.06*	*2.12*	*2.08*
Canada	*2.30*	*2.36*	*2.24*	*2.28*	*2.26*	*2.28*	*2.18*	*2.14*	*2.27*	*2.27*	*2.21*	*2.24*	*2.19*	*2.28*	*2.32*	*2.26*
Brazil	*2.15*	*2.12*	*2.18*	*2.25*	*2.21*	*2.19*	*2.18*	*2.20*	*2.28*	*2.27*	*2.23*	*2.22*	*2.24*	*2.32*	*2.31*	*2.27*
India	*2.57*	*2.72*	*2.60*	*2.47*	*2.56*	*2.59*	*2.74*	*2.70*	*2.50*	*2.69*	*2.66*	*2.80*	*2.77*	*2.58*	*2.75*	*2.73*
Annual Change (% per annum)																
North America	3.5	1.4	1.0	0.7	-0.8	0.6	-1.9	-0.9	-0.6	-0.4	-0.9	1.5	0.9	1.8	2.5	1.7
Europe	0.3	0.8	0.9	0.7	-1.2	0.3	1.0	-0.9	-0.8	-0.3	-0.3	-1.0	0.2	0.6	0.5	0.1
Pacific	-1.6	2.3	2.3	-0.5	0.6	1.2	-1.6	-2.4	-2.2	-0.4	-1.6	-1.8	-0.8	0.7	1.4	-0.1
Total OECD	1.5	1.4	1.2	0.5	-0.7	0.6	-1.0	-1.2	-0.9	-0.4	-0.8	0.1	0.4	1.2	1.7	0.8
FSU	4.8	8.6	-0.3	-0.1	-2.7	1.2	2.4	0.6	4.7	9.8	4.5	5.5	1.2	0.3	-2.0	1.1
Europe	2.2	2.1	2.1	1.7	1.6	1.9	2.5	1.4	1.6	1.6	1.8	0.8	1.8	1.9	1.6	1.5
China	15.8	6.2	-0.4	6.6	4.5	4.2	4.0	11.8	6.4	3.8	6.4	5.1	6.1	7.1	6.2	6.1
Other Asia	6.8	4.3	2.4	2.5	-1.6	1.8	-0.2	0.9	0.7	3.1	1.1	1.7	1.8	2.3	2.0	1.9
Latin America	5.8	3.2	3.1	2.4	2.1	2.7	2.3	1.6	1.8	2.6	2.1	1.5	1.5	2.1	1.6	1.7
Middle East	6.9	5.7	5.8	5.6	5.3	5.6	5.4	5.4	5.4	5.6	5.4	5.0	4.8	4.9	5.1	5.0
Africa	4.1	3.3	3.3	2.5	2.7	3.0	2.4	2.3	2.4	2.4	2.4	2.4	1.8	2.1	2.2	2.2
Total Non-OECD	7.7	5.1	2.3	3.5	1.6	3.1	2.5	4.0	3.5	4.3	3.6	3.4	3.1	3.5	2.9	3.2
World	3.9	2.8	1.7	1.7	0.2	1.6	0.4	1.0	0.9	1.5	1.0	1.4	1.5	2.2	2.2	1.8
Annual Change (mb/d)																
North America	0.85	0.35	0.26	0.17	-0.20	0.14	-0.49	-0.23	-0.14	-0.10	-0.24	0.37	0.22	0.46	0.63	0.42
Europe	0.04	0.12	0.13	0.11	-0.19	0.04	0.15	-0.14	-0.13	-0.05	-0.04	-0.16	0.03	0.10	0.07	0.01
Pacific	-0.14	0.21	0.18	-0.04	0.06	0.10	-0.15	-0.19	-0.18	-0.04	-0.14	-0.17	-0.06	0.05	0.12	-0.01
Total OECD	0.75	0.69	0.58	0.23	-0.33	0.29	-0.49	-0.56	-0.45	-0.18	-0.42	0.04	0.19	0.61	0.83	0.42
FSU	0.17	0.30	-0.01	0.00	-0.11	0.04	0.09	0.02	0.18	0.38	0.17	0.22	0.04	0.01	-0.09	0.05
Europe	0.02	0.02	0.01	0.01	0.01	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
China	0.88	0.39	-0.03	0.41	0.29	0.27	0.26	0.76	0.43	0.26	0.43	0.35	0.44	0.51	0.45	0.44
Other Asia	0.55	0.36	0.21	0.21	-0.14	0.16	-0.02	0.08	0.06	0.27	0.10	0.15	0.16	0.20	0.18	0.17
Latin America	0.27	0.15	0.15	0.12	0.11	0.13	0.11	0.08	0.09	0.13	0.11	0.07	0.08	0.11	0.08	0.09
Middle East	0.37	0.32	0.34	0.34	0.31	0.32	0.32	0.33	0.34	0.34	0.33	0.31	0.31	0.33	0.33	0.32
Africa	0.11	0.09	0.09	0.07	0.08	0.08	0.07	0.07	0.07	0.07	0.07	0.07	0.05	0.06	0.07	0.06
Total Non-OECD	2.37	1.64	0.77	1.16	0.54	1.03	0.86	1.35	1.18	1.47	1.22	1.18	1.09	1.23	1.03	1.13
World	3.12	2.32	1.34	1.40	0.21	1.31	0.37	0.79	0.73	1.29	0.80	1.22	1.28	1.84	1.86	1.55
Revisions to Oil Demand from Last Month's Report (mb/d)																
North America	-	-	-	-	0.03	0.01	-	-	-0.01	-0.29	-0.08	-0.07	-0.05	0.04	-0.08	-0.04
Europe	-0.02	-	-	-	-	-	-	-	-	-0.02	-0.01	-	-	0.02	0.05	0.02
Pacific	-	-	-	-	-	-	-	-	-	-0.06	-0.01	-0.02	-0.01	-0.04	0.03	-0.01
Total OECD	-0.02	-	-	-	0.03	0.01	-	-	-0.01	-0.37	-0.10	-0.09	-0.06	0.02	-0.01	-0.03
FSU	-	-	-	-	-	-	0.03	0.02	0.01	0.18	0.06	0.16	0.06	0.06	0.07	0.09
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	0.11	0.06	0.08	0.11	0.09	0.18	0.22	0.23	-0.04	0.15	0.17	0.32	0.31	0.02	0.21
Other Asia	-	-	-	-	-	-	-	-	-	0.01	-	-	-	-	0.02	0.01
Latin America	-	-	-	-	-	-	-	-	-0.04	0.02	-	0.01	0.01	-0.02	0.02	-
Middle East	-	-	-	-	-	-	-	-	-	-	-	-0.07	-0.02	0.28	-0.19	-
Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Non-OECD	-	0.11	0.06	0.07	0.11	0.09	0.21	0.24	0.20	0.17	0.21	0.27	0.37	0.64	-0.06	0.31
World	-0.02	0.11	0.06	0.07	0.14	0.10	0.21	0.24	0.19	-0.20	0.11	0.19	0.31	0.66	-0.07	0.27
Revisions to Oil Demand Growth from Last Month's Report (mb/d)																
World	0.00	0.12	0.08	0.09	0.16	0.11	0.11	0.18	0.12	-0.34	0.01	-0.03	0.07	0.47	0.14	0.16

Table 3
WORLD OIL PRODUCTION
(million barrels per day)

	2005	2006	2007	3Q06	4Q06	1Q07	2Q07	3Q07	Nov 06	Dec 06	Jan 07
OPEC											
Crude Oil											
Saudi Arabia	9.06	8.96		8.95	8.60				8.62	8.42	8.42
Iran	3.88	3.89		4.05	3.88				3.95	3.88	3.90
Iraq	1.81	1.90		2.04	1.85				1.84	1.77	1.65
UAE	2.46	2.62		2.65	2.60				2.53	2.60	2.60
Kuwait	2.13	2.21		2.20	2.20				2.21	2.19	2.18
Neutral Zone	0.58	0.58		0.57	0.57				0.57	0.57	0.56
Qatar	0.77	0.82		0.82	0.81				0.81	0.82	0.82
Angola[6]											1.51
Nigeria	2.40	2.22		2.24	2.21				2.20	2.19	2.15
Libya	1.64	1.71		1.73	1.74				1.73	1.73	1.71
Algeria	1.34	1.35		1.34	1.34				1.34	1.34	1.34
Venezuela	2.71	2.56		2.51	2.50				2.43	2.55	2.49
Indonesia	0.94	0.89		0.87	0.86				0.86	0.86	0.86
Total Crude Oil	29.74	29.70		29.97	29.16				29.08	28.89	30.18
Total NGLs[1]	4.46	4.69	4.88	4.72	4.75	4.78	4.81	4.91	4.74	4.75	4.78
Total OPEC	34.20	34.38		34.69	33.91				33.82	33.64	34.96
OPEC incl. Angola[6]	35.45	35.79		36.14	35.35				35.28	35.12	34.96
NON-OPEC[2]											
OECD											
North America	14.14	14.26	14.32	14.31	14.36	14.48	14.27	14.20	14.28	14.43	14.47
United States	7.32	7.38	7.50	7.46	7.51	7.60	7.58	7.39	7.42	7.63	7.61
Mexico	3.76	3.68	3.48	3.69	3.50	3.54	3.50	3.45	3.55	3.38	3.59
Canada	3.06	3.19	3.34	3.17	3.34	3.34	3.19	3.36	3.30	3.41	3.27
Europe	5.61	5.20	5.15	4.93	5.21	5.24	5.07	5.04	5.26	5.32	5.20
UK	1.84	1.67	1.70	1.48	1.69	1.72	1.69	1.61	1.69	1.74	1.68
Norway	2.97	2.78	2.70	2.73	2.76	2.76	2.63	2.66	2.77	2.83	2.76
Others	0.80	0.76	0.76	0.72	0.76	0.76	0.75	0.76	0.79	0.75	0.77
Pacific	0.58	0.57	0.66	0.65	0.64	0.64	0.63	0.67	0.61	0.65	0.63
Australia	0.54	0.53	0.61	0.61	0.60	0.60	0.59	0.61	0.57	0.61	0.60
Others	0.04	0.04	0.05	0.04	0.04	0.04	0.04	0.06	0.04	0.04	0.04
Total OECD	20.33	20.03	20.13	19.89	20.20	20.36	19.97	19.91	20.15	20.39	20.31
NON-OECD											
Former USSR	11.64	12.10	12.59	12.21	12.37	12.38	12.57	12.65	12.43	12.41	12.51
Russia	9.48	9.69	9.92	9.77	9.80	9.76	9.91	10.01	9.80	9.84	9.89
Others	2.16	2.40	2.67	2.44	2.58	2.62	2.67	2.64	2.63	2.57	2.62
Asia	6.30	6.38	6.45	6.35	6.37	6.43	6.44	6.45	6.40	6.32	6.42
China	3.62	3.67	3.71	3.68	3.64	3.68	3.70	3.72	3.67	3.59	3.67
Malaysia	0.77	0.75	0.76	0.75	0.76	0.76	0.75	0.75	0.76	0.75	0.77
India	0.78	0.79	0.82	0.77	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Others	1.13	1.16	1.16	1.15	1.15	1.17	1.17	1.16	1.16	1.16	1.16
Europe	0.16	0.15	0.13	0.14	0.14	0.14	0.14	0.13	0.14	0.14	0.14
Latin America	4.29	4.40	4.54	4.42	4.43	4.49	4.50	4.54	4.40	4.45	4.50
Brazil	1.99	2.10	2.29	2.10	2.15	2.22	2.25	2.30	2.14	2.16	2.22
Argentina	0.78	0.77	0.76	0.79	0.77	0.76	0.76	0.75	0.74	0.77	0.77
Colombia	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53
Ecuador	0.53	0.54	0.50	0.54	0.53	0.52	0.51	0.50	0.54	0.53	0.52
Others	0.46	0.46	0.46	0.46	0.46	0.46	0.45	0.46	0.46	0.46	0.46
Middle East[3]	1.86	1.74	1.69	1.72	1.71	1.70	1.70	1.69	1.70	1.70	1.70
Oman	0.79	0.74	0.71	0.73	0.72	0.72	0.71	0.71	0.72	0.72	0.72
Syria	0.46	0.42	0.38	0.41	0.40	0.39	0.38	0.38	0.40	0.40	0.40
Yemen	0.42	0.39	0.41	0.38	0.38	0.40	0.41	0.41	0.39	0.39	0.39
Africa	3.72	3.99	2.73	4.04	4.12	2.72	2.74	2.73	4.13	4.17	2.71
Egypt	0.70	0.67	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66
Angola[6]	1.25	1.41		1.45	1.43				1.45	1.47	
Gabon	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23
Others	1.54	1.67	1.85	1.69	1.79	1.82	1.85	1.85	1.79	1.80	1.82
Total Non-OECD	27.96	28.75	28.14	28.88	29.13	27.85	28.08	28.20	29.21	29.19	27.97
Processing Gains[4]	1.86	1.90	1.92	1.88	1.92	1.92	1.92	1.92	1.92	1.92	1.92
Other Biofuels[5]	0.12	0.18	0.34	0.18	0.18	0.34	0.34	0.34	0.18	0.18	0.34
TOTAL NON-OPEC	50.27	50.87	50.53	50.83	51.43	50.48	50.31	50.37	51.45	51.68	50.54
Non-OPEC excl. Angola[6]	49.03	49.46	50.53	49.38	50.00	50.48	50.31	50.37	50.00	50.21	50.54
TOTAL SUPPLY	84.48	85.25		85.52	85.34				85.27	85.33	85.50

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 will reportedly cease from January 2007.

2 Comprises crude oil, condensates, NGLs and oil from non-conventional sources. No allowance is made in the non-OPEC forecast for exceptional events, which have, at certain times historically, reduced non-OPEC supply by 300-400 kbd on an annual basis.

3 Includes small amounts of production from Israel, Jordan and Bahrain.

4 Net volumetric gains and losses in refining (excludes net gain/loss in FSU, China and non-OECD Europe) and marine transportation losses.

5 Comprises Fuel Ethanol and Biodiesel supply from outside Brazil and US.

6 With effect from OMR of 13 February 2007, Angolan production will be reclassified within OPEC and excluded from the Non-OPEC total, for the period January 2007 onwards. Secondary aggregates allow comparison with previous year totals by including Angola within OPEC retroactively

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			
	Aug2006	Sep2006	Oct2006	Nov2006	Dec2006*	Dec2003	Dec2004	Dec2005	1Q2006	2Q2006	3Q2006	4Q2006
North America												
Crude	456.2	460.1	466.2	463.8	437.7	382.0	400.1	456.9	0.07	-0.05	0.02	-0.24
Motor Gasoline	238.1	244.8	232.2	233.5	244.7	234.0	244.8	236.1	0.07	-0.01	0.03	0.00
Middle Distillate	219.2	224.2	216.5	208.8	216.7	209.7	198.8	213.0	-0.20	0.06	0.26	-0.08
Residual Fuel Oil	52.6	53.0	51.8	51.1	51.3	45.7	50.5	44.6	0.07	0.02	0.01	-0.02
Total Products[3]	703.8	724.7	701.1	682.3	687.9	639.8	655.2	658.9	-0.26	0.38	0.60	-0.40
Total[4]	1320.6	1346.6	1326.1	1298.7	1277.2	1160.7	1192.7	1257.2	-0.20	0.40	0.77	-0.75
Europe												
Crude	332.8	327.4	333.2	332.8	329.7	313.3	321.5	327.9	0.18	-0.07	-0.12	0.03
Motor Gasoline	101.4	103.9	105.9	109.5	110.5	118.4	113.9	112.4	-0.01	-0.12	0.04	0.07
Middle Distillate	271.9	270.4	263.7	261.7	269.6	238.9	240.5	256.9	-0.11	0.11	0.15	-0.01
Residual Fuel Oil	77.3	77.0	80.8	77.2	78.5	79.4	73.6	73.2	-0.04	0.06	0.02	0.02
Total Products[3]	556.5	559.7	555.3	555.1	565.2	537.8	531.3	544.3	-0.16	0.04	0.29	0.06
Total[4]	963.7	961.7	957.5	958.2	964.2	921.7	924.4	944.3	0.05	-0.06	0.20	0.03
Pacific												
Crude	173.8	174.9	177.6	183.0	177.0	180.1	171.2	157.4	0.15	0.11	-0.07	0.02
Motor Gasoline	23.7	23.4	23.8	23.9	22.5	22.0	24.2	22.5	0.02	0.00	-0.01	-0.01
Middle Distillate	80.9	86.0	87.6	83.2	73.4	73.8	75.1	61.0	-0.01	0.10	0.18	-0.14
Residual Fuel Oil	24.6	23.8	23.5	22.0	22.6	23.0	22.4	20.5	-0.01	0.04	0.01	-0.01
Total Products[3]	203.2	210.7	210.1	201.1	183.6	183.2	187.8	167.4	0.00	0.17	0.30	-0.29
Total[4]	449.9	458.6	459.7	457.1	432.4	434.8	430.3	393.8	0.16	0.30	0.25	-0.28
Total OECD												
Crude	962.8	962.3	977.0	979.6	944.3	875.4	892.8	942.2	0.40	-0.01	-0.17	-0.20
Motor Gasoline	363.3	372.1	361.8	366.9	377.7	374.4	382.8	371.0	0.08	-0.12	0.06	0.06
Middle Distillate	572.0	580.6	567.8	553.7	559.7	522.5	514.4	530.8	-0.33	0.27	0.59	-0.23
Residual Fuel Oil	154.4	153.9	156.0	150.3	152.3	148.0	146.5	138.3	0.02	0.12	0.04	-0.02
Total Products[3]	1463.5	1495.1	1466.6	1438.5	1436.7	1360.8	1374.4	1370.6	-0.42	0.58	1.19	-0.64
Total[4]	2734.1	2766.9	2743.2	2714.0	2673.8	2517.1	2547.3	2595.2	0.01	0.64	1.22	-1.01

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			
	Aug2006	Sep2006	Oct2006	Nov2006	Dec2006*	Dec2003	Dec2004	Dec2005	1Q2006	2Q2006	3Q2006	4Q2006
North America												
Crude	687.8	687.8	688.6	688.6	688.6	638.4	675.6	684.5	0.02	0.02	0.00	0.01
Products	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	0.00	0.00	0.00	0.00
Europe												
Crude	174.5	175.5	174.7	174.9	174.9	157.5	168.0	166.9	0.04	0.04	0.02	-0.01
Products	237.3	235.0	234.7	233.3	233.3	216.0	208.2	239.0	-0.03	0.00	-0.01	-0.02
Pacific												
Crude	381.5	381.5	381.5	381.6	384.5	384.7	384.5	381.6	-0.01	0.00	0.01	0.03
Products	11.8	11.8	11.8	11.8	11.8	11.0	11.0	11.5	0.00	0.00	0.00	0.00
Total OECD												
Crude	1243.9	1244.8	1244.8	1245.1	1248.0	1180.6	1228.1	1233.0	0.04	0.06	0.03	0.04
Products	251.2	248.8	248.5	247.1	247.1	229.0	221.2	252.5	-0.04	0.01	-0.01	-0.02
Total[4]	1496.0	1494.6	1494.3	1493.2	1496.2	1410.6	1450.3	1486.5	0.01	0.07	0.02	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 December 2005		End March 2006		End June 2006		End September 2006		End December 2006 [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	178.1	82	169.7	79	169.7	75	179.1	-	-	-
Mexico	43.9	21	41.7	21	42.1	21	47.0	-	-	-
United States[4]	1699.6	83	1693.7	83	1731.6	83	1788.3	-	-	-
Total[4]	1943.7	78	1927.2	77	1965.5	77	2036.4	80	1967.8	77
Pacific										
Australia	32.7	36	35.5	39	38.9	42	35.3	-	-	-
Japan	612.1	103	620.1	130	627.2	130	649.1	-	-	-
Korea	134.9	59	137.4	68	155.4	77	160.5	-	-	-
New Zealand	7.2	44	6.8	45	6.7	46	6.9	-	-	-
Total	786.8	85	799.8	102	828.2	105	851.9	97	828.7	91
Europe[5]										
Austria	20.4	72	18.7	66	19.2	67	19.6	-	-	-
Belgium	28.6	45	27.3	52	30.4	57	30.5	-	-	-
Czech Republic	18.8	98	19.6	90	19.5	88	19.3	-	-	-
Denmark	20.3	102	19.5	99	20.4	106	21.1	-	-	-
Finland	25.1	113	26.7	120	30.5	136	26.8	-	-	-
France	195.6	93	196.2	104	188.7	97	187.5	-	-	-
Germany	282.6	111	279.9	110	281.4	104	278.5	-	-	-
Greece	33.1	69	35.4	93	34.9	86	38.2	-	-	-
Hungary	17.6	120	20.8	127	17.6	110	17.4	-	-	-
Ireland	11.6	55	13.1	72	12.6	71	13.9	-	-	-
Italy	132.0	71	131.5	81	126.0	76	134.1	-	-	-
Luxembourg	0.8	11	0.9	15	1.0	17	0.9	-	-	-
Netherlands	116.4	116	120.5	121	123.1	119	125.0	-	-	-
Norway	30.7	123	21.9	91	21.8	90	29.4	-	-	-
Poland	35.2	79	35.5	74	35.7	67	37.3	-	-	-
Portugal	25.7	78	24.7	83	24.7	81	23.8	-	-	-
Slovak Republic	6.5	83	8.3	102	7.7	89	7.4	-	-	-
Spain	128.6	79	130.2	84	129.2	82	133.9	-	-	-
Sweden	38.0	102	38.4	109	39.6	113	38.6	-	-	-
Switzerland	37.7	128	37.7	144	39.3	141	38.9	-	-	-
Turkey	51.1	100	51.6	79	51.6	78	53.7	-	-	-
United Kingdom	95.2	50	97.4	54	99.0	56	97.4	-	-	-
Total	1351.2	86	1355.9	90	1353.8	88	1373.2	88	1373.4	88
Total OECD	4081.7	82	4082.9	85	4147.5	85	4261.5	86	4169.9	83
DAYS OF IEA Net Imports[6]	-	114	-	115	-	116	-	119	-	-

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 2006 and December 2006 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. 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]*		
4Q2003	3928	1411	2517	79	28	50
1Q2004	3888	1423	2465	81	30	51
2Q2004	3974	1429	2545	81	29	52
3Q2004	4016	1435	2581	80	29	51
4Q2004	3998	1450	2547	79	29	50
1Q2005	4005	1462	2542	82	30	52
2Q2005	4116	1494	2623	84	30	53
3Q2005	4132	1494	2638	83	30	53
4Q2005	4082	1487	2595	82	30	52
1Q2006	4083	1487	2596	85	31	54
2Q2006	4148	1493	2654	85	31	54
3Q2006	4262	1495	2767	86	30	56
4Q2006	4170	1496	2674	83	30	53

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 3Q2006 and 4Q2006 (when latest forecasts are used).

Table 6

IEA Member Country Destinations of Selected Crude Streams[1]

(million barrels per day)

	2003	2004	2005	4Q05	1Q06	2Q06	3Q06	Sep 06	Oct 06	Nov 06	Year Earlier Nov 05	Year Earlier change
Saudi Light & Extra Light												
North America	0.64	0.55	0.46	0.52	0.51	0.68	0.62	0.55	0.56	0.73	0.49	0.24
Europe	1.00	1.03	0.90	0.91	0.83	0.80	0.72	0.63	0.87	0.72	0.97	-0.25
Pacific	1.18	1.24	1.31	1.37	1.40	1.33	1.29	1.28	1.30	1.28	1.50	-0.22
Saudi Medium												
North America	0.83	0.80	0.81	0.81	0.65	0.61	0.68	0.75	0.55	0.65	0.84	-0.19
Europe	0.11	0.11	0.16	0.16	0.17	0.14	0.14	0.16	0.14	0.08	0.18	-0.10
Pacific	0.24	0.23	0.26	0.32	0.38	0.35	0.35	0.33	0.33	0.33	0.33	0.00
Saudi Heavy												
North America	0.30	0.22	0.17	0.16	0.21	0.21	0.21	0.21	0.20	0.19	0.14	0.06
Europe	0.19	0.23	0.23	0.26	0.14	0.22	0.21	0.23	0.19	0.11	0.26	-0.15
Pacific	0.16	0.15	0.25	0.29	0.25	0.20	0.22	0.22	0.25	0.21	0.31	-0.10
Iraqi Basrah Light[2]												
North America	0.44	0.71	0.60	0.59	0.44	0.60	0.60	0.60	0.47	0.52	0.53	-0.01
Europe	0.09	0.21	0.23	0.31	0.24	0.29	0.40	0.41	0.38	0.39	0.29	0.11
Pacific	0.03	0.12	0.06	0.06	0.08	0.09	0.10	0.13	0.06	0.06	0.03	0.03
Iraqi Kirkuk												
North America	0.06	0.02	..	..	..	..	0.01	..	..	..	..	..
Europe	0.12	0.08	0.05	0.03	..	..	0.04	0.04	0.02	..	0.02	..
Pacific	..	..	..	..	..	..	..	..	..	..	..	..
Iranian Light												
North America	..	..	..	..	..	..	..	..	..	..	..	..
Europe	0.19	0.24	0.20	0.22	0.20	0.27	0.31	0.27	0.29	0.16	0.14	0.02
Pacific	0.17	0.16	0.15	0.15	0.19	0.12	0.10	0.14	0.08	0.09	0.12	-0.03
Iranian Heavy[3]												
North America	..	..	..	..	..	..	..	..	..	..	..	..
Europe	0.59	0.57	0.63	0.57	0.48	0.57	0.67	0.72	0.51	0.74	0.73	0.01
Pacific	0.69	0.65	0.62	0.63	0.64	0.48	0.51	0.54	0.58	0.65	0.56	0.09
Venezuelan Light & Medium												
North America	0.69	0.67	0.82	0.81	0.76	0.68	0.62	0.69	0.69	0.45	0.76	-0.31
Europe	0.02	0.01	0.04	0.07	0.12	0.15	0.08	0.10	0.07	0.14	0.17	-0.02
Pacific	0.00	..	..	..	..	..	..	..	..	..	..	..
Venezuelan 22 API and heavier												
North America	0.60	0.88	0.72	0.56	0.72	0.72	0.74	0.72	0.65	0.67	0.52	0.15
Europe	0.06	0.05	0.06	0.06	0.08	0.05	0.06	0.04	0.05	0.05	0.04	0.01
Pacific	..	..	..	..	..	..	..	..	..	..	..	..
Mexican Maya												
North America	1.32	1.36	1.27	1.25	1.26	1.24	1.30	1.23	1.24	1.19	1.25	-0.06
Europe	0.16	0.16	0.17	0.18	0.13	0.20	0.16	0.11	0.20	0.13	0.13	-0.01
Pacific	0.00	0.00	..	..	..	..	..	..	..	..	..	..
Mexican Isthmus												
North America	0.00	..	0.03	0.10	0.09	0.03	0.01	0.01	0.02	0.04	0.06	-0.02
Europe	0.00	0.01	0.03	0.05	0.01	0.00	0.00	0.01	0.03	0.01	0.07	-0.06
Pacific	0.00	0.00	..	..	..	..	..	..	..	..	..	..
Russian Urals												
North America	0.14	0.12	0.13	0.09	..	0.16	0.16	0.14	0.02	..	0.08	..
Europe	1.62	1.86	1.77	1.69	1.68	1.83	1.66	1.62	1.40	1.62	1.61	0.00
Pacific	0.00	0.01	0.00	..	..	..	0.01	..	..	..	..	..
Nigerian Light[4]												
North America	0.63	0.80	0.90	0.90	0.87	0.79	0.78	0.64	0.78	0.67	1.01	-0.34
Europe	0.41	0.28	0.35	0.41	0.28	0.27	0.39	0.26	0.38	0.37	0.32	0.05
Pacific	0.08	0.11	0.05	0.02	0.09	0.03	0.02	0.03	0.03	..	..	..
Nigerian Medium												
North America	0.17	0.23	0.17	0.15	0.19	0.17	0.16	0.25	0.19	0.24	0.15	0.09
Europe	0.06	0.04	0.07	0.07	0.08	0.08	0.08	0.10	0.08	0.14	0.10	0.04
Pacific	0.01	0.01	0.01	..	..	..	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 North America includes United States and Canada.
IEA Europe includes all countries in OECD Europe except Hungary, Poland and the Slovak Republic.
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)

	2003	2004	2005	4Q2005	1Q2006	2Q2006	3Q2006	Sep-06	Oct-06	Nov-06	Year Earlier Nov-05	Year Earlier % change
Crude Oil												
North America	8069	8431	8384	8101	7740	8265	8686	8985	8203	7733	8476	-9%
Europe	9096	9478	9792	9954	9398	9753	10166	10031	9817	9688	10065	-4%
Pacific	6711	6659	6801	6967	7399	6509	6684	6661	6205	6968	6733	3%
Total OECD	23876	24569	24978	25022	24537	24526	25536	25677	24224	24390	25274	-3%
LPG												
North America	27	24	18	30	8	8	12	1	14	33	9	258%
Europe	193	225	248	249	280	242	210	200	228	315	247	27%
Pacific	541	541	527	486	651	575	593	591	492	494	485	2%
Total OECD	760	790	793	764	938	825	815	792	733	842	742	14%
Naphtha												
North America	67	99	110	76	41	49	64	71	114	101	66	54%
Europe	305	282	273	281	352	276	303	303	317	340	330	3%
Pacific	770	769	746	760	692	731	810	802	738	794	696	14%
Total OECD	1142	1150	1129	1116	1084	1056	1177	1176	1169	1236	1092	13%
Gasoline[3]												
North America	669	794	1016	1148	1113	1365	1166	1002	928	971	1027	-5%
Europe	150	137	165	120	194	149	122	138	136	162	64	155%
Pacific	70	105	102	90	86	145	74	61	96	70	120	-41%
Total OECD	888	1035	1283	1358	1393	1658	1363	1201	1160	1204	1211	-1%
Jet & Kerosene												
North America	97	101	130	268	79	191	203	201	142	76	312	-76%
Europe	271	293	375	371	313	382	398	435	430	406	379	7%
Pacific	102	77	66	49	131	39	43	45	66	50	40	25%
Total OECD	470	471	571	687	523	612	644	681	638	532	731	-27%
Gasoil/Diesel												
North America	126	123	142	267	210	173	181	196	140	99	270	-63%
Europe	652	751	845	867	1078	947	900	1002	1000	929	887	5%
Pacific	73	74	79	83	80	94	65	66	69	82	101	-19%
Total OECD	850	947	1066	1217	1368	1213	1146	1264	1209	1110	1259	-12%
Heavy Fuel Oil												
North America	326	453	525	610	481	320	309	283	273	242	686	-65%
Europe	385	397	490	473	520	479	421	363	517	454	433	5%
Pacific	88	76	85	82	122	105	76	44	65	59	100	-40%
Total OECD	799	926	1100	1166	1122	904	806	690	855	755	1219	-38%
Other Products												
North America	680	872	1005	1049	972	1162	1298	1281	1039	988	939	5%
Europe	690	676	781	787	891	863	912	883	888	981	738	33%
Pacific	235	256	247	263	271	208	225	139	272	284	251	13%
Total OECD	1605	1805	2033	2099	2134	2233	2434	2302	2199	2254	1927	17%
Total Products												
North America	1991	2466	2947	3447	2903	3268	3233	3034	2650	2511	3309	-24%
Europe	2644	2759	3177	3148	3628	3337	3266	3325	3515	3587	3079	17%
Pacific	1879	1898	1852	1812	2032	1896	1886	1748	1797	1834	1793	2%
Total OECD	6514	7123	7976	8407	8563	8501	8386	8107	7963	7932	8181	-3%
Total Oil												
North America	10061	10897	11332	11548	10643	11533	11919	12019	10853	10244	11785	-13%
Europe	11740	12237	12969	13102	13026	13090	13432	13356	13332	13276	13144	1%
Pacific	8590	8558	8653	8779	9431	8404	8570	8409	8002	8803	8526	3%
Total OECD	30390	31692	32954	33429	33100	33027	33922	33784	32187	32322	33455	-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

OIL MARKET REPORT CONTACTS

Editorial Enquiries

Editor — Lawrence Eagles
Head, Oil Industry & Markets Division
(+33) 0*1 40 57 65 90
e-mail: lawrence.eagles@iea.org

Demand — Eduardo Lopez
(+33) 0*1 40 57 65 93
e-mail: eduardo.lopez@iea.org

Supply — David Fyfe
(+33) 0*1 40 57 65 94
e-mail: david.fyfe@iea.org

Prices/OECD Stocks — Julius Walker
(+33) 0*1 40 57 65 22
e-mail: julius.walker@iea.org

Refinery Activity — David Martin
(+33) 0*1 40 57 65 95
e-mail: david.martin@iea.org

OECD Stocks/Trade — Toril Ekeland Bosoni
(+33) 0*1 40 57 66 36
e-mail: toril.bosoni@iea.org

Statistics/Freight/Trade — James Ryder
(+33) 0*1 40 57 66 18
e-mail: james.ryder@iea.org

End-User Prices/Statistical Support — Miklos Bankuti
(+33) 0*1 40 57 67 76
e-mail: miklos.bankuti @iea.org

Administrative Support — Anne Mayne
(+33) 0*1 40 57 65 96
e-mail: anne.mayne@iea.org

Fax: *(+33) 0*1 40 57 65 99/40 57 65 09*

* 0 only within France

Media Enquiries

Press Office — Gwyn Darling
(+33) 0*1 40 57 65 54
e-mail: ieapressoffice@iea.org

Subscription and Delivery Enquiries

Oil Market Report Subscriptions (Attn: Ms. Sandra Coleman)
International Energy Agency
BP 586-75726 PARIS Cedex 15, France

Tel. +33 (0) 1 40 57 65 57
Fax. +33 (0) 1 40 57 65 59
e-mail: sandra.coleman@iea.org

Users' Guide to the IEA Oil Market Report

Readers are referred to the *Users' Guide*, published in conjunction with the *Annual Statistical Supplement* (current issue dated 11 August 2006), for information on the data sources, definitions, technical terms and general approach used in preparing the Report. 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 (© 2007 Platts - a division of McGraw-Hill Inc.).

INTERNATIONAL ENERGY AGENCY/AGENCE INTERNATIONALE DE L'ENERGIE

OIL MARKET REPORT

A MONTHLY OIL MARKET AND STOCKS ASSESSMENT

www.oilmarketreport.org

INTERNATIONAL ENERGY AGENCY

AGENCE INTERNATIONALE DE L'ENERGIE

13 March 2007

HIGHLIGHTS

- **Oil prices rose above $60/bbl** on OPEC cuts, the coldest February in the US for 30 years and refinery outages. Falling US product stocks were offset partially by unusually warm weather in Europe and Northeast Asia, but further OPEC cuts in February prevented the normal seasonal crude stock build in the OECD.

- **World oil output** fell by 65 kb/d in February to 85.5 mb/d amid OPEC supply cuts. Non-OPEC supply additions for 2007 remain at 1.1 mb/d, extending the growth evident since mid-2006. OPEC gas liquids add a further 0.2 mb/d this year. Sizeable supply risks remain, not least those from underinvestment caused by intensifying resource nationalism.

- **OPEC February crude supply** averaged 30.2 mb/d, down 125 kb/d from January as a 365 kb/d cut from OPEC-10 was partly offset by increases from Iraq and Angola, and leaves OPEC supply within the possible 2Q-range for the *call*. OPEC cuts since September amount to 1.0 mb/d, leaving effective spare capacity at 2.8 mb/d. In addition, outages in early March brought the offline total in Nigeria to 0.8 mb/d.

- **Global oil product demand** remains unchanged at 84.5 mb/d in 2006 and is seen growing by 1.8% to 86.0 mb/d in 2007. Weather-related adjustments to OECD data in Europe and the Pacific were largely offset by US demand strength and upward changes to China, FSU and India.

- **Total OECD inventories** fell 8.6 mb in January as a crude draw in Europe outweighed a weather-induced product build, leaving forward demand cover broadly flat at 54 days. Preliminary data show the US driving a 65.7 mb fall in February stocks in key OECD countries – or an average 1.2 mb/d decline in the first two months of 2007.

- **Seasonal refinery maintenance** cut January OECD throughputs by 0.5 mb/d, to an estimated 39.3 mb/d. February crude runs are seen falling to 38.4 mb/d, but rise to 38.6 mb/d in March. The end of maintenance in the Atlantic Basin will be followed by seasonal work at Pacific refineries leaving crude demand relatively flat over the first and second quarters.

Next Issue: 12 April 2007

INTERNATIONAL ENERGY AGENCY (IEA)

AGENCE INTERNATIONALE DE L'ENERGIE

The International Energy Agency is Seeking an Energy Emergency Analyst

A Three- to Five-Year, Fixed-Term Appointment

The Emergency Planning and Preparations Division of the IEA is looking for an Energy Emergency Analyst to work under the supervision of the Division head. The Division is responsible for developing strategies and policy and ultimately co-ordinating an emergency response among IEA Member countries in the event of a serious supply disruption, such as were experienced in September 2005 following the hurricanes Katrina and Rita in the Gulf of Mexico Major responsibilities include:

- Participation in the design and improvement of emergency response systems and strategies;
- Help to co-ordinate their implementation during actual oil supply disruptions;
- Analyse oil/energy and geopolitical situations affecting energy supply security;
- Develop and maintain contacts on emergency policies with government officials and oil companies in major consuming non-member countries, aiming to co-ordinate those policies with the IEA;
- Represent the IEA at international workshops, training sessions and conferences;
- Act as Desk Officer for several IEA Member countries, maintaining contacts with officials of those countries, undertaking reviews of their emergency response policies and programmes.

The ideal candidate should possess:

- Advanced university degree in economics, engineering or other relevant discipline;
- A minimum of five years' experience with aspects of oil supply;
- Sound administrative experience;
- The ability to work within a committed team, within a multicultural environment;
- The ability to work under pressure;
- An excellent knowledge of, and drafting ability in, English; a working knowledge of other languages would be an advantage
- Very good communication skills and ability to draft clearly and succinctly.

For a full job description, information and application, please contact the International Energy Agency in the first instance by e-mail: **recruitment@iea.org**

The OECD is an Equal Opportunity Employer

OECD OCDE

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

Organisation de coopération et de développement économiques

CONTENTS

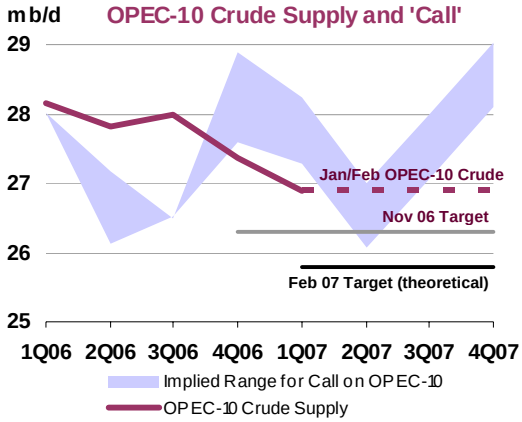
HEADING FOR A LARGE 1Q STOCK DRAW

Tighter OPEC supply and colder temperatures in the US in February served to perpetuate the recent downward trend in OECD stocks, despite the continually mild weather elsewhere. Preliminary data suggest that OECD stocks have fallen by over 1.26 mb/d over the first two months of the year, and could be heading for the largest first quarter stock draw for over ten years. Unsurprisingly, prices have risen from their mid-January low of $50/bbl, and for the past two weeks have been ranging between $60 and $63/bbl.

OPEC crude supplies fell by 125 kb/d in February as a tightening of OPEC-10 output was partly offset by increased supplies from the two countries currently exempt from targets, Iraq and Angola. The outlook for March is a little less clear. Term allocations suggest slightly higher supplies from some members, but additional outages in Nigeria and ongoing problems in Iraq could act as an offset. Nigeria is a particular source of concern, with violence expected to increase ahead of the presidential election in April. Non-OPEC supply growth continues at around 1.1 mb/d, with lower forecast supply from the Americas predominantly offset by higher output from the Russia and the Asia Pacific.

Demand trends have been disparate. US demand jumped sharply as one of the coldest Februarys for 30 years bolstered heating needs, while transport fuel deliveries remained robust. Although it turned colder in Europe in February, heating degree-days remained around 7% below the 10-year average. Temperatures remained mild in Japan and Korea.

Demand in the US transportation fuel sector has been surprisingly robust. Primary gasoline deliveries have seen 1.8% growth for the first two months of this year, while diesel offtake is even stronger. Although the strength in diesel demand looks unseasonably high, the strong growth is really a reflection of a weak January and February last year, when demand was up by just 0.4%. This compares with the 2006 average for diesel of around 6% - suggesting that current demand is broadly in line with last year's trend.



Demand always falls in the second quarter, but its market impact is often exaggerated. The weakness is primarily in Asian heating fuel use, and comes at a time when the refining industry traditionally builds crude stocks.

In other regions, the second-quarter dip in demand is limited and is becoming less significant as air-conditioning use spreads and summers start earlier. And it is worth remembering that the calming influence of milder-than-normal weather this winter may have the opposite effect if the warm trend persists through the summer months.

Crude demand also has a different seasonal pattern to that of products: there is little difference between throughputs in the first and second quarters. On a monthly basis, it is clear that refiners start to crank up crude use in May and June to meet peak summer demand. This year is no exception: our estimates show global offline capacity remaining high until May – but that means refiners will step up purchases around mid-April to ensure the crude is in place for restarts.

Data are always subject to revision, and assessing first-quarter stock movements based on provisional data for January and partial OECD data for February is far from an exact science - but it certainly shows reason to be concerned. While stock levels in key products such as gasoline and distillate are on a par with last year, and crude stocks only appear tight in Europe, these are inventory levels that were associated with higher and sharply rising prices last summer. Moreover, both the speed of the stock fall and the fact that crude inventories are drawing counter-seasonally is of greater concern.

Atlantic Basin refiners typically build crude stocks in the first quarter so they can hit the ground running to build product stocks for the driving season when maintenance has finished. This year they could end seasonal maintenance with both lower product stocks and lower crude stocks.

So far, most signals by OPEC suggest that there will be no change in output targets at its 15 March meeting in Vienna. That comes as little surprise: current output levels continue to tighten the market and prevailing targets give the producer group the flexibility to tighten supplies by another 1.0 mb/d. In reality, stock trends and prices are signalling that higher OPEC exports will be needed in the months ahead.

CLARIFYING THE CALL ON OPEC

Analysts love detail and there is no shortage of it in this report. We build our models and forecasts from the most detailed data, whether it be product-level supply and demand, oil production from individual fields or specific unit maintenance at refineries. These estimates are fed by data-flow from a homogenised 250-point questionnaire from OECD countries, non-OECD data from both the *Joint Oil Data Initiative (JODI)* and just plain hard digging among myriad oil company, tanker tracking, financial, consulting and trade press sources.

Still there are gaps. There is little stock data from non-OECD countries, and supply, demand, stock and trade data never perfectly add up. The resulting difference goes into our *miscellaneous-to-balance*. Any of these factors can cause this gap and while we may have suspicions on the underlying cause, we do not try to force the balance with such assumptions. For the sake of transparency, we feel it is better not to subjectively allocate the balancing factor to supply and demand in one country or another. When better information becomes available, it is then a simple accounting proposition to move data from the *miscellaneous-to-balance* category into another as appropriate.

We also have, in bold letters in each supply section, a warning that there has been an historical tendency for non-OPEC supply to be revised down on average by 350 kb/d in a year. That figure is not constant, nor is it typically steady over the course of a year and can be caused by weather, strikes, faster-than-expected decline and accidents (among others). Again, when the underlying analysis is done at field level, it would be misleading to allocate risk arbitrarily to specific fields or countries.

Those who know our data well appreciate the clarity that this methodology brings, but for those who do not, this can create some misunderstanding. As much as we flag trends in the *miscellaneous-to-balance* or supply-side uncertainties, it will inevitably translate into comments that the IEA underestimates demand or overstates supply - after all, it makes a juicier sound bite than 'adjusting for the known trends in supply and *miscellaneous-to-balance*'. It is a simple fact of life that no one reads the 'small print'

Without adjusting the data on the back of 'hunches', some clarity can be added via the *call on OPEC + stock change (call)*. The *call* is simply an arithmetical balance between non-OPEC supply, OPEC NGLs and global demand – and without an adjustment for trends in the *miscellaneous-to-balance* or risk adjustments to non-OPEC supply, it will not truly reflect the supply gap. So, to add some clarity, we have for some time been running graphics, articles and tables in the *Oil Market Report* (*OMR)* and *Medium-Term Oil Market Report* (*MTOM)R* looking at both the *call on OPEC + stock change* (*call*) **and an *adjusted call***.

The adjusted call takes into account trends in the *miscellaneous-to-balance* (an eight-quarter moving average) and also a 350 kb/d adjustment for downside risks to non-OPEC supply (for historical data, this range only includes the actual quarterly *miscellaneous-to-balance*). The adjusted call has now been permanently added as a line item in Table 1 at the back of this report.

Balances from Table 1
(million barrels per day)

	2003	2004	1Q05	2Q05	3Q05	4Q05	2005	1Q06	2Q06	3Q06	4Q06	2006	1Q07	2Q07	3Q07	4Q07	2007
Global Demand	**79.3**	**82.4**	**84.7**	**82.5**	**83.4**	**84.2**	**83.7**	**85.0**	**83.3**	**84.1**	**85.5**	**84.5**	**85.9**	**84.6**	**85.9**	**87.7**	**86.0**
Total Non-OPEC	49.1	50.1	50.4	50.6	49.8	50.2	50.2	50.7	50.5	50.9	51.3	50.8	50.5	50.3	50.3	50.9	50.5
OPEC Crude	27.1	28.9	29.3	29.7	30.0	29.9	29.7	29.9	29.8	30.0	29.2	29.7					
OPEC NGLs	3.7	4.2	4.4	4.4	4.5	4.5	4.5	4.6	4.7	4.7	4.7	4.7	4.8	4.8	4.9	5.0	4.9
Global Supply	**79.8**	**83.2**	**84.1**	**84.8**	**84.2**	**84.7**	**84.5**	**85.2**	**85.0**	**85.6**	**85.3**	**85.3**					
Miscellaneous to balance	0.1	0.6	-0.2	1.0	0.8	0.8	0.6	0.0	1.0	0.0	1.3	0.6					
Call on OPEC crude + Stock ch.*	26.5	28.1	29.8	27.4	29.1	29.5	29.0	29.7	28.1	28.6	29.4	29.0	30.6	29.5	30.7	31.8	30.7
Adjusted Call on OPEC + Stock ch.	26.7	28.7	29.6	28.4	29.9	30.4	29.6	29.7	29.2	28.5	30.7	29.5	31.6	30.4	31.6	32.8	31.6

* including Angola from 2007

So which call is most accurate? The answer is that this will depend upon the issues that are causing the *miscellaneous-to-balance*. In recent years there appears to have been an understatement of demand. If so, then the adjusted call will provide the best indicator (a glance at Table 1 shows that on a yearly average basis actual OPEC production is closer to the adjusted call). However, in recent months, issues such as the anecdotal reports of a 25 mb build in Chinese strategic reserves could mean that the adjusted call is perhaps an overstatement – leaving the true call somewhere between the *arithmetical call* and the *adjusted call*.

Ultimately, we would like to be able to estimate the *call* with pinpoint precision, but the reality is that a range provides a better perspective – one that will widen and contract as data uncertainties fluctuate. It will not eradicate the comments that we over or understate demand and supply in certain periods, but perhaps a few more knowing looks will be exchanged every time such comments are made.

DEMAND

Summary

- **Global oil product demand** has been kept virtually unchanged at 84.5 mb/d in 2006 and 86.0 mb/d in 2007. Downward revisions to 4Q06 OECD data were largely offset by upward changes in non-OECD figures. In percentage terms, world demand is estimated to have grown by 1.0% in 2006; in 2007, it is expected to increase by 1.8%.

Global Oil Demand (2005-2007)

(million barrels per day)

	1Q05	2Q05	3Q05	4Q05	2005	1Q06	2Q06	3Q06	4Q06	2006	1Q07	2Q07	3Q07	4Q07	2007
Africa	2.9	2.9	2.8	2.9	2.9	3.0	3.0	2.9	3.0	2.9	3.0	3.0	2.9	3.0	3.0
Americas*	30.6	30.4	30.8	30.6	30.6	30.2	30.3	30.7	30.6	30.5	30.8	30.6	31.3	31.3	31.0
Asia/Pacific**	25.0	23.4	23.4	24.4	24.0	25.1	24.1	23.8	25.0	24.5	25.3	24.6	24.5	25.7	25.0
Europe***	16.4	15.9	16.2	16.4	16.2	16.6	15.8	16.1	16.3	16.2	16.3	15.8	16.2	16.5	16.2
FSU	3.8	3.7	3.8	3.9	3.8	3.9	3.7	4.0	4.3	4.0	3.9	3.8	4.0	4.5	4.0
Middle East	6.0	6.1	6.4	6.0	6.1	6.3	6.4	6.7	6.4	6.5	6.6	6.7	7.0	6.7	6.8
World	**84.7**	**82.5**	**83.4**	**84.2**	**83.7**	**85.0**	**83.3**	**84.1**	**85.5**	**84.5**	**85.9**	**84.6**	**85.9**	**87.7**	**86.0**
Annual Chg (%)	2.8	1.6	1.7	0.2	1.6	0.4	1.0	0.9	1.5	1.0	1.0	1.6	2.1	2.6	1.8
Annual Chg (mb/d)	2.3	1.3	1.4	0.2	1.3	0.4	0.8	0.8	1.2	0.8	0.9	1.3	1.8	2.2	1.5
Changes from last month's report	-	-0.01	-0.02	-	-0.01	-	0.01	0.01	-0.04	-0.01	-0.35	0.03	-0.04	0.32	-0.01

* OECD North America & Latin America

** OECD Pacific, China & other Asia

*** OECD & non-OECD

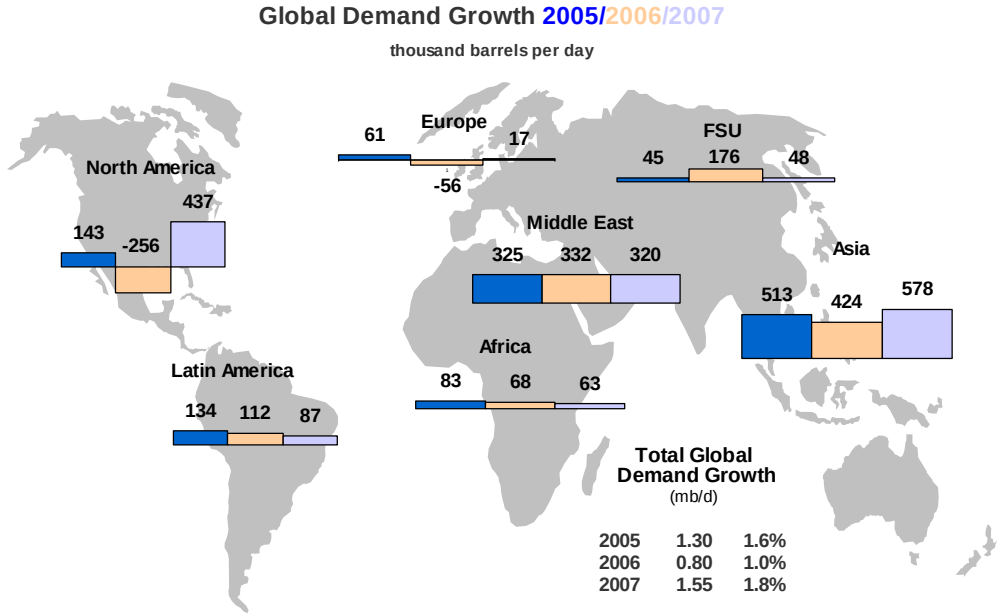
- **OECD oil product demand** has been slightly lowered by 35 kb/d in 2006 and 56 kb/d in 2007. Data revisions and continuing mild temperatures, particularly in Europe and the Pacific, weighed down on heating and residual oil demand. Total OECD oil product demand is estimated to have declined by 0.9% in 2006, but is still expected to rebound by 0.8% in 2007 to 49.6 mb/d.

- **Non-OECD oil product demand** has been adjusted upwards slightly in 2006 and 2007, due to a rebasing of India's consumption and revisions to FSU and China apparent demand. Non-OECD oil product consumption is now estimated to have grown by 3.7% in 2006. This year, demand is expected to rise by 3.3% to 36.5 mb/d.

Worldwide Overview

Over the past few months, oil product demand has largely been driven by erratic weather conditions. After a mild start to the winter, North America endured severe cold snaps from late January, which bolstered demand. And despite the cold weather, transportation fuel demand remained robust in that region. Elsewhere, however, temperatures have been milder-than-normal, leading to significant reductions in demand in Europe and Asia Pacific, and to sharply higher exports from the FSU. We have therefore kept our global demand forecast for 2006 and 2007 virtually unchanged. In volumetric terms, we estimate that global oil product demand averaged 84.5 mb/d in 2006 (+1.0% year-on-year), and we foresee it will reach 86.0 mb/d in 2007 (+1.8%).

On the macroeconomic front, the stock exchange turmoil during the last week of February, seemingly prompted by sharp selling in China's Shanghai bourse and pessimistic comments by former Federal Reserve chairman Alan Greenspan, highlighted the downside risks to the global economy. While the capitalization of the Chinese stock market is small, the reaction highlights the importance of the country's economy – which is still racing ahead despite its dependence on exports – as a barometer of global growth. The turmoil has also reminded investors that any slowing of the US economy entails risks for global economic activity. Indeed, US 4Q06 GDP growth was sharply revised downwards, from an earlier 3.5% year-on-year to 2.2% – the second quarter in a row of below-trend growth. Moreover, there is growing evidence that the stalling housing market will eventually curb private consumption. On the one hand, the rate of default of 'sub-prime' (lowest-quality) mortgages has soared over the past months; on the other, bank lending (credit card) is growing, indicating that US consumers are increasingly unable to borrow from their housing wealth, as was the case during the real estate boom. As such, if the Federal Reserve concludes that the risks of a sharp slowdown are higher than inflationary pressures, it could well ease monetary policy by the second half of the year.



Nevertheless, other economies could help limit the negative effects of a US slowdown. Europe – particularly Germany – is holding its ground, despite earlier expectations that last year's strong growth would peter out in 2007, reflecting concern that consumers had brought forward their spending ahead of the January VAT increase. The United Kingdom and Scandinavia are also growing fast, with France following, although at a slower pace. Two European countries, though, face significant risks: Spain and Italy. In both countries, productivity is stagnant, labour costs are rising faster than elsewhere in the EU and output depends essentially on their overheated housing markets. We have therefore maintained our GDP assumptions, and are unlikely to make any significant revisions until the next IMF forecasts are released in April.

OECD

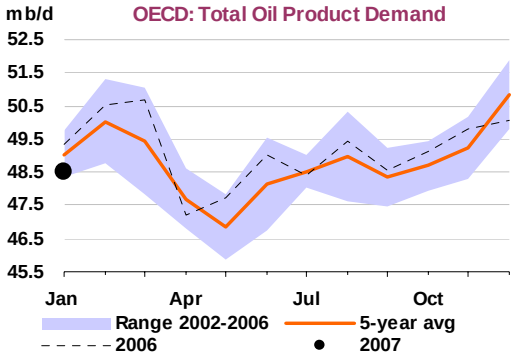
Total OECD demand growth was negative in January (-1.7% versus levels of a year ago) across all regions bar North America and lower than that of December. The month-on-month change is a typical seasonal variation; the year-on-year fall was due to continuing mild temperatures, which weighed down on both heating and fuel oil demand. Thus, inland deliveries fell by 4.5% in Europe and by 3.2% in the Pacific. However, deliveries rose by 1.4% in North America. Last month's cold snap lent more support to demand in North America (it was reportedly the coldest February on record in almost three decades), and briefly in Europe and the Pacific (by the end of the month temperatures in the latter two regions rose again).

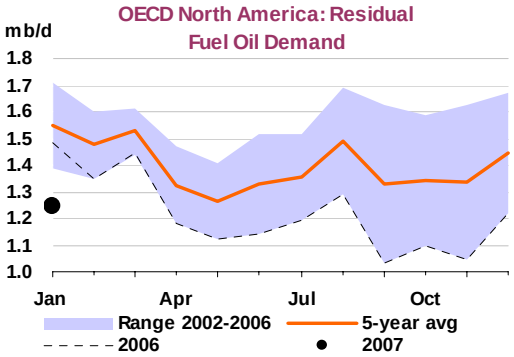
OECD Demand based on Adjusted Preliminary Submissions - January 2007
(million barrels per day)

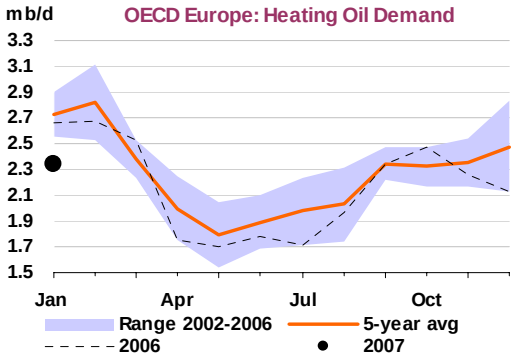
	Gasoline		Jet/Kerosene		Diesel		Other Gasoil		RFO		Other		Total Products	
	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa
OECD North America	**10.41**	**2.8**	**1.79**	**-1.8**	**3.52**	**5.0**	**1.65**	**-7.8**	**1.24**	**-16.3**	**6.47**	**4.87**	**25.08**	**1.4**
USA*	8.96	2.3	1.57	-2.5	3.03	5.2	1.12	-13.8	0.69	-22.8	5.13	6.5	20.49	1.2
Canada	0.67	6.0	0.11	-1.0	0.18	1.4	0.39	9.8	0.14	-1.9	0.66	2.1	2.17	4.1
Mexico	0.71	6.5	0.07	11.7	0.25	5.4	0.11	5.4	0.32	-10.7	0.62	-4.2	2.08	0.1
OECD Europe	**2.25**	**-4.0**	**1.22**	**6.2**	**3.75**	**5.5**	**2.35**	**-11.8**	**1.77**	**-10.5**	**3.52**	**-1.2**	**14.85**	**-2.6**
Germany	0.42	-10.7	0.17	3.3	0.51	2.4	0.43	-27.8	0.19	13.2	0.59	2.5	2.31	-6.6
UK	0.42	-2.0	0.37	12.1	0.43	5.1	0.13	-12.1	0.09	6.3	0.36	-13.7	1.80	-1.0
France	0.21	-3.2	0.15	1.2	0.62	3.9	0.45	-8.0	0.13	-18.0	0.46	-3.6	2.01	-3.2
Italy	0.28	-2.6	0.08	2.0	0.51	6.8	0.11	-26.7	0.22	-38.0	0.34	-9.8	1.54	-10.7
Spain	0.13	-7.1	0.10	6.8	0.48	6.5	0.26	-7.3	0.22	-2.1	0.42	3.7	1.61	0.9
OECD Pacific	**1.45**	**-4.0**	**1.25**	**-21.8**	**1.09**	**0.7**	**0.56**	**-22.5**	**1.02**	**-14.9**	**3.23**	**-1.2**	**8.60**	**-8.3**
Japan	0.91	-7.4	0.88	-25.5	0.51	-7.0	0.44	-23.9	0.52	-20.9	1.92	-6.5	5.19	-13.7
Korea	0.16	-0.2	0.24	-16.6	0.28	9.6	0.12	-18.3	0.47	-7.4	1.10	8.1	2.37	-0.2
Australia	0.32	5.2	0.10	4.3	0.25	8.5	0.00	32.0	0.02	-7.0	0.19	8.3	0.88	6.3
OECD Total	**14.10**	**0.9**	**4.26**	**-6.8**	**8.35**	**4.6**	**4.56**	**-11.9**	**4.03**	**-13.5**	**13.22**	**1.7**	**48.53**	**-1.7**

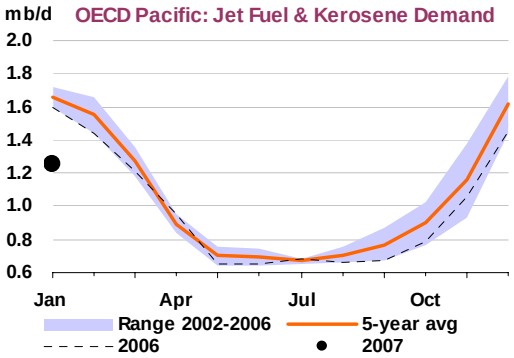
* Fifty states only

Coupled with data revisions from country submissions, we made a 35 kb/d downward adjustment of OECD demand in 2006, to 49.2 mb/d. For the year as a whole, OECD demand fell by 0.9%, compared with our previous estimate of -0.8%. For 2007, we have kept our growth forecast unchanged at +0.8%, assuming normal temperatures throughout the rest of the year.









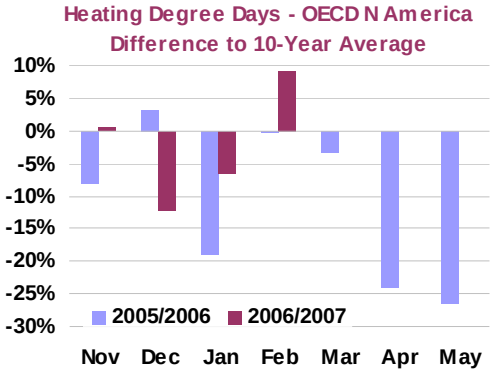
Total OECD Demand by Product
(million barrels per day)

	2005	2006	1Q06	2Q06	3Q06	4Q06	Oct 06	Nov 06	Dec 06*	Latest month vs. Nov 06	Latest month vs. Dec 05
LPG & Ethane	4.74	4.62	5.03	4.44	4.37	4.63	4.30	4.62	4.98	0.36	-0.36
Naphtha	3.22	3.16	3.22	2.94	3.13	3.35	3.28	3.35	3.43	0.09	0.25
Motor Gasoline	14.84	14.88	14.35	14.96	15.27	14.93	14.90	14.79	15.10	0.31	0.03
Jet & Kerosene	4.25	4.18	4.48	3.99	3.98	4.28	4.03	4.20	4.60	0.39	-0.41
Gas/Diesel Oil	13.06	13.21	13.74	12.65	12.87	13.58	13.75	13.77	13.23	-0.54	-0.52
Residual Fuel Oil	4.44	4.02	4.65	3.79	3.81	3.84	3.67	3.85	4.00	0.15	-0.77
Other Products	5.06	5.10	4.73	5.23	5.38	5.05	5.20	5.24	4.71	-0.53	-0.04
Total Products	**49.62**	**49.16**	**50.19**	**48.00**	**48.81**	**49.67**	**49.14**	**49.83**	**50.04**	**0.22**	**-1.81**

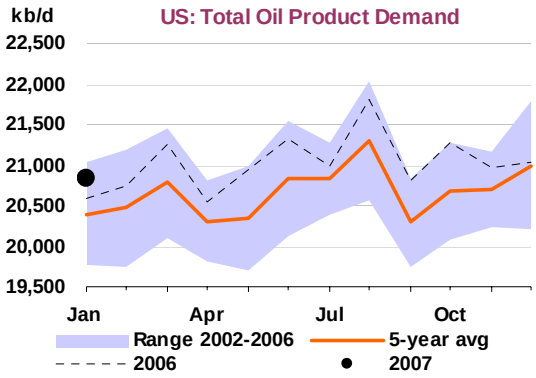
* Latest official OECD submissions (MOS)

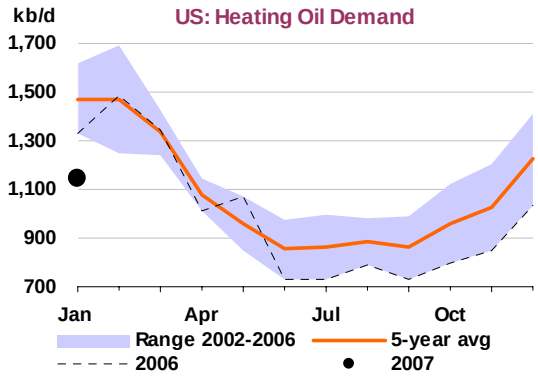
North America

According to preliminary data, January's inland deliveries in the continental **United States** – a proxy of demand – rose by 1.2% versus January 2005. Gasoline and diesel gains offset losses in other product categories. Furthermore, preliminary weekly data show a strong demand increase in February (+4.8%). These figures, however, are likely to be revised once monthly data are compiled.



This volatile demand pattern is largely due to the weather, from an unusually warm January to a very cold February. In OECD North America, the number of 'heating-degree days' (HDDs) in January was 7% lower than the 10-year average, but 9% higher than average in February. Changing temperatures had a downward effect upon heating and fuel oil demand in January, but supported it in February.





OECD North America Demand by Product

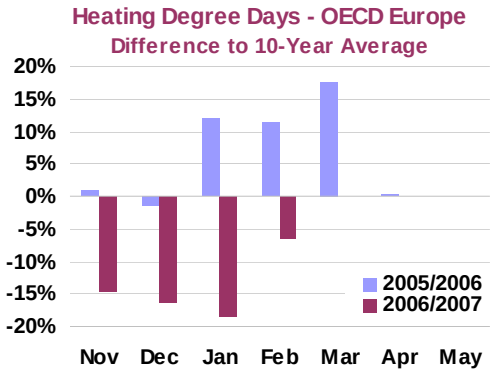
(million barrels per day)

	2005	2006	1Q06	2Q06	3Q06	4Q06	Oct 06	Nov 06	Dec 06*	Latest month vs. Nov 06	Latest month vs. Dec 05
LPG & Ethane	2.82	2.77	2.98	2.65	2.66	2.82	2.68	2.84	2.93	0.09	-0.26
Naphtha	0.46	0.43	0.37	0.41	0.45	0.48	0.48	0.50	0.46	-0.04	0.09
Motor Gasoline	10.59	10.73	10.35	10.80	11.00	10.78	10.80	10.68	10.86	0.18	0.08
Jet & Kerosene	1.97	1.91	1.87	1.95	1.94	1.89	1.91	1.87	1.90	0.03	-0.14
Gas/Diesel Oil	5.09	5.17	5.35	5.01	5.06	5.28	5.33	5.28	5.23	-0.05	-0.09
Residual Fuel Oil	1.56	1.22	1.43	1.15	1.17	1.12	1.10	1.05	1.22	0.17	-0.45
Other Products	3.02	3.02	2.78	3.14	3.18	2.97	3.11	3.05	2.76	-0.29	-0.02
Total Products	**25.52**	**25.26**	**25.12**	**25.09**	**25.47**	**25.35**	**25.40**	**25.27**	**25.37**	**0.09**	**-0.78**

* Latest official OECD submissions (MOS)

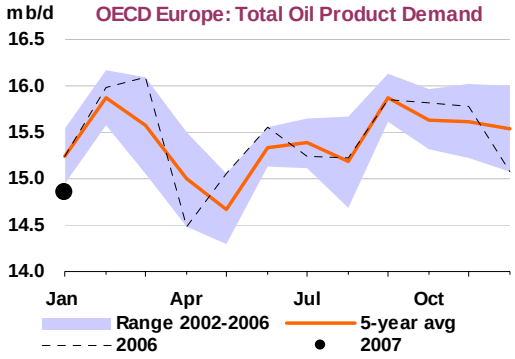
Europe

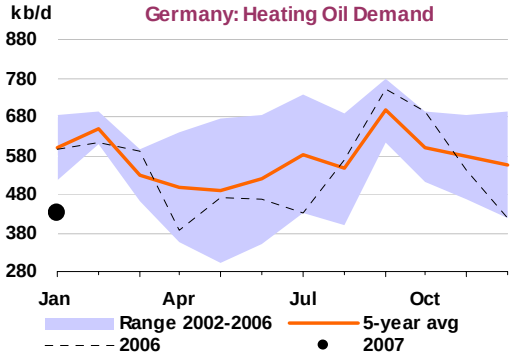
In January, oil product demand in Europe declined by 2.6% compared with the same month in 2006, dragged down mostly by heating and residual oil (-11.8% and -10.5%, respectively). Continued mild temperatures curbed heating oil demand (HDDs were some 18% lower than normal in January), while low gas prices and subdued peak electricity demand weighed down on fuel oil use. Similarly, the mild temperatures left German domestic heating oil stocks (the continent's main market) at high levels. By contrast, jet fuel and diesel demand recorded strong gains (+6.2% and +5.5%, respectively) as economic activity resumed in earnest following the end of the holiday season.



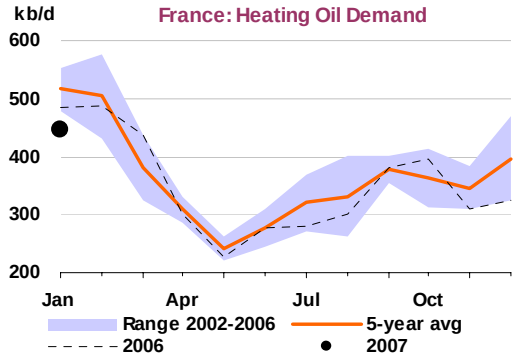
Germany's preliminary data indicate that January's heating oil deliveries contracted by 27.8% on an annual basis, with persistent mild weather throughout the month and consumer stocks still relatively plentiful (with domestic storage tanks filled at approximately 60% of capacity by month-end, four percentage points less than in December). Moreover, despite February's cold snap, heating oil deliveries are unlikely to have risen, as consumers drew on their stocks, which were built up ahead of January's VAT tax rise. On aggregate, this would point to weak heating oil demand in 1Q07, as we have suggested in previous issues of this report. Meanwhile, gasoline deliveries plummeted (-10.7% year-on-year), while those of diesel slowed down (+2.4%), confirming that the strong growth recorded in December (+9.6% and +13.1%, respectively) had also been prompted by anticipated purchases ahead of the VAT increase. Meanwhile, jet/kerosene deliveries rose by 3.3% versus year-ago levels.

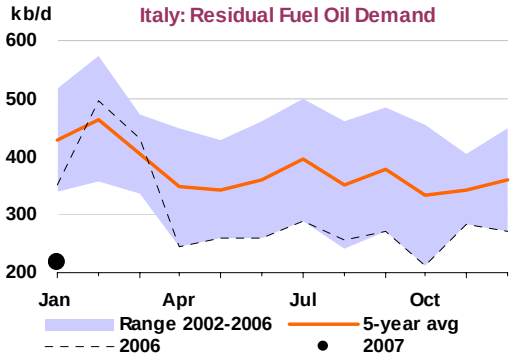
As in Germany, deliveries of heating oil in **France** and **Italy** were also weak (-8.0% and -26.7%, respectively, compared with January 2006) because of continuing mild weather. Similarly, in both countries residual fuel oil demand contracted (by -18.0% and -38.0%, respectively). In addition to the weather, it should be noted that, despite a shortfall of hydro power generation given relatively scarce rainfall, the sharp fuel oil fall in Italy is due to structural substitution for other fuels, primarily natural gas. Furthermore, by contrast to this year, 1Q06 demand was supported by interruptions to Russian natural gas supplies (January 2006), which prompted Italian utilities to buy in fuel oil.





In late January, Italy's service station operators called for a total 14 days of strikes to protest against a government decree that allows shopping centres and supermarkets to sell fuel, abolishes rules establishing minimum distances between stations and extends opening hours. The stated goal is to encourage competition and bring about lower prices for transportation fuels (Italian retail prices are among the highest on the continent). Nevertheless, it is unclear whether the protest will succeed and force the government to backtrack by creating crippling shortages – and ultimately curbing transportation fuel demand in 1Q07. Indeed, the first two days of stoppage (on 7 and 8 February) were followed by only 38.5% of motorway stations, according to consumer groups (by 90%, according to the unions), while the second planned stoppage (from 27 February to 2 March) was called off, allegedly because of ongoing talks with the Industry Ministry. In any case, February data may highlight an unusual surge in gasoline and diesel demand, since consumers may have engaged in some precautionary buying as a result of the strike threat.





OECD Europe Demand by Product
(million barrels per day)

	2005	2006	1Q06	2Q06	3Q06	4Q06	Oct 06	Nov 06	Dec 06*	Latest month vs. Nov 06	Latest month vs. Dec 05
LPG & Ethane	1.03	0.96	1.13	0.96	0.83	0.90	0.83	0.87	1.00	0.13	-0.19
Naphtha	1.18	1.11	1.20	1.05	1.07	1.14	1.12	1.12	1.18	0.06	0.01
Motor Gasoline	2.64	2.55	2.44	2.61	2.64	2.53	2.54	2.53	2.53	0.00	-0.04
Jet & Kerosene	1.24	1.28	1.19	1.28	1.37	1.28	1.33	1.27	1.24	-0.03	-0.01
Gas/Diesel Oil	6.10	6.21	6.46	5.85	6.12	6.42	6.66	6.58	6.04	-0.54	-0.30
Residual Fuel Oil	1.84	1.80	2.06	1.70	1.73	1.73	1.70	1.78	1.71	-0.08	-0.24
Other Products	1.50	1.52	1.29	1.59	1.67	1.54	1.63	1.63	1.37	-0.26	0.05
Total Products	**15.52**	**15.45**	**15.77**	**15.03**	**15.43**	**15.55**	**15.81**	**15.78**	**15.07**	**-0.71**	**-0.71**

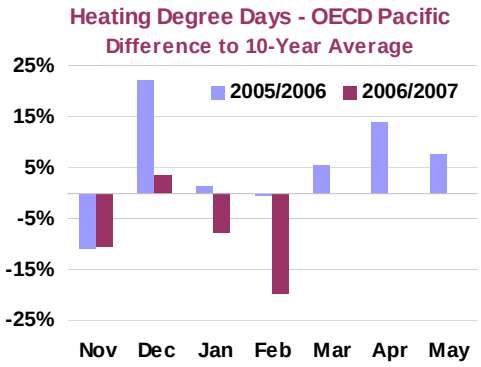
* Latest official OECD submissions (MOS)

Pacific

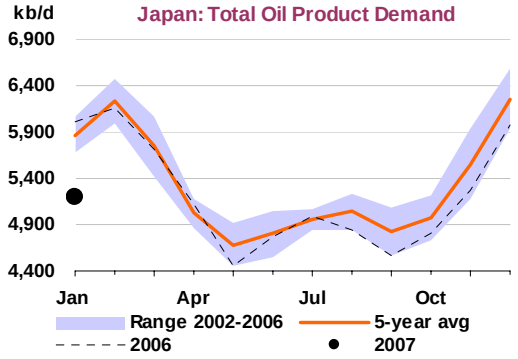
According to preliminary data, total oil product demand in **Japan** declined sharply in January (-13.7% year-on-year). This was mostly due to weak inland deliveries of jet/kerosene (-25.5%) as a result of balmy winter conditions (demand for kerosene, which is widely used for heating in Japan, normally peaks in January). Despite a colder-than-average December, January was unusually warm (HDDs in the Pacific were about 8% lower than normal), and this mildness continued well into February (HDDs were some 20% lower than average). As such, average temperatures in January contrasted sharply

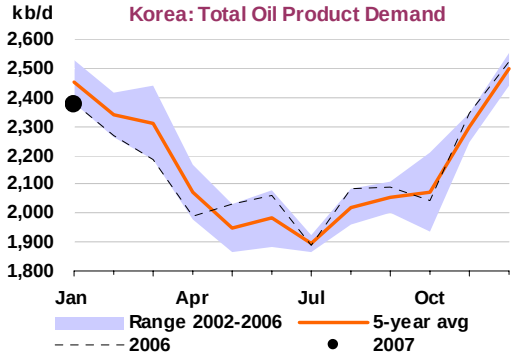
with those registered during the same month of 2006, which was particularly cold. By the same token, electricity demand remained subdued and utilities required less residual fuel oil (-20.9%) and other low-sulphur gasoil (-23.9%).

There is a possibility, however, that these figures may be revised next month, since the drop in products such as gasoline or diesel (-7.4% and -7.0%, respectively), although in line with expected trends, is astonishingly large. Nevertheless, the unusually warm weather justifies a downward revision of Japanese demand of about 135 kb/d in 1Q07, implying a fall of 2.0% for 2007 as a whole when compared with 2006.



In **Korea**, the mild weather also weighed down on jet/kerosene demand (-16.6% year-on-year), non-automotive gasoil (-18.3%) and residual fuel oil (-7.4%). Total oil product demand, though, was supported by the continued strength of naphtha (+13.4%), which will remain the driving force behind Korea's consumption growth, as we have previously observed. Overall, the country's oil product demand fell by only 0.2% on a yearly basis.





OECD Pacific Demand by Product
(million barrels per day)

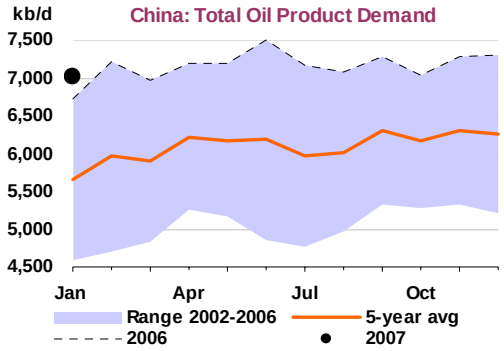
	2005	2006	1Q06	2Q06	3Q06	4Q06	Oct 06	Nov 06	Dec 06*	Latest month vs. Nov 06	Latest month vs. Dec 05
LPG & Ethane	0.89	0.89	0.92	0.84	0.88	0.91	0.79	0.91	1.04	0.14	0.08
Naphtha	1.58	1.62	1.65	1.48	1.60	1.73	1.68	1.73	1.79	0.07	0.15
Motor Gasoline	1.61	1.59	1.56	1.55	1.63	1.62	1.57	1.58	1.71	0.13	-0.01
Jet & Kerosene	1.04	0.98	1.42	0.75	0.67	1.10	0.79	1.06	1.45	0.39	-0.27
Gas/Diesel Oil	1.87	1.82	1.92	1.80	1.69	1.88	1.77	1.92	1.96	0.04	-0.13
Residual Fuel Oil	1.05	1.00	1.16	0.95	0.91	0.99	0.87	1.02	1.08	0.05	-0.08
Other Products	0.55	0.56	0.67	0.50	0.52	0.53	0.47	0.56	0.57	0.01	-0.07
Total Products	**8.59**	**8.46**	**9.30**	**7.87**	**7.90**	**8.77**	**7.93**	**8.77**	**9.60**	**0.83**	**-0.32**

* Latest official OECD submissions (MOS)

Non-OECD

China

According to preliminary data, January's apparent demand (defined as refinery output plus net oil product imports, adjusted for fuel oil and direct crude burning, smuggling and stock changes) increased by 4.1% on an annual basis. Growth was mostly driven by naphtha (+12.4%), gasoline (+3.3%), gasoil (+5.9%) and 'other' products (+27.0%). Following further revisions to last year's monthly data, particularly in 4Q06, we estimate that demand in 2006 averaged 7.2 mb/d, slightly higher than in our last report, bringing yearly growth to 6.9%. For 2007, we estimate that total oil product demand will rise by about 6.1% to 7.6 mb/d.



January's relatively modest – by Chinese standards – pace of growth is explained by the fact that oil product demand was particularly strong in January 2006, buoyed by the Lunar New Year festivities. In 2007, by contrast, these celebrations – which prompt a surge in demand, particularly of gasoil, as many Chinese citizens travel back home – took place in February. In anticipation, the government ordered refiners to cut gasoil exports during the month in order to meet a surge of domestic demand in February. In late January, the government also reduced jet fuel surcharges for domestic airlines by 17-20%, arguably to encourage air travel (the surcharges had been raised in August 2006). According to the new rules issued by China's National Development and Reform Commission (NDRC) and the General Administration of Civil Aviation, the surcharge for flights shorter than 800 km fell from Rmb 60 to Rmb 50, while those applied to flights longer than 800 km were reduced from Rmb 100 to Rmb 80.

China Demand by Product
(thousand barrels per day)

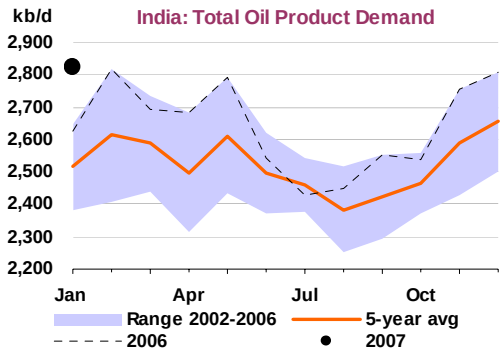
	Demand			Annual Chg (kb/d)		Annual Chg (%)	
	2005	**2006**	**2007**	**2006**	**2007**	**2006**	**2007**
LPG & Ethane	649.5	632.8	654.7	-16.7	21.9	-2.6	3.5
Naphtha	706.8	825.6	915.0	118.8	89.4	16.8	10.8
Motor Gasoline	1,130.8	1,169.5	1,238.8	38.8	69.2	3.4	5.9
Jet & Kerosene	245.8	279.6	301.7	33.8	22.1	13.8	7.9
Gas/Diesel Oil	2,238.8	2,338.0	2,465.5	99.2	127.5	4.4	5.5
Residual Fuel Oil	778.0	776.1	786.4	-1.8	10.3	-0.2	1.3
Other Products	943.1	1,135.0	1,234.6	191.9	99.6	20.3	8.8
Total Products	**6,692.7**	**7,156.6**	**7,596.7**	**463.9**	**440.1**	**6.9**	**6.1**

According to recently released data from the *China Electric Power News*, over the next few years the country is unlikely to see a repeat of its 2004 oil demand surge – when electricity shortages were met mostly by small diesel generators, especially in the countryside. Indeed, China reportedly expanded its generating capacity by some 102 gigawatts (GW) in 2006 to a total of about 520 GW. This increase – to be replicated in 2007 – is roughly equivalent to the entire capacity of a large European country such as France or the United Kingdom.

It should be noted, however, that many analysts, who expected a rise of 'only' 75-80 GW, are questioning the official figure. But even under the lower estimate, the generating margin (the spare capacity available to meet peak demand) is likely to reach some 10 GW this summer, compared with a 40 GW shortfall in 2004. Most of the new plants (90%) are reportedly coal-fired (hydropower accounts for some 9%, while nuclear and other represent less than 1%). Coal's cost advantage over oil or even gas is arguably the main driver: for example, LNG (the main source of supply in coastal cities) should need to trade at about $3.30-3.60/mmbtu to compete with coal, instead of the current $7-9/mmbtu (including subsidies, which will be in principle gradually phased out).

Other Non-OECD

According to preliminary data, **India's** oil product demand rose by 7.5% year-on-year in January, mostly driven by strong gains both in naphtha (+28%) and transportation fuels (gasoline sales rose by 8.5%, jet/kerosene by 2.7% and gasoil by 8.2%). Naphtha's vigorous increase is related to natural gas shortages, as we had anticipated in our last report, and to some pricing issues (discussed below). The strength of transportation fuels sales, albeit seasonal (winter is usually the peak season for tourist and business travel), was arguably also related to stock building, with retailers keeping inventories low in anticipation of government-mandated price cuts (as happened in December).



In terms of overall oil product demand, we have made minor adjustments to our 2005 baseline following the submission of new data. Coupled with a few revisions to 2006, India's demand was actually flat in 2005 (compared with a previous estimate of 0.8%), rising by 2.5% in 2006 (versus 2.7% in our last report). For 2007, we foresee that total demand will rise by 3.1% to about 2.7 mb/d (marginally above our previous forecast of 2.6%).

India's Price Distortions

Following November's retail price cut, the government mandated a second in mid-February, thereby reducing gasoline and diesel prices by 4.5% and 3.2%, respectively. The caps on LPG and kerosene prices were also maintained. The move was ostensibly dictated by the need to curb inflation, but political motives are also at play – in late February the ruling Congress Party lost elections in the states of Punjab and Uttarakhand, and seeks to keep a majority in its fief of Uttar Pradesh, India's most populous state.

Nevertheless, this second cut will further harm the financial position of India's downstream players. As we have previously noted in this report, price controls (re-imposed in 2004 after the 2002 liberalization) have gradually eroded retailing margins, given the rise in international oil prices. As a result, the country's refiners and marketers incur losses – so much so that some private players, such as Reliance, are trying to export as much oil product as possible, manufacturing jet fuel and gasoil that meet European and Asian specifications, and in the process nurturing India's transformation into a global refining hub. Acknowledging the problem, the government's fiscal 2007-2008 budget, presented in late February, will attempt to reduce the magnitude of downstream losses by cutting import excise taxes on crude oil from 8% to 6%, but it remains to be seen whether this will have a significant offsetting impact.

The price conundrum is also a potential obstacle to the country's avowed goal of using more natural gas, both domestic and imported (LNG), for petrochemical activities and power generation. Currently, India has two gas price mechanisms. On the one hand, both gas from domestic fields developed by Indian companies with foreign partners and regasified LNG can be sold at market prices. On the other, older gas production, mostly from fields operated by state-owned Oil and Natural Gas Corporation (ONGC), is sold at much lower prices, under the government's Administered Pricing Mechanism (APM).

An unintended consequence of this dual system is that some LNG operators, such as Shell, are seeing a lack of demand for their gas despite overall country shortages, which have forced petrochemical plants and domestic utilities to use naphtha as a feedstock over the past few months. As with oil products, the government has offered a partial solution by ruling out the construction of new gas-fired power generation plants, focusing instead on large coal-fired stations, on the grounds that natural gas shortages will last several years – despite the fact that recent significant gas finds in the Krishna Godavari basin by Reliance Industries and by ONGC, Cairn and Gujarat State Petroleum Corporation in a nearby area could arguably lead to a reduction in LNG imports in as little as three to four years.

FSU apparent demand – defined as domestic crude production minus net exports of crude and oil products – has been revised downwards by 255 kb/d in 1Q07, given both lower crude production and net exports. Unlike last year, production has reportedly been hampered by the mild weather, especially in Siberia (the tundra was too wet, rendering operational activities more difficult). Higher January seaborne exports from the Black Sea were somewhat offset by reductions in deliveries from both the BTC and Druzhba pipelines (the latter because of a transit dispute between Russia and Belarus). Moreover, we have also revised upwards 4Q07 demand by 267 kb/d to account for the weak 4Q06. As such, the region's annual growth rate for 2006 remains virtually unchanged at 1.2%, reaching 4.0 mb/d on average. Nevertheless, we are pursuing our efforts to develop a more solid demand benchmark than our current 'apparent consumption' proxy.

According to preliminary data, **Brazil's** oil product demand grew by 2.1% in 2006, when compared with 2005, to about 2.2 mb/d. Even though minor data revisions are likely, this rate is commensurate with the country's somewhat lacklustre economic expansion, with most product categories increasing by only 1-2%. The only exception, of course, is 'other' products, which include ethanol – this category shot up by 11.8% in 2006. Regarding 2007, we expect oil product demand to grow by 1.9%.

The surge in Brazilian ethanol demand – which now represents roughly 10% of oil-based transportation fuels (gasoline and diesel) – is understandable, considering the strong sales of flex-fuel vehicles and its wide price differential with gasoline. However, ethanol's lower energy content means that if demand were measured on a gasoline equivalent basis, growth would be even lower.

SUPPLY

Summary

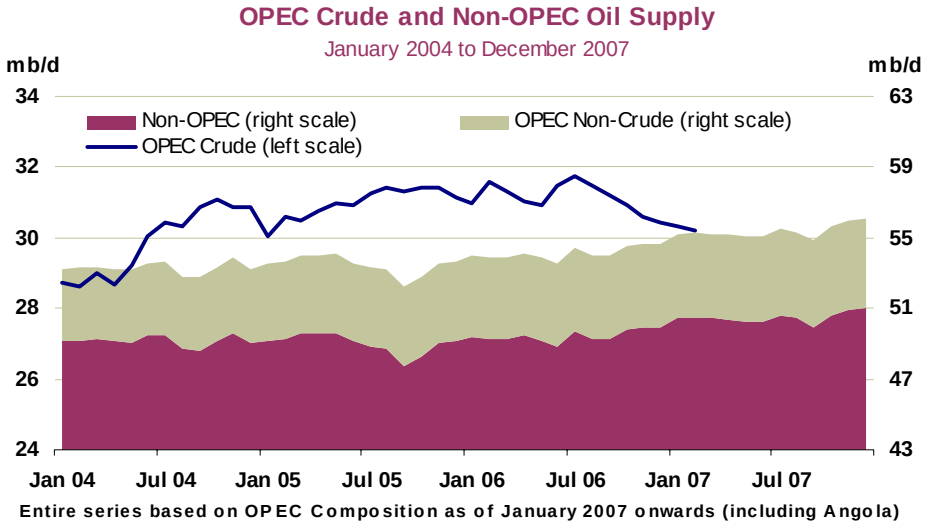
- **World oil supply** drifted lower by 65 kb/d in February to 85.5 mb/d as a 130 kb/d reduction in total OPEC supply countered a modest rise from non-OPEC. Preliminary data suggest that the UK, Canada, Kazakhstan, Brazil, Angola and Iraq saw higher February output, offset by markedly lower production from the US, Mexico, Norway, Saudi Arabia and Venezuela.

- **Non-OPEC supply growth** for 2007 is held largely unchanged at 1.1 mb/d, with a further 0.2 mb/d of growth coming from OPEC gas liquids. Yearly growth of around 1 mb/d has been evident since 3Q06, initially due to weak year-earlier levels, but this has been sustained into 1Q07. Non-OPEC growth this year therefore should regain levels seen in the first half of the decade, after weak growth in 2005 and early 2006. Russia, Azerbaijan, Brazil, Sudan, Canada and Australia are the main drivers in 2007. Downward adjustments are made to 2007 supply from North and Latin America and Kazakhstan, partly offset by upward revision to China, Russia and Malaysia.

- **Total OPEC crude supply** averaged 30.2 mb/d in February, a fall of 125 kb/d versus January. Recovering southern exports pushed Iraqi supply up by 185 kb/d to 1.9 mb/d while rising new field output saw Angolan production breach 1.55 mb/d. Offsetting supply cuts came from all other OPEC members, led by Saudi Arabia (100 kb/d), Venezuela (65 kb/d), Kuwait, Iran and UAE (35-40 kb/d each). Nigerian production continues to struggle, with up to 800 kb/d of shuttered production in early March. Effective spare OPEC capacity was up by 320 kb/d to 2.8 mb/d in February. Sustainable production capacity could rise by some 800 kb/d to 35 mb/d by end-2007.

- **OPEC-10 (excluding Angola and Iraq) output** fell by 365 kb/d in February, taking reductions in overall supply to 1.0 mb/d since September and 1.5 mb/d since the previous high point in July. Comments by OPEC representatives suggest that output targets may remain unchanged at the organisation's 15 March meeting in Vienna if prices remain close to recent levels.

- **The baseline 'call on OPEC crude and stock change'** is revised down by 0.3 mb/d for 1Q07 reflecting weaker demand. A counteracting upward revision in 4Q07 reflects demand rebound under normal weather after an exceptionally mild 4Q06. However, the report now also presents the 'call' as a range, with an expected high-end incorporating non-OPEC supply risks and a historical average of the report's miscellaneous-to-balance item. February OPEC supply was already within range of the expected 2Q low for the call.



All world oil supply figures for February discussed in this report are IEA estimates. Estimates for OPEC countries, Alaska, Kazakhstan 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. 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. These aside, no contingency allowance for random events is subtracted from the supply forecast. While upside variations can occur, experience in recent years indicates that the random events listed above may cause supply losses of between 300 kb/d and 400 kb/d for non-OPEC supply each year.

OPEC

OPEC crude supply fell by an estimated 125 kb/d in February to 30.2 mb/d. This was compared with a 155 kb/d upward-revised January base of 30.3 mb/d (both Nigeria and Iraq were revised up for January). While in February Iraq boosted supply by 185 kb/d and Angola by 55 kb/d, output from all of the remaining OPEC producers fell, by a collective 365 kb/d. Saudi Arabia's production declined by 100 kb/d to 8.6 mb/d, with Venezuela, Kuwait, UAE and Iran each trimming supplies by between 35 kb/d and 65 kb/d.

February marked the seventh straight month of reduced supply from the OPEC-10 (excluding Iraq and Angola), with output of 26.8 mb/d being around 1.0 mb/d below last September and 1.5 mb/d below the previous high point in July 2006 of 28.2 mb/d. Cuts agreed last October were due to curb supply from November onwards by 1.2 mb/d versus a September baseline. Then, OPEC's December meeting flagged a cut of 500 kb/d from an unspecified base to take place from February.

OPEC Ministers will meet in Vienna on 15 March. Comments ahead of that meeting suggest that, with prices remaining above $60/bbl, there are unlikely to be calls for further production cuts over and above those already agreed. It is always dangerous to pre-judge OPEC decisions, but it would appear that even hitherto hawkish members Iran and Venezuela are stressing compliance with existing targets rather than further supply curbs. We note that February production of 30.2 mb/d stands 400 kb/d below the low of the range for the 1Q *call on OPEC crude and stock change* and well within the likely range for the second quarter *call*.

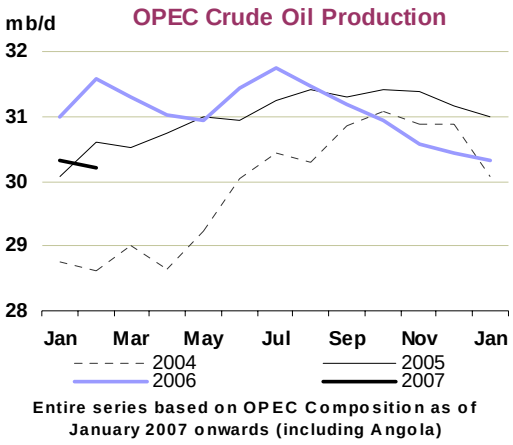
OPEC Crude Production[1]
(million barrels per day)

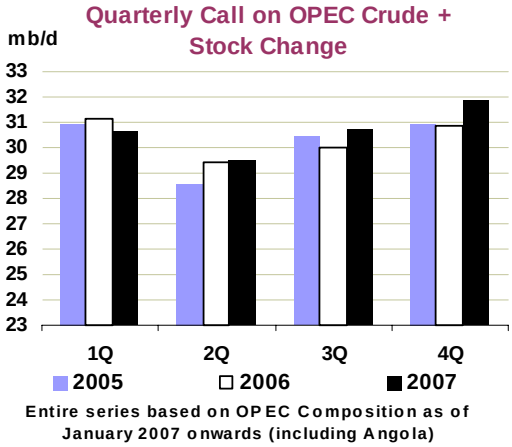
	1 July 2005 Target[2]	1 November 2006 Target[2]	February 2007 Production	Sustainable Production Capacity[3]	Spare Capacity vs Feb 2007 Production
Algeria	0.89		1.32	1.39	0.07
Indonesia	1.45		0.84	0.95	0.12
Iran	4.11		3.87	3.95	0.09
Kuwait[4]	2.25		2.42	2.60	0.18
Libya	1.50		1.69	1.75	0.06
Nigeria[5]	2.31		2.25	2.47	0.22
Qatar	0.73		0.80	0.85	0.05
Saudi Arabia[4]	9.10		8.60	10.80	2.20
UAE	2.44		2.56	2.70	0.14
Venezuela[6]	3.22		2.43	2.70	0.28
Subtotal	**28.00**	**26.30**	**26.76**	**30.16**	**3.40**
Angola[1]			1.57	1.57	0.00
Iraq			1.88	2.50	0.62
Total			**30.21**	**34.23**	**4.02**
(excluding Iraq, Nigeria, Venezuela, Indonesia					*2.79)*

1 Angola joins OPEC effective 1 January 2007.
2 Target production levels superseded by decision to cut output by 1.2 mb/d from 1 November 2006 and 0.5 mb/d from 1 February 2007. Implied aggregate production targets around 26.3 mb/d from November and 25.8mb/d from February.
3 Capacity levels can be reached within 30 days and sustained for 90 days.
4 Includes half of Neutral Zone Production.
5 Nigeria excludes some 545 kb/d of shut-in capacity
6 Includes Orinoco extra-heavy oil assumed at 525 kb/d in February

OPEC installed production capacity stands at 34.2 mb/d (including Iraq and Angola), implying spare capacity for February of around 4.0 mb/d. However, assuming that Angola is producing flat out, and that Indonesia, Iraq, Nigeria and Venezuela face impediments to raising supply in the short term, *effective* spare capacity is seen at 2.8 mb/d, some 300 kb/d above January levels. Essentially the

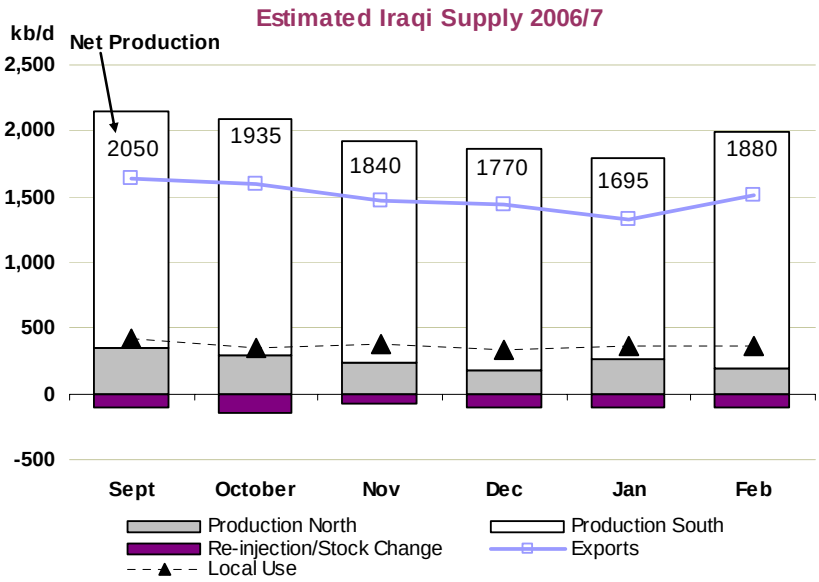
increase in spare capacity since last month derives from lower actual OPEC production. However, we have raised Iranian capacity by 50 kb/d to 3.95 kb/d on signs that the Soroush/Nowruz fields are now producing close to 190 kb/d capacity. Moreover OPEC capacity could potentially rise to 35.0 mb/d by end-2007, based on net increases from Angola, UAE, Qatar, Saudi Arabia, Kuwait and Libya. This pre-supposes that currently-shuttered Nigerian capacity in the Niger Delta region remains unavailable for the duration of 2007. A more detailed look at OPEC capacity developments will be included in an upcoming *OMR* and the subsequent *MTOMR* in July.





Production from **Angola** is estimated at 1.57 mb/d in February, 55 kb/d above January levels. With a series of new field start-ups scheduled for the first half of 2007 (build-up from the already-producing Dalia, plus start at the BBLT, Rosa and Greater Plutonia fields), Angolan production could reach 1.9 mb/d by the end of the year. However, it is believed that ongoing development projects at the time of Angola's accession to OPEC were ruled exempt ('*grandfathered*') from OPEC production curbs. This suggests that Angola may have a free hand to expand production to around 2.0-2.1 mb/d (attainable sometime in the first half of 2008) before it becomes subject to any future OPEC production restraint measures.

Iraqi crude supply broke a four-month run of decline, rising by 185 kb/d from an upward-revised January to reach 1.88 mb/d. With domestic refinery runs believed to have remained suppressed, the increase came entirely from higher exports via the southern ports of Basrah and Khor al-Amayah.



These reached 1.5 mb/d versus less than 1.2 mb/d in January. January levels were adversely affected by port closures for the installation of metering equipment and by weather-related loading delays. However, not all was good news on the export front and February saw scant replenishment of Ceyhan

storage after the lifting of 3 mb (97 kb/d) of Kirkuk crude by Mediterranean refiners in January. The Kirkuk-Ceyhan pipeline remained out of operation for most of February, leaving stocks at Ceyhan barely above 1 mb.

A report to the US Congress has painted a less-than-optimistic picture of progress over the past year in rehabilitating the Iraqi oil sector. Significant improvements in production and exports in 2007 are deemed unlikely. Well workovers, water injection and gas-oil separator projects hold the potential to boost wellhead production in 2007, but delays, insurgency and a lack of essential maintenance are seen as potentially impeding the supply outlook. A production target of 2.7 mb/d for 2006 has been downgraded to 2.1 mb/d for 2007, in line with gross output last year. Some sources see imminent passage of a new hydrocarbon law as providing scope to boost foreign investment, but outstanding disagreements and a lack of security cloud the picture (see below).

Iraq's Draft Hydrocarbon Law

Iraq's cabinet on 26 February approved a draft upstream hydrocarbon law which will be submitted to parliament in mid-March, potentially aiming for approval by end-May. While inevitably a compromise between centralist and regionalist interests, the draft confirms a much more state-orientated hydrocarbon sector than the laissez-faire model envisaged immediately after the toppling of Saddam. The law re-establishes the Iraqi National Oil Company (INOC) and creates a Federal Oil and Gas Council (FOGC) which will control the licensing process and approve development plans submitted by the Oil Ministry. INOC meanwhile will have total operational responsibility for existing fields and for selected, partially-developed fields including Majnoon and West Qurna which had previously been allocated to foreign developers under the Saddam regime. INOC will initially control 87% of Iraq's 115 billion barrels of proven oil reserves, also operating the pipeline network.

Oil revenues are to be pooled in a central account before redistribution to the regions on the basis of population. But details of the revenue sharing mechanisms have yet to be decided. Uncertainty surrounds the form of model contracts for new field developments. Regional authorities will be empowered to enter agreements with independent producing companies, subject to compliance with the Federal Law. A clause ruling out Production Sharing Agreements (PSAs) was reportedly dropped, assuaging the Kurdistan Representative Government (KRG), which has entered into deals for new field developments with five foreign companies. However, FOGC will reportedly only require a 66% majority to veto new contracts reached between foreign/private producers and regional governments. Attempts by parliament to claw back greater central control could lead to the KRG removing its guarded approval for the current draft, embarking on a go-it-alone approach.

Most commentators therefore see the new law as far from being a 'done deal', suggesting that strong lobbying will continue by more centralist tendencies to limit regional authorities' room for manoeuvre. Service contracts may become the preferred contract model, or the terms of deals giving equity to independent producers, such as PSAs, may be heavily skewed in the state's favour. All of this may prove academic until there is fundamental improvement in Iraq's domestic security situation (to which end the government recently closed its borders with Syria and Iran). The next step will be to remove the continuing ambiguities on contract terms and demarcation of responsibility between local and central authorities. Only then will a significant influx of development capital into Iraq's under-appraised and under-exploited oil and gas resources be possible.

Nigerian supply back to mid-2006 was adjusted higher by around 50 kb/d after re-examination of output levels, notably from newer deepwater fields. The January supply estimate was also revised up on a reassessment of shuttered production at the Obagi facility in the Bonny system (now believed at 40 kb/d against an earlier 95 kb/d). The January supply figure now stands at 2.28 mb/d compared with an original estimate of 2.15 mb/d. Notwithstanding these adjustments, over 600 kb/d of capacity remained shut-in during February, the result of a year's worth of security-related incidents in the Niger Delta. Total February supply is assessed at 2.25 mb/d, 25 kb/d below January. This was despite Chevron having restarted 13 kb/d of previously shuttered Escravos supply at the Makaraba flow station. NNPC had earlier flagged 250-300 kb/d cuts versus the original February and March export programmes, ostensibly in support of OPEC supply curbs, but likely with one eye on actual supply capability bearing in mind worsening security and production problems.

Subsequently on 5 March, Shell shut the Nembe Creek pipeline and 187 kb/d of Bonny Light production after an oil spill, taking total offline capacity to some 800 kb/d. Access to the pipeline has

been restricted by local community groups. As mentioned in the *MTOMR*, we have assumed that 500 kb/d of Delta capacity remains offline through to 2007, with only slow reactivation occurring during the course of 2008 and 2009. A potential exodus of service personnel due to a worsening security situation in the run up to April's presidential elections may make even this scenario optimistic. Moreover, actual shut-ins are now markedly higher. We will be considering these factors when producing a revised OPEC capacity update in the next couple of months.

Venezuelan supply is assessed to have fallen by 65 kb/d in February as enforced curbs on supply from the four Orinoco heavy oil upgrader projects, announced in January, took effect. Cuts of over 100 kb/d were spread across the four projects (which are also in the process of being partially renationalised, see below), while state firm PDVSA also announced that it was cutting heavy Boscan crude supply by over 30 kb/d. Total Venezuelan crude production for February is estimated at 2.43 mb/d. There were indications from Exxon in early March that production rates at its 120 kb/d Cerro Negro upgrader facility may have fallen even further, and that it was producing just enough heavy oil to keep the upgrading unit operational.

A Farewell to Apertura

Venezuelan President Hugo Chávez has decreed that the four Orinoco heavy oil projects, which produce up to 570kb/d of synthetic crude, will be under majority state control by 1 May. Announcing in February that "the privatisation of oil in Venezuela has come to an end", Chávez has forced foreign companies to cede operational control over the joint venture projects to state company PDVSA. The state company currently holds minority stakes as follows:

- 42% of Cerro Negro, alongside ExxonMobil and BP;
- 30% of Hamaca, alongside Chevron and ConocoPhillips;
- 38% of Sincor, alongside Total and Statoil;
- 50% of Petrozuata, alongside ConocoPhillips.

The past couple of weeks have seen all the major operators bow to the inevitable and commence negotiations for a transfer of 60% majority control to PDVSA by 1 May, although negotiations over compensation may carry on until 26 June. The 270 billion bbl resource base in the Orinoco dictates that no company would want to write-off entirely the reserves booked to date, with an eye also on possible increased, albeit minority, entitlements in future. The Orinoco changes follow PDVSA's 2006 claw-back of control of service contracts with 20 foreign companies and increases in tax and royalty rates for oil production. Generous early-life fiscal terms were expected to change, indeed increases from the original 1% royalty rate at the Orinoco projects were themselves hardly a surprise. Chávez also declared "we don't want the companies to leave" while reasserting PDVSA's predominance over minority partners. The Venezuelans have also argued that improved recovery rates from existing developments (presently 10% or less in the Faja) should take priority over tapping new reserves.

Chávez doubtless hopes that increasing supply from the Orinoco Belt, or Faja, can continue to sustain upstream growth in the years ahead, with an upstream capacity target of some 5.8 mb/d for 2012. Although the Faja has been one bright spot in an otherwise mediocre upstream performance in recent years, the international companies have understandably placed a moratorium on further Orinoco investment until the new rules of engagement have been settled. In the meantime, Chávez has set a group of politically sympathetic NOCs the task of evaluating Orinoco reserves, albeit some of these new partners lack experience in the technology peculiar to heavy oil exploitation.

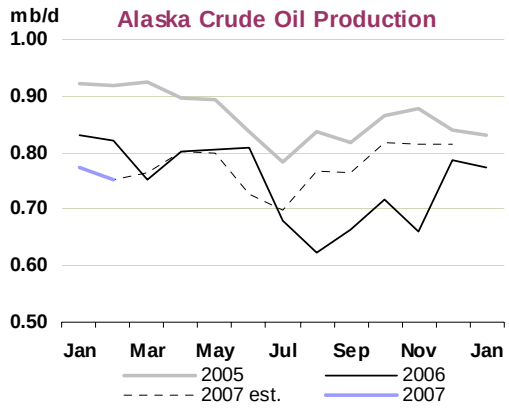
One further question concerns funding. PDVSA has already been saddled with a host of 'extra curricular' social spending obligations. Like Pemex in Mexico, its ability to translate higher revenues into extra barrels of production is constrained. It has taken over a $2.5 billion liability to finance and manage power and telecommunication sector nationalisations, is struggling to pay out the $6 billion for last year's migration of service contracts to joint ventures and has seen its capital spending requirements balloon with a host of diplomatically-driven foreign refining and products supply ventures. Add in an estimated $30 billion required to buy-out the IOC Orinoco shares and it is clear that cash is tight. Reports suggest the Venezuelan current account barely balanced in 2005 and 2006, despite record oil prices. No surprise then that the companies are being offered crude and future tax credits instead of cash for their shares, and that, as in Russia, the spectre of hastily discovered back-tax demands on operating companies has emerged.

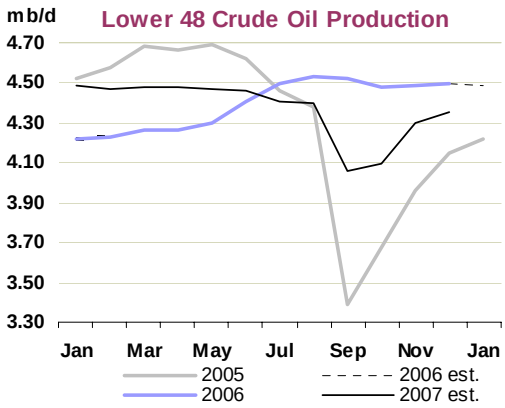
OECD

North America

US – Alaska February actual, others estimated: Preliminary data through to December now suggest that US oil production averaged 7.37 mb/d in 2006 (including 5.14 mb/d of crude), increasing only modestly from 2005's hurricane-affected 7.32 mb/d. While Gulf of Mexico (GOM) liquids plus NGL and ethanol showed healthy growth, amounting to a combined 200 kb/d, weaker Alaskan and Californian output acted as a drag on total supply. Overall, 2007 crude supply could level-off close to last year's 5.14 mb/d, with ethanol and gas liquids growth boosting total supply to 7.45 mb/d.

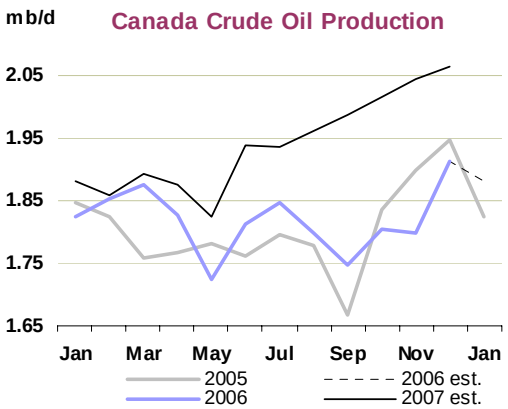
A potential lessening of pipeline-related outages from Alaska is assumed for 2007, and together with modest 30 kb/d growth from the Gulf of Mexico, this offsets ongoing crude output decline from the other lower 48 states. Recent deferrals for the Atlantis and Thunder Horse projects push back more substantial GOM growth into 2008. NGL and other liquids (including ethanol) rise by 25 kb/d and 50 kb/d to 1.8 mb/d and 0.6 mb/d respectively in 2007. All told, the US liquids production forecast has been trimmed by 40 kb/d from last month, largely on the basis of lower NGL projections.

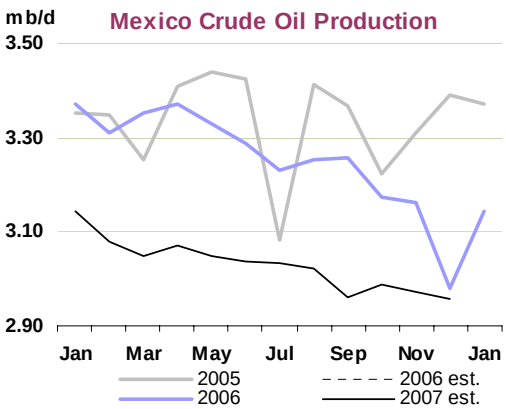




On a monthly basis, February was characterised by further output disruptions. Occidental's Elk Hills field in California (45 kb/d of crude, 25 kb/d of NGL and 280 mcfd of gas) was shut in following a pipeline explosion on 6 February, but had resumed operations later in the month. In Alaska, compressor problems at BP's Northstar field in the Beaufort Sea led to the field being shut-in for three weeks from 17 February. Together, the incidents trimmed a further 50 kb/d from February supply versus last month's expectations.

Canada – December actual: NGL adjustments also affect the Canadian forecast, with a 25 kb/d downward revision for 4Q06 being extended through 2007 and pushing forecast gas liquids supply down to some 680 kb/d after modest growth hitherto this decade. However, conventional crude supply is expected to rise by 120 kb/d in 2007 to average 1.9 mb/d, with growth centred on Albertan bitumen and offshore Newfoundland crude. Synthetic crude production from the three mining projects (excluded from the conventional crude category) adds a further 20 kb/d to reach 680 kb/d. In total, Canadian oil supply matches 2006's growth of 120 kb/d and averages 3.3 mb/d in 2007. This is rather lower growth than suggested by a recent National Energy Board (NEB) forecast, although the outage/maintenance assumptions in that forecast are not known.





Offshore Newfoundland production in January came in 50 kb/d higher than this report's expectation, spread across the three fields of Hibernia, Terra Nova and White Rose. Technical problems at the former two fields proved to have less of an impact than expected. However, Hibernia production is likely to have averaged 45% below normal 180 kb/d levels in February/March as maintenance there has been brought forward from September. Albertan synthetic crude supply in January was also impeded at the Syncrude and Suncor units by maintenance and a diluent unit fire respectively.

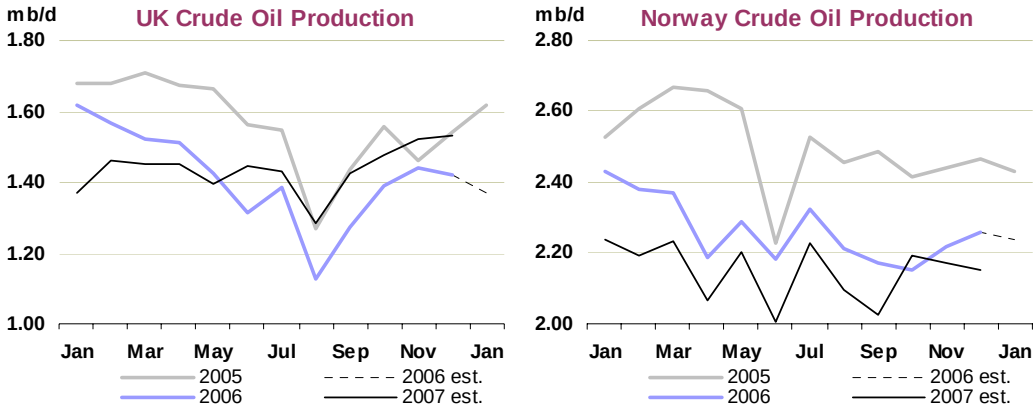
Mexico – January actual: As anticipated in last month's report, Mexican supply rebounded after a disrupted December, reaching 3.14 mb/d of crude and 0.41 mb/d of NGL, a rise of 170 kb/d from the previous month. Crude exports also increased, by 55 kb/d month on month to 1.58 mb/d, albeit standing a hefty 470 kb/d below year-ago levels.

The forecast for Mexican supply is largely unchanged from last month, with crude and NGL combined expected to fall by around 215 kb/d year on year, averaging 3.47 mb/d. However, while doubts continue to surround state company Pemex's ability to stem decline at the 1.5 mb/d Cantarell field, there were reports in February that production at Ku-Maloob-Zap (KMZ) fields stood at between 450-500 kb/d in February. This report persists for now with a rather lower assumed 415 kb/d for KMZ in 2007, although if sustained higher production is confirmed, the Mexican projection may be revised higher. However, with Pemex saying it needs to spend $15 billion on exploration and production annually just to maintain current output, cash shortfall and correspondingly steeper decline in baseload Cantarell could act as a negative offset to any KMZ revision.

North Sea

UK – December actual: We have revised up estimates for UK offshore-loaded crude (based on a higher baseline from November field-specific data) and also for the Forties crude stream as Buzzard field build-up has exceeded our expectations. However, this is offset by now-lower estimates for the Brent/Ninian systems and for NGL supply. The UK production forecast remains largely unchanged at 1.66 mb/d in 2006 and 1.7 mb/d in 2007.

This year sees a levelling off in production after uninterrupted decline so far this decade. Without the impact of rising Buzzard supply and a number of smaller scale increments, UK production would otherwise be facing a repeat of the 200 kb/d annual decreases seen in each of the past four years. Over and above Buzzard, which is on course to reach mid-year capacity output of some 200 kb/d, imminent start-up is also expected at the 40 kb/d Tweedsmuir field. This will be followed through the course of the year by new liquids supplies from the Affleck, Blane, Brenda, Brodgar, Chestnut, Chiswick, Curlew, Enoch, Perth and Starling fields.



Norway – December actual, January provisional: Forecast production from Norway has been held largely unchanged at 2.3 mb/d of crude in 2006 (2.8 mb/d for total oil) and 2.15 mb/d in 2007 (2.7 mb/d total oil). Growth centred on the Sleipner-Frigg systems and from condensate and NGL helps to stem a decline of 200 kb/d evident in the past two years. Higher oil and gas sector spending is now expected for 2007, both compared with 2005/2006 levels and to earlier estimates for this year. Development and maintenance spend is seen accounting for much of the 9% yearly increase for 2007.

Resource Nationalism: Neither New Nor Irreversible

Resource nationalism has become a key oil market buzzword of late, but it is neither new, nor solely the preserve of the more rigidly centralised economies. Few would dispute the right of any government to manage its natural resources in the best interests of its citizens. Previous phases of resource nationalism have included Mexican nationalisation in the 1940s and the creation of OPEC in 1960. The latest episodes in the 1970s, and again in the 2000s, have coincided with tighter markets and higher prices. There is a degree of 'chicken and egg' about nationalism and high prices, but the potential for a self-perpetuating cycle is clear.

This month's report highlights corporate developments in Norway at the more benign end of the scale, through to a new hydrocarbon law in Iraq, the rising economic challenges facing Mexican monopoly Pemex, and on to the increasingly NOC-dominated Russia and Venezuela. Each encapsulates the wide range of national policy approaches to hydrocarbon resource management.

It would be wrong to see resource nationalism in overly simplistic terms. All governments, OECD and non-OECD alike, tend to use higher oil prices as a pretext to shift revenue flows in their favour. But an increasingly dominant national oil company, sudden and unilateral changes in the upstream operating regime and barriers to, or higher costs for, upstream entry characterise resource nationalism in its more extreme form. So too can the actions of consumer country NOCs and monopoly pipeline operators, reacting to security of supply concerns or perhaps using them to expand geopolitical influence abroad. That said, a shift in the fiscal/operating regime, by itself, does not necessarily signify overt resource nationalism: it is usual for upstream contracts to evolve as a country matures from frontier to established producer, and on to the late-production stage.

Nonetheless, a host government's aspirations for increased rents and control can perpetuate high prices in the short and medium term. These may lead to distorted flows of upstream investment capital, particularly if returns are used to directly fund social programmes which become embedded in national spending. Often political and social spending needs grow to the point where oil exploration and development investment is compromised, which can in turn reduce oil and gas exports. In the 1970s high prices also encouraged both demand-restraint and new frontier oilfield exploration (ironically spawning a new breed of national oil company (NOC) to develop the North Sea, Brazil etc).

Eventually the downswing in the cycle tends to lead to lower prices and revenue streams, encouraging host governments to re-introduce more open-access and international company-friendly policies. International expertise is sought to stem mature field decline, to exploit more difficult-to-find oil or to manage complex, integrated oil, gas and petrochemical projects - areas in which the international companies still bring much to the table.

Arguably, the nationalistic cycle may prove prolonged this time around. Banks remain happy to fund new projects, regardless of the promoter, so long as default is unlikely. Rising supply and revenue streams have further to run in key producing countries. And technical and intellectual capital is accessible via service companies that have expanded their research and development expertise (filling the void as some international oil companies have cut back).

Ultimately, what counts is sustained levels of upstream investment. Returns are likely to be optimised for all participants through a combination of careful resource management, unhindered access to intellectual and financial capital and balanced contractual arrangements. The balance is never easy to strike, but it is one the IEA seeks to encourage through:

- ongoing dialogue to persuade major non-OECD producer and consumer governments of the mutual benefits of equal and open access to upstream reserves and;
- continued efforts among its own members to encourage diversification of oil and energy supply and investments in improving energy efficiency.

A proposed merger of the oil and gas assets of Statoil and Norsk Hydro is expected to be presented in a White Paper to the Norwegian parliament by Easter. In the absence of divestments, the new entity would account for around 70% of Norwegian liquids production, with the Norwegian government holding 62.5% ownership of the merged company.

Statoil reported in January that the oil reserves at the Snohvit gas field were likely to be uneconomic to develop. However, government representations to Statoil to reconsider appear to have been successful and the company will now drill an appraisal well targeting an estimated 100 million bbls of

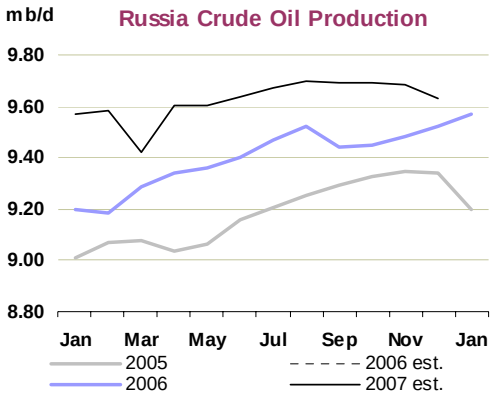
recoverable oil reserves. Both developments signal an apparent reinforcement of state influence over hydrocarbon developments offshore Norway.

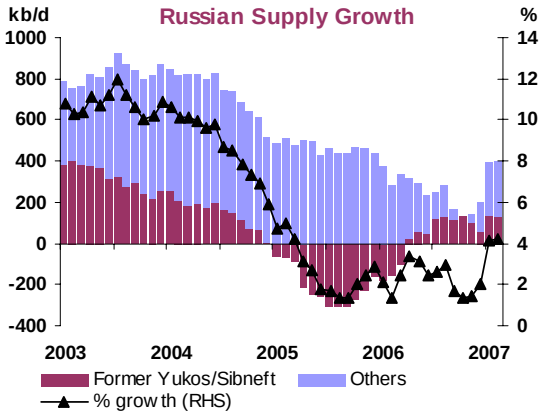
Former Soviet Union (FSU)

Russia – January actual, February provisional: February Russian production came in 200 kb/d above the level forecast in last month's report. Production (including condensate) reached 9.9 mb/d in February, some 60 kb/d above December levels and January and February production stood a clear 400 kb/d (4%) above start-year 2006. However, the apparent 'bounce' in January/February production needs to be kept in context:

- producers were reported to have restrained 4Q06 production to take advantage of favourable production tax changes at new year;
- the impediment of exceptionally cold weather to 1Q oil production seen in 2006 was absent (indeed 1Q07 supply might have been higher still had the opposite phenomenon – early tundra thaw – not constrained oilfield work);
- the Sakhalin 1 project provided a step-up for early 2007 production, with the rapid increase of production towards 225 kb/d since export restrictions were lifted towards the end of 2006.

Hence, inflated early 2007 growth rates may not be sustainable going forward. We also note that downward adjustments made last month to Rosneft and Surgutneftegaz February/March supply on news of impending power supply maintenance were not translated into materially lower supply, at least in February. We have kept supply from these two producers suppressed in March, but may ultimately revise these higher.





Although higher baseline February production from Lukoil, Tatneft and Sakhalin 1 add 25 kb/d to expected 2007 production, growth for the year has been held largely unchanged at 2.6% pa. This is in line with the prevailing view of the Ministry of Economic Development and Trade, which in the past has tended to be fairly conservative in its growth forecasts. There remain concerns outside the Russian government over the upstream operating environment, and an apparently growing appetite on the part of the government to dilute foreign company involvement (Total at Kharyaga and TNK-BP at the Kovytka gas project look likely to be forced to relinquish control in much the way Sakhalin operators were, while foreign companies are likely to step aside in favour of state-sponsored Rosneft and Gazprom in the upcoming auction of assets of the bankrupt Yukos). That said, there does appear to be the potential for sustained, if modest, growth in a 2-3% range over the next three to four years, notwithstanding a tendency by producers to over-estimate growth prospects, notably in the current tight international drilling and service sector market.

Consolidated data for December **net FSU exports** show a 100 kb/d downward revision from last month's preliminary estimate. Total December flows now come in at marginally below 8.2 mb/d. January saw net exports increase by a further 250 kb/d to 8.4 mb/d, with crude shipments increasing notably from Black Sea ports (+260 kb/d), from Sakhalin (+100 kb/d) and with increased rail and barge shipments outside the main Transneft system (+150 kb/d). Russia's temporary cut-off of crude supplies to central Europe via the Druzhba pipeline in January resulted in a 140 kb/d month-on-month drop by that route to 1.11 mb/d, while BTC shipments from Azerbaijan also fell by nearly 100 kb/d. Product exports remained broadly flat in January at 2.36 mb/d. Lower export duties from 1 February are likely to have seen a further rise in FSU exports last month. Although seaborne export schedules

for Russian crude were off by 100 kb/d for the month, rising supplies of crude via Sakhalin and the CPC, BTC and Druzhba pipelines could have pushed total net exports higher by 100-200 kb/d. March may see a further lull in export growth before Russian export duties are cut again from start-April.

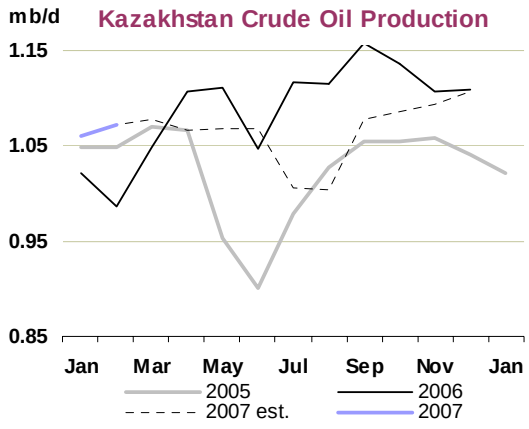
FSU Net Exports of Crude & Petroleum Products
(million barrels per day)

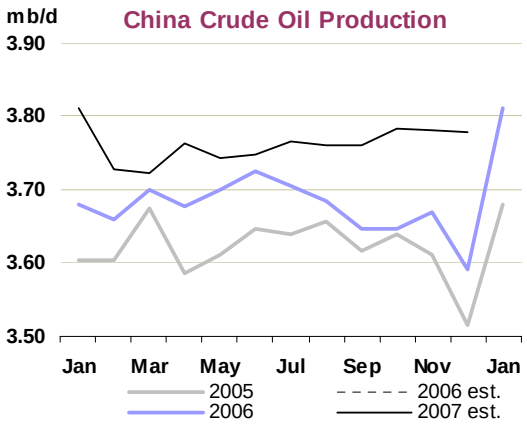
	2005	2006	1Q2006	2Q2006	3Q2006	4Q2006	Nov 06	Dec 06	Jan 07	Latest month vs. Dec 06	Latest month vs. Jan 06
Crude											
Black Sea	2.27	2.22	2.25	2.26	2.27	2.08	2.12	2.00	2.26	0.26	-0.06
Baltic	1.59	1.55	1.54	1.73	1.49	1.43	1.36	1.59	1.61	0.02	0.03
Arctic/FarEast	0.19	0.15	0.10	0.11	0.20	0.19	0.17	0.17	0.26	0.09	0.04
BTC	0.00	0.00	0.00	0.01	0.22	0.38	0.46	0.42	0.33	-0.09	0.33
Crude Seaborne	4.05	4.07	3.89	4.11	4.18	4.08	4.11	4.18	4.47	0.29	0.34
Druzhba Pipeline	1.15	1.20	1.20	1.16	1.23	1.19	1.20	1.25	1.11	-0.14	-0.02
Other Routes	0.25	0.38	0.31	0.38	0.38	0.45	0.48	0.40	0.55	0.15	0.30
Total Crude Exports	5.45	5.64	5.39	5.65	5.80	5.71	5.79	5.83	6.12	0.29	0.62
Of Which: Transneft	4.04	4.09	4.05	4.23	4.16	3.94	3.88	4.16	4.22	0.06	0.12
Products											
Fuel oil	0.93	0.95	0.87	1.05	0.94	0.95	0.94	0.96	0.91	-0.05	-0.06
Gasoil	0.87	0.95	1.01	0.95	0.94	0.91	0.92	0.89	0.86	-0.03	0.03
Other Products	0.58	0.61	0.60	0.70	0.63	0.54	0.54	0.55	0.59	0.04	0.05
Total Product	2.38	2.51	2.47	2.69	2.50	2.40	2.40	2.39	2.36	-0.03	0.02
Total Exports	7.83	8.16	7.87	8.34	8.30	8.11	8.18	8.22	8.48	0.26	0.65
Imports	0.02	0.04	0.03	0.03	0.05	0.04	0.04	0.04	0.04	0.00	0.01
Net Exports	7.81	8.12	7.84	8.31	8.25	8.07	8.14	8.18	8.43	0.25	0.63

Sources: Petro-Logistics, IEA estimates
Note: Transneft data has been revised to exclude Russian CPC volumes.

Kazakhstan – February actual: A 25 kb/d downward adjustment in 2007 supply from Kazakhstan cancels out the impact of higher Russian production. January data came in 80 kb/d below expectation, partly because of outages affecting the Orenburg gas processing facilities in Russia, destination for some of the liquids from the Karachaganak field. However, Karachaganak production rebounded in February from 245 kb/d to 295 kb/d. We anticipate a levelling off in Kazakhstan liquids supply for 2007, at around 1.34 mb/d after 50-60 kb/d growth in both 2005 and 2006. Both of the country's key producing fields, Tengiz and Karachaganak, will expand capacity in years to come but face bottlenecks in export capacity. BG and Agip announced in February plans for an interim 110 kb/d rail export route. This follows Russian-instigated delays in expanding the independent CPC pipeline to Novorossiysk.

Expansion of the 290 kb/d Tengiz field is also stalled by slow progress on CPC. Moreover, there are signs that some of the environmental-related license issues foreign operators have recently faced in Russia are finding a parallel in Kazakhstan. Chevron has been given one month to come up with a plan to dispose of sulphur by-product from Tengiz or else it will have its license suspended.





Meanwhile, operator Eni has acknowledged that start-up of the Kashagan field will be delayed to late 2010, with initial plateau output of 350 kb/d to be attained a year later. The original start-up had been 2008, although delays have been flagged well ahead of Eni's official announcement (the *MTOMR*

anticipated this, showing significant Kashagan volumes only from 2011). Phase one development costs have risen from $10.3 billion, first to $15 billion and now to $19 billion. Total development costs have also risen from $29 billion to $31 billion, although anticipated peak production has also risen from 1.2 mb/d to 1.5 mb/d. Kashagan volumes were to have been exported via an expanded CPC line but alternative shipment options via the BTC pipeline are now planned.

Other Non-OPEC

China – January actual: Steady growth in Chinese production is now expected for 2007. Output is scheduled to average 3.76 mb/d this year, up 90 kb/d from last year's 3.67 mb/d and 3.62 mb/d in 2005. Offshore increases come from the Bozhong and Caofeidan fields, while rising onshore production in the west and northwest helps to offset weakening eastern onshore mature field supply. January production came in 140 kb/d higher than anticipated, with the ageing Daqing, and also the Jilin and Changqing, fields responsible for most of the upward revision. In all, the Chinese forecast has been raised by 50 kb/d for 2007. It is thought that January's surge to 275 kb/d from Changqing may prove temporary, as year-average production is estimated by operator PetroChina at only 240 kb/d. This is nonetheless some 30 kb/d higher than in 2006. One minor downside adjustment for China concerns the north-eastern Liaohe field, where 1,385 wells were shut in during early March due to heavy snowfall. The five day shut-in affected around 40 kb/d of Liaohe's total 240 kb/d production.

Revisions to Other Non-OPEC Estimates

In total, non-OPEC supply estimates are revised only marginally this month. A 25 kb/d downward adjustment for 2005 takes non-OPEC supply to 50.2 mb/d (or 49.0 mb/d excluding Angola). A similar reduction affects 2006 (taking supply to 49.4 mb/d net of Angola), with revisions concentrated in North America. The 2005 adjustment derives from revised data from Petronas and the Central Bank for **Malaysia.** However, Malaysian revisions move in the opposite direction from 4Q06 onwards, pushing up the 2007 production estimate by 20 kb/d to 775 kb/d. Preliminary January data for **Brazil** came in 75 kb/d lower than expected, although this was due to maintenance work at the P-37 platform at the Marlim field which was not captured in the forecast previously. Therefore, the downward adjustment is restricted to January. At +190 kb/d, Brazil remains one of the key contributors to 2007 non-OPEC growth. Modest downward adjustments to December 2006 supply from **Colombia** and **Ecuador** also knock around 10 kb/d off the 2007 projection.

Revisions to Non-OPEC Oil Supply
(million barrels per day)

	Last Month's OMR				This Month's OMR				This Month vs. Last Month			
	2006	2007	06 v 05	07 v 06	2006	2007	06 v 05	07 v 06	2006	2007	06 v 05	07 v 06
North America	14.26	14.32	0.12	0.06	14.24	14.22	0.10	-0.01	-0.02	-0.10	-0.02	-0.07
Europe	5.20	5.15	-0.40	-0.05	5.20	5.16	-0.41	-0.04	0.00	0.00	0.00	0.01
Pacific	0.57	0.66	-0.01	0.09	0.57	0.66	-0.01	0.09	0.00	0.00	0.00	0.00
Total OECD	**20.03**	**20.13**	**-0.30**	**0.10**	**20.01**	**20.04**	**-0.32**	**0.03**	**-0.03**	**-0.09**	**-0.03**	**-0.07**
Former USSR	12.10	12.59	0.46	0.49	12.10	12.59	0.46	0.49	0.00	-0.01	0.00	0.00
Europe	0.15	0.13	-0.01	-0.01	0.15	0.13	-0.01	-0.01	0.00	0.00	0.00	0.00
China	3.67	3.71	0.06	0.04	3.67	3.76	0.06	0.09	0.00	0.05	0.00	0.05
Other Asia	2.70	2.74	0.02	0.04	2.70	2.76	0.05	0.05	0.00	0.01	0.03	0.01
Latin America	4.40	4.54	0.11	0.14	4.40	4.53	0.11	0.13	0.00	-0.01	0.00	-0.01
Middle East	1.74	1.69	-0.12	-0.05	1.74	1.69	-0.12	-0.05	0.00	0.00	0.00	0.00
Africa*	2.58	2.73	0.11	0.15	2.58	2.73	0.11	0.15	0.00	0.00	0.00	0.00
Total Non-OECD*	**27.34**	**28.14**	**0.63**	**0.80**	**27.34**	**28.19**	**0.65**	**0.84**	**0.00**	**0.05**	**0.02**	**0.05**
Processing Gains	1.90	1.92	0.04	0.02	1.90	1.92	0.04	0.02	0.00	0.00	0.00	0.00
Other Biofuels	0.18	0.34	0.06	0.17	0.18	0.34	0.06	0.17	0.00	0.00	0.00	0.00
Total Non-OPEC*	**49.46**	**50.53**	**0.43**	**1.08**	**49.43**	**50.49**	**0.43**	**1.06**	**-0.03**	**-0.04**	**0.00**	**-0.02**

OMR = Oil Market Report
* adjusted to exclude Angola

OECD STOCKS

Summary

- **Total OECD inventories fell by 8.6 mb in January**, largely due to a crude stock draw in Europe, and to a lesser degree in the Pacific. The two regions however both saw product stocks increase, partly on the unusually warm weather. In contrast, North America saw a crude build and a minor decline in product stocks, as refinery maintenance commenced in earnest in January, and the second half of the month turned cold.

Preliminary Industry Stock Change in January 2007 and Fourth Quarter 2006

(million barrels per day)

	January (preliminary)				*Fourth Quarter 2006*			
	North America	Europe	Pacific	Total	North America	Europe	Pacific	Total
Crude Oil	**0.29**	**-0.94**	**-0.13**	**-0.77**	**-0.27**	**0.14**	**-0.02**	**-0.15**
Gasoline	0.52	0.14	0.10	0.76	-0.03	0.09	-0.01	0.05
Distillates	-0.07	0.09	0.24	0.26	-0.08	0.02	-0.14	-0.19
Residual Fuel Oil	-0.01	0.02	-0.02	-0.01	-0.03	0.03	-0.01	-0.02
Other Products	-0.49	-0.01	-0.07	-0.57	-0.20	-0.02	-0.13	-0.35
Total Products	**-0.05**	**0.24**	**0.25**	**0.44**	**-0.33**	**0.12**	**-0.30**	**-0.52**
Other Oils[1]	0.00	-0.03	0.08	0.05	-0.20	-0.05	-0.02	-0.27
Total Oil	**0.24**	**-0.72**	**0.20**	**-0.28**	**-0.81**	**0.20**	**-0.33**	**-0.94**

1 Other oils includes NGLs, feedstocks, and other hydrocarbons.

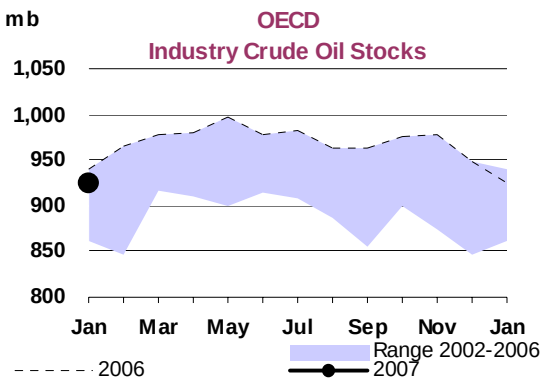
- **Following a crude inventory draw of 23.8 mb in January**, OECD stock levels are now 14.5 mb lower year-on-year, but still in the upper half of their five-year average range. The most pronounced difference is again in Europe, where crude stocks are at the bottom of the five-year average range and 23.2 mb lower year-on-year.

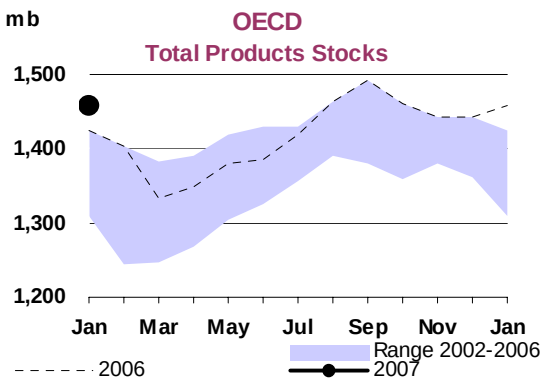
- **Total product stocks rose by 13.7 mb in January**, but are now only 32.9 mb higher than at the end of January 2006, thus halving the year-on-year difference from last month's report. Nevertheless, total product stocks remain above the five-year range for all three regions.

- **Revisions to December data were marginal overall at +3.0 mb**, with upward revisions of 4.0 mb and 7.0 mb in crude and product stocks respectively, offset by a -8.1 mb downward revision in 'other oils'. Regionally, most of the upward revision was centred on Europe, while North America and the Pacific were revised downward.

- **Total forward demand cover is broadly unchanged** at the end of January at 54 days from both the previous month and one year ago. Nominally, OECD total stocks were 26.1 mb higher year-on-year at the end of January.

- **Preliminary February data indicate an even greater monthly drawdown of around 66 mb** in the key OECD countries, largely in products. In the US, strong demand coincided with refinery maintenance and several unplanned outages, drawing down product stocks by 45.5 mb. In Japan, refiners reduced throughputs after stocks reached high levels on low demand, while in Europe, plants were also undergoing maintenance.



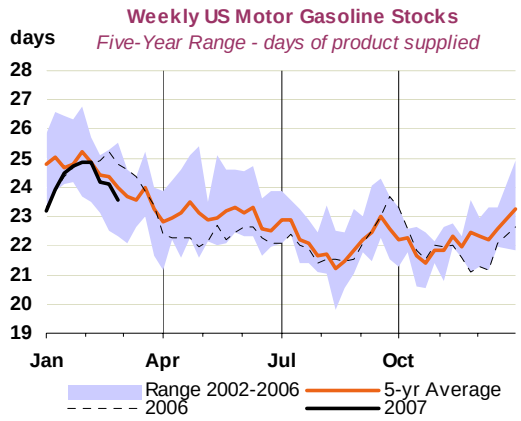


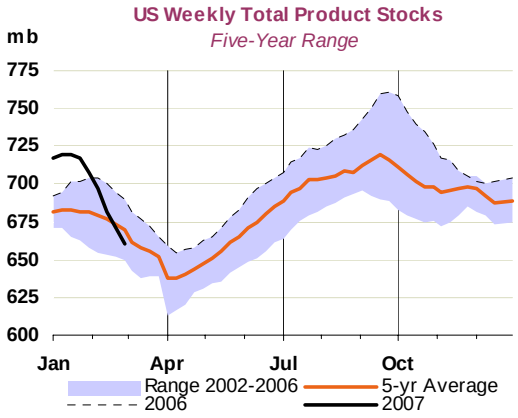
OECD Industry Stock Changes in January 2007

OECD North America

North American crude oil inventories rose by 9.1 mb in January, with stock builds of 7.0 mb and 2.1 mb in the US and Mexico respectively. In the US, the increase resulted from lower-than-expected refinery runs, as the weather was unseasonably warm in the first half of January, while some unexpected refinery outages reduced utilisation in the second half of the month. Weekly data for February show US crude stocks up by 935 kb, as refinery maintenance reached a peak while crude imports fell. A crude draw of 2.6 mb in PADD 3, the Gulf Coast, was offset by increases of 2.0 mb and 1.0 mb respectively on the West and East Coasts.

North American product inventories fell by 1.6 mb in January, of which 1.0 mb was in the US and 0.6 mb in Mexico. Distillate stocks in the US were down by 0.9 mb after the swing back to cold temperatures in the latter half of the month. Meanwhile, total US gasoline stocks rose by 15.7 mb, as refiners were able (in the first half of the month) to concentrate on bolstering gasoline production ahead of the summer. This gain was however offset by 'other products', which fell by 15.2 mb. In Mexico, small increases in gasoline and residues were balanced by a dip of 1.2 mb in distillates. Total North American product stocks at the end of January stood only 2.8 mb higher year-on-year.

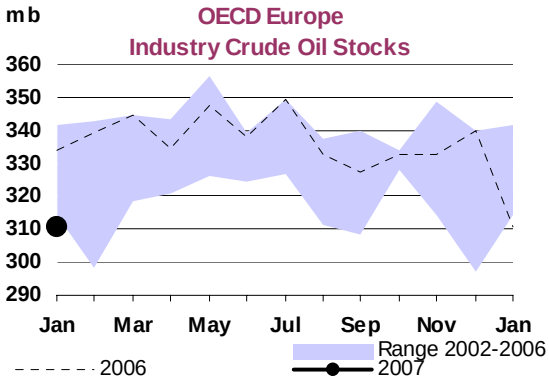




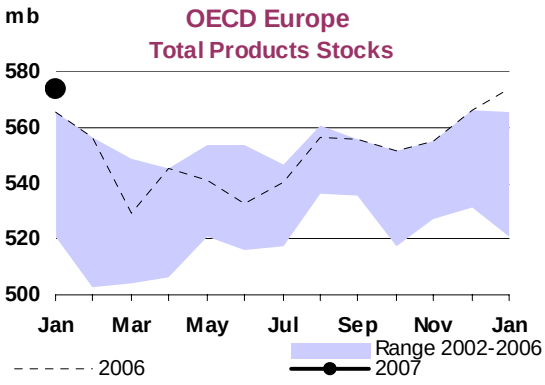
Weekly US data for February show that the net effect of strong demand, peak seasonal refinery maintenance, and several refinery outages has drawn down total product stocks by 46.5 mb. The return of cold weather saw heating oil inventories fall by 10.2 mb, which added to a draw in total diesel stocks of 3.6 mb. Gasoline fell by 9.0 mb and residual fuel oil by 7.1 mb. And at the end of February, total product stocks at 660 mb have now moved below their five-year average. In terms of forward demand cover, gasoline and distillate are now each slightly below their respective five-year averages of 24 and 29 days. While refinery maintenance passed its seasonal peak in February, increased runs will also be met with higher gasoline demand and the need to produce lower-yielding summer-grade material.

OECD Europe

European crude oil stocks fell by 29.0 mb in January, and are now 23.2 mb lower year-on-year. Strong draws were reported from France (-5.4 mb), the Netherlands (-4.4 mb), Germany (-3.0 mb) and the UK (-2.6 mb). Refinery runs were more or less unchanged in January, even though European product demand was weak due to the unseasonably warm temperatures across most of the continent. It is possible that refineries were deliberately running down crude stocks ahead of seasonal maintenance starting in February. On the other hand, North Sea production was down slightly, as was OPEC output in December. Reduced volumes through the Druzhba pipeline in January could also explain some of the difference.



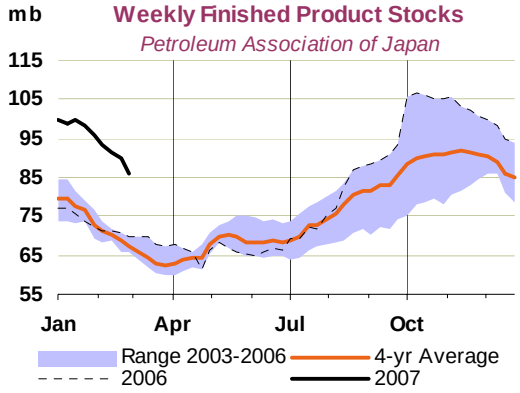
Product inventories in Europe rose by 7.5 mb in January as increases in gasoline (+4.4 mb), distillates (+2.7 mb) and residual fuel (+0.6 mb) offset a small drop in 'other product' stocks (-0.3 mb). Nationally, inventories increased most in the Netherlands (+3.0 mb) and Germany (+1.1 mb), on gains in middle distillate stocks. UK gasoline stocks rose by 1.5 mb, but were offset by draws of 1.0 mb and 0.7 mb in residual fuel and distillate stocks respectively. Total French product stocks were down by 1.2 mb, as a dip in middle distillate stocks (-2.4 mb) outweighed a 1.0 mb increase in residual fuel levels.



OECD Pacific

In the Pacific, inventories of crude oil also fell in January, but only by 3.9 mb. Unlike the other two OECD regions, crude inventories are still 13.8 mb higher year-on-year. The fall in stocks was evenly spread between Japan and South Korea, with each seeing a draw of around 2.0 mb. In both countries, news reports indicated economic run cuts as warm temperatures constrained demand. In Japan in particular, crude and all product stock categories remained higher than at the end of January 2006. Weekly Petroleum Association of Japan (PAJ) data show that crude stocks remained flat in February (+0.2 mb), despite lower runs.

Total product inventories in the OECD Pacific rose by 7.8 mb in January, almost solely due to strong gains in middle distillates, but also on an unusually large drop in transportation fuel demand in Japan. Japanese product stocks rose by 4.6 mb, with increases in middle distillates and gasoline of 3.2 mb and 2.4 mb respectively offsetting slight losses in residues and 'other products'. In Korea, the picture was more or less the same. Total products rose by 3.2 mb as middle distillate and gasoline inventories rose by 4.4 mb and 0.6 mb respectively. 'Other products' and residual fuel oil meanwhile fell by 1.6 mb and 0.3 mb.



Weekly PAJ data for February show that the trend of January was reversed. Total finished product stocks fell by 9.2 mb as refineries lowered throughputs, in part for economic reasons. The largest draw was in heating fuel kerosene inventories (-7.1 mb), which had previously been unusually high due to the warm winter. Accordingly, refineries tried to boost jet fuel output, stocks of which remained flat on the month, and also hiked kerosene exports in early February. Meanwhile, gasoil and gasoline inventories fell by 1.3 mb and 0.7 mb respectively, while naphtha and fuel oil levels each increased by 0.4 mb.

OECD Inventory Position at End-January and Revisions to Preliminary Data

Total OECD industry stocks stood at 2,668.1 mb at the end of January, down 8.6 mb from the end of December, but were still 26.1 mb higher than at the end of January 2006. The year-on-year difference has narrowed sharply from 78.5 mb, compared with last month's report. OECD crude inventories were at 924.5 mb, after falling by 23.8 mb in January, and have fallen below levels of a year ago for the first time since November 2005, even while they remain at the upper end of their five-year range. Total product stocks rose by 13.7 mb to 1,457.4 mb in January and now stand 32.9 mb higher year-on-year.

Revisions to December stock data show only a marginal upward revision of 3.0 mb. This was due to the crude oil (+4.0 mb) and product figures (+7.0 mb) coming in higher, though they were partly offset by a downward revision to the 'other oils' number by 8.1 mb. Regionally, a large upward revision to crude stocks in Europe (+10.3 mb) is noteworthy, contrasting with downward revisions to crude in both the Pacific (-3.7 mb) and North America (-2.5 mb). North America in turn saw products revised up by 6.1 mb, while the changes in Europe (+1.2 mb) and the Pacific (-0.3 mb) were more marginal.

Year-on-Year OECD Industry Stock Comparisons for January 2007

	(million barrels)					*(Days of Forward Demand)*			
	North America	Europe	Pacific	Total		North America	Europe	Pacific	Total
Crude Oil	**-5.1**	**-23.2**	**13.8**	**-14.5**	**Total Oil**	**-0.8**	**-1.2**	**5.3**	**0.1**
Total Products	2.8	8.3	21.8	32.9	*Versus 2004*	3.0	1.1	2.1	2.2
Other Oils[1]	4.2	-2.7	6.3	7.8	*Versus 2003*	4.7	1.4	2.3	3.2
Total Oil	**1.8**	**-17.5**	**41.8**	**26.1**	**Total Products**	**-0.4**	**0.5**	**2.7**	**0.4**
Versus 2004	84.7	8.3	-1.0	92.0	*Versus 2004*	1.3	1.6	1.4	1.5
Versus 2003	134.6	13.3	15.2	163.1	*Versus 2003*	2.4	1.9	2.0	2.2

1 Other oils includes NGLs, feedstocks, and other hydrocarbons.

Recent Developments in ARA Independent Storage

Total oil product inventories held in independent storage in the Amsterdam-Rotterdam-Antwerp (ARA) area fell by 1.4 mb. Most of this was due to fuel oil stocks dipping by 1.3 mb, as recent weeks have again seen a steady stream of exports to the Far East. Inventories of the other product categories all remained more or less unchanged. However, gasoil inventories have moved above their five-year range on the warm weather in Europe. Naphtha levels in contrast have fallen to the bottom of the range, also on exports to Asia, where cracks have been unusually wide.

Revisions versus 13 February 2007 Oil Market Report

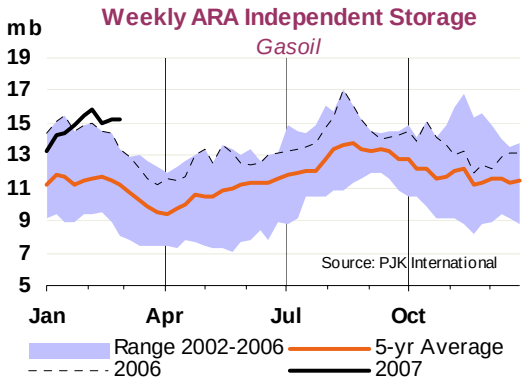
(million barrels)

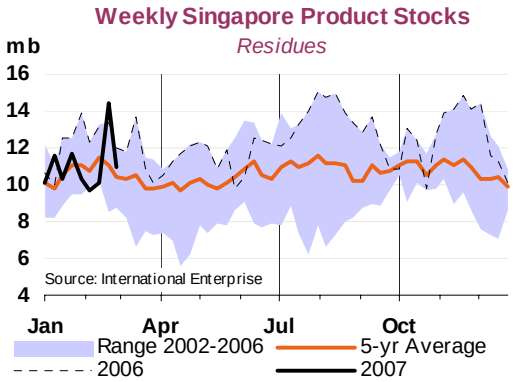
	North America		*Europe*		*Pacific*		*OECD*	
	Nov 06	Dec 06	Nov 06	Dec 06	Nov 06	Dec 06	Nov 06	Dec 06
Crude Oil	**-1.7**	**-2.5**	**0.1**	**10.3**	**0.0**	**-3.7**	**-1.6**	**4.0**
Gasoline	0.6	-2.3	1.1	1.7	-0.1	-0.3	1.7	-0.9
Distillates	1.1	0.5	-0.8	2.4	-0.1	0.0	0.2	2.9
Residual Fuel Oil	0.5	-1.1	-0.1	-2.9	0.0	0.1	0.5	-3.9
Other Products	2.7	8.9	-0.7	0.1	0.0	0.0	2.0	9.0
Total Products	**5.0**	**6.1**	**-0.5**	**1.2**	**-0.3**	**-0.3**	**4.3**	**7.0**
Other Oils[1]	0.3	-8.5	1.8	0.6	0.0	-0.2	2.1	-8.1
Total Oil	**3.7**	**-5.0**	**1.4**	**12.2**	**-0.3**	**-4.2**	**4.8**	**3.0**

1 Other oils includes NGLs, feedstocks, and other hydrocarbons.

Recent Developments in Singapore Stocks

According to International Enterprise, total oil product stocks held in Singapore rose by 1.1 mb, mostly on the back of rising fuel oil levels (+0.6 mb). Late February had seen an unusually strong surge of 4.3 mb in residual fuel oil, after higher volumes from Europe poured in, but this fell again a week later. Meanwhile, light and middle distillate stocks each rose by 0.2 mb.

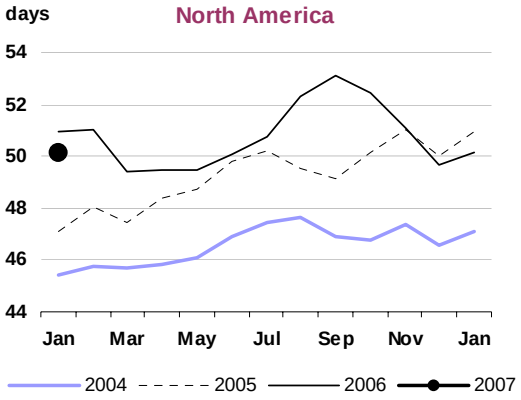


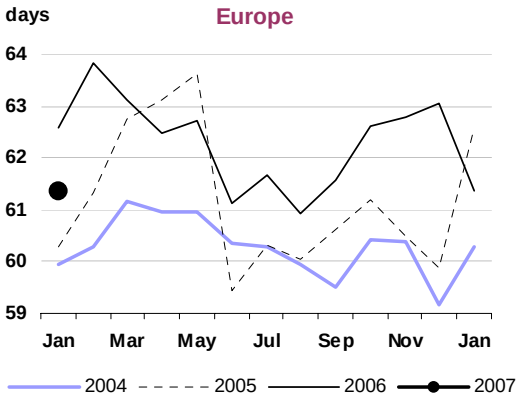


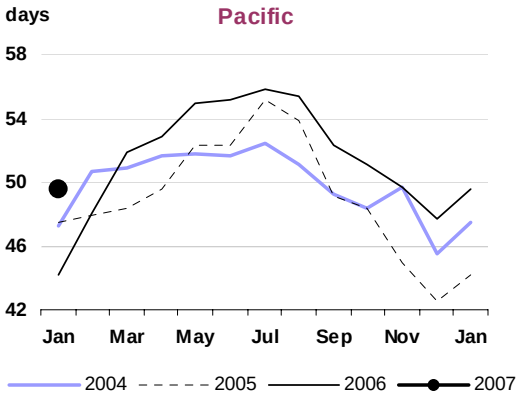
Regional OECD End-of-Month Industry Stocks

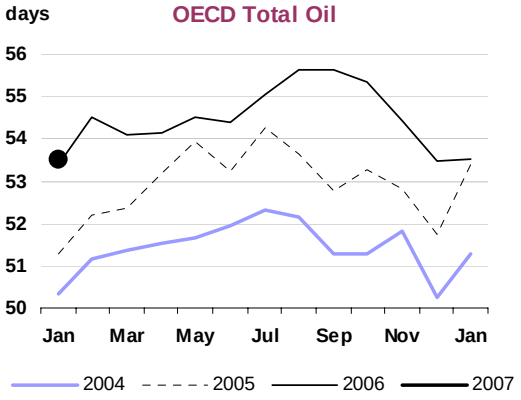
(in days of forward demand and millions of barrels of total oil)

Days[!]

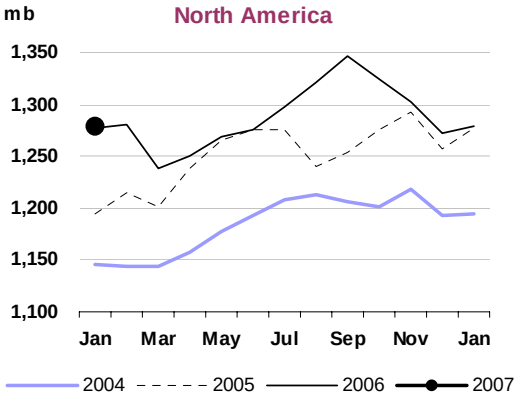


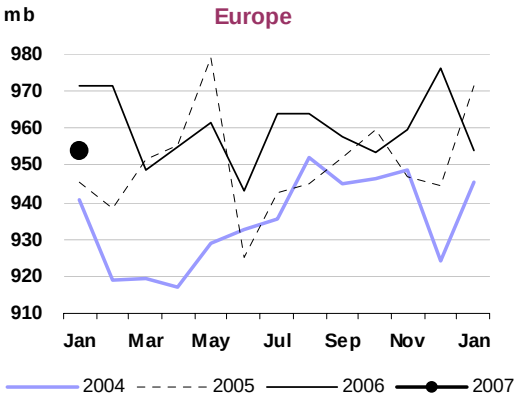


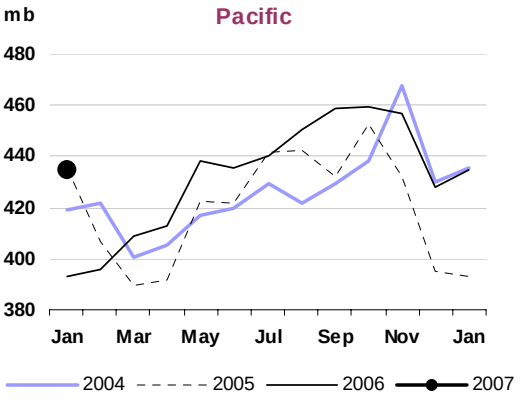


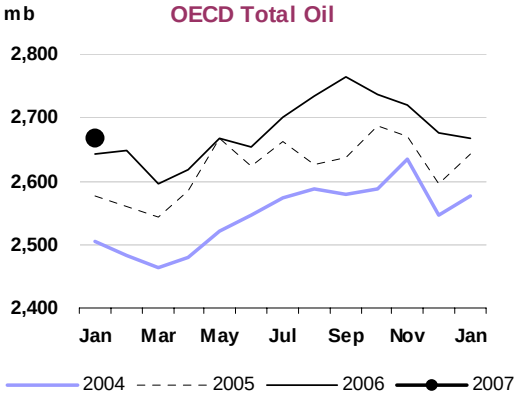


Million Barrels









PRICES

Summary

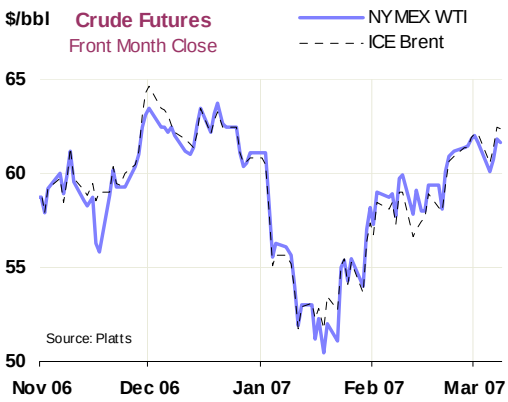
- **Oil prices rose above $60/bbl from a mid-January low** on OPEC cuts, and as the US product market was tightened by strong demand, peak seasonal refinery maintenance and several unplanned downstream outages. These factors offset unusually warm weather in Europe and Northeast Asia, while oil markets took little notice of stock market tremors emanating from China. Further OPEC cuts in February prevented the normal seasonal crude stock build and were only partially offset by refinery maintenance.

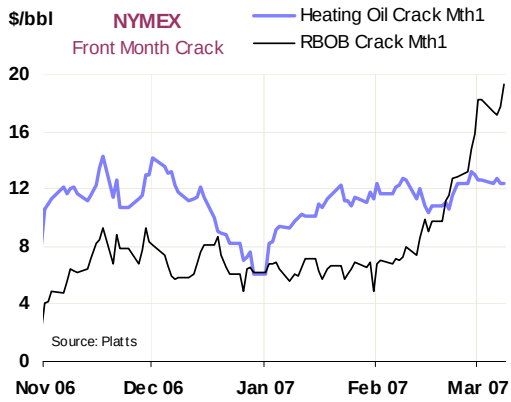
- **Product markets are driving crude prices**, on the back of rising gasoline cracks in all regions. However, in contrast to the strong US and European markets, Japanese and Korean refiners are reportedly making voluntary run cuts, as weak demand has left stocks unusually high. Crude demand is expected to remain broadly flat from February levels until refinery maintenance eases from May onwards.

- **Refining margins rose in February and early March** and are high in the US and Europe. Healthy gasoline and, to a lesser extent, jet fuel and diesel cracks, are responsible, particularly on the US West Coast. Sour cracking margins in Europe are also high, while Asian spreads mostly remain depressed.

- **Gasoline's rally outpaced a strong performance by other transportation fuels.** Regionally, strong demand has boosted US diesel premiums, but in contrast jet fuel premiums were higher in Europe and, until early March, in Asia. Weak demand for fuel oil offset the impact of OPEC cuts of heavy crude, leaving cracks unchanged.

- **Dirty freight rates** from the Middle East Gulf remain well below five-year seasonal averages, undermined by reductions to crude trade caused by OPEC cuts and refinery maintenance. Clean rates were supported by refinery turnarounds and competition from West Africa for product vessels leaving Europe.



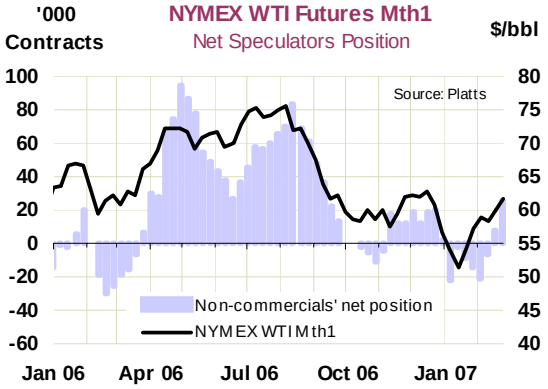


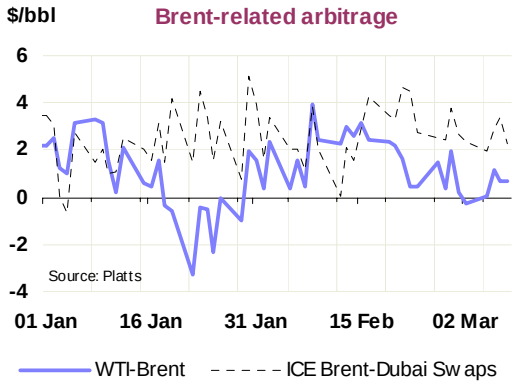
Overview

Crude prices have inched up from early February, but have spent most of the past month hovering around the $60/bbl mark on average. The market was overwhelmingly driven by product prices in the US, where strong demand coincided with peak refinery maintenance and several downstream outages. After an unusually warm December and first half of January, the weather has subsequently turned cold in North America, boosting heating oil demand at a time when refiners had already started to increase gasoline yields ahead of the driving season. Lower product output due to maintenance was exacerbated by some unplanned refinery outages, leading to a strong increase in gasoline cracks in particular. In Europe and Asia, the weather has remained unseasonably warm, but both regions have felt the impact of rising prices in the US.

OPEC cuts have further tightened the market, though rising Iraqi and Angolan supply muted reductions from the OPEC-10. Since September, OPEC has cut output by around 1 mb/d. The group could decide to make further cuts when it meets on 15 March, though the most recent statements by

ministers indicate this is unlikely. Crude outages in Alaska and Nigeria, both due to pipeline spills, contributed to further upward market pressure, and preliminary data show a downturn in February OECD inventories. Geopolitical tension remains high over Iran, though the prospect of US and Iranian officials meeting on the fringe of a regional security conference on Iraq is a development that appeared unlikely a few months ago. Lastly, in terms of upside to prices, non-commercial participants on the NYMEX WTI market switched to net-long positions in mid-February, arguably supporting the upward tendency in prices.



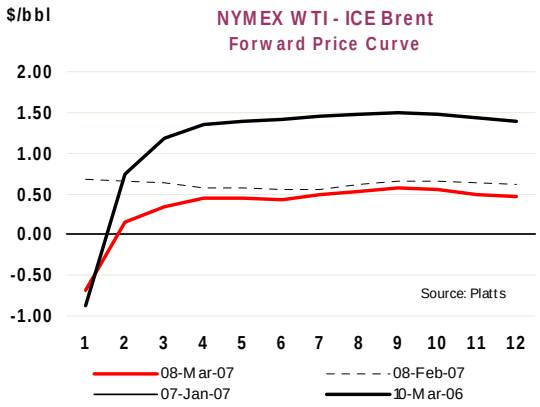


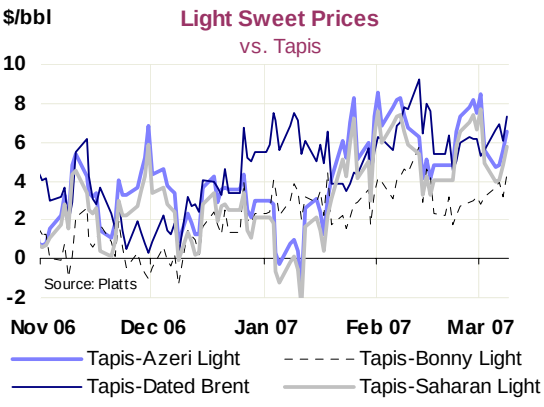
On the downside, Europe and Northeast Asia have continued to see an unusually warm winter, curbing heating and utility demand. A 9% dip on a Chinese equity index sent tremors through global stock markets in late February, leading to a knee-jerk dip in prices and musings on the fragile state of the world economy. In contrast to the picture of a tight US market painted above, Asian refiners have indicated voluntary run cuts in March.

Spot Crude Oil Prices

The crude market has again been shaped by the need to hike gasoline yields for the US market, while refinery maintenance there was in full swing. Benchmark grades rose more or less in line with crude futures, with Dubai gaining additional support from lower OPEC output. In the Atlantic Basin, WTI has seen its premium over Dated Brent decline, which is usually taken to indicate a less favourable transatlantic arbitrage. This can be partly explained by tight crude stocks in Europe, but it is unusual to see the forward curve perpetuating such a weak premium through to the end of the year.

On the other hand, the Brent-Dubai EFS spread has narrowed slightly again, after widening sharply to $4.50/bbl in late February. Now at half that value, Atlantic Basin eastbound shipments will have become more viable. This is all the more true when taking into account how high Asian light sweet benchmark Tapis is relative to Atlantic Basin alternatives Dated Brent, Bonny Light or Saharan Blend. Tapis has risen on strong demand for naphtha-rich crudes in Asia, with additional support for Asia-Pacific light sweets coming from Australian crude shut-ins due to Cyclone George.





Weaker demand for distillate and fuel oil for heating and utilities has failed to offset the impact of lower OPEC sour crude production. Bar the Tapis-Dubai spread, which has widened uniquely due to Tapis' strength, other light sweet-heavy sour spreads have been narrowing since early December.

Spot Crude Oil Prices and Differentials

(monthly and weekly averages, $/bbl)

	Dec	Jan	Feb	Feb-Jan Avg Change	%	Week Commencing: 05 Feb	12 Feb	19 Feb	26 Feb	05 Mar
Crudes										
Dated Brent	62.32	53.68	57.43	3.75	7.0	57.25	55.67	57.94	60.78	60.37
Brent (Asia) Mth1 adjusted	62.31	54.38	58.21	3.82	7.0	58.45	57.17	58.22	60.92	61.44
WTI (Cushing) Mth1 adjusted	61.96	54.14	59.20	5.06	9.4	58.99	58.35	59.37	61.51	61.02
Urals (Mediterranean)	57.95	50.12	53.81	3.69	7.4	53.78	52.29	54.07	57.08	56.99
Dubai Mth1 adjusted	58.68	51.69	55.75	4.06	7.9	55.70	54.92	55.83	58.32	58.51
Tapis (Dated)	65.54	58.88	64.09	5.21	8.8	64.25	63.00	64.06	66.66	67.10
Differential to Dated Brent										
WTI (Cushing) Mth1 adjusted	-0.37	0.46	1.77	1.32		1.74	2.68	1.44	0.73	0.65
Urals (Mediterranean)	-4.38	-3.56	-3.61	-0.06		-3.48	-3.38	-3.87	-3.69	-3.38
Dubai Mth1 adjusted - Dated Brent	-3.64	-1.99	-1.67	0.31		-1.55	-0.75	-2.11	-2.46	-1.87
Tapis (Dated)	3.22	5.20	6.67	1.46		6.99	7.33	6.12	5.89	6.72
Prompt Month Differential										
Forward Cash Brent Mth1-Mth2 adj.	-0.55	-0.59	-0.82	-0.23		-0.80	-0.83	-0.83	-0.77	-0.76
Forward WTI Cushing Mth1-Mth2 adj	-0.96	-0.94	-0.72	0.22		-0.57	-0.59	-0.76	-1.12	-1.37

Source: Platts

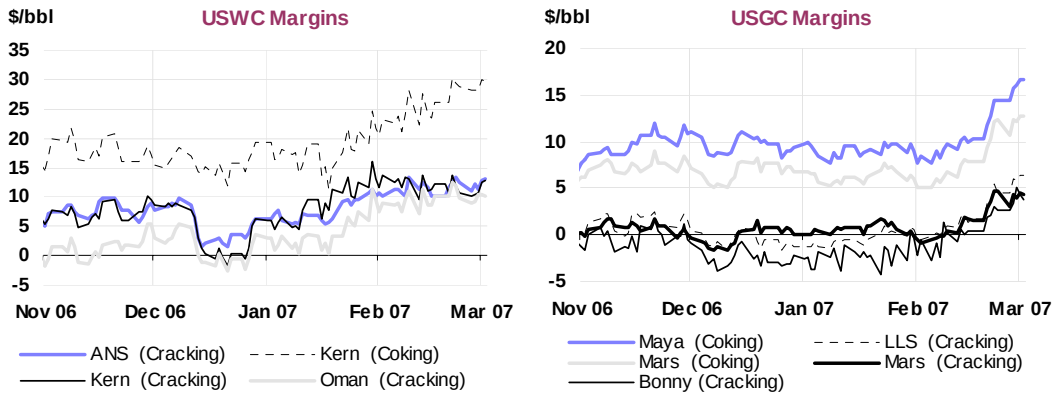
Nevertheless, distillate-rich Middle Eastern grades such as medium sours from Abu Dhabi have proved less popular, as particularly Japanese buyers have shown less interest, and are lowering throughputs to bring down distillate and other stocks. In addition, Abu Dhabi is keeping term volumes to Asia in April steady from March, while Omani volumes are reported to be higher following domestic refinery maintenance. At the same time, the new Sokol crude from Sakhalin 1 is proving popular among Asian refiners, generating extra competition.

Delivered Crude Prices in December

For the first time since August, average CIF crude import prices rose in OECD countries, by $2.02/bbl to an average of $57.90/bbl. In Europe, the average crude oil delivery price increased by $3.15/bbl to $59.94/bbl in December. North American refineries paid a CIF import price of $55.10/bbl which was $1.91/bbl higher than in November. In the OECD Pacific, crude oil delivery prices were essentially unchanged, as longer shipping routes from the Middle East to the Pacific delay the impact of rising global oil prices in 4Q on the region's delivered prices.

Refining Margins

Atlantic Basin refining margins rose steadily in February and were on average higher than in January. Margins are quite high in the US, especially on the West Coast, where the product market has been particularly tight. In Europe, sour cracking margins are also favourable, while in contrast they remain depressed on the whole in Asia – reflecting high regional product stocks.



Strong gasoline, and to some extent distillate, cracks in the US boosted refining margins in February. On the West Coast, refinery outages at BP's Carson, California, plant combined with maintenance, the region's geographical isolation and tight product specifications to substantially raise margins. Problems at McKee's Sunray, Texas refinery, tightened the Arizona market, which it feeds via pipeline.

Selected Refining Margins in Major Refining Centres

($/bbl)

		Monthly Average			Change	Average for week ending:				
		Dec 06	Jan 07	Feb 07	Feb 07-Jan 07	02 Feb	09 Feb	16 Feb	23 Feb	02 Mar
NW Europe	Brent (Cracking)	0.32	2.36	3.76	1.40	2.16	3.16	3.54	3.90	5.95
	Urals (Cracking)	4.17	5.16	5.70	0.54	5.03	5.20	5.41	5.92	7.47
	Brent (Hydroskimming)	-5.32	-2.38	-1.81	0.57	-2.75	-1.84	-1.59	-2.21	-1.01
	Urals (Hydroskimming)	-3.03	-1.17	-1.25	-0.08	-1.47	-1.06	-1.02	-1.58	-1.16
Mediterranean	Es Sider (Cracking)	1.44	2.34	4.54	2.20	3.36	3.80	4.24	5.04	6.46
	Urals (Cracking)	3.66	4.85	5.84	0.99	5.08	5.34	5.59	6.14	7.31
	Es Sider (Hydroskimming)	-4.93	-3.01	-1.41	1.61	-2.26	-1.69	-1.21	-1.35	-0.79
	Urals (Hydroskimming)	-4.01	-1.41	-1.14	0.26	-1.22	-1.01	-0.92	-1.42	-1.18
US Gulf Coast	Bonny (Cracking)	-2.49	-2.21	0.73	2.93	-1.08	-0.92	0.16	2.01	3.81
	Brent (Cracking)	-3.32	-2.65	0.82	3.47	-1.73	-1.17	1.12	1.91	3.90
	LLS (Cracking)	-0.57	-0.43	2.17	2.59	0.07	0.32	1.57	3.67	5.83
	Mars (Cracking)	-0.12	0.60	1.66	1.05	-0.22	-0.16	1.31	3.47	4.06
	Mars (Coking)	6.76	6.30	8.25	1.94	5.72	5.92	7.50	10.45	12.15
	Maya (Coking)	9.58	9.10	10.99	1.89	8.77	8.80	10.01	12.71	15.85
US West Coast	ANS (Cracking)	5.17	7.46	11.37	3.91	10.48	11.38	11.06	12.03	12.08
	Kern (Cracking)	3.90	8.78	11.85	3.07	13.21	12.74	11.57	11.77	11.35
	Oman (Cracking)	1.07	3.78	9.53	5.75	8.66	9.12	9.10	10.90	9.85
	Kern (Coking)	15.68	17.74	25.57	7.83	21.80	23.87	24.67	28.13	28.81
Singapore	Dubai (Hydroskimming)	-4.47	-0.91	-1.00	-0.09	0.39	-0.01	-1.32	-1.77	-1.90
	Tapis (Hydroskimming)	-5.92	-4.28	-5.07	-0.79	-4.45	-5.12	-5.20	-5.16	-4.66
	Dubai (Hydrocracking)	0.48	2.85	2.82	-0.04	3.81	3.29	2.46	2.40	2.76
	Tapis (Hydrocracking)	-2.05	-0.81	-1.63	-0.82	-1.11	-1.86	-1.70	-1.62	-0.89
China	Cabinda (Hydroskimming)	-7.02	-3.76	-5.51	-1.75	-4.11	-4.40	-5.25	-6.83	-6.64
	Daqing (Hydroskimming)	-10.63	-8.00	-7.99	0.01	-6.42	-7.08	-8.65	-8.65	-8.57
	Dubai (Hydroskimming)	-4.76	-1.32	-1.51	-0.19	-0.12	-0.50	-1.85	-2.25	-2.50
	Daqing (Hydrocracking)	-4.02	-2.41	-2.41	0.01	-1.30	-2.06	-3.11	-2.65	-1.98
	Dubai (Hydrocracking)	0.20	2.40	2.30	-0.10	3.26	2.79	1.93	1.93	2.17

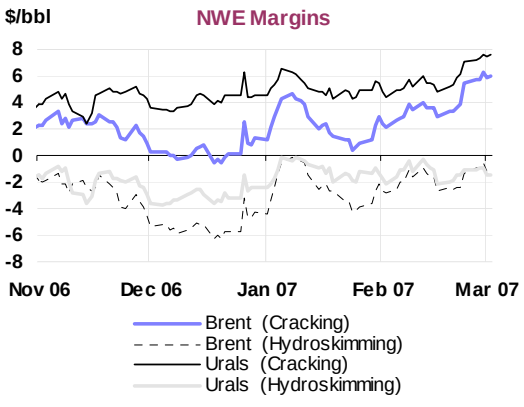
For the purposes of this report, refining margins are calculated for various complexity configurations, each optimized for processing the specific crude in a specific refining centre on a 'full-cost' basis. Consequently, reported margins should be taken as an indication, or proxy, of changes in profitability 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.

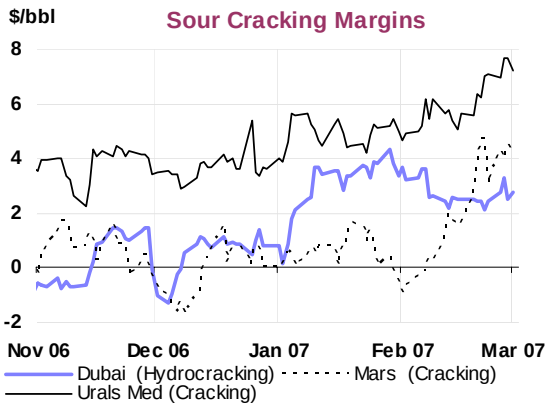
*The China refinery margin calculation represents a model based on spot product import/export parity, and does not reflect internal pricing regulations.

Sources: IEA, Purvin & Gertz Inc.

Of the margins quoted by this report, average February Oman cracking rose by $5.75/bbl from January, and Kern coking added $7.83/bbl in February to surpass $25/bbl – and both are still rising. Such levels were last seen at the height of last summer and prior to that during the hurricane-related outages of autumn 2005. On the Gulf Coast, margins improved too, with light sweet cracking margins for both domestic and foreign crudes moving back into positive territory in February.

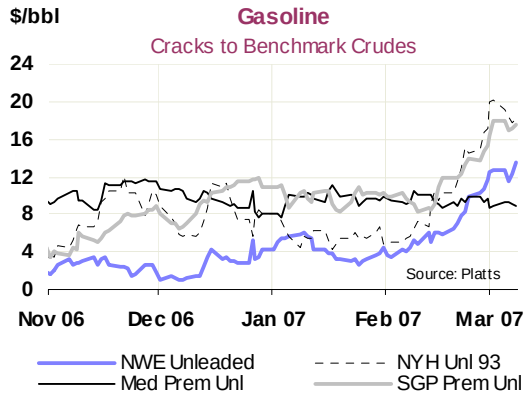
In Europe, sour cracking margins for both Urals and Es Sider are now quite high, benefiting from rising gasoline cracks, but also sustained strength in jet fuel and to a lesser extent diesel. In Asia, with the exception of Dubai hydrocracking (in both Singapore and China), margins mostly deteriorated and remain depressed, reflecting a generally weaker market than in the US or Europe.

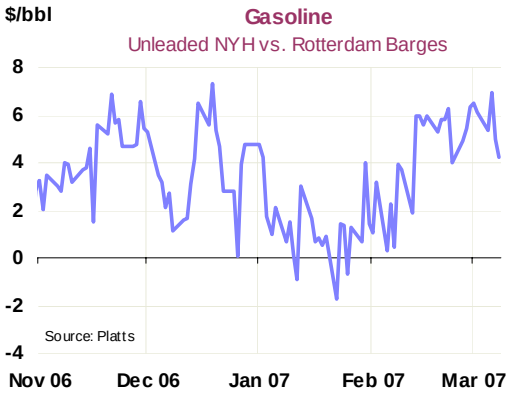




Spot Product Prices

Product markets and indeed the whole oil complex are currently driven by gasoline's strength. Tightness in the US market, on a combination of refinery maintenance, unplanned outages, pipeline problems and the switch to summer grade, is reflected by sharply falling stocks and corresponding wider cracks. However, despite a sharp decline in stocks since the start of the year, inventories remain above the five-year average in absolute terms. Less support than usual has come from Europe in terms of arbitrage cargoes, as New York Harbor/Rotterdam spreads only picked up from mid-February, and gasoline stocks in Europe at the end of January were below the five-year average.





On the other hand, the arbitrage has been open from East Asia to the US West Coast, where cracks have been particularly high. The light distillate complex in Asia has also benefited from naphtha's continued strength on strong petrochemical demand and still-constrained supply, despite higher imports from Europe.

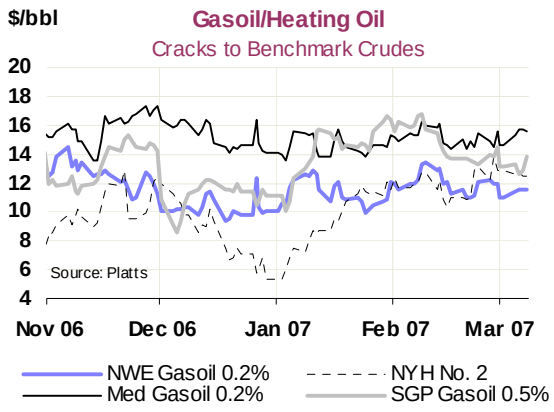
Spot Product Prices

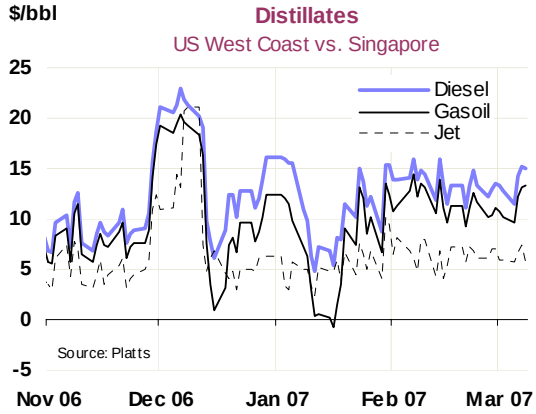
(monthly and weekly averages, $/bbl)

	Dec	Jan	Feb	Feb-Jan		Week Commencing:					Dec	Jan	Feb
				Change	%	05 Feb	12 Feb	19 Feb	26 Feb	05 Mar			
Rotterdam, Barges FOB											**Differential to Brent**		
Premium Unleaded	66.10	58.95	64.97	6.01	10.2	62.87	62.47	66.80	73.49	73.97	3.78	5.28	7.54
Naphtha	60.16	56.03	60.80	4.77	8.5	60.10	59.64	61.21	65.86	66.15	-2.17	2.35	3.37
Jet/Kerosene	78.49	70.98	74.17	3.19	4.5	74.05	71.98	74.35	77.93	76.36	16.16	17.30	16.74
ULSD	75.60	67.79	72.51	4.72	7.0	72.77	70.69	72.61	75.93	75.50	13.27	14.11	15.08
Gasoil .2%	72.64	65.01	69.44	4.43	6.8	69.82	67.91	69.27	72.38	71.86	10.32	11.33	12.01
LSFO 1%	38.81	37.47	36.04	-1.43	-3.8	38.42	34.52	34.38	38.79	39.79	-23.52	-16.21	-21.38
HSFO 3.5%	39.43	35.25	39.61	4.36	12.4	40.57	39.06	38.92	40.99	40.72	-22.90	-18.43	-17.81
Mediterranean, FOB Cargoes											**Differential to Urals**		
Premium 50 ppm	65.70	57.73	64.17	6.43	11.1	62.08	61.57	66.01	72.52	71.79	7.75	7.61	10.35
Naphtha	59.03	54.40	59.13	4.73	8.7	58.61	58.01	59.38	63.94	64.20	1.08	4.27	5.31
Jet Aviation fuel	76.84	68.77	72.03	3.26	4.7	71.73	70.28	72.42	75.33	73.98	18.89	18.64	18.21
Gasoil .2%	73.32	64.71	68.95	4.24	6.6	69.40	67.40	68.91	71.92	72.57	15.37	14.58	15.14
LSFO 1%	39.95	36.01	39.72	3.71	10.3	40.07	39.26	39.24	41.98	41.75	-18.00	-14.12	-14.10
HSFO 3.5%	38.96	35.96	38.89	2.93	8.1	39.95	38.12	37.87	40.50	41.18	-18.99	-14.16	-14.92
New York Harbour, Barges											**Differential to WTI**		
Super Unleaded	76.21	65.54	73.84	8.30	12.7	69.39	71.55	78.14	84.53	84.97	14.25	11.40	14.64
Unleaded	69.83	59.73	69.13	9.41	15.7	64.99	67.53	72.87	79.33	79.34	7.87	5.59	9.93
Jet/Kerosene	77.63	70.48	74.19	3.70	5.3	73.95	72.52	74.20	78.73	78.00	15.67	16.35	14.99
No. 2 (Heating Oil)	70.46	63.77	71.20	7.43	11.6	71.24	69.51	71.34	74.43	73.59	8.50	9.63	12.00
LSFO 1%	40.05	37.23	40.10	2.87	7.7	41.51	39.83	38.71	40.97	42.43	-21.91	-16.91	-19.10
No. 6 3%	38.88	36.07	41.19	5.11	14.2	41.28	42.22	40.70	41.86	42.00	-23.08	-18.06	-18.01
Singapore, Cargoes											**Differential to Dubai**		
Premium Unleaded	68.16	61.59	66.80	5.20	8.4	65.03	64.74	68.99	73.90	75.89	9.48	9.90	11.04
Naphtha	60.54	56.79	63.81	7.02	12.4	62.69	63.97	63.74	68.41	70.52	1.85	5.09	8.06
Jet/Kerosene	77.42	69.66	71.77	2.11	3.0	71.81	70.47	71.53	74.50	74.24	18.74	17.97	16.02
Gasoil .5%	69.76	66.08	70.61	4.53	6.9	71.89	69.35	69.23	72.03	71.59	11.08	14.38	14.86
LSWR Cracked	42.94	39.37	43.27	3.89	9.9	44.32	41.61	42.61	44.67	45.59	-15.74	-12.32	-12.49
HSFO 180 CST	42.90	41.91	45.67	3.75	9.0	47.53	44.62	43.80	45.58	46.64	-15.78	-9.78	-10.08
HSFO 380 CST 4%	42.29	42.17	45.80	3.63	8.6	47.91	44.35	43.66	45.83	46.56	-16.40	-9.52	-9.95

Source: Platts

Middle distillates were more mixed, with jet fuel cracks still high in most markets, and the performance of diesel/heating oil differing in the various regions. Diesel fuel cracks were highest in the US, where year-on-year demand growth is stronger-than-expected. In contrast, mild weather and high stocks kept middle distillate cracks flat in Europe and Asia. Japanese kerosene sales were the weakest in 24 years in January according to government figures, though inventories fell over the course of February, as refiners reduced throughputs. Jet meanwhile received some support from strong Asian exports to the US West Coast.





Fuel oil's discount to crude was flat or wider in February and early March, as the impact of OPEC cuts of heavier crudes failed to offset weak demand. Low-sulphur fuel oil (LSFO) picked up a bit from mid-February on the US East Coast as utility demand grew. Meanwhile in Asia, LSFO benefited from South Korean and Taiwanese demand just as liquefied natural gas (LNG) exports from Indonesia dropped. Ongoing investigations into Japanese nuclear power plant security data continue and considering the rise in fuel oil demand that resulted from plant closures in 2002, developments will be closely watched by the fuel oil trade. In terms of West-East arbitrage, the Rotterdam-Singapore high-sulphur fuel oil (HSFO) spread has narrowed slightly, but according to market reports, some 3.4 million tonnes are due to arrive in the East in the second half of March, significantly more than in February.

End-User Product Prices in February

As the month saw no major movements in the value of OECD currencies compared with the US dollar, trends in domestic end-user prices reflected changes when valued in US dollars. The ex-tax price of gasoline in US dollars declined by 2% on average in OECD countries surveyed in February. Pre-tax gasoline prices in the US declined by 1.8% to $0.483. Notable were the drops in US dollar wholesale gasoline prices in the UK and Japan (4.0% and 5.3% respectively). The ex-tax price of diesel has dropped by 2.3% on average in the OECD. Heating oil prices moved in opposite trends in OECD countries as prices rose by 1.7% on average in France, Germany, Canada and Italy and fell by 3.5% in Spain, the UK and Japan. The ex-tax US dollar price of fuel oil climbed on average by 3.2% in France, Italy and the UK while dropping by 5.6% in Germany and 1.7% in Spain.

Freight

Higher March term volumes from OPEC exporters supported Middle East Gulf tanker rates in late February, but they remain well below seasonal averages. Arbitrage economics up until mid-February encouraged crude exports from Europe and the US and the Far East, but ample vessel supply, due to OPEC cuts and refinery maintenance, prevented rates from climbing dramatically. Clean tanker rates in the Atlantic Basin rose due to reduced product output during OECD refinery maintenance, sustaining demand for product imports, and increased competition for vessels from West Africa.

VLCC rates from the Middle East Gulf fell to $9/tonne to Japan and $15/tonne to US Gulf in the first half of February as OPEC production cuts deepened. The mid-month trough, which mirrored the lull in mid-January, is well below the seasonal five-year average of over $15/tonne and $20/tonne for Japan and the US Gulf respectively.

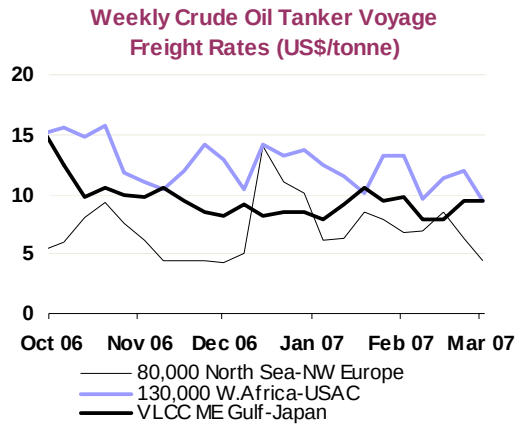
Interest in Middle East Gulf vessels grew later in the month following reports that Saudi Arabia and UAE would increase crude volumes available to term customers, especially in the East, in March. Japan-bound VLCC rates rose to $12/tonne by early March, by which time, rates for vessels heading

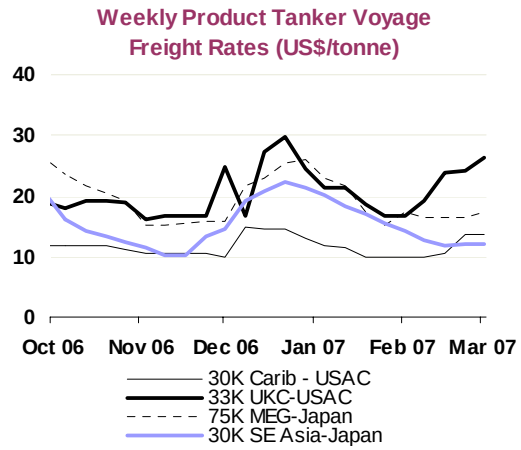
to the US Gulf had reached $17/tonne. Further support came from spot chartering by Saudi Vela in early March. The double-hull premium also continues to offer upside to rates for the chartering of better quality vessels.

In the Atlantic basin, the premium of WTI over Brent widened until mid-February, encouraging shipments of North Sea crude to the US, before dropping. At the same February mid-point, eastern grades such as Tapis were very strong relative to Brent, encouraging Brent-related material in the Atlantic Basin to move east. Relatively low mid-month Suezmax rates added further impetus for arbitrage shipments from the region and tanker sailing reports confirmed that trade volumes increased. This added pressure to vessel availability causing Suezmax rates from North Sea to the US Atlantic to rebound from a mid-February trough of under $13/tonne to over $15/tonne by end-month. West Africa to East Asia VLCC rates rose from $18/tonne to over $21/tonne over a similar period.

In the Mediterranean, Suezmax and Aframax rates fell significantly as delays in the Turkish Straits eased. Black Sea to Mediterranean Aframax rates dropped from $17/tonne at the end of January to under $8/tonne at the end of February.

In the clean sector, charter rates rose in the Atlantic Basin but were flat east of Suez. Competition for clean product vessels in the Atlantic intensified as West Africa boosted imports of high-sulphur material from European refiners. In a period of refinery maintenance, US demand for products imports remained strong. Lower temperatures supported US heating oil demand, gasoline demand was firm and jet fuel imports in 2007 have been more than double the five-year average. Rates for 33,000-tonne cargoes from North Europe to US Atlantic rose from $17/tonne at the start of February to $26/tonne at the start of March. Asian clean rates were flatter despite the growing potential for product tightness during refinery turnarounds.



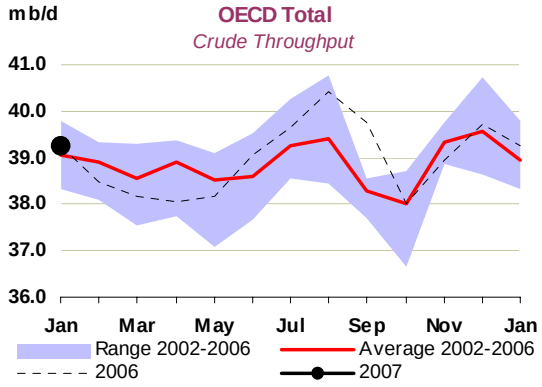


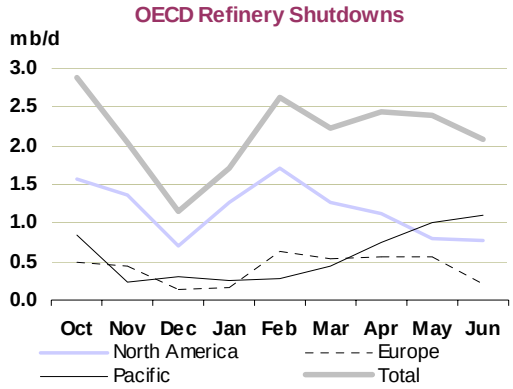
REFINING

Summary

- **OECD throughputs in January fell by 0.5 mb/d, to an estimated 39.3 mb/d**. The start of refinery maintenance in the US and Europe, and unplanned shutdowns in North America, reduced OECD operating rates. Crude runs in the OECD are expected to have fallen further in February to around 38.4 mb/d, but should recover slightly in March to 38.6 mb/d.

- **Refinery problems during February in North America** tightened the region's product markets, leading to stronger light product cracks. In particular the fire at Valero's McKee refinery reduced supplies to south western states, boosting West and Gulf Coast product cracks. Increased product imports into the West Coast should help ease market tightness, in the absence of further refinery disruptions.





- **OECD refineries boosted jet fuel/kerosene yields in December** in response to stronger prices, at the expense of diesel/gasoil. The higher production of jet fuel/kerosene occurred despite warm Pacific weather undermining regional demand. Gasoline yields continued to lag historical levels although some recovery was seen in the US and recent improvements in gasoline cracks suggests further gains will be seen in subsequent data.

- **Global offline capacity is expected to peak in March at 3.5 mb/d.** Current forecasts show that idled capacity will remain at, or close to, this level through early May, before dipping to around 3 mb/d. Overall refinery maintenance in 2007 appears to have started earlier than in 2006, but is currently forecast to be less severe over the second quarter than last year.

Refinery Throughput

The start of US refinery maintenance and unplanned shutdowns in North America lowered OECD crude throughputs in January by 0.5 mb/d, to an estimated 39.3 mb/d. The decline from December's upwardly revised (+120 kb/d) seasonal peak of 39.7 mb/d is in line with typical seasonal patterns, and leaves January OECD crude runs 82 kb/d below the January 2006 level. Weak demand and high product stocks in the OECD Pacific prompted voluntary run cuts of 250 kb/d in January but their impact was partly offset by returning refinery capacity, keeping throughputs in the region level with those of December.

Crude runs in the OECD are expected to have fallen further in February to around 38.4 mb/d, but should recover slightly in March to 38.6 mb/d. The start of maintenance in the Pacific is then expected to offset rising throughputs in the Atlantic Basin, keeping overall activity roughly unchanged through to May.

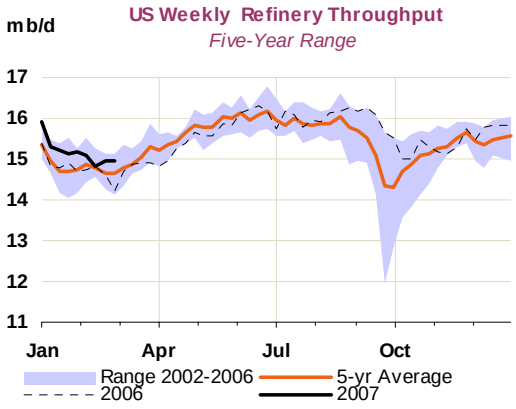
Refinery Crude Throughput and Utilisation in OECD Countries

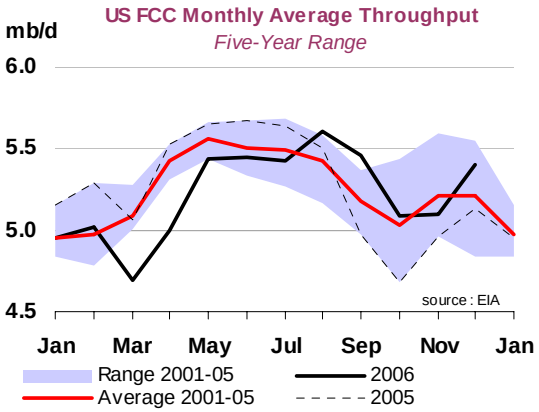
	million barrels per day						*Change from*		Utilisation rate[2]	
	Aug 06	Sep 06	Oct 06	Nov 06	Dec 06	Jan 07	*Dec 06*	*Jan 06*	Jan 07	Jan 06
OECD North America										
US[3]	15.79	15.74	15.00	15.01	15.37	15.00	-0.37	0.19	86.24	86.44
Canada	1.90	1.85	1.82	1.85	1.82	1.77	-0.05	-0.02	87.74	88.78
Mexico	1.22	1.18	1.14	1.24	1.31	1.27	-0.03	-0.06	82.72	71.96
Total	18.92	18.77	17.95	18.10	18.50	18.04	-0.46	0.11	86.12	86.07
OECD Europe										
France	1.81	1.86	1.74	1.81	1.80	1.79	-0.01	0.04	91.57	88.73
Germany	2.45	2.18	2.19	2.41	2.32	2.27	-0.06	-0.02	93.74	93.98
Italy	1.93	1.88	1.95	1.98	1.95	1.85	-0.10	-0.01	79.24	80.02
Netherlands	0.98	1.03	1.02	1.04	1.03	0.99	-0.04	0.09	82.05	74.27
Spain	1.24	1.22	1.17	1.11	1.15	1.18	0.02	-0.05	92.44	96.51
UK	1.68	1.64	1.35	1.50	1.63	1.59	-0.04	0.00	84.28	84.73
Other OECD Europe	4.16	4.11	4.04	3.91	4.00	4.20	0.20	0.13	87.74	84.32
Total	14.27	13.92	13.45	13.76	13.91	13.87	-0.03	0.18	87.41	85.97
OECD Pacific										
Japan	4.09	3.92	3.44	3.87	4.18	4.17	-0.01	-0.23	89.16	94.20
Korea	2.41	2.46	2.42	2.51	2.47	2.49	0.03	-0.04	96.81	98.36
Other OECD Pacific	0.72	0.70	0.72	0.72	0.67	0.68	0.01	-0.03	84.94	89.16
Total	7.22	7.08	6.59	7.10	7.32	7.35	0.03	-0.30	91.18	95.03
OECD Total	40.41	39.77	38.00	38.97	39.72	39.26	-0.46	-0.01	87.49	87.64

1 Estimate
2 Based on crude throughput and current operable refining capacity
3 US50

OECD North America

North American crude throughputs in January fell by 457 kb/d to an average of 18 mb/d, from December's downwardly revised (-143 kb/d) 18.5 mb/d. Unsurprisingly, the drop in throughputs occurred largely in the US, but runs were also lower in Mexico and Canada. Despite planned maintenance being higher than a year ago, crude throughputs were 112 kb/d above January 2006 when the lingering hurricane effects from 2005 kept almost 800 kb/d of capacity off-line.

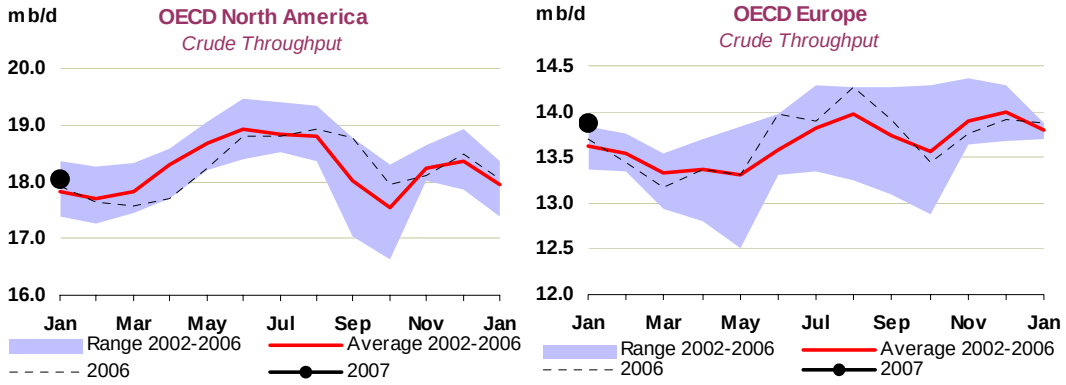




US crude runs in January fell as expected, with the start of maintenance work. On the West Coast Chevron's 240 kb/d Richmond and Tesoro's 160 kb/d Golden Eagle refineries both started planned work. On the Gulf Coast Total's 230 kb/d Port Arthur and Shell's 330 kb/d Deer Park refineries also commenced maintenance. Canadian refineries hit problems with runs curtailed at Imperial Oil's Sarnia facility following a fire at the hydrocracker in December and its Edmonton facility also cut runs in early January following problems with the catalytic cracking unit in late December.

Weekly US data indicate that crude runs fell over the course of February, to a low of 14.4 mb/d in the middle of the month, the lowest level of throughput since last March when refinery maintenance work reached its spring 2006 peak. In addition to the planned increases in work on the Gulf and West Coasts, refinery problems at Valero's 170 kb/d McKee and 210 kb/d Delaware refineries, among others, also curtailed crude runs.

West Coast crude runs remained weak, as expected, although the disruptions to three LA refineries in early March caused by the untimely (concurrent) deaths of a racoon and an opossum at two separate Los Angeles electricity sub-stations, were not factored into our forecasts. Much of the stronger margin environment has been attributed to tighter products supplies as a result of the unplanned outages, particularly the McKee refinery problems. This refinery supplies a significant part of the requirements of Arizona, forcing replacement supplies to be sourced from further afield and has raised product prices, both locally and on the US West Coast.



Canadian product markets in Ontario and Montreal were also affected due to successive refinery disruptions. Imperial Oil (a subsidiary of ExxonMobil) refineries in Sarnia and Edmonton were affected by production problems in December and January. Following on from this, Shell Canada's Montreal refinery is reported to have suffered production problems although details remain sketchy. Reports indicate that supplies to some retail stations were reduced leading to selective stock-outs. Re-supply options were further reduced by industrial action at Canadian National Railways which limited some train shipments and hampered industry attempts to maintain product supply.

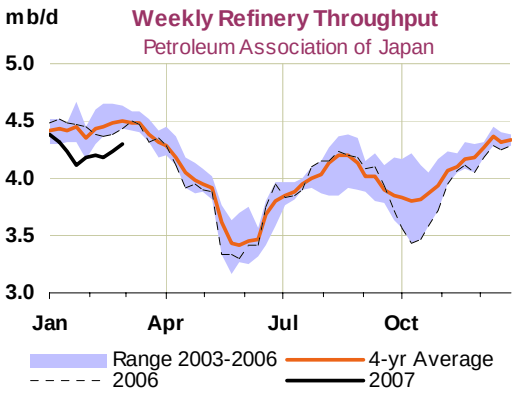
OECD Europe

European crude throughputs averaged 13.9 mb/d in January, unchanged from December's upwardly revised (+249 kb/d) level. The reported start of planned maintenance work at Shell's refineries in the UK, the Netherlands and France, plus work at Eni's Gela refinery resulted in lower runs. However, Belgian runs posted a second consecutive increase as the expanded ExxonMobil Antwerp refinery completed its return from fourth-quarter maintenance, increasing Belgian throughputs by 177 kb/d. Consequently, net regional crude runs were above the level of January 2006 by 180 kb/d.

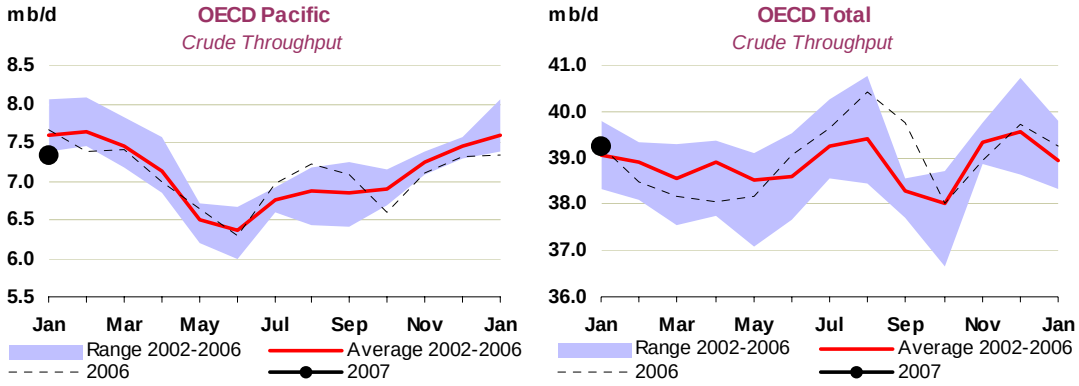
OECD Pacific

January crude throughput in the OECD Pacific region was broadly unchanged from December's at 7.3 mb/d but 304 kb/d below a year ago, as runs were restrained by high stocks, weak demand and poor hydroskimming margins in the region.

Japanese crude runs of 4.2 mb/d in January were broadly unchanged from December's level, with the return to full service of Cosmo's Chiba refinery offsetting 150 kb/d of run cuts. Japanese capacity utilisation was 89.7% in January, in line with December, but well below January 2006's level of 94.2%.



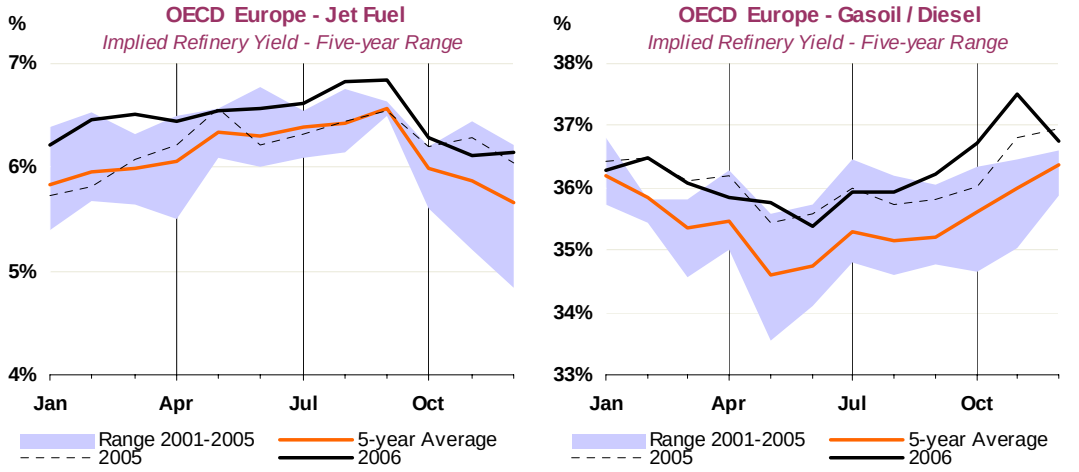
Weekly data from the Petroleum Association of Japan show that crude runs in February were essentially unchanged from January, at 4.2 mb/d. In addition to Nippon Oil's self-imposed run cuts, Showa Shell and Japan Energy were also reported to have trimmed runs during February. In total, cuts from planned crude runs of around 160 kb/d are thought to have occurred, with Nippon Oil contributing some 140 kb/d of these. The need for further runs cuts may be obviated by the pending start of the second-quarter maintenance season.



Korean runs were also largely unchanged, rising 27 kb/d to an average of 2.5 mb/d. Economic run cuts are estimated to have fallen by 10 kb/d to 86 kb/d in the month. Similarly to Japan, warm weather and weak demand for kerosene stifled the incentive for refiners to seasonally maximise runs. As a result of this slight reduction in crude run cuts, Korea's capacity utilisation rate increased to 96.8% in January. Korean refiners have also continued with run cuts in February, with our estimates suggesting a 100 kb/d reduction in runs and the possibility of 120 kb/d in March.

OECD Refinery Yields

OECD refinery yield data for December confirm that refiners responded to price signals, boosting jet fuel/kerosene yields compared with seasonal trends at the expense of diesel and gasoil - despite warm weather weakening demand in the Pacific. Gasoline yields continued to lag historical levels although some recovery was seen in the US.

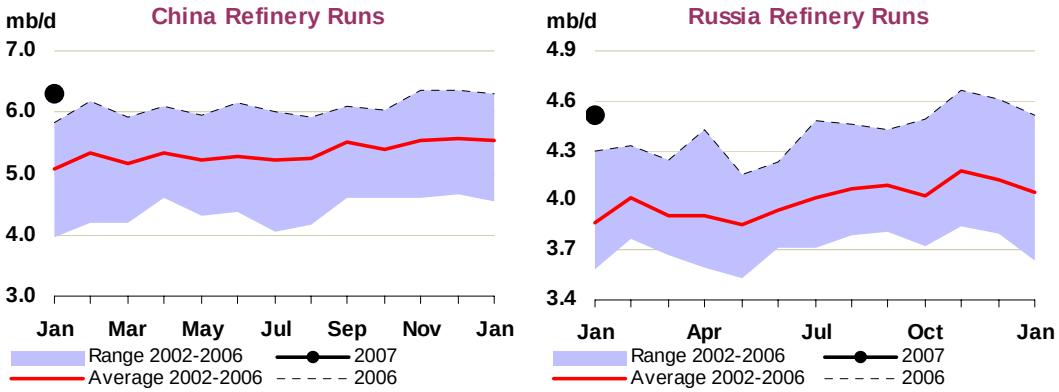


Within the jet/kerosene product category, warm December weather weighed on yields for kerosene (used for domestic heating) in the Pacific, with refiners focusing more on the production of jet fuel. Regional kerosene yields were 9.2% compared with a five-year average of 10.8%. Refiners in Korea in particular appeared to curtail kerosene production to the benefit of jet fuel with kerosene accounting for only 33% of jet/kerosene production in December, compared with 48% in December 2005.

European refineries also curtailed other distillate production in favour of jet fuel and kerosene. This move by refiners is entirely consistent with the region's stronger jet/kerosene cracks during the month. This price premium continued in Northwest Europe in January, but in the Mediterranean ULSD regained a $5/bbl premium, so next month's data may be more mixed. European gasoline yields remained weak in December and January, but the recent recovery in gasoline cracks should have boosted February production.

Non-OECD Throughput

Preliminary data for the big two national refiners suggest that **Chinese** crude runs fell slightly in January compared with December, averaging 6.3 mb/d (official data are unavailable at the time of writing due to the Lunar New Year holidays). Crude runs are seen increasing in February in line with stronger demand due to holiday-related travel. January data indicate that **Indian** crude runs averaged 3.0 mb/d, as higher crude runs at Reliance's Jamnagar refinery, where a fire the previous month disrupted production and Bharat Petroleum's Kochi refinery boosted the overall activity level.



Russian crude runs declined in January to 4.5 mb/d from December's level of 4.6 mb/d. The decline at Surgutneftegas's Kirishi facility was largely responsible, although the reason for lower runs is not apparent at the time of writing. Partly offsetting this decline were increases at Yukos's Angarsk and Achinsk plants and TNK-BP's Saratov refinery.

Offline Refinery Capacity

Further details have emerged on planned maintenance over the recent weeks allowing us to revise up our forecast for first-half 2007 by an average of 250 kb/d. Offline capacity is currently expected to peak in March at 3.5 mb/d and is forecast to remain at, or close to, this level through early May, before dipping to around 3 mb/d. Overall refinery maintenance this year appears to have started earlier than in 2006, but is currently forecast to be less severe over the second quarter than last year.

The upward revisions in OECD regions are centred in Europe in the first quarter and the Pacific in the second quarter. The latter revision is driven partly by higher anticipated run cuts in April. North American offline capacity in February is now estimated to be 1.7 mb/d, an increase of 0.4 mb/d, following disruption to several refineries, including Valero's McKee refinery, and three refineries in Canada. European first-quarter maintenance is expected to continue at above 0.5 mb/d through until the middle of the second quarter having made an earlier than normal start in January at refineries in the Netherlands, the UK and France. OECD Pacific offline capacity forecasts have been revised up due to the higher than anticipated run cuts in Japan and Korea. Furthermore, revised timings for some planned maintenance work has shifted the second-quarter peak back to June at 1.1 mb/d, although the average remains largely unchanged at 958 kb/d, slightly ahead of the second quarter last year.

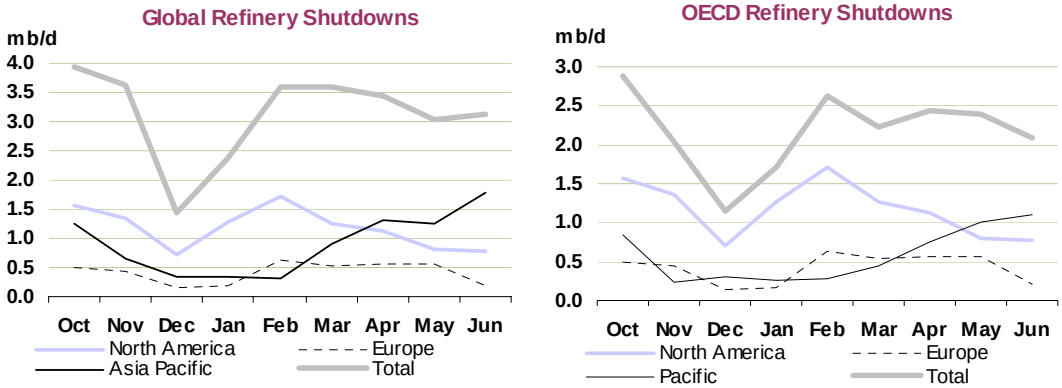


Table 1
WORLD OIL SUPPLY AND DEMAND
(million barrels per day)

	2003	2004	1Q05	2Q05	3Q05	4Q05	2005	1Q06	2Q06	3Q06	4Q06	2006	1Q07	2Q07	3Q07	4Q07	2007
OECD DEMAND																	
North America	24.5	25.4	25.6	25.3	25.6	25.5	25.5	25.1	25.1	25.5	25.3	25.3	25.6	25.3	25.9	26.0	25.7
Europe	15.4	15.5	15.6	15.2	15.6	15.7	15.5	15.8	15.0	15.4	15.6	15.4	15.5	15.1	15.5	15.7	15.5
Pacific	8.6	8.5	9.4	8.1	8.1	8.8	8.6	9.3	7.9	7.9	8.8	8.5	9.0	7.8	8.0	8.9	8.4
Total OECD	48.6	49.3	50.7	48.6	49.3	50.0	49.6	50.2	48.0	48.8	49.7	49.2	50.1	48.2	49.4	50.6	49.6
NON-OECD DEMAND																	
FSU	3.6	3.8	3.8	3.7	3.8	3.9	3.8	3.9	3.7	4.0	4.3	4.0	3.9	3.8	4.0	4.5	4.0
Europe	0.7	0.7	0.8	0.7	0.7	0.7	0.7	0.8	0.7	0.7	0.7	0.7	0.8	0.7	0.7	0.7	0.7
China	5.5	6.4	6.7	6.5	6.7	6.9	6.7	7.0	7.3	7.2	7.2	7.2	7.3	7.8	7.7	7.6	7.6
Other Asia	8.1	8.6	8.9	8.8	8.6	8.7	8.8	8.8	8.9	8.7	9.0	8.9	9.0	9.1	8.9	9.2	9.0
Latin America	4.7	5.0	5.0	5.1	5.2	5.1	5.1	5.1	5.2	5.3	5.2	5.2	5.2	5.3	5.4	5.3	5.3
Middle East	5.4	5.8	6.0	6.1	6.4	6.0	6.1	6.3	6.4	6.7	6.4	6.5	6.6	6.7	7.0	6.7	6.8
Africa	2.7	2.8	2.9	2.9	2.8	2.9	2.9	3.0	3.0	2.9	3.0	2.9	3.0	3.0	2.9	3.0	3.0
Total Non-OECD	30.7	33.1	34.0	33.9	34.1	34.3	34.1	34.8	35.3	35.3	35.8	35.3	35.8	36.4	36.6	37.1	36.5
Total Demand[1]	79.3	82.4	84.7	82.5	83.4	84.2	83.7	85.0	83.3	84.1	85.5	84.5	85.9	84.6	85.9	87.7	86.0
OECD SUPPLY																	
North America	14.6	14.6	14.5	14.7	13.7	13.8	14.1	14.2	14.2	14.3	14.3	14.2	14.4	14.2	14.1	14.2	14.2
Europe	6.3	6.1	5.9	5.7	5.4	5.5	5.6	5.5	5.1	4.9	5.2	5.2	5.2	5.1	5.0	5.3	5.2
Pacific	0.7	0.6	0.5	0.6	0.6	0.6	0.6	0.5	0.5	0.7	0.6	0.6	0.6	0.6	0.7	0.7	0.7
Total OECD	21.6	21.2	20.9	21.0	19.7	19.8	20.3	20.2	19.8	19.9	20.1	20.0	20.2	19.9	19.8	20.2	20.0
NON-OECD SUPPLY																	
FSU	10.3	11.2	11.5	11.5	11.7	11.9	11.6	11.8	12.0	12.2	12.4	12.1	12.4	12.6	12.6	12.7	12.6
Europe	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
China	3.4	3.5	3.6	3.6	3.6	3.6	3.6	3.7	3.7	3.7	3.6	3.7	3.8	3.8	3.8	3.8	3.8
Other Asia	2.6	2.7	2.7	2.6	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.8	2.8	2.8	2.8	2.8
Latin America	4.0	4.1	4.2	4.4	4.3	4.3	4.3	4.3	4.4	4.4	4.4	4.4	4.5	4.5	4.5	4.6	4.5
Middle East	2.0	1.9	1.9	1.9	1.9	1.8	1.9	1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
Africa[2]	3.0	3.4	3.5	3.6	3.8	3.9	3.7	3.9	3.9	4.0	4.1	4.0	2.7	2.7	2.7	2.7	2.7
Total Non-OECD	25.6	27.0	27.5	27.7	28.1	28.4	27.9	28.4	28.6	28.9	29.1	28.8	28.0	28.1	28.2	28.4	28.2
Processing Gains[3]	1.8	1.8	1.9	1.9	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
Other Biofuels[4]	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3
Total Non-OPEC[5]	49.1	50.1	50.4	50.6	49.8	50.2	50.2	50.7	50.5	50.9	51.3	50.8	50.5	50.3	50.3	50.9	50.5
Non-OPEC excl. Angola[2]	48.2	49.2	49.3	49.5	48.4	48.8	49.0	49.3	49.2	49.4	49.9	49.4	50.5	50.3	50.3	50.9	50.5
OPEC																	
Crude[6]	27.1	28.9	29.3	29.7	30.0	29.9	29.7	29.9	29.8	30.0	29.2	29.7					
NGLs	3.7	4.2	4.4	4.4	4.5	4.5	4.5	4.6	4.7	4.7	4.7	4.7	4.8	4.8	4.9	5.0	4.9
Total OPEC	30.8	33.1	33.7	34.2	34.5	34.5	34.2	34.5	34.5	34.7	34.0	34.4					
OPEC incl. Angola[2]	31.7	34.1	34.8	35.3	35.8	35.9	35.4	35.9	35.8	36.2	35.4	35.8					
Total Supply[7]	79.8	83.2	84.1	84.8	84.2	84.7	84.5	85.2	85.0	85.6	85.3	85.3					
STOCK CHANGES AND MISCELLANEOUS																	
Reported OECD																	
Industry	0.1	0.1	0.0	0.9	0.2	-0.4	0.1	0.0	0.6	1.2	-0.9	0.2					
Government	0.2	0.1	0.1	0.3	0.0	-0.1	0.1	0.0	0.1	0.0	0.0	0.0					
Total	0.3	0.2	0.1	1.2	0.2	-0.5	0.2	0.0	0.7	1.2	-0.9	0.3					
Floating Storage/Oil in Transit	0.2	0.0	-0.4	0.1	0.0	0.1	-0.1	0.1	-0.1	0.3	-0.6	-0.1					
Miscellaneous to balance[8]	0.1	0.6	-0.2	1.0	0.8	0.8	0.6	0.0	1.0	0.0	1.3	0.6					
Total Stock Ch. & Misc	0.6	0.8	-0.6	2.3	0.9	0.4	0.8	0.1	1.7	1.5	-0.2	0.8					
Memo items:																	
Call on OPEC crude + Stock ch.[9]	26.5	28.1	29.8	27.4	29.1	29.5	29.0	29.7	28.1	28.6	29.4	29.0	30.6	29.5	30.7	31.8	30.7
Adjusted Call on OPEC + Stock ch.[10]	26.7	28.7	29.6	28.4	29.9	30.4	29.6	29.7	29.2	28.5	30.7	29.5	31.6	30.4	31.6	32.8	31.6
"Call" incl. Angola[2]	27.4	29.1	30.9	28.6	30.4	30.9	30.2	31.1	29.5	30.0	30.9	30.4	30.6	29.5	30.7	31.8	30.7
"Adjusted Call" incl. Angola[2]	27.5	29.7	30.7	29.6	31.2	31.7	30.8	31.1	30.5	30.0	32.2	30.9	31.6	30.4	31.6	32.8	31.6

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 With effect from OMR of 13 February 2007, Angolan production will be reclassified within OPEC and excluded from the Non-OPEC and Africa totals, for the period January 2007 onwards. Secondary aggregates allow comparison with previous year totals by including Angola within OPEC retroactively.

3 Net volumetric gains and losses in the refining process (excludes net gain/loss in former USSR, China and non-OECD Europe) and marine transportation losses

4 Biofuels from sources outside Brazil and US.

5 Non-OPEC supplies include crude oil, condensates, NGL and non-conventional sources of supply such as synthetic crude, ethanol and MTBE. No allowance is made in the non-OPEC forecast for exceptional events which have, at certain times historically, reduced non-OPEC supply by 300-400 kbd on an annual basis

6 As of the March 2006 OMR, Venezuelan Orinoco heavy crude production is included within Venezuelan crude estimates. Orimulsion fuel remains within the OPEC NGL & non-conventional category, but Orimulsion production will reportedly cease from January 2007.

7 Comprises crude oil, condensates, NGLs, oil from non-conventional sources and other sources of supply

8 Includes changes in non-reported stocks in OECD and non-OECD areas

9 Equals the arithmetic difference between total demand minus total non-OPEC supply minus OPEC NGLs

10 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 plus an extra 350 kb/d allowance for average understatement of non-OPEC supply added for forecast periods.

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

(million barrels per day)

	2003	2004	1Q05	2Q05	3Q05	4Q05	2005	1Q06	2Q06	3Q06	4Q06	2006	1Q07	2Q07	3Q07	4Q07	2007
OECD DEMAND																	
North America	-	-	-	-	-	-	-	-	-	-	-0.1	-	0.1	-	-	-	-
Europe	-	-	-	-	-	-	-	-	-	-	-0.1	-	-0.1	-	-	-	-
Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-0.1	-	-	-	-
Total OECD	-	-	-	-	-	-	-	-	-	-	-0.1	-	-0.2	-	-	-	-0.1
NON-OECD DEMAND																	
FSU	-	-	-	-	-	-	-	-	-	-	-	-	-0.3	-	-	0.3	-
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-	0.1	-	-	-	-	-	-
Other Asia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Latin America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Middle East	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Non-OECD	-	-	-	-	-	-	-	-	-	-	0.1	-	-0.2	0.1	-	0.3	-
Total Demand	-	-	-	-	-	-	-	-	-	-	-	-	-0.4	-	-	0.3	-
OECD SUPPLY																	
North America	-	-	-	-	-	-	-	-	-	-	-0.1	-	-0.1	-0.1	-0.1	-0.1	-0.1
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total OECD	-	-	-	-	-	-	-	-	-	-	-0.1	-	-0.1	-0.1	-0.1	-0.1	-0.1
NON-OECD SUPPLY																	
FSU	-	-	-	-	-	-	-	-	-	-	-	-	0.1	-	-	-	-
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-	-	-	0.1	0.1	-	-	0.1
Other Asia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Latin America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Middle East	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Non-OECD	-	-	-	-	-	-	-	-	-	-	-	-	0.1	0.1	-	-	-
Processing Gains	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Biofuels	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Non-OPEC	-	-	-	-	-	-	-	-	-	-	-0.1	-	-	-	-	-0.1	-
Non-OPEC excl. Angola	-	-	-	-	-	-	-	-	-	-	-0.1	-	-	-	-	-0.1	-
OPEC																	
Crude	-	-	-	-	-	-	-	-	-	0.1	0.1	-					
NGLs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total OPEC	-	-	-	-	-	-	-	-	-	0.1	0.1	-					
OPEC incl. Angola	-	-	-	-	-	-	-	-	-	0.1	0.1	-					
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	-					
Total Stock Ch. & Misc	-	-	-	-	-	-	-	-	-	0.1	-	-					
Memo items:																	
Call on OPEC crude + Stock ch.	-	-	-	-	-	-	-	-	-	-	0.1	-	-0.3	0.1	-	0.4	-
Adjusted Call on OPEC + Stock ch.	-	-	-	-	-	-	-	-	-	0.1	-	-	-0.4	-	-	0.4	-
"Call" incl. Angola[2]	-	-	-	-	-	-	-	-	-	-	0.1	-	-0.3	0.1	-	0.4	-
"Adjusted Call" incl. Angola	-	-	-	-	-	-	-	-	-	0.1	-	-	-0.4	-	-	0.4	-

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

	2004	1Q05	2Q05	3Q05	4Q05	2005	1Q06	2Q06	3Q06	4Q06	2006	1Q07	2Q07	3Q07	4Q07	2007
Demand (mb/d)																
North America	25.37	25.61	25.33	25.61	25.51	25.52	25.12	25.09	25.47	25.35	25.26	25.60	25.30	25.88	26.00	25.70
Europe	15.47	15.62	15.17	15.57	15.70	15.52	15.77	15.03	15.43	15.55	15.45	15.48	15.06	15.52	15.74	15.45
Pacific	8.49	9.45	8.06	8.07	8.79	8.59	9.30	7.87	7.90	8.77	8.46	8.98	7.81	7.96	8.88	8.41
Total OECD	49.33	50.68	48.56	49.25	50.00	49.62	50.19	48.00	48.81	49.67	49.16	50.07	48.16	49.37	50.63	49.56
FSU	3.76	3.82	3.71	3.79	3.89	3.80	3.91	3.73	3.97	4.30	3.98	3.87	3.79	3.98	4.45	4.03
Europe	0.70	0.77	0.71	0.66	0.72	0.72	0.79	0.72	0.67	0.73	0.73	0.80	0.74	0.69	0.74	0.74
China	6.42	6.68	6.50	6.70	6.89	6.69	6.96	7.29	7.17	7.20	7.16	7.32	7.76	7.68	7.63	7.60
Other Asia	8.62	8.88	8.84	8.63	8.71	8.76	8.85	8.91	8.68	9.00	8.86	9.05	9.08	8.86	9.18	9.04
Latin America	4.96	4.96	5.12	5.18	5.10	5.09	5.08	5.21	5.28	5.25	5.20	5.16	5.29	5.39	5.33	5.29
Middle East	5.80	5.97	6.10	6.36	6.05	6.12	6.29	6.43	6.70	6.38	6.45	6.59	6.74	7.04	6.72	6.77
Africa	2.79	2.90	2.91	2.79	2.90	2.88	2.97	2.98	2.86	2.97	2.94	3.04	3.04	2.92	3.04	3.01
Total Non-OECD	33.05	33.98	33.91	34.11	34.25	34.06	34.84	35.28	35.33	35.83	35.32	35.82	36.42	36.55	37.09	36.48
World	82.38	84.66	82.47	83.37	84.25	83.68	85.03	83.28	84.13	85.49	84.48	85.89	84.59	85.92	87.71	86.03
of which:																
US50	*20.73*	*20.84*	*20.65*	*20.92*	*20.79*	*20.80*	*20.49*	*20.60*	*20.86*	*20.73*	*20.67*	*20.91*	*20.73*	*21.20*	*21.20*	*21.01*
Euro4	*8.25*	*8.25*	*7.95*	*8.26*	*8.21*	*8.17*	*8.42*	*7.88*	*8.07*	*8.14*	*8.13*	*8.15*	*7.86*	*8.15*	*8.24*	*8.10*
Japan	*5.29*	*6.00*	*4.94*	*5.03*	*5.46*	*5.35*	*5.96*	*4.78*	*4.81*	*5.35*	*5.22*	*5.58*	*4.68*	*4.81*	*5.41*	*5.12*
Korea	*2.16*	*2.40*	*2.07*	*2.01*	*2.23*	*2.18*	*2.28*	*2.03*	*2.02*	*2.30*	*2.16*	*2.32*	*2.05*	*2.06*	*2.34*	*2.19*
Mexico	*2.00*	*2.04*	*2.11*	*2.06*	*2.10*	*2.08*	*2.08*	*2.02*	*1.99*	*2.03*	*2.03*	*2.08*	*2.05*	*2.06*	*2.11*	*2.07*
Canada	*2.30*	*2.36*	*2.24*	*2.28*	*2.26*	*2.28*	*2.18*	*2.14*	*2.27*	*2.22*	*2.20*	*2.22*	*2.18*	*2.27*	*2.31*	*2.25*
Brazil	*2.15*	*2.12*	*2.18*	*2.25*	*2.21*	*2.19*	*2.18*	*2.20*	*2.28*	*2.29*	*2.24*	*2.22*	*2.24*	*2.33*	*2.32*	*2.28*
India	*2.57*	*2.71*	*2.58*	*2.46*	*2.55*	*2.57*	*2.71*	*2.67*	*2.48*	*2.70*	*2.64*	*2.82*	*2.76*	*2.54*	*2.76*	*2.72*
Annual Change (% per annum)																
North America	3.5	1.4	1.0	0.7	-0.8	0.6	-1.9	-0.9	-0.6	-0.6	-1.0	1.9	0.8	1.6	2.6	1.7
Europe	0.3	0.8	0.9	0.7	-1.1	0.3	0.9	-0.9	-0.9	-0.9	-0.4	-1.8	0.2	0.6	1.2	0.0
Pacific	-1.6	2.3	2.3	-0.5	0.7	1.2	-1.6	-2.4	-2.1	-0.3	-1.6	-3.3	-0.7	0.8	1.3	-0.5
Total OECD	1.5	1.4	1.2	0.5	-0.6	0.6	-1.0	-1.2	-0.9	-0.7	-0.9	-0.2	0.3	1.2	1.9	0.8
FSU	4.8	8.6	-0.3	-0.1	-2.7	1.2	2.4	0.6	4.8	10.5	4.6	-1.0	1.5	0.4	3.6	1.2
Europe	2.2	2.1	2.1	1.7	1.6	1.9	2.5	1.4	1.6	1.6	1.8	0.8	1.8	1.9	1.6	1.5
China	15.8	6.4	-0.4	6.4	4.5	4.2	4.2	12.1	7.1	4.6	6.9	5.1	6.4	7.2	5.9	6.1
Other Asia	6.8	4.1	2.2	2.4	-1.8	1.7	-0.3	0.7	0.6	3.3	1.1	2.2	1.9	2.1	2.1	2.1
Latin America	5.8	3.2	3.1	2.4	2.1	2.7	2.4	1.7	1.9	2.9	2.2	1.5	1.5	2.1	1.6	1.7
Middle East	6.9	5.7	5.8	5.6	5.3	5.6	5.4	5.4	5.4	5.6	5.4	4.9	4.7	5.0	5.2	5.0
Africa	4.1	3.3	3.3	2.5	2.7	3.0	2.4	2.3	2.4	2.4	2.4	2.4	1.8	2.1	2.2	2.2
Total Non-OECD	7.7	5.1	2.3	3.4	1.6	3.1	2.6	4.0	3.6	4.6	3.7	2.8	3.2	3.5	3.5	3.3
World	3.9	2.8	1.6	1.7	0.2	1.6	0.4	1.0	0.9	1.5	1.0	1.0	1.6	2.1	2.6	1.8
Annual Change (mb/d)																
North America	0.85	0.35	0.26	0.17	-0.20	0.14	-0.49	-0.23	-0.14	-0.16	-0.26	0.48	0.20	0.41	0.65	0.44
Europe	0.04	0.13	0.14	0.12	-0.18	0.05	0.15	-0.14	-0.13	-0.15	-0.07	-0.28	0.02	0.09	0.19	0.01
Pacific	-0.14	0.21	0.18	-0.04	0.06	0.10	-0.15	-0.19	-0.17	-0.02	-0.13	-0.31	-0.06	0.06	0.12	-0.05
Total OECD	0.75	0.69	0.58	0.24	-0.33	0.29	-0.50	-0.56	-0.45	-0.33	-0.46	-0.11	0.17	0.56	0.96	0.40
FSU	0.17	0.30	-0.01	0.00	-0.11	0.04	0.09	0.02	0.18	0.41	0.18	-0.04	0.06	0.01	0.16	0.05
Europe	0.02	0.02	0.01	0.01	0.01	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
China	0.88	0.40	-0.03	0.40	0.30	0.27	0.28	0.79	0.47	0.32	0.46	0.36	0.46	0.51	0.42	0.44
Other Asia	0.55	0.35	0.19	0.20	-0.16	0.15	-0.03	0.06	0.05	0.29	0.09	0.20	0.17	0.18	0.19	0.18
Latin America	0.27	0.15	0.15	0.12	0.11	0.13	0.12	0.09	0.10	0.15	0.11	0.08	0.08	0.11	0.08	0.09
Middle East	0.37	0.32	0.34	0.34	0.31	0.32	0.32	0.33	0.34	0.34	0.33	0.31	0.30	0.33	0.33	0.32
Africa	0.11	0.09	0.09	0.07	0.08	0.08	0.07	0.07	0.07	0.07	0.07	0.07	0.05	0.06	0.07	0.06
Total Non-OECD	2.37	1.63	0.75	1.13	0.53	1.01	0.87	1.37	1.22	1.57	1.26	0.98	1.14	1.22	1.26	1.15
World	3.12	2.33	1.33	1.37	0.21	1.30	0.37	0.81	0.77	1.24	0.80	0.86	1.31	1.79	2.22	1.55
Revisions to Oil Demand from Last Month's Report (mb/d)																
North America	-	-	-	-	-	-	-	-	-	-0.06	-0.02	0.12	-0.02	-0.05	-0.05	-
Europe	-	-	-	0.00	0.01	-	-	-	-	-0.10	-0.02	-0.12	-	-0.01	0.02	-0.03
Pacific	-	-	-	-	-	-	-	-	-	0.02	0.01	-0.15	-	0.01	0.01	-0.03
Total OECD	-	-	-	0.00	0.01	0.00	-	-	-	-0.14	-0.03	-0.15	-0.02	-0.04	-0.01	-0.06
FSU	-	-	-	-	-	-	-	-	-	0.02	0.01	-0.26	0.01	-	0.27	0.01
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	0.01	-	-0.01	-	-	0.03	0.02	0.03	0.05	0.03	0.03	0.05	0.04	0.03	0.04
Other Asia	-	-0.01	-0.01	-0.01	-0.01	-0.01	-0.03	-0.03	-0.03	0.01	-0.02	0.02	-0.01	-0.04	0.01	-0.01
Latin America	-	-	-	-	-	-	0.01	0.01	-	0.01	0.01	0.01	0.01	-	0.01	0.01
Middle East	-	-	-	-	-	-	-	-	-	-	-	-0.01	-	-	0.01	-
Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Non-OECD	-	-	-0.01	-0.03	-0.01	-0.01	0.01	-	0.01	0.10	0.03	-0.20	0.05	0.01	0.33	0.05
World	-	-	-0.01	-0.02	-	-0.01	-	0.01	0.01	-0.04	-0.01	-0.35	0.03	-0.04	0.32	-0.01
Revisions to Oil Demand Growth from Last Month's Report (mb/d)																
World	0.00	0.00	-0.01	-0.02	0.00	-0.01	0.00	0.02	0.04	-0.05	0.00	-0.36	0.03	-0.05	0.36	0.00

Table 3
WORLD OIL PRODUCTION
(million barrels per day)

	2005	2006	2007	3Q06	4Q06	1Q07	2Q07	3Q07	Dec 06	Jan 07	Feb 07
OPEC											
Crude Oil											
Saudi Arabia	9.06	8.96		8.95	8.60				8.42	8.42	8.32
Iran	3.88	3.89		4.05	3.88				3.88	3.90	3.87
Iraq	1.81	1.90		2.04	1.85				1.77	1.70	1.88
UAE	2.46	2.62		2.65	2.60				2.60	2.60	2.56
Kuwait	2.13	2.21		2.20	2.20				2.19	2.18	2.14
Neutral Zone	0.58	0.58		0.57	0.57				0.57	0.56	0.56
Qatar	0.77	0.82		0.82	0.81				0.82	0.81	0.80
Angola[6]										1.51	1.56
Nigeria	2.40	2.24		2.29	2.26				2.26	2.28	2.25
Libya	1.64	1.71		1.73	1.74				1.73	1.70	1.69
Algeria	1.34	1.35		1.34	1.34				1.34	1.34	1.32
Venezuela	2.71	2.56		2.51	2.50				2.55	2.49	2.43
Indonesia	0.94	0.89		0.87	0.86				0.86	0.86	0.84
Total Crude Oil	29.74	29.72		30.02	29.22				28.96	30.34	30.21
Total NGLs[1]	4.46	4.69	4.88	4.72	4.75	4.78	4.81	4.91	4.75	4.78	4.77
Total OPEC	34.20	34.41		34.74	33.97				33.71	35.11	34.98
OPEC incl. Angola[6]	35.45	35.82		36.19	35.40				35.18	35.11	34.98
NON-OPEC[2]											
OECD											
North America	14.14	14.24	14.22	14.31	14.26	14.36	14.19	14.12	14.22	14.35	14.31
United States	7.32	7.37	7.46	7.46	7.47	7.54	7.55	7.35	7.53	7.56	7.51
Mexico	3.76	3.68	3.47	3.69	3.50	3.52	3.49	3.45	3.38	3.55	3.52
Canada	3.06	3.18	3.30	3.17	3.29	3.29	3.15	3.32	3.31	3.23	3.28
Europe	5.61	5.20	5.16	4.93	5.19	5.25	5.07	5.05	5.26	5.21	5.25
UK	1.84	1.66	1.70	1.48	1.66	1.71	1.68	1.62	1.67	1.65	1.74
Norway	2.97	2.78	2.69	2.73	2.76	2.77	2.62	2.66	2.83	2.78	2.74
Others	0.80	0.76	0.77	0.72	0.77	0.77	0.77	0.77	0.76	0.78	0.78
Pacific	0.58	0.57	0.66	0.65	0.64	0.63	0.63	0.67	0.64	0.64	0.65
Australia	0.54	0.53	0.60	0.61	0.60	0.59	0.59	0.61	0.60	0.60	0.61
Others	0.04	0.04	0.06	0.04	0.04	0.04	0.04	0.06	0.04	0.04	0.04
Total OECD	20.33	20.01	20.04	19.90	20.09	20.23	19.90	19.84	20.12	20.20	20.21
NON-OECD											
Former USSR	11.64	12.10	12.59	12.21	12.36	12.44	12.57	12.61	12.40	12.45	12.51
Russia	9.48	9.69	9.94	9.77	9.80	9.84	9.94	10.01	9.84	9.89	9.90
Others	2.16	2.40	2.64	2.44	2.56	2.60	2.63	2.61	2.56	2.56	2.61
Asia	6.27	6.38	6.52	6.36	6.38	6.52	6.50	6.51	6.33	6.57	6.49
China	3.62	3.67	3.76	3.68	3.64	3.76	3.75	3.76	3.59	3.81	3.73
Malaysia	0.74	0.75	0.78	0.75	0.78	0.78	0.77	0.77	0.79	0.78	0.78
India	0.78	0.79	0.82	0.77	0.82	0.82	0.82	0.82	0.82	0.81	0.82
Others	1.13	1.16	1.16	1.15	1.15	1.17	1.17	1.16	1.14	1.16	1.17
Europe	0.16	0.15	0.13	0.14	0.14	0.14	0.14	0.13	0.14	0.14	0.14
Latin America	4.29	4.40	4.53	4.42	4.42	4.46	4.50	4.54	4.43	4.42	4.48
Brazil	1.99	2.10	2.29	2.10	2.15	2.19	2.25	2.30	2.16	2.14	2.22
Argentina	0.78	0.77	0.76	0.79	0.77	0.76	0.76	0.76	0.77	0.77	0.76
Colombia	0.53	0.53	0.52	0.53	0.53	0.52	0.52	0.52	0.52	0.53	0.52
Ecuador	0.53	0.54	0.50	0.55	0.53	0.52	0.51	0.50	0.52	0.52	0.52
Others	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46
Middle East[3]	1.86	1.74	1.69	1.72	1.71	1.70	1.70	1.69	1.70	1.70	1.70
Oman	0.79	0.74	0.71	0.73	0.72	0.72	0.71	0.71	0.72	0.72	0.72
Syria	0.46	0.42	0.38	0.41	0.40	0.39	0.38	0.38	0.40	0.40	0.39
Yemen	0.42	0.39	0.41	0.38	0.38	0.40	0.41	0.41	0.39	0.39	0.40
Africa	3.72	3.99	2.73	4.04	4.12	2.72	2.74	2.73	4.17	2.71	2.72
Egypt	0.70	0.67	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66
Angola[6]	1.25	1.41		1.45	1.43				1.47		
Gabon	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23
Others	1.54	1.67	1.85	1.69	1.79	1.82	1.85	1.85	1.80	1.82	1.83
Total Non-OECD	27.94	28.75	28.19	28.90	29.13	27.97	28.14	28.21	29.18	27.99	28.04
Processing Gains[4]	1.86	1.90	1.92	1.88	1.92	1.92	1.92	1.92	1.92	1.92	1.92
Other Biofuels[5]	0.12	0.18	0.34	0.18	0.18	0.34	0.34	0.34	0.18	0.34	0.34
TOTAL NON-OPEC	50.25	50.84	50.49	50.85	51.32	50.47	50.30	50.32	51.40	50.45	50.52
Non-OPEC excl. Angola[6]	49.00	49.43	50.49	49.40	49.88	50.47	50.30	50.32	49.93	50.45	50.52
TOTAL SUPPLY	84.45	85.25		85.59	85.28				85.11	85.57	85.50

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 will reportedly cease from January 2007.

2 Comprises crude oil, condensates, NGLs and oil from non-conventional sources. No allowance is made in the non-OPEC forecast for exceptional events, which have, at certain times historically, reduced non-OPEC supply by 300-400 kbd on an annual basis.

3 Includes small amounts of production from Israel, Jordan and Bahrain.

4 Net volumetric gains and losses in refining (excludes net gain/loss in FSU, China and non-OECD Europe) and marine transportation losses.

5 Comprises Fuel Ethanol and Biodiesel supply from outside Brazil and US.

6 With effect from OMR of 13 February 2007, Angolan production will be reclassified within OPEC and excluded from the Non-OPEC total, for the period January 2007 onwards. Secondary aggregates allow comparison with previous year totals by including Angola within OPEC retroactively

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			
	Sep2006	Oct2006	Nov2006	Dec2006	Jan2007*	Jan2004	Jan2005	Jan2006	1Q2006	2Q2006	3Q2006	4Q2006
North America												
Crude	460.2	464.8	462.1	435.2	444.3	382.8	402.4	449.4	0.07	-0.05	0.02	-0.27
Motor Gasoline	244.8	232.5	234.2	242.5	258.5	237.9	251.8	254.8	0.07	-0.01	0.03	-0.03
Middle Distillate	224.2	216.4	209.9	217.3	215.2	195.8	198.0	222.2	-0.20	0.06	0.26	-0.08
Residual Fuel Oil	53.0	51.6	51.7	50.2	49.9	46.7	48.8	51.0	0.07	0.02	0.01	-0.03
Total Products[3]	724.7	700.6	687.4	694.0	692.4	622.6	654.1	689.6	-0.26	0.38	0.60	-0.33
Total[4]	1346.7	1324.5	1302.4	1272.2	1279.6	1145.0	1194.9	1277.8	-0.20	0.40	0.77	-0.81
Europe												
Crude	327.4	333.0	332.9	339.9	310.9	318.7	325.6	334.1	0.18	-0.07	-0.12	0.14
Motor Gasoline	103.9	106.1	110.6	112.2	116.6	123.9	124.9	120.4	-0.01	-0.12	0.04	0.09
Middle Distillate	270.4	263.3	260.8	271.9	274.7	244.8	252.8	267.9	-0.11	0.11	0.15	0.02
Residual Fuel Oil	73.1	77.2	77.1	75.6	76.2	79.0	72.1	75.0	-0.04	0.06	-0.02	0.03
Total Products[3]	555.8	551.4	554.7	566.4	573.9	549.1	554.1	565.6	-0.17	0.04	0.25	0.12
Total[4]	957.8	953.6	959.6	976.4	954.0	940.7	945.7	971.5	0.05	-0.06	0.16	0.20
Pacific												
Crude	174.9	177.6	183.0	173.3	169.4	172.9	178.8	155.6	0.13	0.11	-0.07	-0.02
Motor Gasoline	23.5	23.8	23.8	22.2	25.2	24.8	27.1	24.9	0.02	0.00	-0.01	-0.01
Middle Distillate	85.9	87.4	83.1	73.4	80.9	66.2	68.2	62.6	0.00	0.10	0.18	-0.14
Residual Fuel Oil	23.8	23.5	22.0	22.6	22.0	23.1	22.3	21.3	-0.01	0.04	0.01	-0.01
Total Products[3]	210.7	210.0	200.8	183.3	191.1	175.9	186.5	169.3	0.01	0.16	0.30	-0.30
Total[4]	458.6	459.5	456.8	428.2	434.5	419.3	435.5	392.7	0.15	0.30	0.25	-0.33
Total OECD												
Crude	962.5	975.4	978.0	948.3	924.5	874.4	906.8	939.1	0.39	-0.01	-0.17	-0.15
Motor Gasoline	372.2	362.3	368.6	376.8	400.3	386.7	403.8	400.0	0.08	-0.13	0.06	0.05
Middle Distillate	580.5	567.1	553.8	562.6	570.8	506.7	519.0	552.7	-0.32	0.27	0.59	-0.19
Residual Fuel Oil	149.9	152.2	150.7	148.4	148.1	148.7	143.1	147.3	0.02	0.12	-0.01	-0.02
Total Products[3]	1491.2	1462.0	1442.8	1443.7	1457.4	1347.6	1394.7	1424.5	-0.42	0.58	1.15	-0.52
Total[4]	2763.1	2737.7	2718.8	2676.7	2668.1	2505.0	2576.1	2642.0	0.00	0.64	1.18	-0.94

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			
	Sep2006	Oct2006	Nov2006	Dec2006	Jan2007*	Jan2004	Jan2005	Jan2006	1Q2006	2Q2006	3Q2006	4Q2006
North America												
Crude	687.8	688.6	688.6	688.6	688.6	641.2	679.7	683.5	0.02	0.02	0.00	0.01
Products	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	0.00	0.00	0.00	0.00
Europe												
Crude	175.5	174.7	174.9	175.0	175.0	157.4	165.4	169.5	0.04	0.04	0.02	-0.01
Products	235.0	234.7	233.3	235.3	235.3	215.4	209.5	235.9	-0.03	0.00	-0.01	0.00
Pacific												
Crude	381.5	381.5	381.6	384.5	384.5	384.8	384.5	380.0	-0.01	0.00	0.01	0.03
Products	11.8	11.8	11.8	11.8	11.8	11.0	11.0	11.6	0.00	0.00	0.00	0.00
Total OECD												
Crude	1244.8	1244.8	1245.1	1248.1	1248.1	1183.3	1229.6	1233.0	0.04	0.06	0.03	0.04
Products	248.8	248.5	247.1	249.1	249.1	228.4	222.5	249.5	-0.04	0.01	-0.01	0.00
Total[4]	1494.6	1494.3	1493.2	1498.2	1498.2	1412.7	1453.1	1483.4	0.01	0.07	0.02	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 December 2005		End March 2006		End June 2006		End September 2006		End December 2006 [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	178.1	82	169.7	79	169.7	75	179.2	81	175.5	-
Mexico	43.9	21	41.7	21	42.1	21	47.0	23	42.3	-
United States[4]	1699.6	83	1693.7	83	1731.6	83	1788.3	87	1722.9	-
Total[4]	1943.7	78	1927.2	77	1965.5	77	2036.5	81	1962.8	77
Pacific										
Australia	32.7	36	35.5	39	38.9	42	35.3	37	34.8	-
Japan	612.1	103	620.1	130	627.2	130	649.1	121	630.8	-
Korea	134.9	59	137.4	68	155.4	77	160.5	70	151.8	-
New Zealand	8.5	53	7.3	47	6.8	46	7.0	44	7.0	-
Total	788.2	85	800.3	102	828.3	105	851.9	97	824.5	92
Europe[5]										
Austria	20.4	72	18.7	66	19.2	67	19.6	70	22.0	-
Belgium	28.6	45	27.3	52	30.4	57	30.5	56	28.9	-
Czech Republic	18.8	98	19.6	90	19.5	88	19.3	94	19.7	-
Denmark	20.3	102	19.5	99	20.4	106	21.1	111	19.3	-
Finland	25.1	113	26.7	120	30.5	136	26.8	116	26.6	-
France	195.6	93	196.2	104	188.7	97	187.5	96	192.4	-
Germany	282.6	111	279.9	110	281.4	104	278.5	103	276.5	-
Greece	33.1	69	35.4	93	34.9	86	38.2	80	38.1	-
Hungary	17.6	120	20.8	127	17.6	110	17.4	100	16.5	-
Ireland	11.6	55	13.1	72	12.6	71	13.9	70	12.5	-
Italy	132.0	71	131.5	81	126.0	76	134.1	79	133.1	-
Luxembourg	0.8	11	0.9	15	1.0	17	0.9	15	1.0	-
Netherlands	116.4	116	120.5	121	123.1	119	121.1	119	123.3	-
Norway	30.7	123	21.9	91	21.8	90	29.4	123	35.1	-
Poland	35.2	79	35.5	74	35.7	67	37.3	71	41.5	-
Portugal	25.7	78	24.7	83	24.7	81	23.8	83	24.0	-
Slovak Republic	6.5	83	8.3	102	7.7	89	7.4	94	7.5	-
Spain	128.6	79	130.2	84	129.2	82	133.9	85	134.8	-
Sweden	38.0	102	38.4	109	39.6	113	38.6	102	34.7	-
Switzerland	37.7	128	37.7	144	39.3	141	38.9	133	38.1	-
Turkey	51.1	100	51.6	79	51.6	78	53.7	83	55.5	-
United Kingdom	95.2	50	97.4	54	99.0	56	97.4	54	106.5	-
Total	1351.2	86	1355.9	90	1353.8	88	1369.3	88	1387.7	90
Total OECD	4083.1	82	4083.4	85	4147.7	85	4257.7	86	4175.0	83
DAYS OF IEA Net Imports[6]	-	114	-	115	-	116	-	119	-	121

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 2006 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. 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]*		
4Q2003	3928	1411	2517	79	28	50
1Q2004	3888	1423	2465	81	30	51
2Q2004	3974	1429	2545	81	29	52
3Q2004	4016	1435	2581	80	29	51
4Q2004	3997	1450	2547	79	29	50
1Q2005	4005	1462	2543	82	30	52
2Q2005	4116	1494	2623	84	30	53
3Q2005	4132	1494	2638	83	30	53
4Q2005	4083	1487	2597	82	30	52
1Q2006	4083	1487	2596	85	31	54
2Q2006	4148	1493	2655	85	31	54
3Q2006	4258	1495	2763	86	30	56
4Q2006	4175	1498	2677	83	30	53

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 4Q2006 (when latest forecasts are used).

Table 6

IEA Member Country Destinations of Selected Crude Streams[1]

(million barrels per day)

	2004	2005	2006	1Q06	2Q06	3Q06	4Q06	Oct 06	Nov 06	Dec 06	Year Earlier Dec 05	Year Earlier change
Saudi Light & Extra Light												
North America	0.55	0.46	0.60	0.51	0.68	0.62	0.60	0.56	0.73	0.53	0.63	-0.10
Europe	1.03	0.90	0.78	0.83	0.80	0.72	0.78	0.87	0.72	0.73	0.85	-0.12
Pacific	1.24	1.31	1.32	1.40	1.33	1.29	1.28	1.30	1.28	1.26	1.35	-0.08
Saudi Medium												
North America	0.80	0.81	0.64	0.65	0.61	0.68	0.61	0.55	0.65	0.64	0.99	-0.35
Europe	0.11	0.16	0.14	0.17	0.14	0.14	0.10	0.14	0.08	0.08	0.15	-0.07
Pacific	0.23	0.26	0.35	0.38	0.35	0.35	0.32	0.33	0.33	0.31	0.36	-0.05
Saudi Heavy												
North America	0.22	0.17	0.21	0.21	0.21	0.21	0.19	0.20	0.19	0.17	0.21	-0.04
Europe	0.23	0.23	0.18	0.14	0.22	0.21	0.14	0.19	0.11	0.11	0.18	-0.07
Pacific	0.15	0.25	0.23	0.25	0.20	0.22	0.23	0.25	0.21	0.23	0.32	-0.10
Iraqi Basrah Light[2]												
North America	0.71	0.60	0.52	0.44	0.60	0.60	0.46	0.47	0.52	0.39	0.58	-0.18
Europe	0.21	0.23	0.32	0.24	0.29	0.40	0.36	0.38	0.39	0.32	0.35	-0.03
Pacific	0.12	0.06	0.08	0.08	0.09	0.10	0.07	0.06	0.06	0.09	0.08	0.02
Iraqi Kirkuk												
North America	0.02	..	0.00	..	..	0.01	..	..	..	..	..	..
Europe	0.08	0.05	0.01	..	..	0.04	0.01	0.02	..	..	0.02	..
Pacific	..	..	..	..	..	..	..	..	..	..	..	..
Iranian Light												
North America	..	..	..	..	..	..	..	..	..	..	..	..
Europe	0.24	0.20	0.26	0.20	0.27	0.31	0.27	0.29	0.16	0.35	0.29	0.05
Pacific	0.16	0.15	0.13	0.19	0.12	0.10	0.11	0.08	0.09	0.16	0.17	-0.01
Iranian Heavy[3]												
North America	..	..	..	..	..	..	..	..	..	..	..	..
Europe	0.57	0.63	0.58	0.48	0.57	0.67	0.60	0.51	0.74	0.57	0.44	0.13
Pacific	0.65	0.62	0.56	0.64	0.48	0.51	0.61	0.58	0.65	0.60	0.79	-0.19
Venezuelan Light & Medium												
North America	0.67	0.82	0.66	0.76	0.68	0.62	0.57	0.69	0.53	0.51	0.89	-0.39
Europe	0.01	0.04	0.11	0.12	0.15	0.08	0.11	0.07	0.14	0.11	0.02	0.09
Pacific	..	..	..	..	..	..	..	..	..	..	..	..
Venezuelan 22 API and heavier												
North America	0.88	0.72	0.72	0.72	0.72	0.74	0.70	0.65	0.72	0.73	0.65	0.08
Europe	0.05	0.06	0.06	0.08	0.05	0.06	0.05	0.05	0.05	0.06	0.06	0.00
Pacific	..	..	..	..	..	..	..	..	..	..	..	..
Mexican Maya												
North America	1.36	1.27	1.24	1.26	1.24	1.30	1.15	1.24	1.19	1.02	1.38	-0.36
Europe	0.16	0.17	0.16	0.13	0.20	0.16	0.15	0.20	0.13	0.12	0.15	-0.03
Pacific	0.00	..	..	..	..	..	..	..	..	..	..	..
Mexican Isthmus												
North America	..	0.03	0.04	0.09	0.03	0.01	0.02	0.02	0.04	0.01	0.13	-0.12
Europe	0.01	0.03	0.01	0.01	0.00	0.00	0.01	0.03	0.01	0.01	..	..
Pacific	0.00	..	..	..	..	..	..	..	..	..	..	..
Russian Urals												
North America	0.12	0.13	0.09	..	0.16	0.16	0.05	0.02	..	0.11	0.00	0.11
Europe	1.86	1.77	1.68	1.68	1.83	1.66	1.54	1.40	1.62	1.59	1.63	-0.04
Pacific	0.01	0.00	0.00	..	..	0.01	..	..	..	..	..	..
Nigerian Light[4]												
North America	0.80	0.90	0.79	0.87	0.79	0.78	0.72	0.78	0.67	0.71	0.86	-0.15
Europe	0.28	0.35	0.33	0.28	0.27	0.39	0.37	0.38	0.37	0.36	0.55	-0.20
Pacific	0.11	0.05	0.04	0.09	0.03	0.02	0.03	0.03	..	0.06	..	..
Nigerian Medium												
North America	0.23	0.17	0.17	0.19	0.17	0.16	0.17	0.19	0.24	0.09	0.27	-0.18
Europe	0.04	0.07	0.10	0.08	0.08	0.08	0.14	0.08	0.14	0.20	0.05	0.16
Pacific	0.01	0.01	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 North America includes United States and Canada.
IEA Europe includes all countries in OECD Europe except Hungary, Poland and the Slovak Republic.
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)

	2004	2005	2006	1Q2006	2Q2006	3Q2006	4Q2006	Oct-06	Nov-06	Dec-06	Year Earlier Dec-05	Year Earlier % change
Crude Oil												
North America	8431	8384	8154	7740	8265	8686	7919	8204	7733	7814	7402	6%
Europe	9478	9792	9770	9398	9753	10166	9755	9817	9703	9745	9657	1%
Pacific	6659	6801	6814	7400	6508	6680	6676	6207	6968	6864	7120	-4%
Total OECD	24569	24978	24738	24538	24526	25532	24351	24227	24404	24423	24627	-1%
LPG												
North America	24	18	14	8	8	12	28	14	33	38	47	-18%
Europe	225	248	249	280	242	210	266	228	315	256	284	-10%
Pacific	541	527	579	651	576	595	497	492	495	503	615	-18%
Total OECD	790	793	843	938	825	818	791	734	843	797	946	-16%
Naphtha												
North America	99	110	62	41	49	64	96	114	101	73	98	-26%
Europe	282	273	312	352	276	303	316	317	340	291	261	11%
Pacific	769	746	754	692	731	810	783	738	794	815	752	8%
Total OECD	1150	1129	1128	1084	1056	1177	1194	1169	1236	1179	1112	6%
Gasoline[3]												
North America	794	1016	1146	1113	1365	1166	943	945	971	913	996	-8%
Europe	137	165	155	194	149	122	157	136	162	173	167	4%
Pacific	105	102	97	84	135	74	96	96	70	122	90	35%
Total OECD	1035	1283	1399	1392	1648	1363	1196	1177	1204	1208	1253	-4%
Jet & Kerosene												
North America	101	130	151	79	191	203	130	142	76	170	191	-11%
Europe	293	375	376	313	382	398	408	430	406	388	383	1%
Pacific	77	66	71	129	39	43	76	66	50	111	55	101%
Total OECD	471	571	598	521	612	644	614	638	532	669	630	6%
Gasoil/Diesel												
North America	123	142	169	210	173	181	114	140	99	103	225	-54%
Europe	751	845	963	1078	947	900	929	1000	933	854	956	-11%
Pacific	74	79	81	78	100	65	81	69	82	93	96	-4%
Total OECD	947	1066	1213	1365	1220	1146	1124	1209	1114	1049	1277	-18%
Heavy Fuel Oil												
North America	453	525	340	481	320	309	254	273	242	246	492	-50%
Europe	397	491	479	520	479	421	499	517	435	543	559	-3%
Pacific	76	85	91	122	105	76	63	65	59	66	87	-25%
Total OECD	926	1101	911	1122	904	806	816	855	736	854	1138	-25%
Other Products												
North America	872	1005	1106	972	1162	1298	991	1039	988	946	835	13%
Europe	676	781	892	891	863	912	902	888	986	836	790	6%
Pacific	256	248	242	270	209	224	267	272	284	245	311	-21%
Total OECD	1805	2033	2241	2134	2234	2434	2160	2199	2258	2027	1935	5%
Total Products												
North America	2466	2947	2990	2903	3268	3233	2556	2667	2511	2488	2885	-14%
Europe	2759	3177	3426	3628	3337	3266	3476	3515	3576	3341	3400	-2%
Pacific	1898	1852	1917	2026	1894	1888	1863	1798	1835	1955	2006	-3%
Total OECD	7123	7976	8333	8557	8499	8388	7895	7981	7922	7783	8292	-6%
Total Oil												
North America	10897	11332	11144	10643	11533	11919	10475	10871	10244	10302	10735	-4%
Europe	12237	12969	13196	13026	13090	13432	13232	13332	13279	13086	13057	0%
Pacific	8558	8654	8731	9426	8402	8568	8539	8005	8804	8818	9127	-3%
Total OECD	31692	32954	33071	33095	33025	33919	32246	32208	32327	32206	32918	-2%

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

OIL MARKET REPORT CONTACTS

Editorial Enquiries

Editor — Lawrence Eagles
Head, Oil Industry & Markets Division
(+33) 0*1 40 57 65 90
e-mail: lawrence.eagles@iea.org

Demand — Eduardo Lopez
(+33) 0*1 40 57 65 93
e-mail: eduardo.lopez@iea.org

Supply — David Fyfe
(+33) 0*1 40 57 65 94
e-mail: david.fyfe@iea.org

Prices/OECD Stocks — Julius Walker
(+33) 0*1 40 57 65 22
e-mail: julius.walker@iea.org

Refinery Activity — David Martin
(+33) 0*1 40 57 65 95
e-mail: david.martin@iea.org

OECD Stocks/Trade — Toril Ekeland Bosoni
(+33) 0*1 40 57 66 36
e-mail: toril.bosoni@iea.org

Statistics/Freight/Trade — James Ryder
(+33) 0*1 40 57 66 18
e-mail: james.ryder@iea.org

End-User Prices/Statistical Support — Miklos Bankuti
(+33) 0*1 40 57 67 76
e-mail: miklos.bankuti @iea.org

Administrative Support — Anne Mayne
(+33) 0*1 40 57 65 96
e-mail: anne.mayne@iea.org

Fax: *(+33) 0*1 40 57 65 99/40 57 65 09*

* 0 only within France

Media Enquiries

Press Office — Gwyn Darling
(+33) 0*1 40 57 65 54
e-mail: ieapressoffice@iea.org

Subscription and Delivery Enquiries

Oil Market Report Subscriptions (Attn: Ms. Sandra Coleman)
International Energy Agency
BP 586-75726 PARIS Cedex 15, France

Tel. +33 (0) 1 40 57 65 57
Fax. +33 (0) 1 40 57 65 59

e-mail: sandra.coleman@iea.org

Users' Guide to the IEA Oil Market Report

Readers are referred to the *Users' Guide*, published in conjunction with the *Annual Statistical Supplement* (current issue dated 11 August 2006), for information on the data sources, definitions, technical terms and general approach used in preparing the Report. 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 (© 2007 Platts - a division of McGraw-Hill Inc.).

INTERNATIONAL ENERGY AGENCY/AGENCE INTERNATIONALE DE L'ENERGIE

OIL MARKET REPORT

A MONTHLY OIL MARKET AND STOCKS ASSESSMENT

www.oilmarketreport.org

INTERNATIONAL ENERGY AGENCY

AGENCE INTERNATIONALE DE L'ENERGIE

12 April 2007

HIGHLIGHTS

- Dated Brent prices continued to rise from mid-March to average $68/bbl in early April, driven by a strong US gasoline market. Peak seasonal refinery maintenance, a string of outages and the switch to summer specifications kept gasoline supply tight. OPEC cuts, falling stocks and geopolitical tension over Iran lent further support.
- World oil output fell by 265 kb/d in March to 85.3 mb/d on OPEC supply cuts and OECD production outages. Non-OPEC growth in 2007 is unchanged at 1.1 mb/d, versus 0.4 mb/d in 2006, extending the sharp recovery evident since mid-2006. OPEC NGLs will grow by 0.25 mb/d this year to 4.9 mb/d. Seasonal factors peg non-OPEC supply below 50.3 mb/d through to 3Q, before growth resumes to 50.9 mb/d in 4Q.
- OPEC March crude supply fell by 165 kb/d to 30.1 mb/d, largely due to Nigerian and Iraqi outages. OPEC supply curbs since last autumn have coincided with two quarters of heavy OECD stock draws and output remains below the level needed to generate the usual spring crude stock build. Effective spare capacity is 3.0 mb/d, but could diminish as the 0.7 mb/d of net new capacity due onstream by end-2007 lags an expected 2 mb/d rise in the call.
- Global oil product demand has been revised down to 84.3 mb/d in 2006 and 85.8 mb/d in 2007. For 2006 this is mainly related to improved data in non-OECD countries. Demand in the OECD remained largely unchanged, as a cold snap in North America was offset by milder temperatures in Europe and the Pacific.
- Total OECD inventories fell by 80.5 mb in February on declining product stocks in all regions and a crude draw in the Pacific. Forward cover is declining counter-seasonally and preliminary March data for the US, Japan and Europe indicate an unusual 1Q stock draw of around 1.0 mb/d.
- OECD February refinery throughputs fell by 0.6 mb/d, to 38.5 mb/d, due to heavier maintenance and unplanned shutdowns. Russian and Chinese crude runs in February increased by a combined 0.5 mb/d, to a new record level of 11.3 mb/d. OECD crude runs in March fell further to around 38.2 mb/d, but are expected to recover to 38.7 mb/d in April.

Next Issue: 11 May 2007

INTERNATIONAL ENERGY AGENCY (IEA)

AGENCE INTERNATIONALE DE L'ENERGIE

The International Energy Agency is seeking a Head of Section for its Energy Statistics Division

A Three- to Five-Year, Fixed-Term Appointment

The Energy Statistics Division of the IEA is looking for a Head of the non-OECD Countries Statistics Section to work under the supervision of the Division Head. Over the years, the IEA has established itself as one of the key references in terms of global oil and energy statistics. However, much more needs to be done in order to provide analysts with more reliable, timely and complete data. The challenge for the post holder will be to further improve the quality of non-OECD statistics and to strengthen the position and the role of the IEA Secretariat in global energy statistics. Major responsibilities include:

- Assist in directing the maintenance, updating and development of large supply/demand databases on oil and all energy sources of non-OECD countries;
- Lead the preparation of several major statistics publications;
- Assist in the Secretariat's analysis of the global energy situation;
- Contribute to the development and harmonisation of global energy statistics through co-operation with international organisations, administrations and recognised experts;
- Represent the Secretariat at international meetings, market the image and raise the profile of IEA Statistics worldwide;
- Supervise and manage a team of international statisticians.

The ideal candidate should possess:

- An advanced university degree in statistics and/or economics;
- A minimum of five years' experience in an energy industry and/or statistical administration;
- A good knowledge of the sources and methods used for compiling energy statistics;
- A solid experience of database management as well as a good knowledge of microcomputer software and programming;
- A robust knowledge of the energy sector;
- The ability to work with a committed team within a multicultural environment;
- Proven experience and ability in supervision of a team of statisticians;
- The ability to work under pressure;
- An excellent knowledge of, and drafting ability in, English; a working knowledge of other languages would be an advantage;
- Very good communication skills and the ability to draft clearly and succinctly.

For a full job description, information and application, please contact the International Energy Agency in the first instance before Friday 11 May 2007 by email: **recruitment@iea.org** quoting the reference **JR2226**.

The OECD is an Equal Opportunity Employer

OECD OCDE

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

Organisation de coopération et de développement économiques

CONTENTS

THE COST OF SULPHUR

The world is moving, albeit slowly, to lower-sulphur fuels. But there are consequences, both economic and environmental, which need to be better understood. Broadly, lowering sulphur levels has the potential to reduce competition, alter the structure of refined product and crude markets, thus raising prices. Achieving lower sulphur fuels will also significantly increase CO_2 emissions.

The first option for refiners to meet low-sulphur targets is to use low-sulphur crudes. This is particularly pertinent in the initial stages of the sulphur-reduction process and puts upward pressure on prices for light sweet crudes. Even with desulphurisation capacity, the need for incremental light sweet crude inputs may persist, and the process can also result in yield losses - so the price effects may linger. Another option for refiners is to forego production of the tighter fuel specifications – with the consequence of higher transport fuel prices as local fuel markets get even tighter.

There is also a CO_2 cost. Sulphur reduction relies on three key factors: temperature, pressure and hydrogen - all of which require energy. The deeper the cuts in sulphur content, the more energy that is expended in its removal. At some point, the environmental trade-off between low-sulphur and higher CO_2 emissions becomes blurred. Emissions changes in other areas can also have broad-reaching impacts. If emissions encourage utilities to switch to natural gas, fuel oil prices will soften, weakening refinery margins and therefore tightening the supply of transportation fuels. In other words, power sector emissions controls could translate into higher gasoline prices (and possibly higher crude prices as well).

The suggested shift away from heavy, sour marine bunkers also has the potential to affect oil prices. Squeezing sulphur levels in bunkers is far harder, costly and generates more CO_2 than desulphurising middle distillates. Refiners would have no alternative market for the bottom of the barrel at a time when the long-term trend in crude quality is getting heavier and sourer. A shift to low-sulphur marine fuels would certainly cost the refining industry a great deal, but as detailed above, there could also be implications for gasoline or diesel prices. Moreover, using diesel as the solution to lower sulphur standards, would stress a refining system already struggling to meet current transportation needs.

The opportunity to increase product trade could increase as OECD countries move to sulphur-free fuels, but the shift is slow, and other barriers may develop to constrain competition. For example, biofuel blending has the potential to exacerbate regional differences in fuel standards, an area already complicated by oxygenate and volatility regulations. Without the harmonisation of product standards trade is restricted, increasing prices and price volatility.

The impacts of less-than-optimum product market competition have been demonstrated in the US, where Californians, with tight state-level environmental specifications and with the Rocky Mountains as a barrier to competition from other US refiners, regularly have the highest wholesale gasoline prices in the world. Another example stems from the temporary lifting of some US product specification restrictions post-Hurricanes Katrina and Rita – improving supply both domestically and (through higher trade), internationally and thereby lowering prices.

A better understanding of the issues and a move to universally agreed standards would carry greater economic and possibly environmental benefits than a rush towards arbitrary regional or national standards. Ultimately, three issues in the reduction of sulphur need to be considered:

1. The net cost to consumers is significantly higher than just the cost of desulphurising equipment – complex refinery economics could mean higher prices of crude and products.
2. At some point, the benefits of incremental smog and particulate reduction may be outweighed by the marginal cost to the environment in terms of higher CO_2 emissions.
3. Competition could be restrained by a lack of convergence in product specifications.

All three factors need to be taken into account when deciding on sulphur targets. International-level discussions among governments and between governments and industry are essential. Some choices are difficult, but improving competition through harmonised standards is one that could significantly improve market efficiency – particularly as global trade in refined products increases in the coming years.

DEMAND

Summary

- **Global oil product demand** has been revised down to 84.3 mb/d in 2006 and 85.8 mb/d in 2007. Changes in 2006 are related to adjustments in various, mostly non-OECD, countries. For 2007, the revisions reflect continued weather-related weak OECD demand in the first quarter and lower-than-expected FSU apparent demand, only partially offset by a higher figure for Chinese consumption. As such, world demand is estimated to have grown by 0.9% in 2006, and is expected to rise by 1.8% in 2007.

Global Oil Demand (2005-2007)

(million barrels per day)

	1Q05	2Q05	3Q05	4Q05	2005	1Q06	2Q06	3Q06	4Q06	2006	1Q07	2Q07	3Q07	4Q07	2007
Africa	2.9	2.9	2.8	2.9	2.9	2.9	2.9	2.9	2.9	2.9	3.0	3.0	2.9	3.0	3.0
Americas*	30.6	30.4	30.8	30.7	30.6	30.2	30.3	30.8	30.7	30.5	31.0	30.7	31.4	31.4	31.1
Asia/Pacific**	24.9	23.4	23.3	24.2	24.0	25.1	24.0	23.6	24.7	24.3	25.4	24.5	24.3	25.6	24.9
Europe***	16.4	15.9	16.2	16.4	16.2	16.6	15.8	16.1	16.3	16.2	16.0	15.8	16.2	16.4	16.1
FSU	3.8	3.7	3.8	3.9	3.8	3.9	3.7	4.0	4.3	4.0	3.6	3.8	4.0	4.5	4.0
Middle East	5.9	6.0	6.3	6.0	6.1	6.2	6.4	6.6	6.3	6.4	6.5	6.7	7.0	6.6	6.7
World	**84.5**	**82.4**	**83.3**	**84.0**	**83.5**	**84.9**	**83.1**	**84.0**	**85.2**	**84.3**	**85.5**	**84.4**	**85.7**	**87.6**	**85.8**
Annual Chg (%)	2.7	1.6	1.7	0.2	1.6	0.5	0.9	0.8	1.4	0.9	0.7	1.5	2.1	2.8	1.8
Annual Chg (mb/d)	2.2	1.3	1.4	0.2	1.3	0.4	0.7	0.7	1.2	0.7	0.6	1.2	1.8	2.4	1.5
Changes from last month's report (mb/d)	-0.16	-0.08	-0.07	-0.23	-0.14	-0.15	-0.15	-0.15	-0.30	-0.19	-0.44	-0.22	-0.18	-0.16	-0.25

* OECD North America & Latin America

** OECD Pacific, China & other Asia

*** OECD & non-OECD

- **OECD oil product demand** has remained largely unchanged in 2006 at 49.2 mb/d, but is revised down slightly in 2007 to 49.5 mb/d. A cold snap from late January in North America led to upward revisions in 1Q07, but these were largely offset by downward adjustments in Europe and the Pacific, where temperatures continued to be much milder than average over the past two months.

- **Non-OECD oil product demand** has been adjusted downwards, both on a historical basis and looking ahead. This is due to the submission of preliminary 2005 data and revisions to previous years, which were particularly marked in Asia and the Middle East. Non-OECD oil product consumption is now estimated to have increased by 3.5% in 2006, and is expected to rise by 3.4%, to 36.3 mb/d, in 2007.

Worldwide Overview

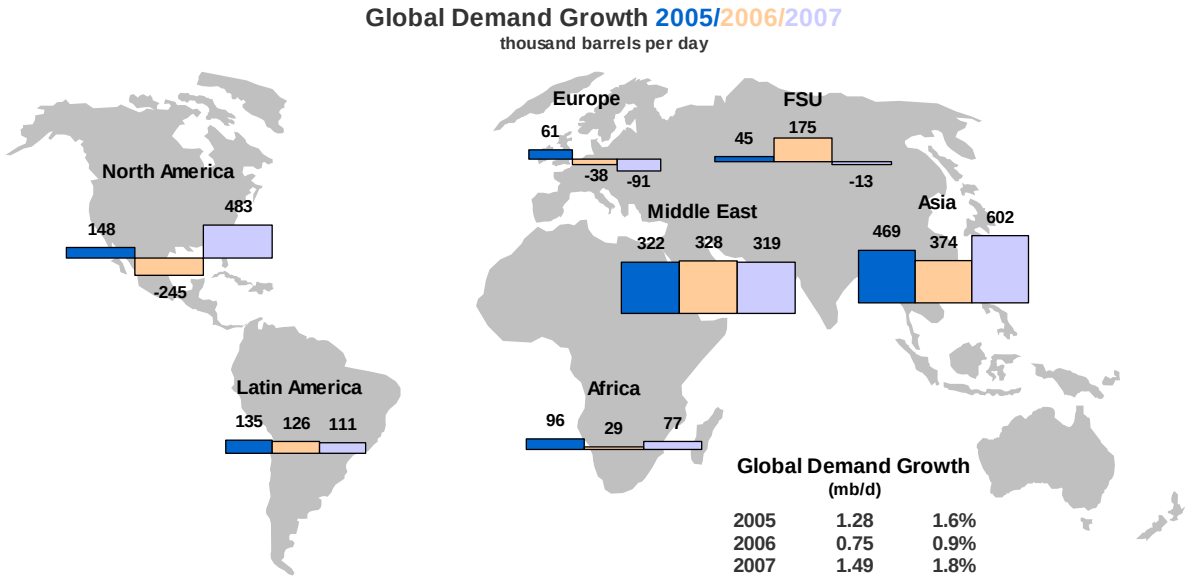
As noted in the last *Oil Market Report*, global oil product demand has largely been driven by erratic weather conditions in 1Q07. Demand in North America, which was particularly weak in late 2006 due to a mild winter start, rebounded strongly in February following a series of very cold snaps. The winter reprise in Europe, the Pacific and the Former Soviet Union was extremely mild, leading to significantly lower demand and, in the case of the FSU, to sharply higher exports. A notable exception to this weak trend has been China, where demand surged in January and February as a result of the Lunar New Year festivities.

Overall, however, our global demand growth assessment for 2006 and 2007 remains virtually unchanged in percentage terms, with stronger non-OECD growth offsetting weaker OECD growth. In volumetric terms, the arrival of new data submissions by a number of non-OECD countries have resulted in downward revisions to both historical figures and forecasts of about 200 kb/d on average. We now estimate that global oil product demand averaged 84.3 mb/d in 2006 (+0.9% year-on-year), and we foresee it reaching 85.8 mb/d in 2007 (+1.8%).

Concerns about the US economic outlook remain, reflecting the nervousness over the country's housing market and despite an official upward revision of 4Q06 GDP growth from 2.2% to 2.5% as a result of a reappraisal of inventories. This was the third quarter in a row of below-trend growth, and slowing overall credit growth augurs lower private consumption and hence relatively weaker GDP growth in 2007. At the time of writing, the IMF is due to release its worldwide economic forecasts – which alongside OECD data underpin our econometric demand model. The Fund has reportedly lowered its US GDP forecast for 2007 to slightly above 2%, suggesting that it sees, as do many other

observers, growth slowing and inflation easing over the course of the year. More interestingly, this downward adjustment is relatively small; as such, oil demand in the world's largest consumer will unlikely be dented significantly. In the next issue of the *Oil Market Report* we will incorporate the IMF's latest economic assumptions in order to fine-tune the prospects of US (and worldwide) oil product demand.

Indeed, it should be noted that global growth – and hence oil demand – is increasingly driven by non-OECD countries. In China, in particular, a slowdown of its major trading partner (the US buys roughly a third of Chinese exports) is unlikely to curb economic growth. Indeed, China's recent economic activity relies essentially on investment, rather than internal and external consumption, given that capital is abundant and cheap (large household savings and private profits). Although the government's goal is to reduce investment – the so-called 'rebalancing' of the economy, away from the growth-at-any-cost model and its related environmental consequences – the country is still required to grow fast enough to maintain social stability. Therefore, it remains to be seen whether investment will be capped over the next few years and what would that imply in terms of oil demand.



OECD

Total OECD demand decreased in February (-0.3% versus year-ago levels) across all regions, according to preliminary data. The fall was due to continuing mild temperatures in Europe and the Pacific, which largely offset gains in North America, where the winter reprise was particularly severe. Thus, inland deliveries fell by 4.3% in Europe and by 4.9% in the Pacific, but rose by 4.1% in North America.

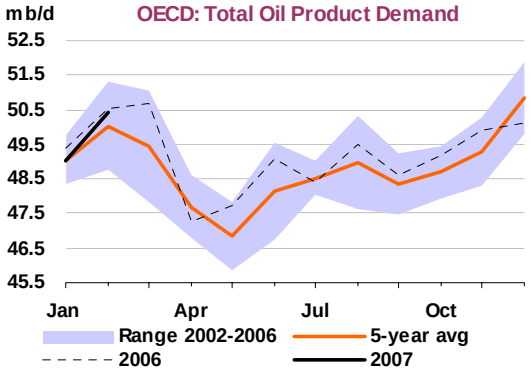
OECD Demand based on Adjusted Preliminary Submissions - February 2007
(million barrels per day)

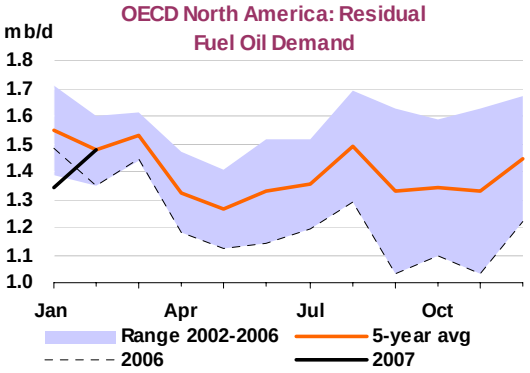
	Gasoline		Jet/Kerosene		Diesel		Other Gasoil		RFO		Other		Total Products	
	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa
OECD North America*	**10.44**	**1.5**	**1.91**	**1.7**	**3.83**	**14.3**	**1.86**	**-7.0**	**1.48**	**9.5**	**6.54**	**5.95**	**26.06**	**4.1**
US50	8.97	1.2	1.69	1.3	3.32	16.3	1.30	-10.7	0.97	22.0	5.15	7.9	21.41	4.8
Canada	0.68	1.3	0.11	2.9	0.19	2.9	0.41	3.1	0.15	-2.9	0.72	4.0	2.27	2.4
Mexico	0.72	5.4	0.07	11.3	0.27	3.1	0.11	3.1	0.27	-13.5	0.60	-6.1	2.05	-1.3
OECD Europe	**2.36**	**-3.2**	**1.24**	**6.3**	**4.03**	**3.7**	**2.23**	**-16.4**	**1.78**	**-18.6**	**3.67**	**0.6**	**15.30**	**-4.3**
Germany	0.47	-7.4	0.17	0.2	0.56	3.1	0.36	-41.2	0.19	-1.4	0.63	11.6	2.38	-8.1
United Kingdom	0.42	-1.8	0.38	11.1	0.46	2.4	0.14	18.1	0.09	-25.4	0.39	3.0	1.89	2.3
France	0.21	-5.7	0.15	2.6	0.64	1.9	0.35	-28.6	0.09	-39.6	0.47	-5.2	1.91	-10.3
Italy	0.29	-5.8	0.07	-1.8	0.55	1.0	0.12	-23.4	0.21	-58.7	0.39	-0.8	1.63	-17.5
Spain	0.14	-5.9	0.11	3.8	0.52	4.1	0.27	-6.5	0.23	-5.4	0.39	11.8	1.67	1.5
OECD Pacific	**1.61**	**2.8**	**1.35**	**-6.3**	**1.28**	**4.0**	**0.66**	**-7.6**	**0.95**	**-21.4**	**3.20**	**-4.7**	**9.05**	**-4.9**
Japan	1.04	2.5	1.00	-8.1	0.66	3.8	0.52	-12.3	0.44	-36.0	1.90	-10.9	5.56	-9.7
Korea	0.17	9.9	0.22	-4.2	0.28	3.0	0.14	16.3	0.48	-1.2	1.08	7.2	2.37	4.4
Australia	0.34	-1.2	0.10	4.8	0.29	5.1	0.00	-12.2	0.02	-2.2	0.20	0.6	0.96	1.6
OECD Total	**14.41**	**0.8**	**4.50**	**0.3**	**9.13**	**7.9**	**4.76**	**-11.7**	**4.21**	**-11.3**	**13.41**	**1.7**	**50.42**	**-0.3**

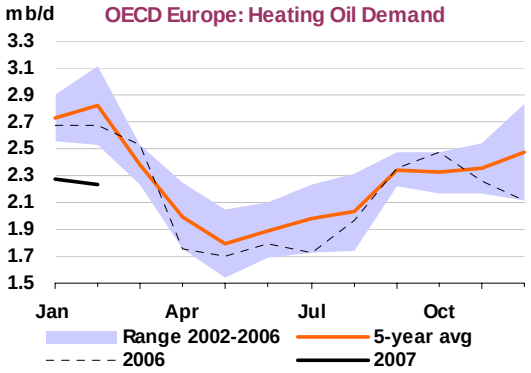
* Including US territories

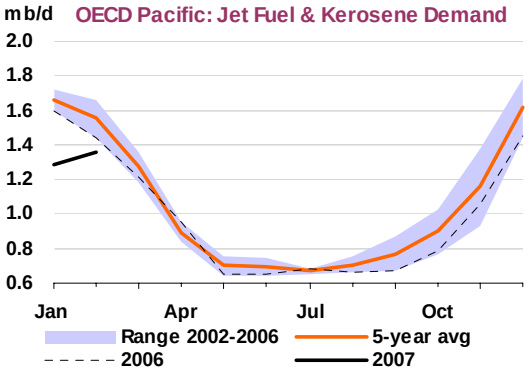
In terms of products, demand weakness in the first two areas was predictably related to lower heating fuels consumption, which declined by about 15% on average (heating and fuel oil in Europe and jet/kerosene in the Pacific). By contrast, North America posted a surge in residual fuel oil (+9.5%), and more interestingly, diesel (+14.3%), predominantly in the US, which suggests that overall economic activity is still strong despite the ongoing concerns.

The very mild temperatures that have prevailed in Europe and the Pacific have led to a slight downward adjustment of our OECD demand forecast for 2007 to 49.5 mb/d (+0.6% over 2006). It should be emphasised that this forecast assumes normal temperatures throughout the rest of this year.









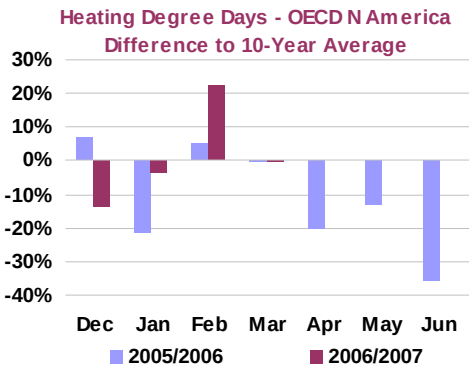
Total OECD Demand by Product
(million barrels per day)

	2005	2006	1Q06	2Q06	3Q06	4Q06	Nov 06	Dec 06	Jan 07*	Latest month vs. Dec 06	Latest month vs. Jan 06
LPG & Ethane	4.74	4.63	5.03	4.44	4.37	4.71	4.73	5.10	5.28	0.18	0.30
Naphtha	3.22	3.17	3.23	2.96	3.15	3.35	3.35	3.42	3.47	0.05	0.18
Motor Gasoline	14.84	14.88	14.35	14.96	15.28	14.94	14.80	15.10	14.06	-1.04	0.09
Jet & Kerosene	4.25	4.18	4.48	3.99	3.98	4.28	4.21	4.59	4.42	-0.17	-0.15
Gas/Diesel Oil	13.06	13.21	13.74	12.65	12.87	13.58	13.77	13.20	13.08	-0.12	-0.09
Residual Fuel Oil	4.44	4.02	4.65	3.79	3.81	3.84	3.84	4.02	4.17	0.16	-0.49
Other Products	5.06	5.09	4.72	5.22	5.38	5.05	5.23	4.71	4.57	-0.14	-0.17
Total Products	**49.63**	**49.20**	**50.20**	**48.01**	**48.84**	**49.74**	**49.92**	**50.13**	**49.05**	**-1.08**	**-0.33**

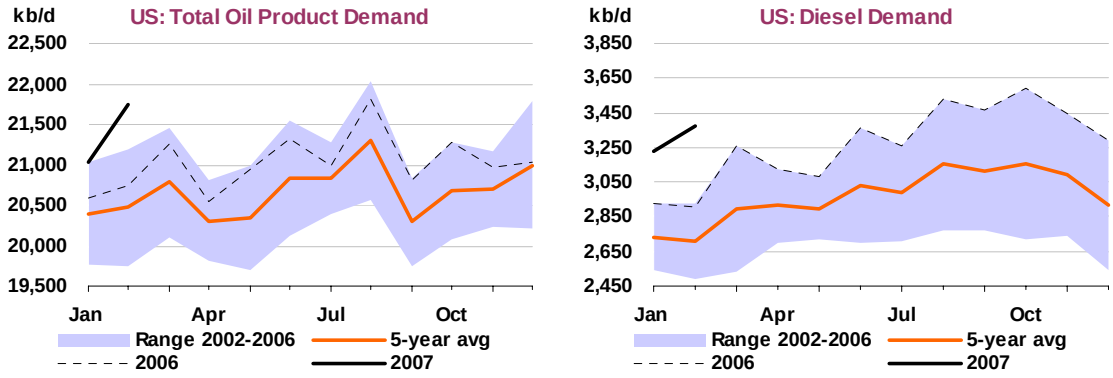
* Latest official OECD submissions (MOS)

North America

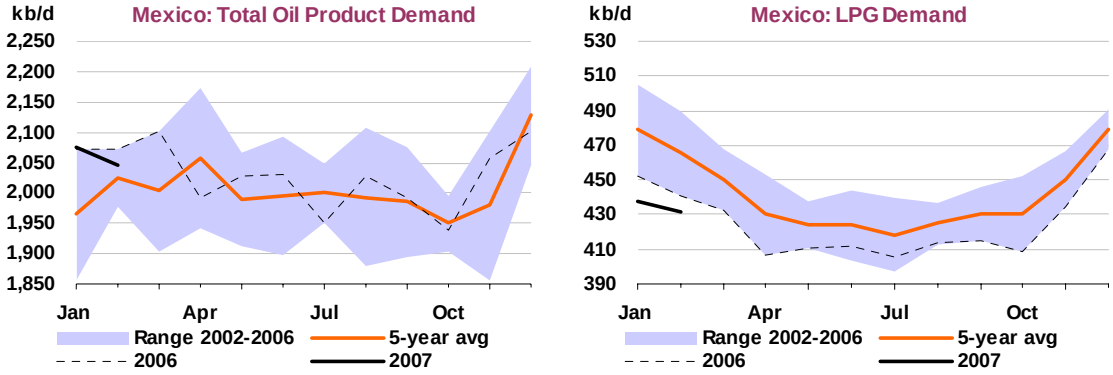
Preliminary data indicate that February's inland deliveries in the **continental United States** – a proxy of demand – rose by 4.8% versus February 2006. The annual growth of diesel and residual fuel demand was particularly strong (+16.3% and 22.0%, respectively), possibly suggesting robust economic activity alongside the effects of the cold snap that hit the country that month. However, the seemingly buoyant growth of US oil product demand must be compared with its relative weakness last year following the after-effects of the devastating hurricanes and the outage of BP's Texas City refinery in 4Q05.



Intriguingly, heating oil deliveries were down by 10.7% on an annual basis. This contraction may seem odd given the extremely cold temperatures (in OECD North America, the number of 'heating-degree days' or HDDs in February was 22% higher than the 10-year average). It could be explained by the fact that mid-Atlantic heating oil markets may be switching to low-sulphur distillates – included in the 'diesel' category – and away from high-sulphur heating oil. If this is indeed the case, diesel's demand growth has been only partially driven by road-freight consumption. Meanwhile, the strength of residual fuel oil can be traced to higher demand of electricity for household heating. In addition, the relatively more expensive natural gas (at $8.3/mmbtu versus $7.7/mmbtu for fuel oil on average in February) probably encouraged some interfuel substitution.



According to preliminary data, February's inland deliveries in **Mexico** shrank by 1.3% versus the same month in 2006, dragged down by a 13.5% fall in residual fuel oil demand. This fall more than offset strong deliveries of transportation fuels (on an annual basis, motor gasoline rose by 5.4%, jet/kerosene by 11.3% and diesel by 3.1%).



More interestingly, the downward trend in LPG consumption, previously highlighted in this report, continues – deliveries fell by 2.2% year-on-year in February after January's -3.1%. Natural gas substitution plays a significant role in this trend, as we have noted, but local observers suggest that two other factors are also behind the ongoing decline: on the one hand, the substitution from LPG to diesel in commercial vehicle fleets and tighter regulations pertaining to LPG-fuelled household water boilers, which have reportedly become much more efficient.

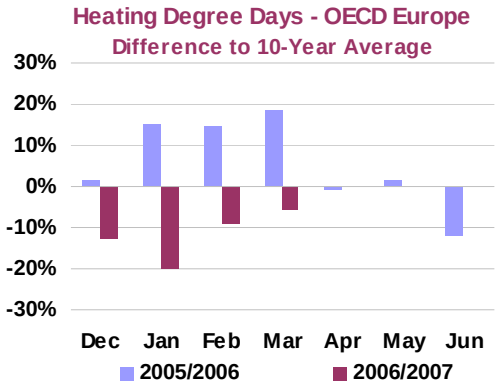
OECD North America Demand by Product
(million barrels per day)

	2005	2006	1Q06	2Q06	3Q06	4Q06	Nov 06	Dec 06	Jan 07*	Latest month vs. Dec 06	Latest month vs. Jan 06
LPG & Ethane	2.83	2.79	2.98	2.65	2.66	2.89	2.95	3.04	3.32	0.29	0.40
Naphtha	0.46	0.43	0.37	0.41	0.45	0.48	0.50	0.46	0.43	-0.03	0.06
Motor Gasoline	10.59	10.73	10.35	10.80	11.00	10.78	10.69	10.86	10.35	-0.51	0.23
Jet & Kerosene	1.97	1.91	1.87	1.95	1.94	1.89	1.87	1.90	1.89	-0.01	0.07
Gas/Diesel Oil	5.09	5.17	5.35	5.01	5.06	5.28	5.27	5.23	5.29	0.06	0.15
Residual Fuel Oil	1.56	1.22	1.43	1.15	1.17	1.12	1.04	1.22	1.34	0.12	-0.14
Other Products	3.02	3.02	2.78	3.14	3.18	2.97	3.05	2.76	2.75	-0.02	-0.12
Total Products	**25.52**	**25.28**	**25.12**	**25.09**	**25.47**	**25.41**	**25.37**	**25.47**	**25.38**	**-0.09**	**0.64**

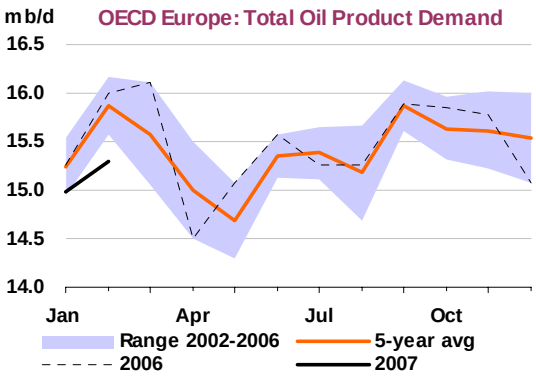
* Latest official OECD submissions (MOS)

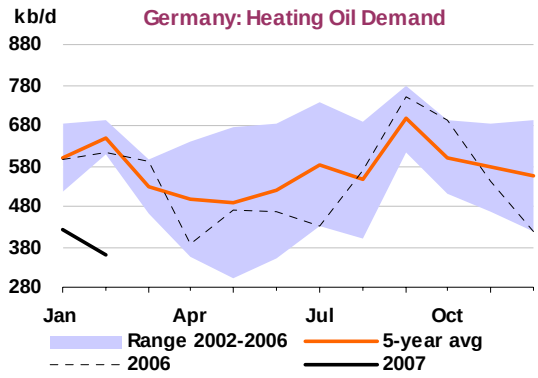
Europe

According to preliminary data, oil product demand in Europe shrank by 4.3% in February on a yearly basis, mostly given the weakness in heating and residual oil use (-16.4% and -18.6%, respectively). As in January, temperatures were mild on average despite several cold snaps across the continent, curbing heating oil demand (HDDs were some 9% lower than normal in February). By the same token, electricity demand was also weak, weighing down on fuel oil consumption. Only jet fuel and diesel posted strong gains (+6.3% and 3.7%, respectively), highlighting the relatively strong economic activity that the continent has enjoyed since last year.

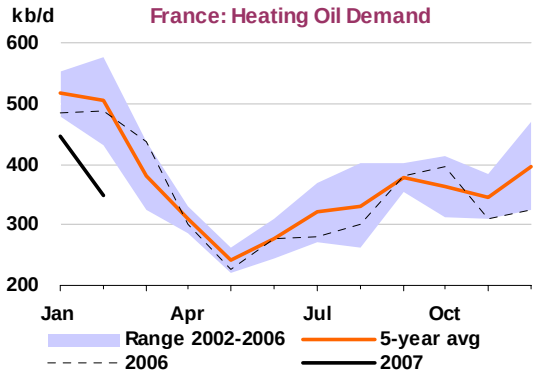


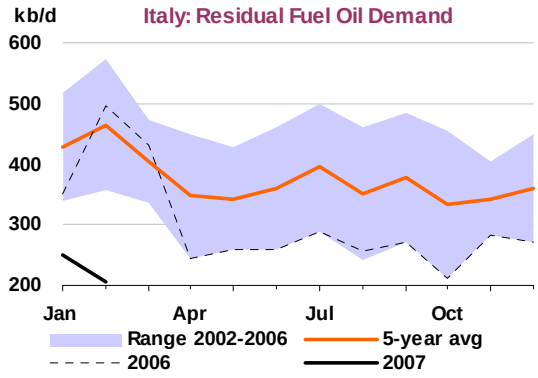
Germany's preliminary data suggest that February's heating oil deliveries contracted by as much as 41.2% on an annual basis as a result of continuing mild weather. As we have previously noted, this sharp contraction is related to German households filling their tanks in late 2006 in anticipation of tax hikes early this year and confirms our anticipation of weak heating oil demand in 1Q07. An unintended consequence of the moderate temperatures, though, is that consumer stocks remain quite plentiful by historical standards, filled at approximately 57% of capacity by month-end, three percentage points less than in January. Therefore, heating oil deliveries in March are likely to have been quite weak as well; moreover, given that the current winter is almost over, heating oil is likely to be subdued for most of this year since consumers will arguably have lower-than-normal filling requirements ahead of next winter. Meanwhile, diesel deliveries jumped by an estimated +3.1%, confirming the ongoing strength of the German economy.





Heating oil deliveries in **France** and **Italy** followed Germany's pattern, falling by 28.6% and 23.4%, respectively, compared with February 2006, because of the mild winter. Similarly, residual fuel oil demand contracted in both countries (by 39.6% and 58.7%, respectively), since electricity demand remained weak. It should be noted that the sharp decline observed in Italy is also explained by comparison with last year's surge following disruptions of Russian natural gas, which forced utilities to burn significantly higher fuel oil volumes.





Regarding transportation fuels, it is as yet unclear whether last month's brief strikes by Italian retail station operators dented demand in February. January's MOS submissions suggest that Italian consumers somewhat anticipated the disruptions (which were announced late that month). Indeed, gasoline demand declined less sharply on an annual basis than in the past few months (-3.4% versus -9.8% year-on-year in December), while diesel consumption surged by 5.7%, compared with -1.7% in the previous month. In February, by contrast, preliminary data indicate that gasoline consumption resumed its structural decline (-5.8%), while diesel deliveries increased by a paltry 1.0%.

OECD Europe Demand by Product
(million barrels per day)

	2005	2006	1Q06	2Q06	3Q06	4Q06	Nov 06	Dec 06	Jan 07*	Latest month vs. Dec 06	Latest month vs. Jan 06
LPG & Ethane	1.03	0.96	1.13	0.96	0.83	0.91	0.87	1.02	1.01	-0.01	-0.10
Naphtha	1.18	1.13	1.22	1.06	1.09	1.13	1.12	1.16	1.23	0.07	0.02
Motor Gasoline	2.64	2.56	2.44	2.61	2.65	2.54	2.53	2.53	2.25	-0.28	-0.09
Jet & Kerosene	1.24	1.28	1.19	1.28	1.37	1.28	1.27	1.23	1.25	0.01	0.10
Gas/Diesel Oil	6.10	6.21	6.47	5.85	6.12	6.42	6.58	6.02	6.13	0.10	-0.10
Residual Fuel Oil	1.84	1.81	2.06	1.70	1.73	1.73	1.78	1.72	1.80	0.08	-0.18
Other Products	1.50	1.52	1.27	1.58	1.67	1.55	1.63	1.37	1.31	-0.06	0.07
Total Products	**15.52**	**15.46**	**15.78**	**15.05**	**15.47**	**15.56**	**15.78**	**15.07**	**14.97**	**-0.09**	**-0.29**

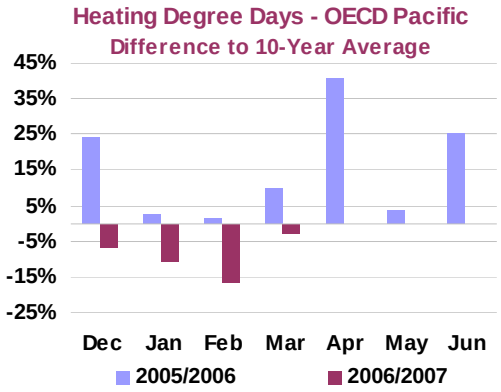
* Latest official OECD submissions (MOS)

Pacific

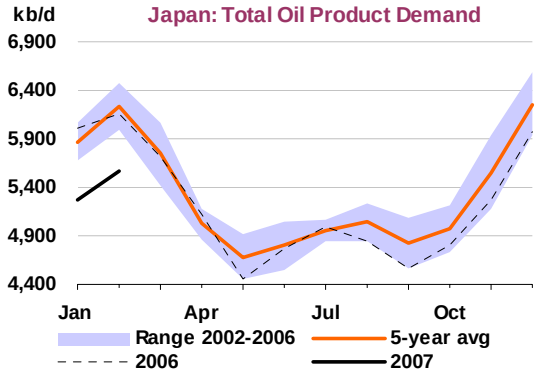
Preliminary data indicate that oil product demand in the Pacific declined by 4.9% in February on an annual basis, due to weak demand for heating fuels (kerosene in Japan and other gasoil elsewhere) as a result of unusually mild temperatures across the region (HDDs were some 17% lower than normal in February). Overall, jet/kerosene deliveries were down by 6.3% compared with the same month in the previous year, while those of other gasoil fell by 7.6%. As in Europe, the clement winter also curbed electricity demand, thus weighing down on fuel oil consumption (-21.4%).

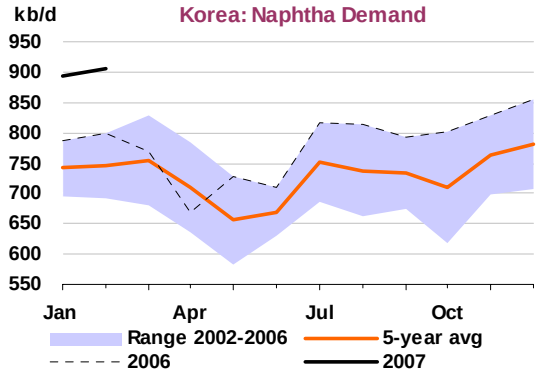
In **Japan**, total oil product demand contracted sharply in February (-9.7% on an annual basis), following January's decline of 12.3% (virtually unchanged from earlier preliminary data), implying a large revision to our earlier forecast (-380 kb/d).

As noted, extraordinarily temperate winter conditions depressed inland deliveries of jet/kerosene (-8.1%), which is mostly used for heating. Electricity demand was also weak, thus reducing the need to burn residual fuel oil (-36.0%), other low-sulphur gasoil (-12.3%) and direct crude for power generation (direct crude is included in 'other products', which contracted by 36.3%).



On a more positive note, transportation fuels posted relatively strong gains (gasoline deliveries increased by 2.5% and diesel by 3.8%), probably reflecting the renewed health of the Japanese economy, although these shifts may also be related to stocking following the structural weakness seen in both products in the previous few months.





In **Korea**, jet/kerosene demand was weak in February (-4.2% year-on-year) given mild temperatures. However, total oil product demand was supported by naphtha, which rose by +13.1%, and by a strong rebound in gasoline (+9.9%) and non-automotive gasoil deliveries (+16.3%). Overall, the country's oil product demand increased by a healthy 4.4% on a yearly basis.

Looking ahead, even though naphtha (the feedstock used to produce ethylene and propylene, the chemical sector's basic products) is likely to remain the driving force of consumption growth, its strength could be eventually tempered by its mounting price. Strong ethylene margins have so far outweighed rising feedstock costs, but there have been reports that some petrochemical producers are turning to cheaper alternatives, such as butane, condensates and even gasoil.

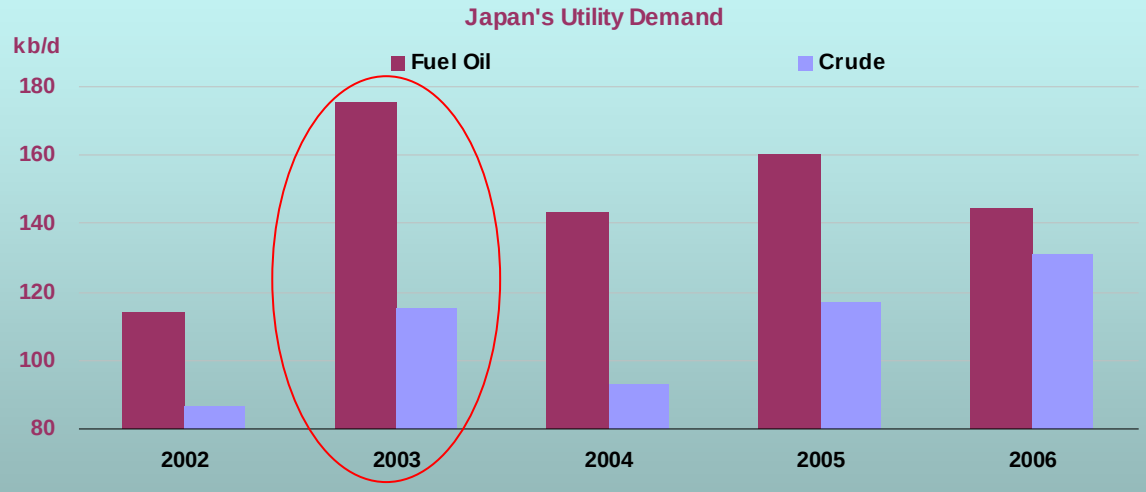
OECD Pacific Demand by Product
(million barrels per day)

	2005	2006	1Q06	2Q06	3Q06	4Q06	Nov 06	Dec 06	Jan 07*	Latest month vs. Dec 06	Latest month vs. Jan 06
LPG & Ethane	0.89	0.89	0.92	0.84	0.88	0.91	0.91	1.04	0.95	-0.09	0.01
Naphtha	1.58	1.62	1.65	1.48	1.60	1.73	1.73	1.79	1.81	0.01	0.10
Motor Gasoline	1.61	1.59	1.56	1.55	1.63	1.62	1.58	1.71	1.45	-0.25	-0.06
Jet & Kerosene	1.04	0.98	1.42	0.75	0.67	1.10	1.06	1.45	1.28	-0.17	-0.32
Gas/Diesel Oil	1.87	1.82	1.92	1.80	1.69	1.88	1.92	1.95	1.67	-0.28	-0.14
Residual Fuel Oil	1.05	1.00	1.16	0.95	0.91	0.99	1.02	1.08	1.03	-0.05	-0.17
Other Products	0.55	0.56	0.67	0.50	0.52	0.53	0.56	0.57	0.51	-0.07	-0.11
Total Products	**8.59**	**8.46**	**9.30**	**7.87**	**7.90**	**8.76**	**8.77**	**9.59**	**8.69**	**-0.90**	**-0.69**

* Latest official OECD submissions (MOS)

Will Japan's Nuclear Problems Bolster Fuel Oil Demand?

On 30 March, ten Japanese power utilities submitted final reports on previously undisclosed problems at their nuclear, thermal and hydroelectric facilities to the Ministry of Economics, Trade and Industry (METI). Evidence of serious incidents in several nuclear plants over the past two decades emerged last November, notably on the improper handling of fuel rods, their subsequent cover up and, in some cases, data falsification. The companies affected include, among others, Tokyo Electric Power (TEPCO, which is the country's largest), Chubu Electric Power (the third largest), Tohoku Electric Power (the fourth), Kansai Electric Power (KEPCO), Electric Power Development, and Hokuriko Electric Power.



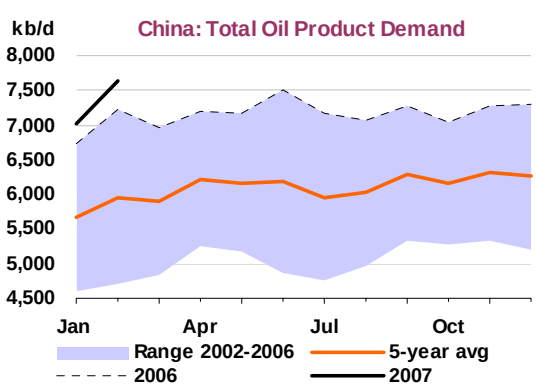
So far, only Hokuriku has been ordered to idle one of the two nuclear reactors of its sole Shi**ka** plant (the second one has been shut since last July for inspections). While it is unclear how the government will respond to these latest developments , we suspect the outcome will be significantly less severe than in 2003, when similar incidents prompted the closure of all of TEPCO's 17 nuclear power units. At that time, residual fuel oil demand jumped by 54%, while direct-crude burning shot up by 32%. However, with TEPCO currently operating only 13 out of 17 units, any incremental restrictions could have some impact on the fuel oil market - particularly ahead of peak summer air conditioning demand.

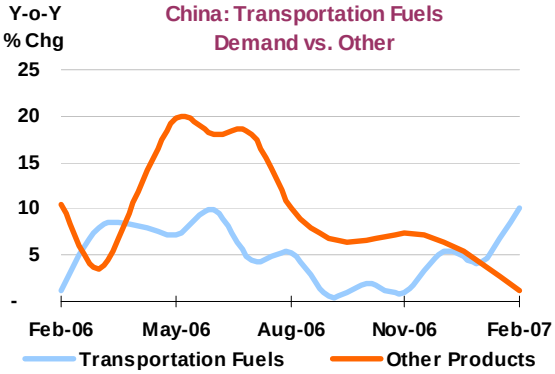
Non-OECD

China

Recently released refining and trade data for the first two months of 2007 (which had been delayed due to the Lunar New Year festivities) indicate that apparent demand (defined as refinery output plus net oil product imports, adjusted for fuel oil and direct crude burning, smuggling and stock changes) has been stronger than anticipated, particularly in January. Indeed, apparent demand in that month increased by about 10.1% year-on-year. In February, as anticipated, apparent demand was quite strong, with growth reaching an astonishing 12.3% according to preliminary data. All product categories bar residual fuel oil posted gains. These upward adjustments have led to a higher prognosis for 2007; we now foresee total oil product demand rising by 6.8% to slightly more than 7.6 mb/d.

As we noted in our previous report, February's strong pace of growth is directly related to the week-long holidays (18-24 February), when a large number of Chinese citizens travel back home. Predictably, demand for transportation fuels (which represent over 50% of total oil product consumption) surged over that month, with gasoline increasing by 14.5%, jet/kerosene by 26.1% and gasoil by 17.8%. Overall, demand for transportation fuels rose by almost 10% on an annual basis, compared with only some 1.5% for all other products, but this may also represent some stock building.





According to a report from the Ministry of Finance, China intends to finally introduce a fuel tax in 2007. The measure would be counterbalanced by the cancellation of highway tolls and other administrative fees. However, it remains to be seen whether the policy will be implemented. Indeed, the fuel tax has been endlessly debated and postponed time and again over the past few years, since it would lead to a politically sensitive increase in gasoline and diesel prices. Further postponement, however, will continue to encourage the sale of large cars and impinge upon Beijing's stated goal of increasing the country's energy efficiency.

China Demand by Product
(thousand barrels per day)

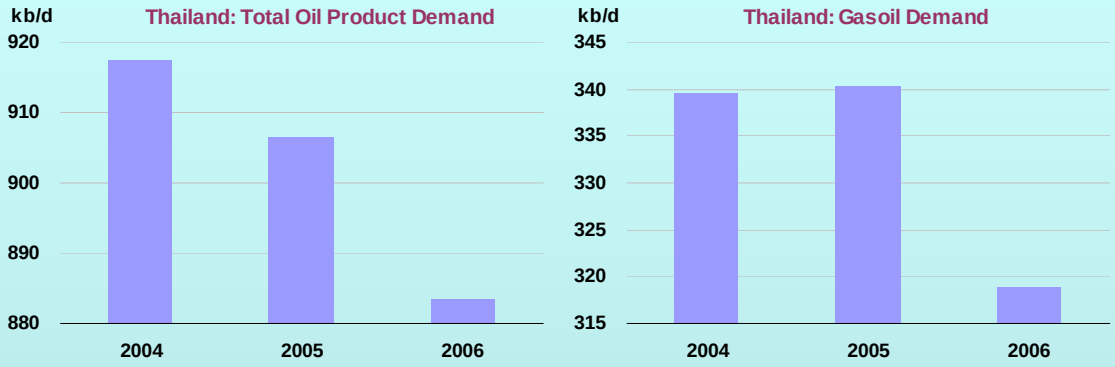
	Demand			Annual Chg (kb/d)		Annual Chg (%)	
	2005	2006	2007	2006	2007	2006	2007
LPG & Ethane	649.5	632.8	679.8	-16.7	47.0	-2.6	7.4
Naphtha	706.8	825.6	911.1	118.8	85.5	16.8	10.4
Motor Gasoline	1,130.8	1,169.5	1,239.0	38.8	69.5	3.4	5.9
Jet & Kerosene	245.8	279.6	303.1	33.8	23.5	13.8	8.4
Gas/Diesel Oil	2,238.8	2,338.0	2,503.4	99.2	165.4	4.4	7.1
Residual Fuel Oil	778.0	776.1	790.7	-1.8	14.5	-0.2	1.9
Other Products	943.1	1,135.0	1,217.8	191.9	82.8	20.3	7.3
Total Products	**6,692.7**	**7,156.6**	**7,644.9**	**463.9**	**488.3**	**6.9**	**6.8**

Other Non-OECD

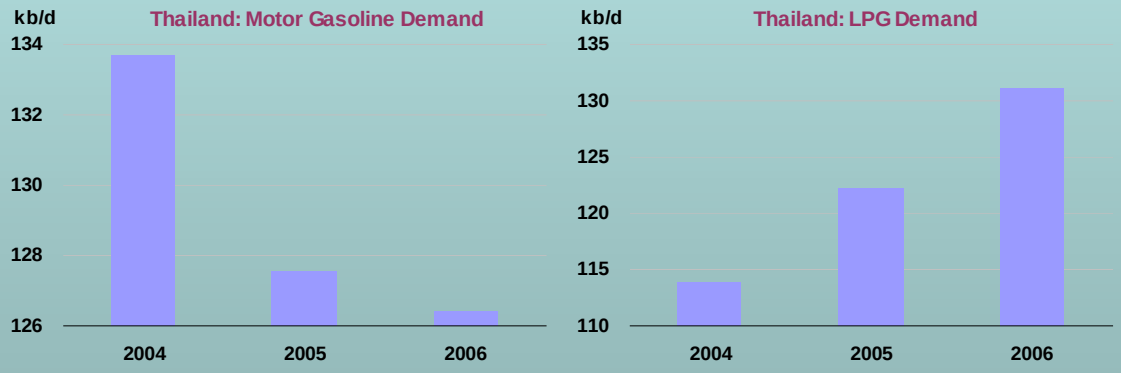
India's oil product sales – a proxy of demand – increased by 4.3% year-on-year in February, according to preliminary data. All product categories recorded gains, particularly LPG (+8.0%) and residual fuel (+8.3%). The somewhat less buoyant demand for transportation fuels (gasoline rose by 4.2%, jet/kerosene by 3.7% and gasoil by a modest 1.2%) is explained by stock drawing (given February's cut in the retail prices of gasoline and diesel).

The Changing Nature of Thailand's Demand

Thailand is a case study on the effect of sustained price hikes on oil product demand. Indeed, high oil prices are arguably having a long-lasting impact upon the country's oil demand, which has substantially dropped over the past two years despite strong economic growth. Preliminary data suggest that total oil product demand fell by 3.7% between 2004 and 2006. In particular, gasoil consumption (of which some 93% is diesel and represents about 36% of total demand) plummeted by 6.1% over that period, followed by gasoline (14% of total demand), which contracted by 5.5%.



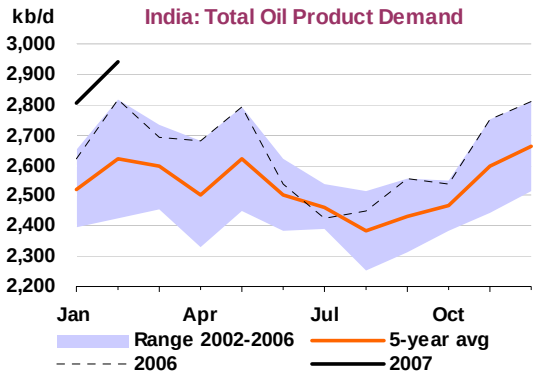
Following the sharp rise in international oil prices that began in 2003, the government introduced transportation fuel subsidies in January 2004, with the goal of shielding the oil-import dependent Thai economy from such a major external shock. However, the subsidies quickly proved too costly (reaching approximately $2.2 billion), and they were removed over the course of the following 18 months (in October 2004 for gasoline and in July 2005 for diesel). Predictably, demand for both products fell substantially as consumers became fully exposed to market prices (gasoline retail prices surged by about a third in the few months after the subsidy removal, while diesel prices shot up by over two-thirds). Motorists were forced to change their driving habits, reducing speed, shortening trips or modifying engines, among other measures. By contrast, the consumption of LPG (15% of demand), which is the only product still subsidized, has risen by 15% per year on average since 2004.



A key question is whether this drop in transportation fuel demand is structural. Monthly estimates suggest that demand for both gasoline and diesel has stabilized over the past few months at around 130 kb/d for gasoline and 330 kb/d for gasoil. Nevertheless, it is unlikely that the rates of growth for both products will ever again reach the highs seen when subsidies were in place (gasoil consumption, for example, jumped by almost 12% in 2004). Indeed, conservation measures have arguably become ingrained and will likely be carried on as long as oil prices remain relatively high. As such, we estimate that transportation fuel demand will only increase by about 3% per year on average over the medium-term.

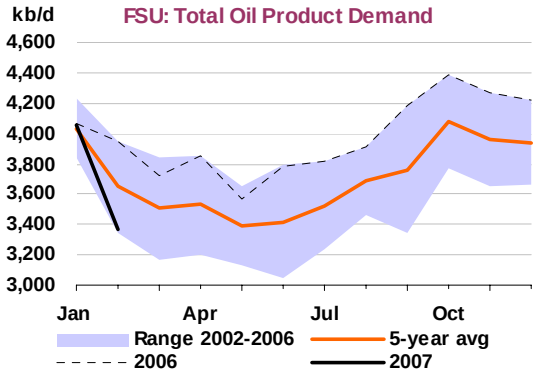
On a final note, the government is actively encouraging the consumption of ethanol-blended gasoline and palm oil-based biodiesel through a policy of price discounts and other incentives. Admittedly, the volume of ethanol is currently marginal; for example, the so-called 'gasohol 95' or E5, which contains 5% of ethanol, accounts for about 20% of gasoline demand, but in practice this is equivalent to only 1% of total oil-based gasoline. Nevertheless, it should be noted that gasohol use rose more than two-fold since its introduction in 2005 and is expected to double again by the end of this year. In the medium-term, biofuels could thus well become a significant alternative to oil in Thailand.

In addition, it should be noted that revised data indicate that naphtha demand, albeit vigorous, is weaker than previously estimated. Naphtha's sales rose by 7.3% year-on-year in January, and by 3.7% in February, suggesting that industrial users are burning more natural gas. There have been reports that Shell plans to double LNG imports into its 2.5-mt/y Hazira terminal this year, having secured new customers willing to pay international gas prices. As such, naphtha demand is likely to resume its slow decline.



Given these revisions, we have marginally increased our 2007 forecast. India's total oil product demand is now expected to rise by 3.4% to slightly above 2.7 mb/d.

FSU apparent demand – defined as domestic crude production minus net exports of crude and oil products – has been further revised downwards by 252 kb/d in 1Q07. Although oil production inched up by some 90 kb/d, preliminary data suggest that net exports in February reached a post-Soviet high of 9.2 mb/d, and that March's figure was also very high. The surge in exports is attributed to the return of the Druzhba pipeline to full capacity and burgeoning Caspian shipments through the BTC and CPC pipelines. Given these sharp revisions, the region's apparent demand in 2007 is expected to be 0.3% lower than in 2006.



However, we remain concerned about the extreme volatility of FSU data, particularly regarding trade flows. We are currently assessing alternative methodologies for estimating demand – within the constraints of the limited availability of data.

SUPPLY

Summary

- **World oil supply** fell by 265 kb/d in March to average 85.3 mb/d, as OECD production outages augmented further curbs in OPEC crude supply. Early 2007 global supply stands 150-200 kb/d above last year. Netting out Angola, non-OPEC supply is 1.0 mb/d above 1Q06 and total OPEC supply 0.8 mb/d lower.

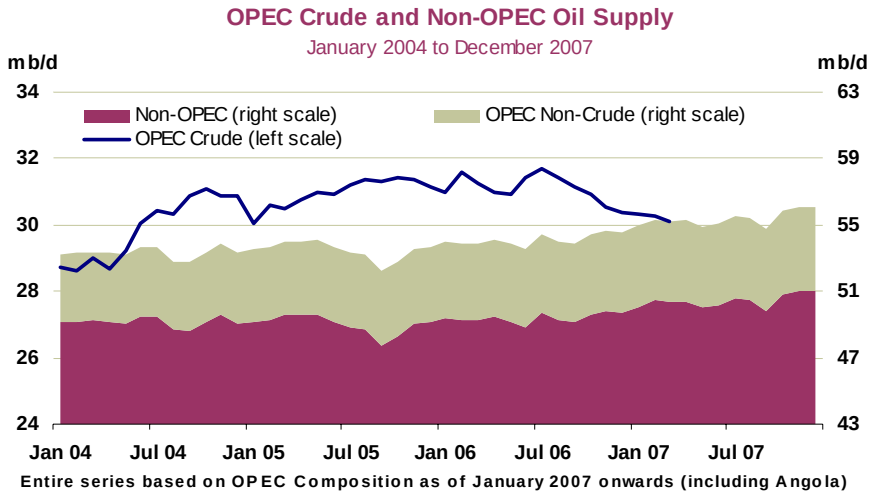
- **Expected non-OPEC supply growth for 2007,** again net of Angola, remains at 1.1 mb/d, sharply higher than 2006's growth of 0.4 mb/d. Moreover, yearly growth has been averaging nearly 1.0 mb/d for the past three quarters, placing this year's expected rise in perspective. OPEC gas liquids growth averages 220-250 kb/d in both years.

- **Downward adjustments to 2006 and 2007 non-OPEC supply** affect Sudan and Yemen, with more minor changes accruing in the Americas. These are partly offset by upward adjustments for the North Sea and Russia in 2007. Non-OPEC supply may level off in 2Q and 3Q 2007 at around 50.3 mb/d as seasonal outages and maintenance take effect, before rising to 50.9 mb/d in 4Q.

- **Total OPEC crude supply** fell by 165 kb/d in March to 30.1 mb/d, amid lower output from Nigeria, Saudi Arabia, Iran, Kuwait, Iraq and Venezuela. Security issues kept 650 kb/d of Nigerian capacity and 440 kb/d of Iraqi output offline in March. On top of voluntary production curbs, this took effective OPEC spare capacity to 3.0 mb/d. OPEC crude capacity could rise 700 kb/d, to 34.8 mb/d, by December and to 36.5 mb/d by end-2008.

- **OPEC-10 (excluding Angola and Iraq) trimmed output** by 195 kb/d in March to 26.5 mb/d. This is 1.2 mb/d below September 2006, the reference point for supply curbs agreed to come into force from November onwards. A 15 March OPEC meeting in Vienna made no mention of new output targets, but noted that volatility would necessitate close monitoring of markets. The next scheduled meeting will be in Vienna on 11 September, suggesting continued production restraint.

- **The 'call on OPEC crude and stock change'** has been revised down by 0.2 mb/d for 2007 and by 0.1 mb/d for 2006, largely due to downward adjustments to non-OECD demand. On an adjusted basis, including Angola, the 'call' rises from 30.9 mb/d in 2006 to 31.5 mb/d this year. Supply curbs since last autumn have already trimmed OPEC production to levels close to the midpoint of the 2Q call, and have been instrumental in seeing two consecutive quarters of falling inventories.



All world oil supply figures for March discussed in this report are IEA estimates. Estimates for OPEC countries, Alaska, Kazakhstan, Peru 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. 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. These aside, no contingency allowance for random events is subtracted from the supply forecast. While upside variations can occur, experience in recent years indicates that the random events listed above may cause supply losses of between 300 kb/d and 400 kb/d for non-OPEC supply each year.

OPEC

Including Angola, OPEC March crude supply fell to its lowest level since January 2005, 165 kb/d lower than February at 30.1 mb/d. February supply was revised up by 40 kb/d as higher estimates for Iraq offset downward revisions for Angola, UAE and Iran. Major changes in March centred on Nigeria (-100 kb/d), amid renewed pipeline outages, and Iran and Saudi Arabia, which are both estimated to have trimmed supply by 50 kb/d. In the case of Saudi Arabia, maintenance at the Jubail refinery is thought to have offset signs of increased export sales to Asian customers. Indonesia saw a modest rise in production in March, albeit output stands 80 kb/d below a year ago. Angolan production rose to 1570 kb/d from a downward revised 1535 kb/d in February, as output increased at the Dalia field. Reduced OPEC supply, plus revised OPEC capacity estimates (see below), take nominal OPEC spare capacity to 4.0 mb/d, although a more realistic measure of effective spare capacity, excluding producers facing short-term constraints on boosting supply, comes in at 3.0 mb/d.

OPEC Crude Production[1]
(million barrels per day)

	1 July 2005 Target[2]	1 November 2006 Target[2]	March 2007 Production	Sustainable Production Capacity[3]	Spare Capacity vs Feb 2007 Production
Algeria	0.89		1.32	1.38	0.06
Indonesia	1.45		0.85	0.87	0.02
Iran	4.11		3.81	3.95	0.14
Kuwait[4]	2.25		2.40	2.64	0.24
Libya	1.50		1.69	1.73	0.04
Nigeria[5]	2.31		2.15	2.49	0.34
Qatar	0.73		0.80	0.90	0.10
Saudi Arabia[4]	9.10		8.55	10.80	2.25
UAE	2.44		2.57	2.75	0.19
Venezuela[6]	3.22		2.42	2.60	0.19
Subtotal	**28.00**	**26.30**	**26.55**	**30.10**	**3.55**
Angola[1]			1.57	1.57	0.00
Iraq			1.97	2.40	0.44
Total			**30.08**	**34.07**	**3.98**
(excluding Iraq, Nigeria, Venezuela, Indonesia					*3.01)*

1 Angola joins OPEC effective 1 January 2007.
2 Target production levels superseded by decision to cut output by 1.2 mb/d from 1 November 2006 and 0.5 mb/d from 1 February 2007. Implied aggregate production targets around 26.3 mb/d from November and 25.8mb/d from February.
3 Capacity levels can be reached within 30 days and sustained for 90 days.
4 Includes half of Neutral Zone Production.
5 Nigeria excludes some 545 kb/d of shut-in capacity
6 Includes Orinoco extra-heavy oil assumed at 525 kb/d in March

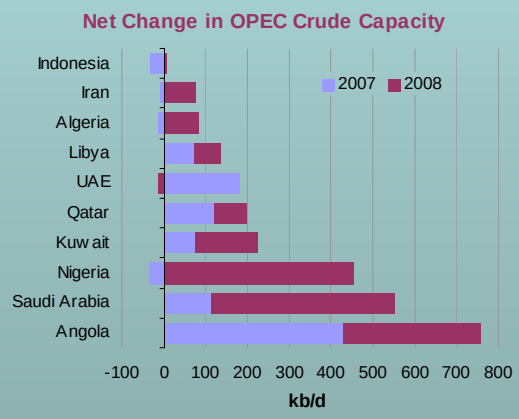
Production for the OPEC-10 (excluding Iraq and Angola) is now some 1.2 mb/d below September (the benchmark for the originally agreed cuts) and 1.7 mb/d below an earlier summer high last July. The communiqué from the 15 March meeting of OPEC ministers made no mention of production targets, but was widely seen as signifying no change from existing policy. Reference was made to a well supplied market, healthy commercial oil stocks, a firm 2007 economic outlook but continuing oil market volatility. Ongoing market monitoring was stressed. By deferring any further meeting to 11 September, the organisation has signalled that it sees no need for any formal change in output targets before the autumn. This breaks with traditional OPEC practice of convening a meeting in June to decide on production policy ahead of the third quarter rise in demand. This report sees OPEC already producing close to the expected 2Q midpoint low for the 'call' of around 30 mb/d. With apparently sharp draws in commercial inventory seen in 4Q06 and 1Q07, and a still-tight margin of spare capacity, current OPEC production could imply a further marked tightening in stocks in months to come as the 'call' rises by over 1.0 mb/d in both the third and fourth quarters. Moreover, this is significantly higher than an expected 0.7 mb/d rise in OPEC capacity through to the end of the year.

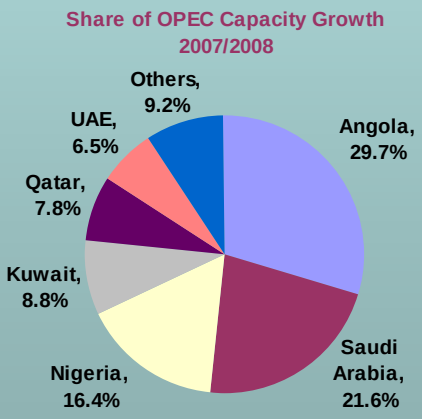
OPEC Crude Capacity Growing in 2007/2008

OPEC producers are expected to add a net 2.6 mb/d to installed crude capacity in 2007 and 2008, taking account of new capacity investments and net decline from older fields (decline rates are assumed to range from 1-5% pa for onshore fields in the Mideast Gulf, through to 12-15% pa for deepwater fields). Capacity is expected to reach 34.8 mb/d by the end of this year, compared with 33.9 mb/d at the end of 2006. Growth could accelerate in 2008, with capacity reaching 36.5 mb/d by the end of next year. However, the rise in 2008 is partly dependent on partially resumed operations at 450 kb/d of capacity in the western Niger Delta currently shuttered due to ethnic and political violence. Moreover, we have persisted with the working assumption of flat capacity in Iraq and Venezuela due to the uncertainties surrounding investment and upstream activity in both countries. Clearly, developments in all three of these countries are surrounded with risks both on the downside and the upside. Furthermore, despite attempts to employ conservative assumptions on project timing and realistic estimates of decline, current tightness in service and drilling markets suggest ongoing potential for slippage from headline capacity targets.

Capacity growth is expected to be heavily skewed towards Angola and Saudi Arabia, together accounting for half of the net increase. There have been recent suggestions that OPEC may attempt to bring **Angola** into the quota system as early as September, setting a ceiling for production close to 2.0 mb/d. However, this may not unduly affect active capacity investment, since our longer-term prognosis for Angola, while seeing capacity rising sharply to 2.0 mb/d by mid-2008, then envisages a levelling-off in a 2.0-2.2 mb/d range for the period through 2011. Note that we have now netted off production of 50-100 kb/d of Sanha condensate from the Bomboco field, counting this as OPEC NGL and reducing estimated current Angolan crude capacity to 1.6 mb/d. Rising supplies from the Dalia, BBLT (both currently producing), Rosa, Greater Plutonia and, later, Kizomba C projects drive the increase, as capacity reaches 2.14 mb/d by late-2008.

Saudi Arabia is expected to underpin OPEC capacity expansion after the short-term increases from Angola in 2007/2008. Much of the Kingdom's growth comes during 2009-2012, but this year and next also see sizeable increments from the Khursaniyah, Nuayyim and Shaybah fields, overall crude capacity increasing to 11.4 mb/d by end-2008 from a current 10.8 mb/d. This report excludes a combined 250 kb/d of Abu Safah crude and spiked condensates from the capacity total, underpinning the difference between our estimate and Saudi stated capacity of 11-11.3 mb/d. Much of the new crude lies at the lighter/sweeter (low sulphur) end of the Saudi quality spectrum, although longer-term developments such as the Manifa project in 2011/2012 will entail heavy crude destined for new domestic deep processing refineries. The Kingdom has been adept at pre-ordering drilling rigs and other supplies to ensure projects attain scheduled start-up in an increasingly delay-prone upstream investment environment. We see crude capacity rising further to some 12.5 mb/d by 2012, and with many of these new developments being linked to associated gas projects, Saudi NGL & condensate supply could also increase by some 500 kb/d in the next two years.



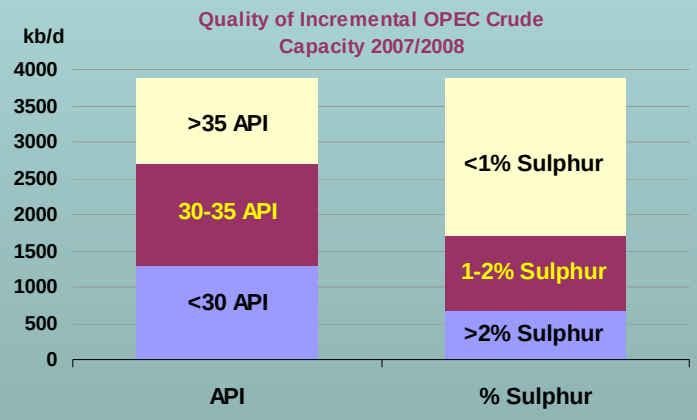


Nigeria generates 16% of OPEC's capacity growth for 2007/2008, albeit entirely in 2008. Capacity is expected to bounce back from 2.5 mb/d at end-2006, to 2.9 mb/d by 2008. Further modest net decline is expected for 2007, with 450 kb/d from the EA and Forcados streams assumed to remain offline. This capacity is assumed to be phased back in over the course of 2008 and 2009, subject to political tensions easing after presidential and local elections in April 2007. Indeed, Shell recently announced that this production could be restarted within five to six months, security permitting. Chevron's deepwater Agbami field also contributes to growth from late-2008. Nigeria's new, lower capacity target of 3.2 mb/d by 2011 in our opinion represents a more realistic level (compared with an earlier 4.1 mb/d), assuming deepwater projects such as Bosi, Usan, Akpo and Bonga SW proceed.

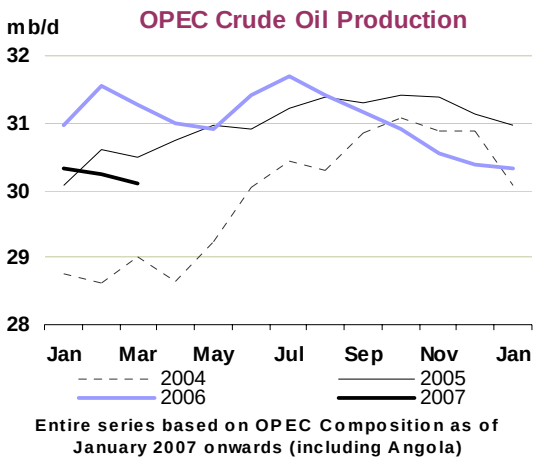
OPEC Crude Capacity Growing in 2007/2008 (continued)

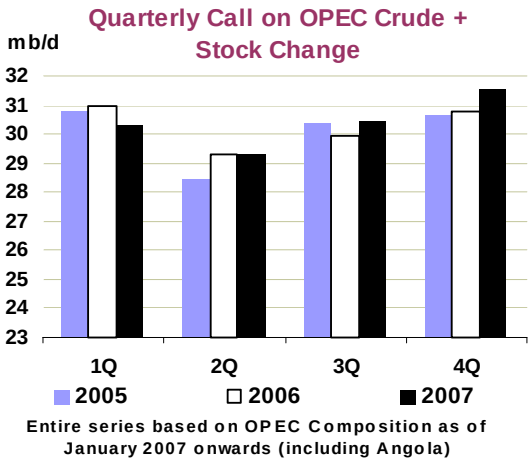
Kuwait, Qatar and the UAE each add around 200 kb/d to respective capacity levels during 2007/2008. For **Kuwait**, the increase centres on expansion and refurbishment at the western Minagish field and at the southern workhorse, Burgan. New capacity has been sanctioned for northern fields with the GC-24 project at the Sabriyah field, although this seems unlikely to be realised until 2010. Direct foreign participation in upstream projects remains off limits, which this report envisages may place an effective ceiling for capacity closer to 3.0 mb/d than the 4.0 mb/d longer-term official target. In **Qatar**, crude capacity increases are likely to be modest in comparison to those for gas and NGL (the latter potentially doubling to 1.0 mb/d by 2012). Nonetheless, we see Maersk's investment at the al-Shaheen field allowing capacity to increase to 400 kb/d by late-2008 from 240 kb/d currently. Total Qatari crude capacity reaches 1.1 mb/d from a current 0.9 mb/d in the same period. Growth from the **United Arab Emirates (UAE)** comes from Abu Dhabi, where ongoing investment at onshore fields feeding the Murban crude stream is already bearing fruit. Murban capacity, which stood at 1.2 mb/d in 2005 and 1.3 mb/d in 2006, is expected to average 1.55 mb/d in 2007 and 1.58 mb/d in 2008. Longer-term expansion from Abu Dhabi is likely to shift offshore, to the Upper Zakum and Umm Shaif fields, albeit this is only likely to result in higher capacity in 2010/2011. In all, UAE capacity could rise to 2.9 mb/d by end-2007 from 2.7 mb/d at end-2006, stabilising at that level through 2010 before offshore increments allow a further increase to 3.4 mb/d by 2012.

Algeria, Libya and **Iran** until recently held substantial potential for increased upstream capacity, based on a liberalising investment regime (Algeria and Libya) and the resource base (Iran) respectively. However, there has been an apparent change in tone in the past couple of years from Algeria and Libya as regards receptiveness to capacity expansion itself, and licence terms in particular. These factors, allied to Iran's relatively unattractive investment climate and worsening political isolation, limit any capacity growth potential from these producers in the short term. Each should see net capacity growth within a 70 kb/d to 135 kb/d range for 2007/2008. Increments come from the Hassi Messaoud field in Algeria and at Elephant and El Shahara in Libya. Iran has a series of field expansions, including Darkhovin, Masjid e Suleiman, Rag e Safid, Salman, Foroozan, Doroud and Abuzar. All told, Iranian increments add 350 kb/d to capacity between 4Q06 and 4Q08 but are offset by aggressive decline rates at older fields, leaving capacity largely unchanged at 4.0 mb/d by end-2008. Any step change in Iranian capacity would require greater outside investment at fields such as Azadegan, Yadavaran and South Pars. Without that, overall capacity levels could stagnate, or more likely decline. A government target of 5.2 mb/d by 2011 seems wholly unrealistic in the current political and regulatory environment.



The quality of new crude supplies from OPEC during 2007/2008 looks to be relatively sweet. While the crude gravity of the increments (totalling nearly 4 mb/d) is fairly evenly split between light, medium and heavy grades, 56% of the new supplies are expected to have a sulphur content of less than 1%. Sour, 2%-plus sulphur material makes up less than 20% of the new supplies. The importance of new North and West African output helps to explain this trend. However, while this holds some scope for supply-side sulphur quality pressures to ease in the next two years, there is likely to be no let-up in demand-side pressures as legislators continuously tighten oil product sulphur limits. Moreover, African crude supplies can bring their own shipment and processing problems in terms of wax and acid content. Newer Angolan grades like Dalia for example have an acid content of 1.6 mgKOH/g. Crude from Chad and Congo can have even higher acid levels. Generally speaking, refiners will be restricted to running only small volumes of any crude with a total acid number (TAN) in excess of 1.0 to avoid equipment corrosion.

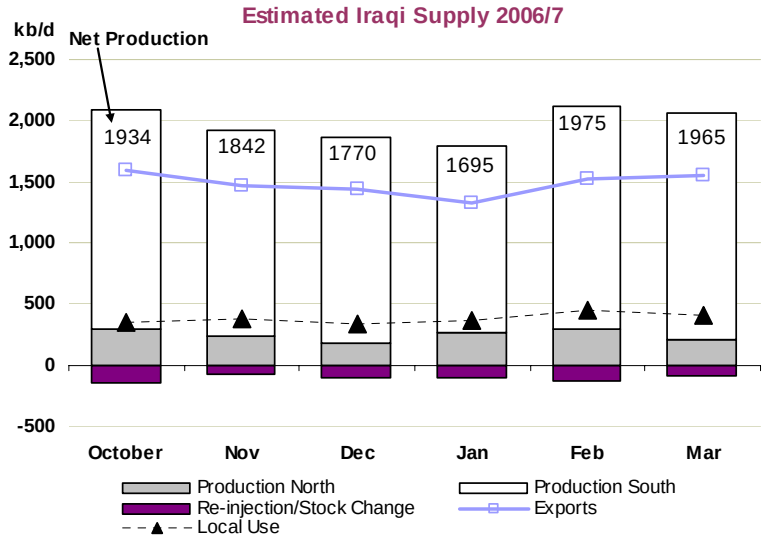




We have adjusted **Angolan** crude production estimates to net out gas liquids from the Sanha-Bomboco fields, currently around 80 kb/d. These are now counted within the OPEC NGL category. After adjusting for Sanha, preliminary indications for Angolan crude output seem to be running marginally ahead of our earlier expectation, with a 35 kb/d increase to 1.57 mb/d seen in March. Production from the Dalia field was reported by operator Total to have reached peak 220 kb/d early in April, slightly ahead of our assumed schedule.

Mixed signals emerged during March on the likelihood of Angola becoming bound by OPEC production limits. There were press suggestions that Angola was being told that production should not be allowed to rise above 2.0 mb/d, with the country potentially being required to adjust its expansion programme as early as this September. Angolan representatives denied that pressure was being brought to bear by other producers. There is no certainty that a much-quoted 2.0 mb/d is indeed the benchmark against which Angolan entry to an explicit or implicit OPEC quota system is to be measured. Nor is the status of Sanha-Bomboco liquids entirely clear. Notwithstanding, our supply model does not assume Angolan *crude* production attaining 2.0 mb/d until well into 2008.

Contrary to earlier estimates, **Iraqi** domestic crude use appears to have bounced back from January lows in February. This pulls up February's supply estimate, since a combination of Iraqi local crude use and exports, net of deliveries into storage, is used as a monthly proxy for production. An earlier estimate of 370 kb/d of domestic use for February has been revised up to 450 kb/d, taking February total supply to 1.98 mb/d. In March, local crude use is reported to have dipped to 410 kb/d, offsetting an increase in crude exports from February's 1.53 mb/d to 1.56 mb/d. Total Iraqi March supply thus fell marginally to 1.97 mb/d.



For the second consecutive month, exports were almost entirely concentrated on the southern ports of Basrah and Khor al-Amaya (augmented by around 12 kb/d shipped by pipeline to Syria). The last liftings of crude by tanker from Ceyhan in Turkey were 3 mb which loaded in January, since when the

northern Kirkuk to Ceyhan pipeline has been largely non-operational. Crude in storage at Ceyhan remains at or below 1 mb as a result, unchanged since the January cargoes sailed. It will be interesting to see how soon and at what rate two new fields in the Kurdish-administered north come onstream. The Taq Taq and Tawke fields, operated by Addax and DNO respectively, are reportedly nearing the production phase, with initial capacity of some 70 kb/d combined. However, delays in actual production start-up may occur unless access to the northern export pipeline, or alternative offtake arrangements, can be secured.

Supply from **Saudi Arabia** in March is assessed at 8.55 mb/d, off by 50 kb/d from February. Exports and local use are used as a proxy for production, so although March Asian term crude sales nudged higher compared with February, this was likely offset by lower domestic crude use, with units at the Jubail refinery taken down for maintenance and potentially curbing throughput by 250 kb/d. April supply may prove broadly stable, with more limited refinery maintenance (and higher runs) offsetting weaker Asian export liftings.

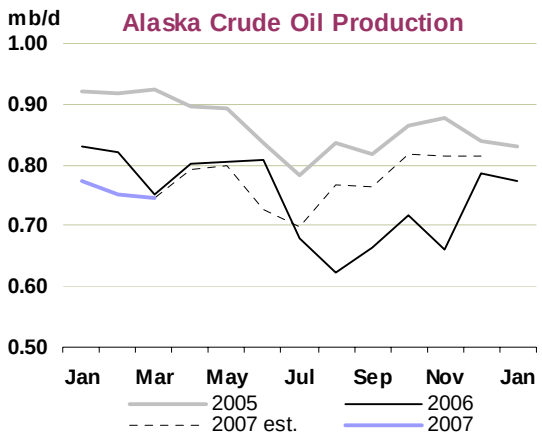
Saudi Aramco's President and CEO was quoted in March as saying end-2006 crude capacity reached 10.7 mb/d, suggesting a Saudi total of close to 11.1 mb/d if half of Partitioned Neutral Zone capacity is included. This is broadly in line with this report's estimate of 10.8 mb/d if condensate and Abu Safah volumes accruing to Bahrain are excluded. Aramco also stated its reserve replacement ratio stood at 106% in 2006, with the discovery of 3.6 billion barrels of new oil reserves.

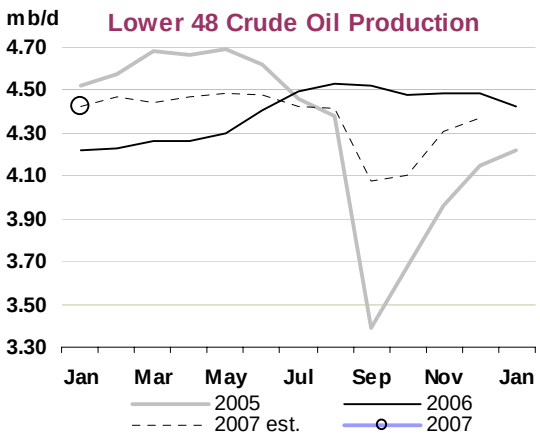
Nigerian supply for March is assessed down by 100 kb/d following the loss of 187 kb/d of Bonny Light production during 5-22 March due to a pipeline spill at Nembe Creek. Alongside reports of maintenance at the deepwater Bonga field, Nigerian supply is seen at 2.15 mb/d for the month. A total of some 650 kb/d of Nigerian capacity is estimated to have remained offline in March, although the gap between monthly production and sustainable capacity is a lesser 350 kb/d, as we have netted off long-term shut-ins of Forcados, EA and Escravos production from the installed capacity figure. Without the disruptions to Niger Delta supply seen over the past year, Nigerian capacity could have reached 3.0 mb/d by now. Rumours abounded in March surrounding potential postponement of elections on 21 April, in turn raising the possibility that this could inflame ethnic unrest in the Niger Delta. Drilling companies are reportedly avoiding taking on new work in the area due to security concerns, suggesting that the divergence in output between a disruption-prone delta and more secure deepwater facilities will continue.

OECD

North America

US – Alaska March actual, others estimated: The first-quarter US crude production estimate has been revised down by 45 kb/d, largely due to lower inferred Gulf of Mexico (GOM) production in January. March GOM supply has also been cut by a month-long, water cooling system outage at the 50 kb/d Mad Dog field. However, downward revisions for the area are expected to taper off through 2007, with GOM supply rising modestly this year to 1.39 mb/d compared with 1.37 mb/d in 2006. Our 2007 base case forecast assumes a five-year average level of hurricane outages for the GOM, at around 165 kb/d for 3Q and 215 kb/d for 4Q. These levels are of course heavily influenced by the exceptional storm outages of 2005. Despite early-year warnings of a stronger-than-normal hurricane season for 2007, should this year prove more akin to 2006 (when outages were minimal) than 2005, GOM production could be correspondingly higher, particularly in 4Q07.

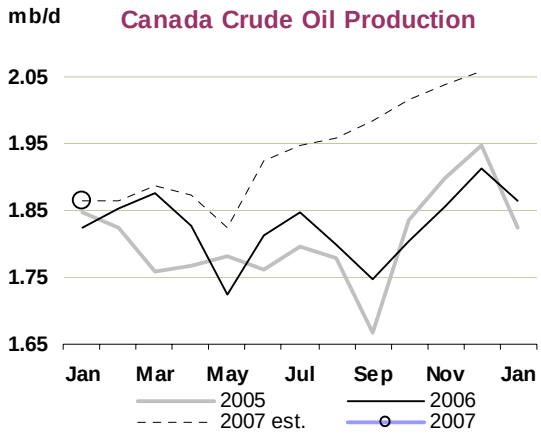


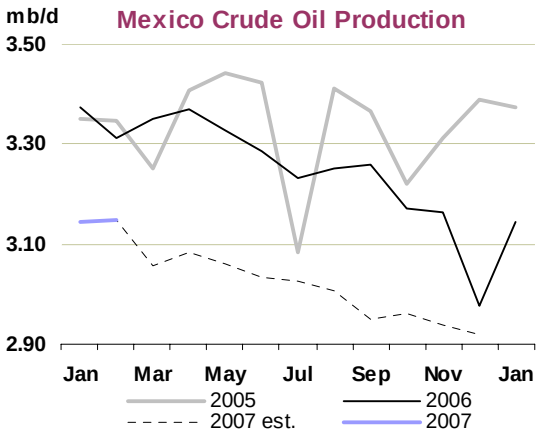


March also saw Alaskan supply running marginally below expectation, although crude production should nonetheless show modest recovery in 2007 after the pipeline problems which plagued 2006. Alaskan crude supply is seen averaging 770 kb/d this year, up from 745 kb/d last year. Early year data for US NGL supply also pull down the 1Q total by 30 kb/d, but we have assumed gradual recovery, with NGL supply this year coming in at 1.75 mb/d, up a modest 15 kb/d from 2006. With California, Texas and other lower-48 states' production for 4Q06 having marginally exceeded expectation, the overall trend for US crude production this year is a levelling off at 5.14 mb/d, after five consecutive years of decline. Upside adjustments to supply could materialise if autumn storms again prove less intense than the norm, whereas lower production will materialise in the event that hurricanes and mechanical outages on the scale evident in 2004-2006 recur. Local ethanol production is also expected to show growth of 60 kb/d in 2007, over and above crude oil's modest increase.

Canada – January actual: Canadian supply projections for 2007 are largely unchanged in aggregate this month, with conventional crude rising by 115 kb/d to 1.94 mb/d, while a 35 kb/d increase in synthetic crude (to 690 kb/d) offsets a 20 kb/d expected reduction in NGL output (to 680 kb/d). All told, Canada sees oil supply match last year's 120 kb/d growth, attaining 3.31 mb/d in total. However, the balance of supply shifts towards the second half of the year, as mechanical problems and scheduled maintenance in the first and second quarters respectively affect both offshore east coast and synthetic crude production. Supply growth in 2007, as in 2006, derives in part from rising Albertan bitumen and syncrude supplies. Production growth offshore Newfoundland and Labrador is also expected to resume after three disappointing years, with output from the Hibernia, Terra Nova and White Rose fields expected to rise by a combined 90 kb/d to reach 390 kb/d. These increments help offset declining onshore conventional production.

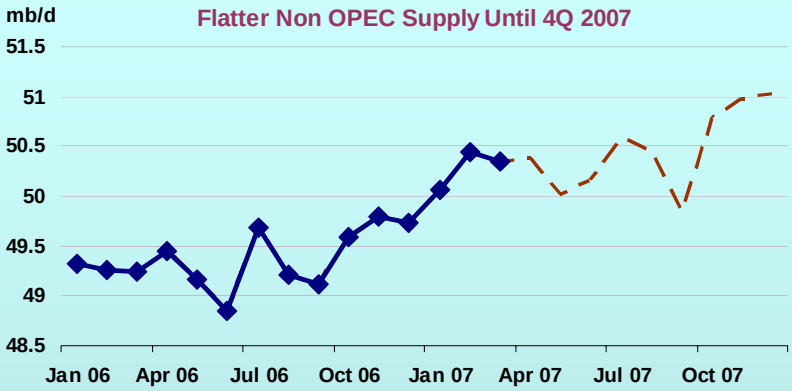
Future growth from Canada will be heavily weighted towards the oilsands in Alberta, where combined bitumen and syncrude production could reach 2.0 mb/d by the end of the decade. However, the oilsands, like other producing areas, face tightening fiscal and regulatory terms in the present high oil price era. Canada's federal government will gradually phase out the *accelerated capital cost allowance*, which enabled project developers to recover investment outlays more quickly through larger deductions early in project life. But existing projects are protected from the tax change, and even new projects will not begin to see the allowance phased out until 2011-2015. The impact on firmly committed developments is generally assumed to be slight therefore. Further changes in the fiscal and operating regime are being examined however, including an increase of the early-life royalty rate of 1%, and new Alberta rules on curbing CO_2 emissions.





Mexico – February actual: Total Mexican oil production for February came in 35 kb/d higher than anticipated, with crude output outperforming this report's estimate by 70 kb/d but NGL lower by 35 kb/d. Crude averaged 3.15 mb/d in February and NGL 405 kb/d. Nonetheless, forecast supply for 2007 has been held largely unchanged, with crude expected to fall by over 200 kb/d to 3.0 mb/d, while NGL production is broadly flat at 435 kb/d. Field-specific data for February confirmed a much higher profile for the Ku-Maloob-Zap fields, where output averaged 460 kb/d in February. We have added around 40 kb/d to the previous forecast of 415 kb/d for KMZ in 2007. Supplies could prove higher than this, notably with the expected arrival of a new FPSO at the field in April. Offsetting higher KMZ supply, however, is a similar scale downward adjustment for the Cantarell field, where decline of 15% has now been assumed for 2007, in line with recent announcements from state company Pemex.

Non-OPEC Supply Capped by Seasonality



Non-OPEC supply growth is likely to remain around 1.0 mb/d year-on-year for the rest of 2007, emulating actual performance over the past three quarters. However, the absolute level of non-OPEC supply could now level off for some months, having risen fairly consistently, from 49.1 mb/d last September to 50.4 mb/d recently. Seasonal reductions in crude and NGL supply, allied to scheduled maintenance, may restrain non-OPEC supply within a 50.0-50.5 mb/d range over the spring and summer. Renewed growth should re-emerge in 4Q however, when the non-OPEC total rises to average 50.9 mb/d. Rising supplies in the fourth quarter centre on a post-maintenance North Sea rebound, higher Caspian production, and an expected build-up in supplies from new fields in deepwater off Brazil. Before then, although new field start-ups are distributed through the year, seasonal factors will constrain mid-year non-OPEC supply. These include:

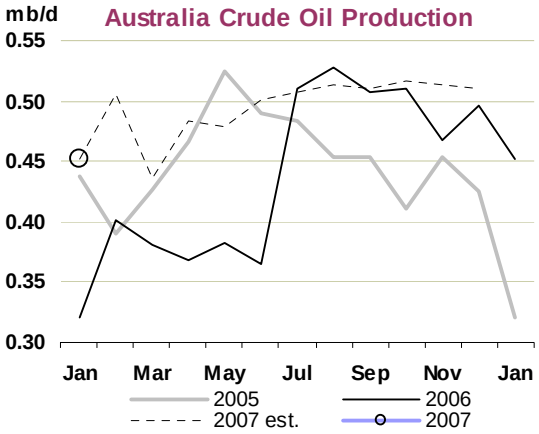
- operating constraints due to spring thaw in areas of Alaska and Canada, which customarily remove upwards of 100 kb/d of production;
- maintenance at Canadian heavy crude upgrading units and offshore eastern Canada, which this year could remove 150-200 kb/d;
- seasonality in North American natural gas and NGL supply which can reduce output by around 70 kb/d from winter peaks;
- traditional North Sea spring and summer maintenance, typically 100-150 kb/d on average for April-September for Norway, with equivalent volumes assumed for the UK;
- early-year cyclone activity, which reduced Australian production by around 65 kb/d in March, but which is factored into our forecast each year at lesser levels of 20-30 kb/d through May;
- an assumed five-year average hurricane outage for the US Gulf of Mexico, which this year removes 160 kb/d from 3Q supply (and also 215 kb/d from 4Q);
- maintenance work affecting major Caspian Sea oilfields in the summer.

Seasonal trends in maintenance and production elsewhere in the non-OECD, outside of a winter dip in Russia, are less easy to discern and are only included in the non-OPEC forecast once the timing of specific maintenance programmes has been announced. Even excluding these, often sporadically-reported, factors it is clear that a seasonal dip in demand, so often cited by market watchers, needs to be considered alongside a similar trend in non-OPEC oil supply. With refinery runs customarily rising after spring maintenance, demand for OPEC crude looks likely to increase in the months ahead from current output levels of around 30 mb/d.

Pacific

Australia – January actual: Final data for January show that the impact of cyclone Isobel on Carnarvon Basin production from Australia's offshore North West Shelf was greater than originally thought, reducing both the basin's output and that for Australia as a whole by 45 kb/d. January crude output averaged some 450 kb/d, with gas liquids adding a further 90 kb/d. March too saw precautionary storm shut-ins with the passing of cyclones George, Jacob and Kara. North West Shelf output is estimated to have lost an average of 65 kb/d in March as a result. A further downward adjustment for Australia comes with revised official data for 4Q06 from the Bonaparte Basin.

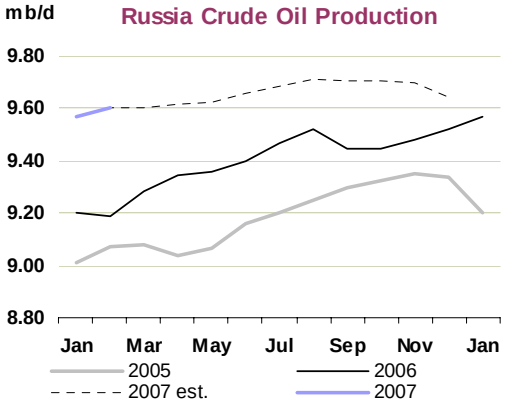
All told however, our Australian forecast remains little changed for 2007, with crude and gas liquids output increasing by 70 kb/d to 595 kb/d, reversing several years of decline and showing the strongest growth since 2000. A full year of output from the Baskar Manta and Enfield projects, allied to expected start-up at the Puffin field, and an assumption of weakening cyclone impact henceforward, underpin the increase. This report's expectations for rising Australian crude supply over 2006-2008 lie close to recently published projections from Australia's Bureau of Agricultural and Resource Economics (ABARE), which envisage crude production of 480 kb/d in 2006/2007 and 560 kb/d in 2007/2008.

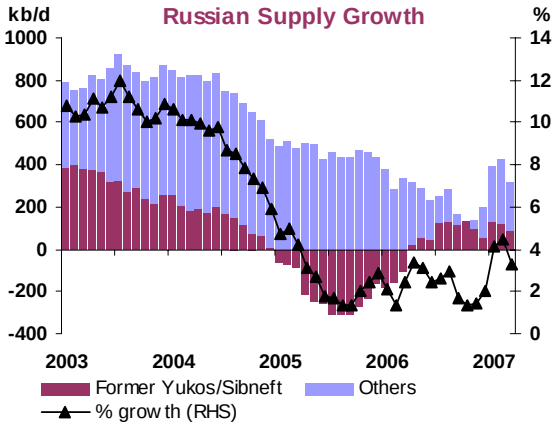


Former Soviet Union (FSU)

Russia – February actual, March provisional: First-quarter 2007 Russian oil supply growth stands at 4% versus year-earlier, albeit extreme weather in early 2006 curbed production. Data for February and March show stronger-than-expected supply, leading to a 65 kb/d upward revision for 1Q Russian production. However, since this revision was largely due to the absence of an anticipated supply downturn due to power supply work at Rosneft and Surgutneftegaz facilities, the upward revisions are largely confined to the first quarter. From a higher baseline, Russian crude supply growth in 2007 is now expected to average 2.8%, an annual increment of 265 kb/d to 9.65 mb/d. Condensate supplies are expected to add 320 kb/d to the total crude supply figure this year.

Some 175 kb/d of this year's growth comes from the Sakhalin projects in Russia's Far East. Output from Exxon's Sakhalin 1 project is already approaching peak 250 kb/d levels, and there are also reports that year-round production of Vityaz crude from the Sakalin 2 project, hitherto only produced in summer months, could begin later in 2007. For now, this report employs a working assumption that year-round supply only commences in 2008, raising the possibility that the supply data may be revised up later in the year. Moreover, the imminently expected sale of remaining Yukos producing assets to state-sponsored Rosneft and Gazprom raises some possibility of renewed investment in these moribund facilities. Although this report has assumed that the slide in production from Yukos units continues through 2007, some upside potential to this conservative forecast may now become evident. However, we will allow the dust to settle after any purchase, and await the subsequent production trend, before adjusting the forecast.





Preliminary data show that net oil exports from the FSU in February were at a post-Soviet high of 9.22 mb/d. This marked a dramatic rise of 830 kb/d compared with January's figure which had been revised down by 50 kb/d to 8.39 mb/d. The monthly increase was driven by higher non-Transneft exports, recovered transits through the Druzhba pipeline and the implementation of lower export duties in Russia from 1 February.

Greater February crude flows from the Caspian prompted a 460 kb/d rise in exports bypassing the Transneft pipeline system. Among these, exports of Azeri crude via the BTC pipeline rebounded by

150 kb/d, CPC exports rose by a similar amount, while over 90 kb/d of incremental exports left from Batumi on the Black Sea. Following reduced January exports into central Europe via the Druzhba line, interrupted by a dispute between Russia and Belarus, February exports along this route recovered by 140 kb/d. Transneft-controlled Baltic shipments also increased in February. FSU product exports meanwhile gained 290 kb/d in February to reach 2.65 mb/d, bolstered by increases of 140 kb/d and 130 kb/d in exports of fuel oil and gasoil respectively. This followed similar sharp increases in Russian refinery runs.

Loading schedules suggest that March exports may have come in 50 kb/d lower than in February, as a continuation of strong exports via BTC were possibly outweighed by reduced exports via Primorsk due to pipeline maintenance. However, a further cut in Russian export duties from 1 April may subsequently push FSU exports higher once again, capacity permitting.

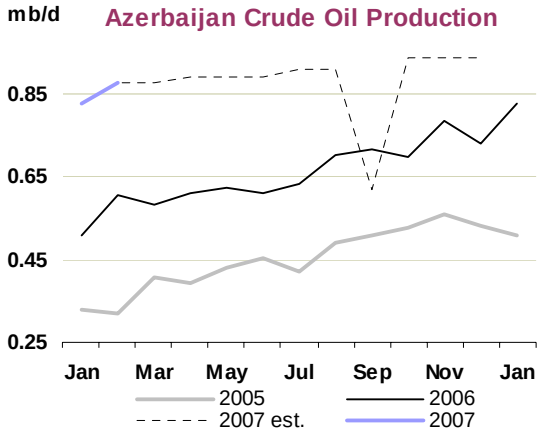
FSU Net Exports of Crude & Petroleum Products
(million barrels per day)

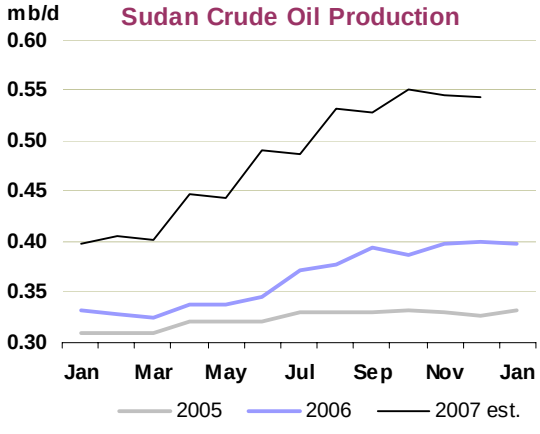
	2005	2006	1Q2006	2Q2006	3Q2006	4Q2006	Dec 06	Jan 07	Feb 07	Latest month vs. Jan 07	Latest month vs. Feb 06
Crude											
Black Sea	2.27	2.22	2.25	2.26	2.27	2.08	2.00	2.19	2.39	0.20	0.07
Baltic	1.59	1.55	1.54	1.73	1.49	1.43	1.59	1.61	1.59	-0.02	0.01
Arctic/FarEast	0.19	0.15	0.10	0.11	0.20	0.19	0.17	0.26	0.31	0.05	0.09
BTC	0.00	0.00	0.00	0.01	0.22	0.38	0.42	0.33	0.48	0.15	0.48
Crude Seaborne	4.05	4.07	3.89	4.11	4.18	4.08	4.18	4.39	4.77	0.38	0.65
Druzhba Pipeline	1.15	1.20	1.20	1.16	1.23	1.19	1.25	1.11	1.25	0.14	0.12
Other Routes	0.25	0.38	0.31	0.38	0.38	0.45	0.40	0.55	0.58	0.03	0.33
Total Crude Exports	5.45	5.64	5.39	5.65	5.80	5.71	5.83	6.05	6.60	0.55	1.10
Of Which: Transneft	4.04	4.09	4.05	4.23	4.16	3.94	4.16	4.22	4.31	0.09	0.21
Products											
Fuel oil	0.93	0.95	0.87	1.05	0.94	0.95	0.96	0.91	1.05	0.14	0.09
Gasoil	0.87	0.95	1.01	0.95	0.94	0.91	0.89	0.86	0.99	0.13	0.16
Other Products	0.58	0.61	0.60	0.70	0.63	0.54	0.55	0.59	0.61	0.02	0.07
Total Product	2.38	2.51	2.47	2.69	2.50	2.40	2.39	2.36	2.65	0.29	0.32
Total Exports	7.83	8.16	7.87	8.34	8.30	8.11	8.22	8.40	9.25	0.85	1.42
Imports	0.02	0.04	0.03	0.03	0.05	0.04	0.04	0.02	0.03	0.02	0.00
Net Exports	7.81	8.12	7.84	8.31	8.25	8.07	8.18	8.39	9.22	0.83	1.41

Sources: Petro-Logistics, IEA estimates
Note: Transneft data has been revised to exclude Russian CPC volumes.

Azerbaijan – February actual: Forecast crude production for Azerbaijan in 2007 is largely unchanged from last month at 880 kb/d, a rise of 225 kb/d compared with 2006. Offshore production from the Azeri-Chirag-Guneshli (ACG) complex, operated by BP, reached 700 kb/d in February, and could rise towards 750 kb/d over the rest of the year. A year ago, ACG was producing around 400 kb/d. The 620 kb/d Baku-Tbilisi-Ceyhan pipeline, which feeds ACG crude to the Mediterranean, will also be expanded to 1.0 mb/d in 2Q07. However, stronger output now expected in the first half of this year is offset by news of a two-week maintenance outage scheduled for September at the Azeri field. This could curb supply by as much as 300 kb/d for the month as a whole.

In late March, the country's Industry and Energy Minister stated that Azerbaijan would double crude production to 1.3 mb/d by 2010. This is slightly higher than the forecast contained in the last *Medium-Term Oil Market Report (MTOMR)* of 1.15 mb/d of crude and 50 kb/d of gas liquids by 2010.





Other Non-OPEC

Sudan: Oil production from Sudan is now expected to average 480 kb/d in 2007, compared with 360 kb/d in 2006. Production estimates for both years have been revised down by 40-55 kb/d as the build-up in supply from new fields feeding the Dar export blend has been slower-than-expected. Production has been constrained in part because of differences in quality between the longer-established Nile Blend and the more acidic Dar Blend. Both grades are exported via the existing Bashayer export facility on the Red Sea coast. Inauguration of the Bashayer 2 terminal later in 2007 will double current 450 kb/d export capacity. The country also plans to double production capacity to 1.0 mb/d by 2012 and to increase domestic refining capacity from a current 75 kb/d. Sudan has said it is considering joining OPEC, although it seems unlikely to do so before Ecuador, whose membership was suspended back in 1993, and which has stated that it too wishes to rejoin the producer group.

Revisions to Other Non-OPEC Estimates

Non-OPEC supply estimates this month have been revised down by 60 kb/d for both 2006 and 2007, leaving growth unchanged at 1.1 mb/d this year compared with 0.4 mb/d in 2006. Aside from adjustments mentioned in the main text above, OECD Europe supply for 2007 has been increased by 35 kb/d. A 20 kb/d downward adjustment based on lower January/February data for **Denmark**, is countered by upward adjustments totalling 50 kb/d for **Norway** and the **UK**. A 2Q dip in northerly Haltenbanken production from Norway has been modified to take account of an expected rebound from maintenance work at a number of fields. Early indications from aggregate January data and loading schedules for succeeding months also boost baseline 1Q UK supply by some 20 kb/d.

Revisions to Non-OPEC Oil Supply
(million barrels per day)

	Last Month's OMR				This Month's OMR				This Month vs. Last Month			
	2006	2007	06 v 05	07 v 06	2006	2007	06 v 05	07 v 06	2006	2007	06 v 05	07 v 06
North America	14.24	14.22	0.10	-0.01	14.23	14.21	0.09	-0.02	0.00	-0.01	0.00	-0.01
Europe	5.20	5.16	-0.41	-0.04	5.20	5.19	-0.41	-0.01	0.00	0.03	0.00	0.04
Pacific	0.57	0.66	-0.01	0.09	0.57	0.65	-0.02	0.09	0.00	0.00	0.00	0.00
Total OECD	**20.01**	**20.04**	**-0.32**	**0.03**	**20.00**	**20.06**	**-0.33**	**0.06**	**-0.01**	**0.02**	**-0.01**	**0.03**
Former USSR	12.10	12.59	0.46	0.49	12.09	12.60	0.46	0.51	0.00	0.02	0.00	0.02
Europe	0.15	0.13	-0.01	-0.01	0.15	0.13	-0.01	-0.01	0.00	0.00	0.00	0.00
China	3.67	3.76	0.06	0.09	3.67	3.77	0.06	0.09	0.00	0.00	0.00	0.00
Other Asia	2.70	2.76	0.05	0.05	2.70	2.76	0.05	0.05	0.00	0.00	0.00	0.00
Latin America	4.40	4.53	0.11	0.13	4.40	4.51	0.11	0.11	0.00	-0.02	0.00	-0.02
Middle East	1.74	1.69	-0.12	-0.05	1.73	1.65	-0.13	-0.08	-0.01	-0.03	-0.01	-0.03
Africa*	2.58	2.73	0.11	0.15	2.54	2.68	0.07	0.14	-0.04	-0.05	-0.04	-0.01
Total Non-OECD*	**27.34**	**28.19**	**0.65**	**0.85**	**27.29**	**28.10**	**0.60**	**0.81**	**-0.05**	**-0.09**	**-0.05**	**-0.04**
Processing Gains	1.90	1.92	0.04	0.02	1.90	1.92	0.04	0.02	0.00	0.00	0.00	0.00
Other Biofuels	0.18	0.34	0.06	0.17	0.18	0.34	0.06	0.17	0.00	0.00	0.00	0.00
Total Non-OPEC*	**49.43**	**50.49**	**0.43**	**1.06**	**49.37**	**50.42**	**0.37**	**1.05**	**-0.06**	**-0.07**	**-0.06**	**-0.01**

OMR = Oil Market Report
* adjusted to exclude Angola

JODI data for September-December 2006 knock 15-30 kb/d off estimated supply from **Yemen**. As this report was already employing aggressive decline rates for older fields such as Masila, production estimates for newer fields in Blocks 43 and 51 have been adjusted downwards. Early-year oilfield maintenance in **Brazil** and **Peru**, allied to lower late-2006 production from **Trinidad**, cut the 2007 supply estimate for Latin America by 20 kb/d.

OECD STOCKS

Summary

- **Total OECD inventories fell by 80.5 mb in February**, leaving them 49.6 mb lower year-on-year. Product stocks declined in all three regions by a cumulative 72.3 mb and despite seasonal refinery maintenance in North America and Europe, a draw in the Pacific region led to a net fall in crude stocks in the OECD. Total stocks forward cover fell slightly at a time when it usually increases, though due to rounding stayed at 54 days – the same as both end-January and levels of a year ago.

Preliminary Industry Stock Change in February 2007 and Fourth Quarter 2006

	February (preliminary) *(million barrels)*				February (preliminary) *(million barrels per day)*				Fourth Quarter 2006 *(million barrels per day)*			
	N. America	Europe	Pacific	Total	N. America	Europe	Pacific	Total	N. America	Europe	Pacific	Total
Crude Oil	**0.2**	**1.3**	**-10.6**	**-9.1**	**0.01**	**0.05**	**-0.38**	**-0.32**	**-0.26**	**0.13**	**-0.02**	**-0.15**
Gasoline	-10.9	-3.8	-1.1	-15.7	-0.39	-0.14	-0.04	-0.56	-0.03	0.10	-0.01	0.06
Distillates	-13.7	-1.3	-10.6	-25.6	-0.49	-0.05	-0.38	-0.92	-0.08	0.03	-0.14	-0.18
Fuel Oil	-7.4	-4.7	0.2	-11.9	-0.26	-0.17	0.01	-0.43	-0.03	0.03	-0.01	-0.01
Other Products	-18.2	0.1	-0.8	-19.0	-0.65	0.00	-0.03	-0.68	-0.20	-0.04	-0.13	-0.38
Total Products	**-50.2**	**-9.7**	**-12.3**	**-72.3**	**-1.79**	**-0.35**	**-0.44**	**-2.58**	**-0.33**	**0.12**	**-0.30**	**-0.51**
Other Oils[1]	1.7	-0.9	0.0	0.8	0.06	-0.03	0.00	0.03	-0.19	-0.06	-0.02	-0.27
Total Oil	**-48.3**	**-9.3**	**-22.9**	**-80.5**	**-1.73**	**-0.33**	**-0.82**	**-2.87**	**-0.79**	**0.19**	**-0.33**	**-0.93**

1 Other oils includes NGLs, feedstocks, and other hydrocarbons.

- **January 2007 data were revised up by 9.5 mb**, shared almost equally between crude and total product stocks. Much of this stemmed from Europe, where product numbers were revised up by 10.6 mb. In contrast, North American end-January product stocks were revised down by 5.0 mb.

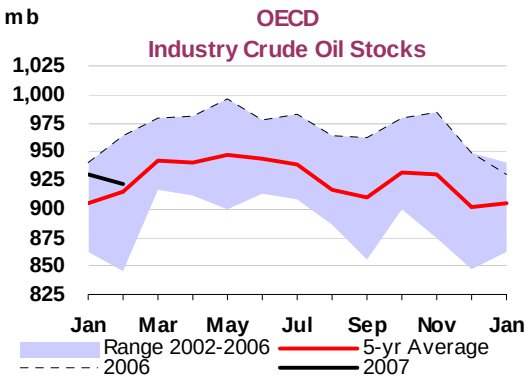
- **Preliminary March data for the US, Japan and Europe showed a further dip in total stocks** of 23.0 mb, indicating that total first-quarter OECD inventories remain on track to fall by around 1.0 mb/d (following a 0.9 mb/d fall in 4Q06). While this would be the highest rate of decline since 1Q96, it remains subject to confirmation by final data.

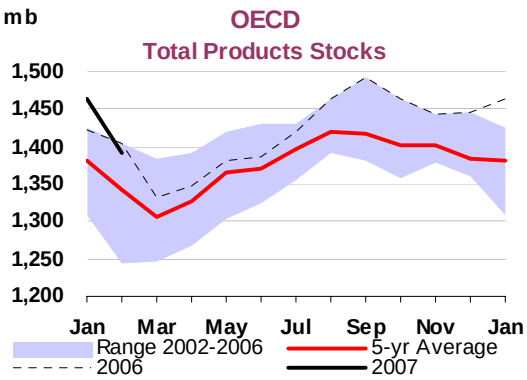
OECD Industry Stock Changes in February 2007

OECD North America

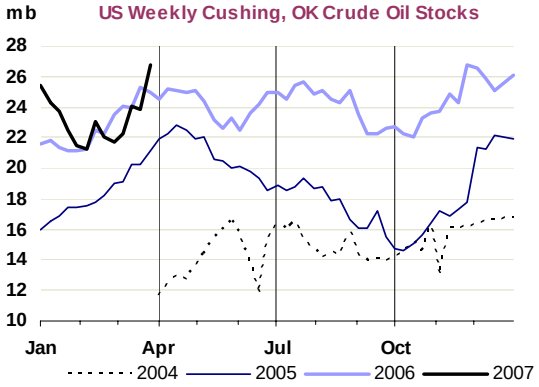
North American inventories fell again in February, by a total of 48.3 mb. This was essentially all in product stocks, while crude levels were unchanged. The US stock draw of 46.3 mb made up the lion's share, but total Mexican inventories were also down by 2.0 mb, again mostly in products. In the US, lower-than-average refinery utilisation was balanced by only average crude imports, leaving crude inventories flat on the month but down 17.6 mb year-on-year.

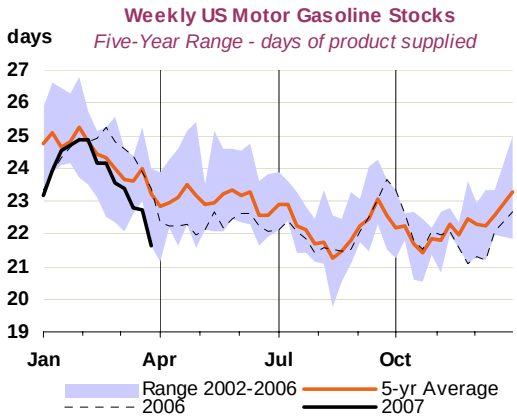
Preliminary US data for March show a crude stock build of 7.2 mb, as imports increased again and refinery utilisation only inched upwards. The distribution of crude inventories in the US remains significant. Refinery hitches in the Midwest have kept more crude landlocked. Stocks in Cushing, Oklahoma, the delivery point for NYMEX WTI, are notably high, leading to heavy spot discounts and an unusually wide discount to ICE Brent and other domestic crudes. In contrast, stocks on the West and East Coasts were until recently at the bottom of their respective five-year average ranges.





Product inventories in North America fell by 50.2 mb in February, most of which was in the US. Ongoing refinery maintenance and several unplanned outages have curbed product output, while imports of refined products were only at average levels for this time of year. Total middle distillate stocks in February fell by 13.7 mb, and gasoline by 10.9 mb, but compared with the five-year average, gasoline levels remain tighter.

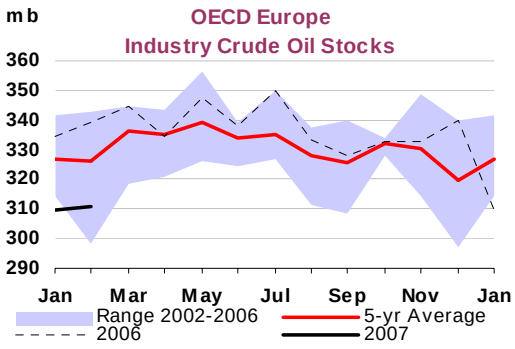


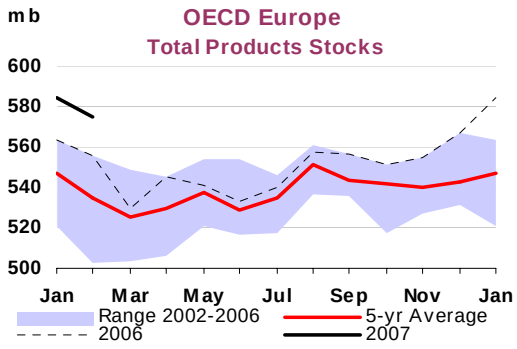


Preliminary weekly March data for the US show that product stocks have fallen further, by a total of 14.1 mb. Most of this draw was in gasoline (-12.3 mb), as demand remains strong and refinery utilisation continued to be lower-than-average. Heating oil inventories also fell by 3.7 mb, while diesel stocks were down by 1.9 mb. Having started the year well above the five-year average, a steeper-than-normal decline in gasoline stocks has dragged total product stocks to the middle of that range. However, in terms of forward demand cover, gasoline inventories are at the bottom of the five-year range for this time of year.

OECD Europe

Total inventories in OECD Europe fell by 9.3 mb in February, which again was due to a decline in product levels. Crude stocks rose by 1.3 mb, but remain 28.7 mb lower than one year ago, and also at the bottom end of their five-year range. Draws were observed in Germany (-2.2 mb), Italy and the Netherlands (both -1.5 mb), while the UK and France saw crude stock builds of 5.3 mb and 3.5 mb respectively. The latter were both undergoing substantial seasonal refinery maintenance in February. While pan-European maintenance was expected to peak in March, the ongoing tightness in Brent forward spreads suggests this did not coincide with a significant recovery in crude inventories.



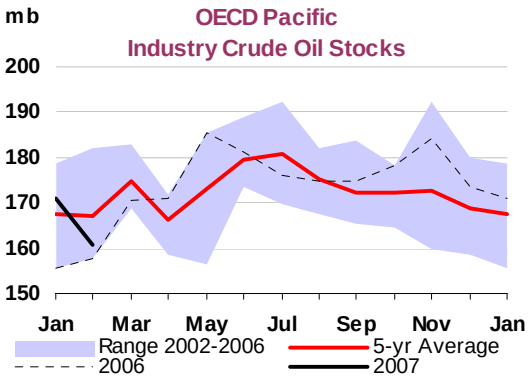


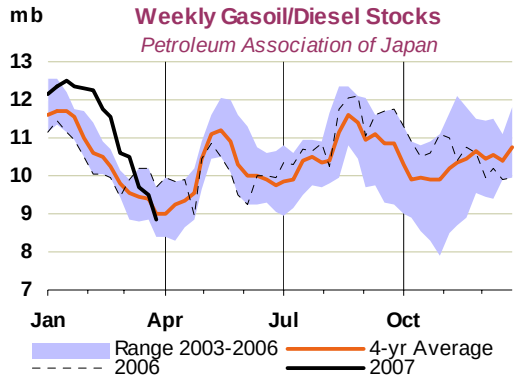
Total product inventories in Europe fell by 9.7 mb in February, but overall, a mild winter has left stocks substantially above year-ago (+20 mb) and five-year average levels (+40 mb). The February decline was predominantly in residual fuel oil (-4.7 mb) but also in gasoline (-3.8 mb) and distillate (-1.3 mb). Stock draws were observed in the UK (-3.1 mb), the Netherlands (-1.9 mb), France (-1.6 mb) and Italy (-1.4 mb), while inventories increased in Germany (+2.7 mb).

OECD Pacific

The OECD Pacific also saw a considerable stock draw of 22.9 mb in February. In this case, the fall was almost equally due to decreases in crude (-10.6 mb) and product inventories (-12.3 mb). Crude stocks are now at 160.5 mb – slightly higher than one year ago, but at the bottom end of the five-year

range. Crude inventories fell both in Japan and South Korea, by 6.1 mb and 4.4 mb respectively. Preliminary March data from the Petroleum Association of Japan (PAJ) show a slight crude stock build of 2.3 mb, reflecting the start of seasonal refinery maintenance in the OECD Pacific as well as some voluntary run cuts.





Pacific product stocks in February fell by 12.3 mb, most of which was due to declining middle distillate levels. Middle distillate inventories drew by 10.6 mb, while gasoline dipped by only 1.1 mb, and fuel oil stocks inched up by 0.2 mb. Most of the product stock draw took place in Japan, where distillates fell by 8.9 mb. Korean product inventories fell by 1.7 mb, again largely driven by a decline in distillates. Preliminary PAJ data for March indicated a further downward trend in product stocks of 8.3 mb in Japan, as refiners reduced throughputs for maintenance. Kerosene inventories (for domestic heating), fell from unusually high levels at the beginning of 2007 to year-ago levels by the end of March, but remain at the upper end of their four-year range. The decline was helped by higher-than-average kerosene exports throughout February and early March.

Year-on-Year OECD Industry Stock Comparisons for February 2007

	(million barrels)					*(Days of Forward Demand)*			
	North America	Europe	Pacific	Total		North America	Europe	Pacific	Total
Crude Oil	**-17.9**	**-28.7**	**2.9**	**-43.6**	**Total Oil**	**-2.6**	**-0.2**	**3.1**	**-0.9**
Total Products	-39.5	19.3	7.4	-12.8	*Versus 2004*	0.4	2.2	3.3	1.4
Other Oils[1]	5.2	-6.2	7.9	6.8	*Versus 2003*	2.7	3.3	0.5	2.4
Total Oil	**-52.2**	**-15.6**	**18.2**	**-49.6**	**Total Products**	**-1.8**	**1.8**	**1.3**	**-0.2**
Versus 2004	12.1	17.0	6.8	35.9	*Versus 2004*	-0.8	3.0	2.0	0.8
Versus 2003	84.4	36.6	-8.0	112.9	*Versus 2003*	1.1	3.8	1.6	2.0

1 Other oils includes NGLs, feedstocks, and other hydrocarbons.

OECD Inventory Position at End-February and Revisions to Preliminary Data

Total OECD industry stocks were 2,597.1 mb at the end of February, down 80.5 mb from January, and 49.6 mb lower than a year ago. Total crude inventories stood at 921.0 mb, 9.1 mb lower than in January, and down by 43.6 mb year-on-year. Total refined product stocks fell by 72.3 mb in February to 1,391.1 mb, or 12.8 mb lower year-on-year. Despite the draw-down, weaker demand kept end-February forward cover at 54 days, unchanged from the previous month and end-February 2006. Taking preliminary (and incomplete) March data into account, the first quarter remains on track for an OECD stock draw of around 1.0 mb/d. As noted in last month's report, this would represent the steepest first-quarter decline in stocks since 1996.

Revisions versus 13 March 2007 Oil Market Report

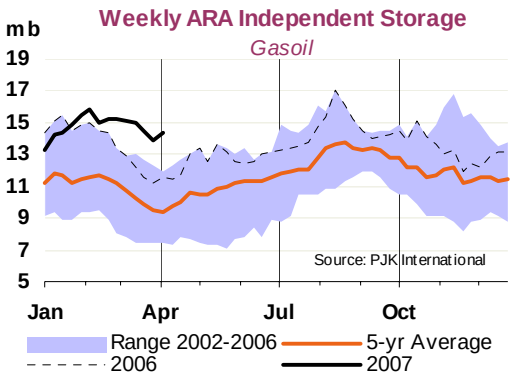
(million barrels)

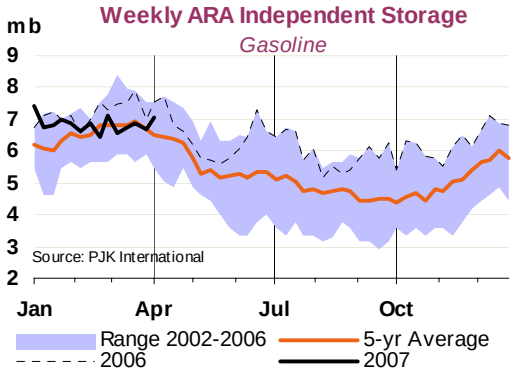
	North America		*Europe*		*Pacific*		*OECD*	
	Dec 06	Jan 07	Dec 06	Jan 07	Dec 06	Jan 07	Dec 06	Jan 07
Crude Oil	**1.2**	**5.4**	**-0.1**	**-1.5**	**0.0**	**1.7**	**1.1**	**5.6**
Gasoline	0.0	-2.1	0.8	1.4	0.0	1.1	0.8	0.5
Distillates	0.0	-4.5	1.8	3.4	0.0	0.4	1.8	-0.7
Residual Fuel Oil	0.0	1.4	0.1	7.1	0.0	-0.3	0.1	8.1
Other Products	0.0	0.2	-2.1	-1.3	0.0	-0.8	-2.1	-1.9
Total Products	**0.0**	**-5.0**	**0.6**	**10.6**	**0.0**	**0.4**	**0.7**	**6.0**
Other Oils[1]	0.8	-3.9	-2.7	1.8	0.0	0.1	-1.8	-2.1
Total Oil	**2.1**	**-3.6**	**-2.2**	**10.8**	**0.0**	**2.2**	**0.0**	**9.5**

1 Other oils includes NGLs, feedstocks, and other hydrocarbons.

Recent Developments in ARA Independent Storage

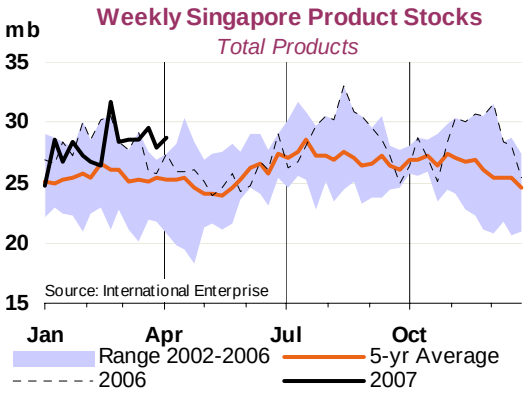
Total oil product inventories held in independent storage in the Amsterdam-Rotterdam-Antwerp (ARA) area fell by 1.2 mb in March, but remain well above their five-year average range. The decline was almost wholly due to distillate stocks falling by 1.1 mb, though gasoline and fuel oil levels were also down by 0.2 mb and 0.1 mb respectively. Naphtha and jet-kerosene inventories meanwhile increased by 0.2 mb and 0.1 mb respectively. It is worth noting that gasoil, fuel oil, jet-kerosene and naphtha stock levels all remain above their respective five-year ranges. Gasoline in contrast, at just over 7.0 mb, has been in the middle of its range in February and March. It remains to be seen whether, with European refineries gradually returning from their March maintenance peak, the usual volumes of gasoline can be sent to the structurally short, and currently tight, US market.

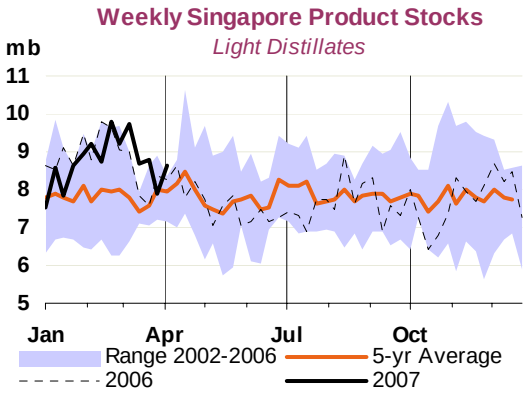




Recent Developments in Singapore Stocks

According to International Enterprise, total oil product stocks held in Singapore fell marginally by 0.2 mb in March, and remain slightly above their five-year average range. A 1.0 mb draw in light distillate inventories was balanced by increases in middle distillate and fuel oil levels of 0.5 mb and 0.4 mb respectively. India has raised naphtha exports in April, which has reduced market tightness, even though petrochemical demand remains strong in the region. High-sulphur fuel oil (HSFO) prices in Singapore have risen compared with Rotterdam since mid-March, and could attract more imports from Europe as refiners there ramp up production after maintenance. Three million tonnes are reportedly booked to arrive in April, but only in the latter half of the month.

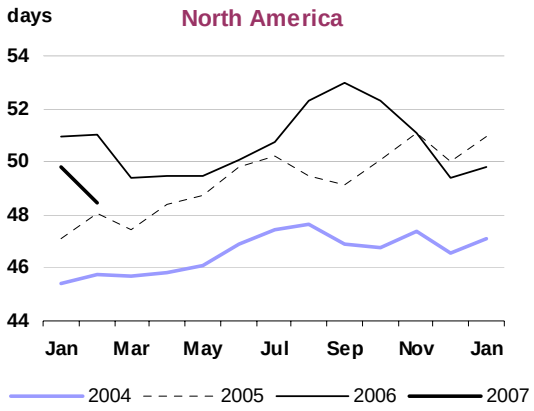


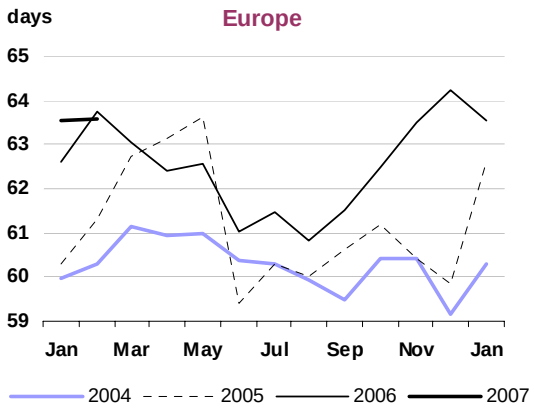


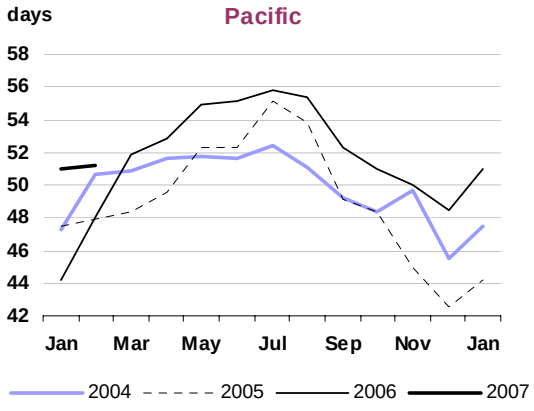
Regional OECD End-of-Month Industry Stocks

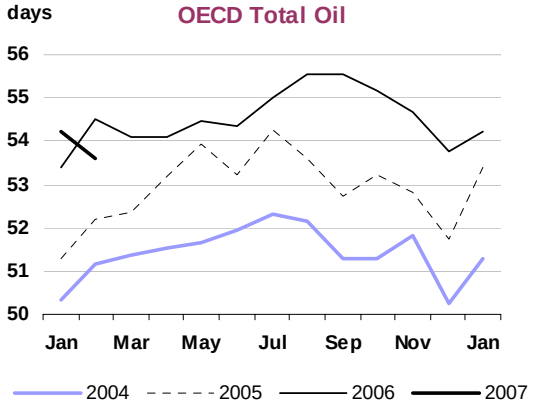
(in days of forward demand and millions of barrels of total oil)

Days

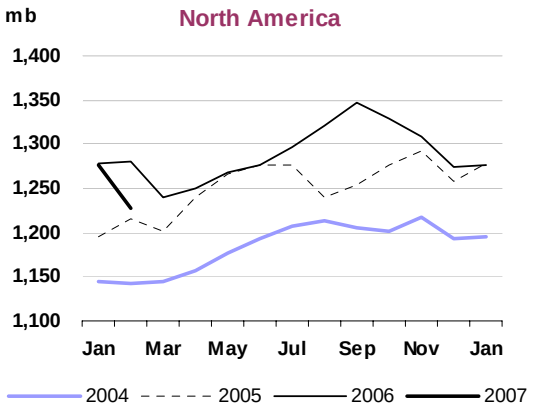


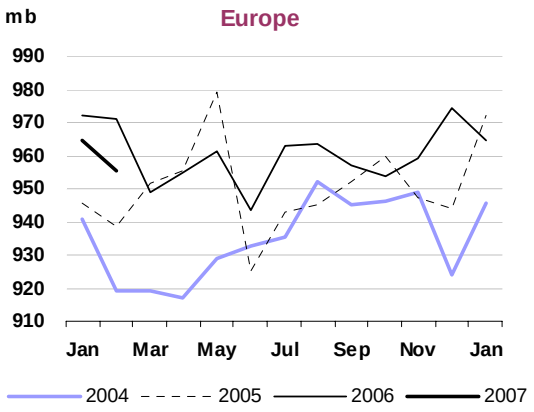


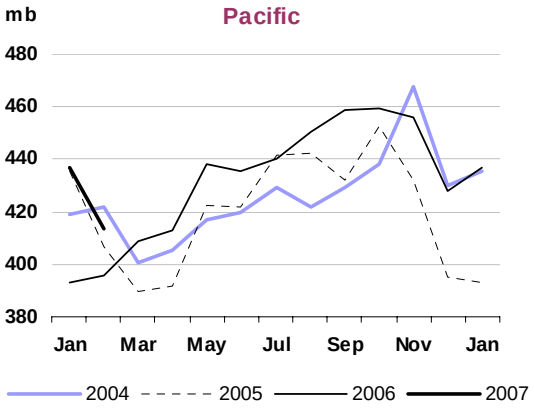


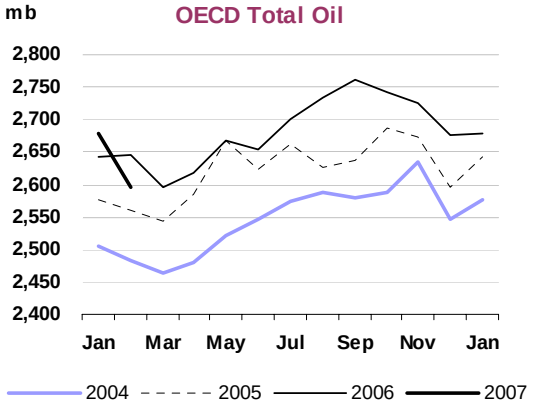


Million Barrels









PRICES

Summary

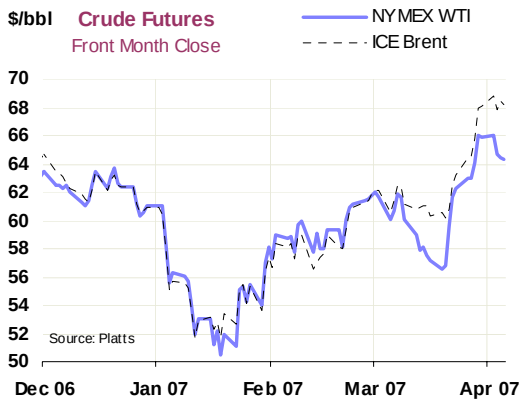
- **Prices rose further from mid-March on a strong US gasoline market and rising geopolitical tension** over Iran and Nigeria. Ongoing refinery maintenance and unplanned outages kept mogas supply tight, particularly on the US West Coast. Crude futures spiked in late March when (unfounded) rumours spread that Iranian and US naval forces had clashed in the Middle East Gulf in the midst of a standoff over Iran briefly seizing 15 UK naval personnel.

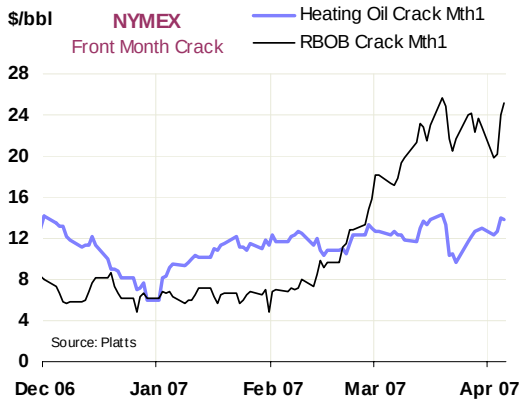
- **Crude prices were supported by OPEC production cutbacks, strong product stock draws and a thirst for gasoline-rich grades**, despite global refinery maintenance peaking in March. WTI has widened its unusual discount to Dated Brent, though this was more a reflection of temporarily weak inland US crude demand than of the wider crude market, which remains strong.

- **Refining margins mostly rose in March** on strong gasoline prices, particularly in the US, where they remain highest. In Europe strong gasoline resulted in a higher return for more complex refineries, with hydroskimmers also pressured by weak fuel oil cracks and stronger regional crude prices. Asia suffered from similar, but more exaggerated pressures from crude and fuel oil, leaving margins more or less flat.

- **Gasoline led product prices higher**, supported by tight supply and the changeover to summer-specification material. Distillate prices also rose on spring agricultural demand, while fuel oil was mainly flat as lower output due to maintenance was balanced by a seasonal downturn in demand.

- **Crude freight rates in the Mediterranean hit 15-month peaks** at the end of March as the Fos strike in southern France left almost 40 tankers stranded offshore. Meanwhile, US refiners seeking crude post-maintenance boosted VLCC rates from the Mideast Gulf to six-month highs.





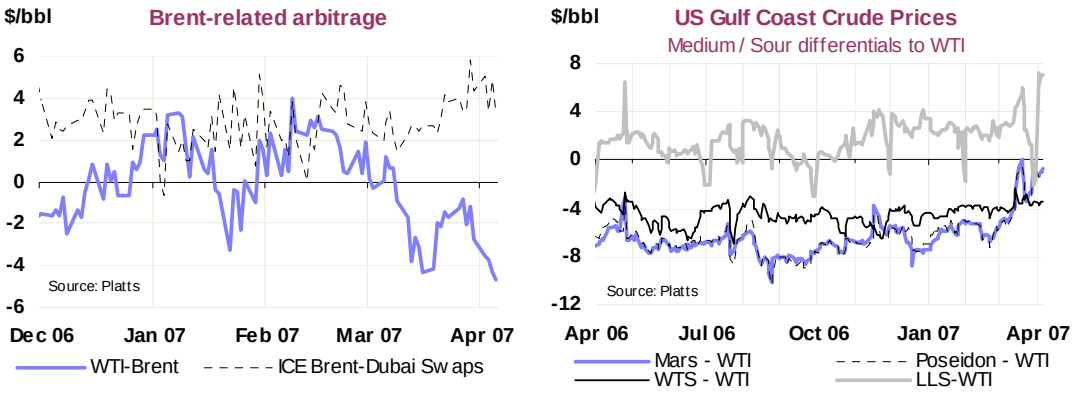
Overview

A flare-up of geopolitical tension concerning Iran contributed to rising prices between mid-March and early April. Against the background of new, tighter UN Security Council sanctions passed in late March, and both US and Iranian naval exercises in the Gulf, the Iranian detention of 15 UK navy personnel stirred worries that a confrontation of sorts was increasingly likely. Indeed on 27 March these concerns provoked a $5 spike in thin trading conditions to nearly $70/bbl on (unfounded) rumours that Iranian and US vessels had clashed in the Middle East Gulf.

But the primary driver of higher prices was a tight US gasoline market. Although US refineries are gradually returning from seasonal maintenance, a string of unplanned outages has intensified regional tightness. This has been particularly severe on the West Coast, driving gasoline prices to heights last seen in the aftermath of Hurricanes Katrina and Rita in 2005. Transport fuel demand has been robust which, coupled with modest gasoline and crude imports (partly related to fog in the Houston ship channel), and the switch from winter to summer-specification products, has exacerbated gasoline tightness.

In Europe, crude stocks remained at the lower end of the five-year average range in February and may have fallen even further in March. A two-week strike by dock workers in southern France's main oil hub Fos created a backlog of oil tankers that were unable to unload and OPEC production was further reduced, but with the offset that refinery throughput was lower. However, the persistent backwardation in nearby Brent futures contracts would suggest a continued tightness in European crude stocks.

European gasoline inventories, pressured by the structural reduction in regional demand were likely to have been further reduced. Before the Fos strike ended on March 31, several refineries were forced to reduce throughputs as crude stocks ran low, on average cutting throughputs by 45 kb/d in March and April (the latter due to a slow ramp-up). Meanwhile other refiners indicated they were undergoing seasonal maintenance. Elsewhere in Europe, the Rhine near Cologne was blocked for several days after a shipping accident, tightening supply upstream in southern Germany and Switzerland.



The price dip on the news that the British sailors had been released on 5 April proved fleeting, and was overwhelmed within an hour by a stronger-than-expected US weekly stock report. Moreover geopolitical issues are unlikely to go away. In particular, although Shell has indicated it hopes to restore shut in Nigerian production by the end of the year, in the short term there is concern that the run-up to the 21 April presidential election will be accompanied by more violence and kidnappings of foreign oil workers. In Ecuador, protests briefly resulted in the declaration of *force majeure* on Oriente and Napo exports, though this has since been resolved.

Spot Crude Oil Prices

Crude markets were shaped by gasoline tightness (and corresponding refinery needs) and OPEC cuts, which combined to create some unusual regional price imbalances. WTI remains weak, leading to unusual spreads to domestic crudes, and is at an unusual discount to Brent for six months out on the forward curve (see text box).

Strong flows of Canadian pipeline crude, as well as refinery maintenance and problems in the US have created a glut of crude in the US Midwest. Stocks at the NYMEX WTI delivery point of Cushing, Oklahoma, are near capacity, but there are limited opportunities to ship it out, leading to heavy spot discounts. In contrast, Gulf Coast refiners' thirst for gasoline-rich crudes has kept seaborne domestic crudes strong. As a result there have been significant shifts in crude price relationships to WTI, with even sour US Gulf crude Mars briefly trading at a premium. However, while the weak WTI/Brent spreads appear to suggest poor economics for West African and other imports, the same is not true when compared with other (currently) more representative grades such as LLS. But many Western Hemisphere crudes are priced off WTI, and this has led to some unusual trades, including reports of an Indian refiner buying Ecuadorean crude.

In Europe, Dated Brent has been exceptionally strong, also relative to other Atlantic Basin sweets. Low European crude stocks, lower OPEC output, rising freight rates in the Mediterranean (due to the Fos strike) and the worries over Iran have lent support. Urals in the Mediterranean gained vis-à-vis Urals in the Rotterdam market, partly on the Fos strike, but also due to projected lower Black Sea exports in April. Relative to Dated Brent however, both crudes remained flat at around a $3-4/bbl discount. In terms of the arbitrage outside of the region, Urals lost ground to Mars, but rose in value versus Oman.

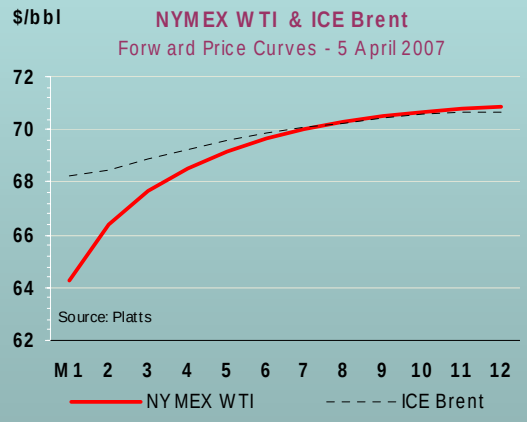
Distorting a Benchmark

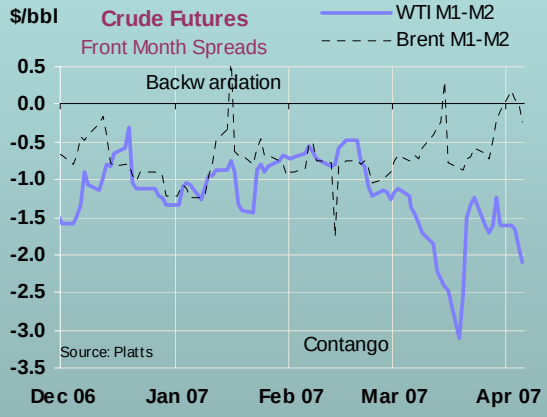
The persistence of WTI's unusual weakness to other domestic and international crudes has raised questions about its viability as a regional benchmark. While globally, oil prices have risen, WTI, a landlocked crude, weakened in relative terms due to local factors. Prolonged outages at Valero's McKee refinery have forced the company to re-route its intake of WTI towards Cushing, where crude stocks were already high due to a steady influx of Canadian barrels. This has led to some unusual price relationships – seaborne US Gulf crudes such as LLS or, even more unusually, sour marker Mars, have been trading at premiums to WTI.

The contrast with Dated Brent, recently even in backwardation for the first two months due to tight European crude stocks, is equally dramatic. Traditionally, WTI has traded at a premium of around $1.50/bbl to Dated Brent which tends to encourage European and African crudes across the Atlantic. But the recent weakness of WTI has pushed the spot spread to a discount of $5/bbl and more, and forward spreads remain at a discount at least six months forward.

This anomaly has not prevented crude oil trading: traders are either using larger discounts to WTI, or have reportedly switched their calculations to more (currently) representative US crudes such as LLS. So why worry?

Pricing benchmarks have emerged over a period of time because they possess certain characteristics – notably location, quality, stability and liquidity. To make the next step and become an accepted futures benchmark is even harder – only two crudes have achieved that status so far – Brent and WTI. Futures market status means that traders can price a multitude of crudes at either a premium or a discount to the benchmark, and both consumers and producers can hedge their risks. But while the risk from shifts in the price of the futures contract can be hedged, the price premium or discount (the basis risk) to that crude often cannot.



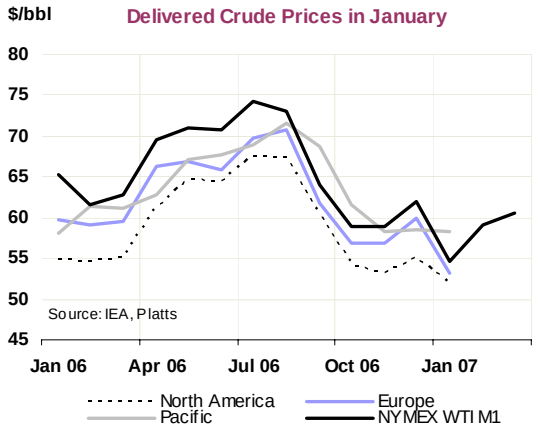


Large swings in the benchmark increase hedging risk and when, as has been the case recently, the basis risk has been larger than the outright shifts in crude oil prices, the viability of the benchmark is called into question. If this is a one-off shift, then the market will quickly shrug it off. But if volatility persists, then volumes may shift to a more stable alternative. More likely, as we have seen in other benchmarks such as Brent and Oman/Dubai, changes to the contract are an option. The market may also see opportunities in the price differential, leading to the construction of more storage capacity or pipelines offering alternative routes out of the Cushing region.

Ultimately, many areas of the industry have a vested interest in maintaining a reliable benchmark and it is unlikely that one bout of volatility will change the status of WTI. But repetitions of such events could spark a search for alternatives.

The Asia-Pacific regional crude market was shaped by sustained demand for grades rich in gasoline and naphtha. This, coupled with shuttered offshore production due to cyclones near Australia, prompted regional benchmark Tapis to rise in comparison to West and North African alternatives. Supplies of Middle Eastern Oman also tightened as Omani refineries returned from maintenance.

Dated Brent's premium to Dubai approximately doubled from mid-March levels to around $4/bbl, again on strong demand for light products. However, given Brent's narrower spreads to similar light sweet grades, this did not significantly curb purchases of Atlantic Basin grades in the region.



Spot Crude Oil Prices and Differentials

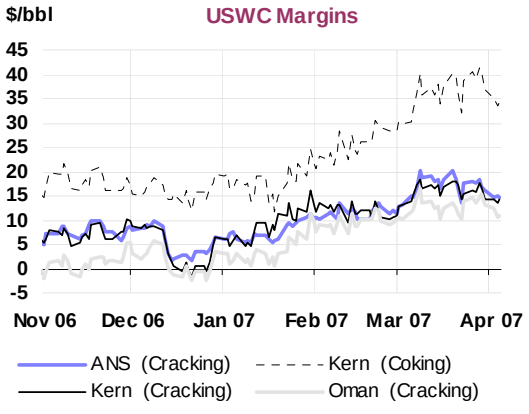
(monthly and weekly averages, $/bbl)

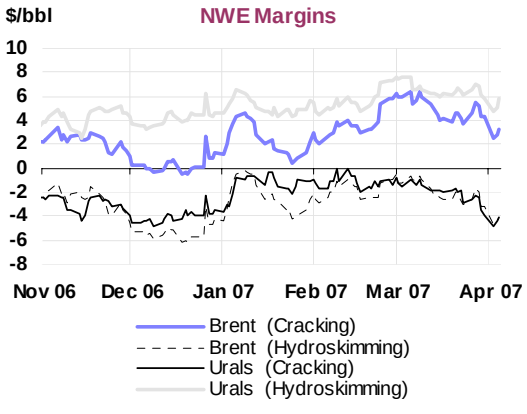
	Jan	Feb	Mar	Mar-Feb Avg Change	%	Week Commencing: 05 Mar	12 Mar	19 Mar	26 Mar	02 Apr
Crudes										
Dated Brent	53.68	57.43	62.15	4.72	8.2	60.48	61.00	61.26	66.03	68.73
Brent (Asia) Mth1 adjusted	54.38	58.21	62.20	3.99	6.8	61.54	60.84	60.98	65.55	68.19
WTI (Cushing) Mth1 adjusted	54.14	59.20	60.62	1.42	2.4	60.82	57.87	58.98	64.40	64.64
Urals (Mediterranean)	50.12	53.81	58.80	4.99	9.3	57.14	57.36	58.16	62.99	65.29
Dubai Mth1 adjusted	51.69	55.75	58.80	3.05	5.5	58.65	57.61	57.56	61.31	63.78
Tapis (Dated)	58.88	64.09	67.87	3.78	5.9	67.27	66.57	66.67	71.27	74.73
Differential to Dated Brent										
WTI (Cushing) Mth1 adjusted	0.46	1.77	-1.53	-3.30		0.34	-3.13	-2.28	-1.63	-4.09
Urals (Mediterranean)	-3.56	-3.61	-3.35	0.27		-3.34	-3.64	-3.10	-3.04	-3.44
Dubai Mth1 adjusted - Dated Brent	-1.99	-1.67	-3.35	-1.67		-1.83	-3.39	-3.69	-4.72	-4.95
Tapis (Dated)	5.20	6.67	5.72	-0.94		6.78	5.57	5.42	5.24	6.00
Prompt Month Differential										
Forward Cash Brent Mth1-Mth2 adj.	-0.59	-0.82	-0.25	0.57		-0.74	-0.20	-0.02	0.15	0.10
Forward WTI Cushing Mth1-Mth2 adj	-0.94	-0.72	-1.67	-0.95		-1.43	-2.26	-1.68	-1.53	-1.81

Source: Platts

Refining Margins

Refining margins mostly rose in March on strong product price gains, especially for gasoline. Increases were greatest on the US West Coast, where margins also remain by far the highest, especially for coking operations. The product market there is particularly tight, due to its relative isolation from the rest of the US, its strict product quality specifications and a string of refinery outages limiting supply. In Europe, margins were more mixed, with gains for sophisticated cracking operations and decreases for already-negative hydroskimming margins. Meanwhile, on the Singapore market, gains in margins were less marked, with the exception of Tapis hydrocracking, which gained over $1/bbl.





Data for early April however show a pronounced decline in full cost refining margins in all markets - even on the US West Coast. This appears related to a tightening of crude prices on constrained OPEC supplies and refiner buying ahead of the return from maintenance.

Spot Product Prices

Product prices increased between mid-March and early April, with gasoline clearly leading the pack. US refinery utilisation has not yet picked up much from seasonal maintenance, and with a string of unplanned outages is keeping output low and pulling down stocks. The changeover from winter to summer-grade gasoline, as well as only average-level gasoline imports are adding to the pressure. Specifically, summer-grade RBOB (reformulated gasoline blendstock for oxygenate blending) is more difficult to produce, requiring more alkylate, the price of which has risen steadily since the beginning of the year. While US refineries should ramp up production steadily towards the summer driving season, their restart coincides with Asian refineries undertaking shutdowns for turnarounds during the second quarter.

Selected Refining Margins in Major Refining Centres

($/bbl)

		Monthly Average			Change	Average for week ending:				
		Jan 07	Feb 07	Mar 07	Mar 07-Feb 07	07 Mar	14 Mar	21 Mar	28 Mar	04 Apr
NW Europe	Brent (Cracking)	2.36	3.76	4.98	1.22	5.87	5.42	4.29	4.64	3.43
	Urals (Cracking)	5.15	5.70	6.55	0.85	7.18	6.41	6.29	6.56	5.53
	Brent (Hydroskimming)	-2.38	-1.81	-1.98	-0.18	-1.08	-1.61	-2.35	-2.42	-3.91
	Urals (Hydroskimming)	-1.17	-1.25	-2.00	-0.75	-1.47	-2.19	-1.80	-2.09	-3.42
Mediterranean	Es Sider (Cracking)	2.34	4.54	4.73	0.19	6.30	5.61	4.15	3.74	2.36
	Urals (Cracking)	4.85	5.83	6.34	0.51	7.21	6.74	5.94	5.96	4.60
	Es Sider (Hydroskimming)	-3.01	-1.41	-2.61	-1.20	-0.99	-1.80	-2.80	-3.70	-5.42
	Urals (Hydroskimming)	-1.41	-1.14	-1.96	-0.82	-1.25	-1.57	-1.90	-2.41	-4.17
US Gulf Coast	Bonny (Cracking)	-2.16	0.77	3.98	3.21	3.76	4.35	4.05	3.66	4.35
	Brent (Cracking)	-2.60	0.87	3.13	2.26	4.02	3.61	2.88	2.23	2.06
	LLS (Cracking)	-0.38	2.22	6.30	4.08	5.76	7.14	6.57	6.34	5.55
	Mars (Cracking)	0.64	1.70	2.94	1.24	3.81	4.43	2.50	2.08	1.40
	Mars (Coking)	6.36	8.30	11.31	3.01	12.21	13.08	10.61	10.25	10.42
	Maya (Coking)	9.17	11.06	17.07	6.01	16.10	17.38	17.65	16.84	18.51
US West Coast	ANS (Cracking)	7.53	11.43	17.00	5.57	14.46	18.85	17.96	16.99	15.42
	Kern (Cracking)	8.84	11.91	16.07	4.16	14.40	17.19	17.02	15.85	14.70
	Oman (Cracking)	3.84	9.59	12.89	3.29	11.78	13.80	11.93	13.43	12.50
	Kern (Coking)	17.84	25.67	36.43	10.75	31.71	37.40	37.47	38.27	35.96
Singapore	Dubai (Hydroskimming)	-0.89	-0.98	-1.20	-0.23	-1.89	-1.53	-0.66	-0.94	-1.05
	Tapis (Hydroskimming)	-4.27	-5.06	-4.27	0.79	-4.49	-3.64	-3.65	-4.81	-6.22
	Dubai (Hydrocracking)	2.89	2.85	3.55	0.70	2.81	3.62	4.05	3.59	3.48
	Tapis (Hydrocracking)	-0.78	-1.60	-0.41	1.18	-0.71	0.33	0.26	-1.01	-2.45
China	Cabinda (Hydroskimming)	-3.74	-5.49	-6.04	-0.55	-6.32	-5.17	-5.34	-6.67	-7.51
	Daqing (Hydroskimming)	-7.98	-7.98	-8.51	-0.53	-8.56	-8.22	-8.16	-8.84	-9.50
	Dubai (Hydroskimming)	-1.30	-1.49	-1.94	-0.44	-2.51	-2.26	-1.46	-1.73	-1.74
	Daqing (Hydrocracking)	-2.39	-2.38	-1.68	0.70	-1.67	-1.15	-1.36	-2.16	-3.00
	Dubai (Hydrocracking)	2.43	2.33	2.82	0.49	2.21	2.89	3.25	2.79	2.81

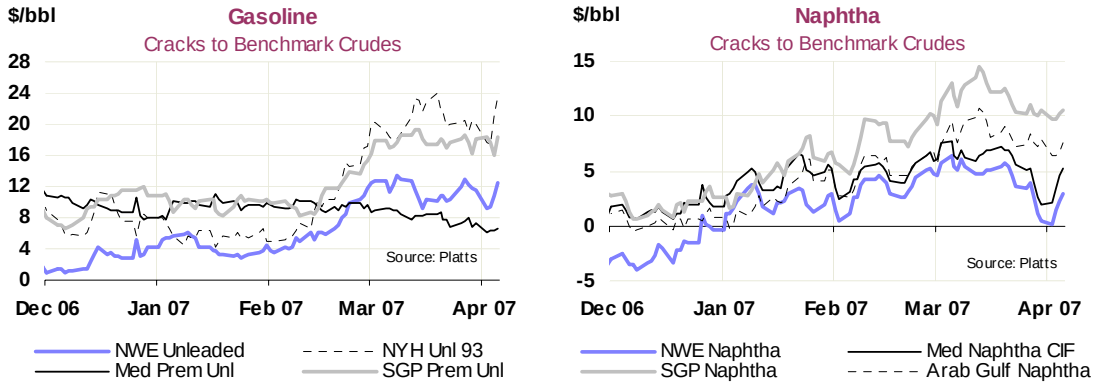
For the purposes of this report, refining margins are calculated for various complexity configurations, each optimized for processing the specific crude in a specific refining centre on a 'full-cost' basis. Consequently, reported margins should be taken as an indication, or proxy, of changes in profitability 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.

European product markets were affected by the Fos strike, though in the end this only brought runs down by around 45 kb/d in both March and April (the latter due to a slow ramp-up). While gasoline stocks in Europe fell in February, they remain in line with the five-year average in terms of forward demand cover. Still, with bookings for April to the US so far only at half of March's volume, there remain concerns about the flow of exports sent there this summer. Naphtha crack spreads are declining along their normal seasonal path, but remain significantly stronger in Asia than elsewhere. Petrochemical producers have in many cases switched to alternative feedstocks, i.e. natural gas or condensate, after naphtha prices became too high. One integrated Asian refinery/petrochemical plant even reported it was using its own gasoil as a feedstock. However, while Asian demand remains

strong, Indian naphtha exports in April are due to rise to their highest level this year, a 25% increase from March, squeezing out European exports to the region.



Distillate prices in absolute terms have risen as well since mid-March, but are flat in relation to crude. Diesel prices improved in the US and Asia due to agricultural demand, with the US predicting a bumper corn crop this year on the back of an ethanol boom. In Asia, Indonesia was seen importing more distillate due to prolonged refinery maintenance, and also to cope with a tightening of the sulphur limit in diesel to 3,500 ppm from 5,000 ppm. While jet cracks gained in the US due to tighter supply, spreads fell in Asia due to higher South Korean exports and lower Chinese buying. Nevertheless, the arbitrage to the US West Coast was still open, with at least 170,000 tonnes shipped there by South Korean refiners.

Spot Product Prices

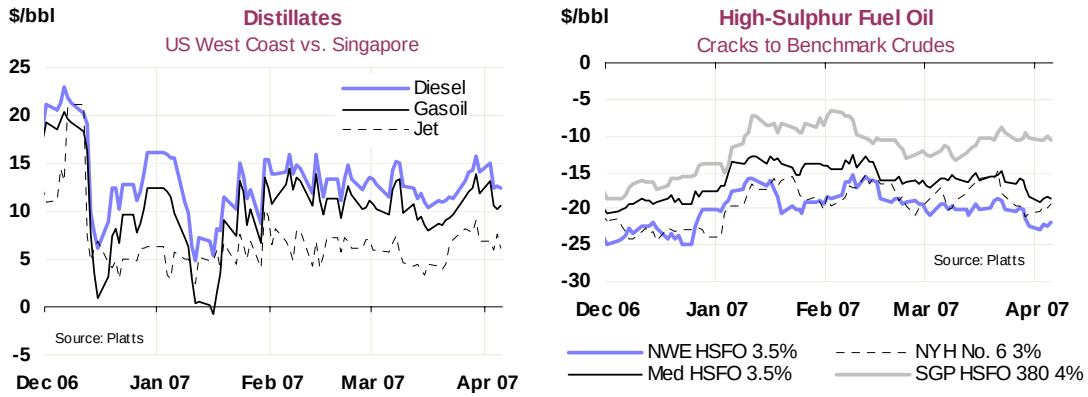
(monthly and weekly averages, $/bbl)

	Jan	Feb	Mar	Mar-Feb		Week Commencing:					Jan	Feb	Mar
				Change	%	05 Mar	12 Mar	19 Mar	26 Mar	02 Apr			
Rotterdam, Barges FOB											**Differential to Brent**		
Premium Unleaded	58.95	64.97	74.89	9.92	15.3	74.16	72.95	72.86	79.34	80.54	5.28	7.54	12.74
Naphtha	56.03	60.80	66.66	5.86	9.6	66.18	65.87	66.17	68.32	70.45	2.35	3.37	4.51
Jet/Kerosene	70.98	74.17	77.03	2.87	3.9	76.46	75.61	75.35	80.49	82.94	17.30	16.74	14.88
ULSD	67.79	72.51	76.23	3.72	5.1	75.46	74.46	74.75	80.11	81.48	14.11	15.08	14.08
Gasoil .2%	65.01	69.44	72.62	3.18	4.6	71.90	70.98	71.21	76.34	77.69	11.33	12.01	10.47
LSFO 1%	37.47	36.04	40.80	4.76	13.2	39.92	39.15	39.72	44.90	43.93	-16.21	-21.38	-21.35
HSFO 3.5%	35.25	39.61	42.07	2.45	6.2	40.72	40.83	41.95	45.17	46.33	-18.43	-17.81	-20.08
Mediterranean, FOB Cargoes											**Differential to Urals**		
Premium 50 ppm	57.73	64.17	73.46	9.29	14.5	72.02	71.28	71.73	78.51	79.07	7.61	10.35	14.66
Naphtha	54.40	59.13	64.85	5.72	9.7	64.26	64.22	64.53	66.36	68.55	4.27	5.31	6.04
Jet Aviation fuel	68.77	72.03	75.03	3.00	4.2	74.07	73.69	73.95	78.46	79.16	18.64	18.21	16.23
Gasoil .2%	64.71	68.95	73.06	4.10	6.0	72.59	71.96	71.67	76.27	78.14	14.58	15.14	14.25
LSFO 1%	36.01	39.72	43.10	3.38	8.5	41.79	41.46	42.60	46.87	46.68	-14.12	-14.10	-15.70
HSFO 3.5%	35.96	38.89	42.67	3.78	9.7	41.33	41.40	42.57	46.17	46.65	-14.16	-14.92	-16.13
New York Harbour, Barges											**Differential to WTI**		
Super Unleaded	65.54	73.84	87.49	13.64	18.5	85.04	85.34	87.28	92.56	91.24	11.40	14.64	26.86
Unleaded	59.73	69.13	81.16	12.03	17.4	79.25	80.27	80.45	84.44	84.60	5.59	9.93	20.54
Jet/Kerosene	70.48	74.19	78.80	4.62	6.2	77.77	77.02	77.27	83.13	83.77	16.35	14.99	18.18
No. 2 (Heating Oil)	63.77	71.20	73.09	1.90	2.7	73.28	71.03	70.85	76.64	77.86	9.63	12.00	12.47
LSFO 1%	37.23	40.10	42.70	2.61	6.5	42.29	40.95	43.17	44.84	45.33	-16.91	-19.10	-17.92
No. 6 3%	36.07	41.19	42.35	1.17	2.8	41.83	40.93	42.42	44.07	44.71	-18.06	-18.01	-18.27
Singapore, Cargoes											**Differential to Dubai**		
Premium Unleaded	61.59	66.80	76.62	9.82	14.7	76.26	76.19	75.20	79.02	81.31	9.90	11.04	17.81
Naphtha	56.79	63.81	70.56	6.75	10.6	70.84	71.06	69.17	71.68	73.80	5.09	8.06	11.76
Jet/Kerosene	69.66	71.77	75.02	3.24	4.5	74.44	73.74	74.03	78.00	79.44	17.97	16.02	16.21
Gasoil .5%	66.08	70.61	73.46	2.86	4.0	71.97	72.37	72.96	77.10	79.20	14.38	14.86	14.66
LSWR Cracked	39.37	43.27	46.20	2.93	6.8	45.68	45.25	45.53	48.84	51.33	-12.32	-12.49	-12.60
HSFO 180 CST	41.91	45.67	47.63	1.96	4.3	46.58	46.12	47.69	50.79	52.77	-9.78	-10.08	-11.17
HSFO 380 CST 4%	42.17	45.80	47.67	1.87	4.1	46.42	46.06	47.81	50.98	53.35	-9.52	-9.95	-11.13

Source: Platts

Fuel oil prices were mostly flat since our last report, as weak demand balanced lower output due to OPEC cuts and refinery maintenance. In Asia, the high-sulphur fuel oil (HSFO) discount to Dubai narrowed slightly (and remains above its low-sulphur variant), on lower South Korean exports and

higher regional demand. Indonesia is also expected to import more fuel oil in April, while Vietnamese purchases for the second quarter are trending above last year.



End-User Product Prices in March

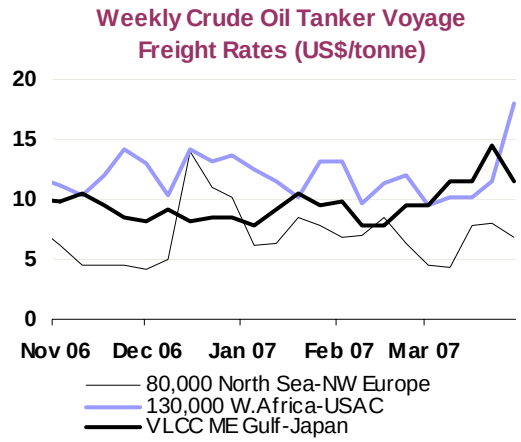
End-user prices increased significantly in all OECD member countries, both in local currency and in US dollars. Gasoline ex-tax prices in US dollars rose by 15.3% in the US, 9.5% on average in Europe, and 2.8% in Japan. Gasoline prices in Canada rose by 23.1%. US dollar diesel prices (ex-tax) increased by 9.1% in the US, 5.3% in Europe, and 1.4% in Japan. Heating oil price rose in all OECD member countries by 4.6% on average, although UK prices jumped by 9.5%. US dollar LSFO prices also rose by 4.1% on average in Europe and Japan, with a 2% decline in German prices being the only exception. *(A detailed breakdown of prices by OECD member countries is available in Table 14 in the Tables section of this report's website.)*

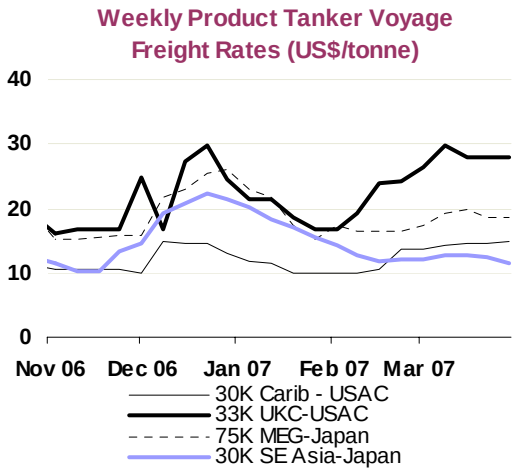
Freight

Million-barrel crude tanker rates in the Mediterranean hit 15-month peaks at the end of March following a strike at Fos, a key European oil import hub in France. Regional vessel availability was reduced sharply as almost 40 tankers were left stranded offshore, unable to discharge their cargo. In the Middle East Gulf, increased vessel demand pushed VLCC rates towards six-month highs in late March, as US refiners sought transportation for crude to arrive ahead of peak summer demand. Clean product tanker rates in the Atlantic rose to the top of five-year ranges in March, supported by strong regional competition for vessels.

On 14 March, port workers at Fos began a strike which lasted 17 days. This left almost 40 tankers stranded, unable to discharge oil into the Marseille refining complex or into pipelines which feed inland refineries and other European countries. The consequent erosion of regional vessel availability pushed cross-Med Suezmax rates up from under $4/tonne to almost $11/tonne on 31 March when the strike finished, a 15-month high. Slim vessel supply also raised West African Suezmax rates from under $10/tonne to nearly $18/tonne over the same period, for trades to the US Gulf. North Sea Suezmax rates were not significantly affected and remained at seasonal norms of $9/tonne for exports to the US Atlantic coast. Aframax rates in the Mediterranean were also boosted substantially by the strike but fell sharply, alongside other regional rates, at the start of April, as the action ended and vessels were offloaded.

Competition for tankers in the Middle East Gulf tightened vessel supply considerably in March, boosting VLCC charter rates. US refiners actively sought transportation to move crude for arrival after the maintenance season, as peak summer demand approaches. Further competition for vessels for late March and first half April loading came from Eastern refiners, notably Korean, despite approaching refinery turnarounds. VLCC rates to Japan rose from around $10/tonne to almost $15/tonne in the first three weeks of March. Corresponding rates to the US Gulf rose from $16/tonne to over $24/tonne during the same period. Middle East Gulf Suezmax rates were also supported in March as thin vessel availability prompted charterers to consider splitting cargoes on to smaller vessels. Tanker movement reports confirmed that, as chartering activity implied, Middle East sailings increased in late March and April. East- and westbound VLCC rates eased at the end of the month as vessel supply increased.





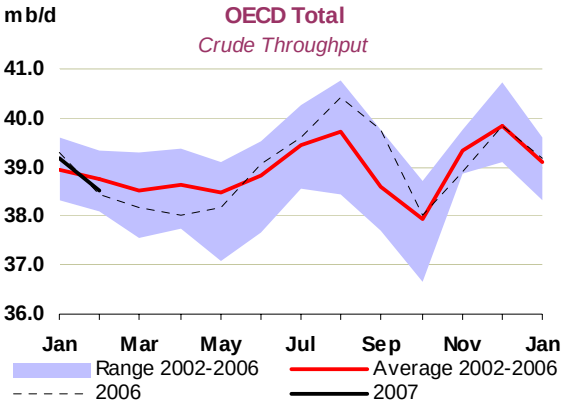
US refinery maintenance reduced demand for short-haul crude imports, causing dirty Aframax rates in the Caribbean to sink from $14/tonne to $10/tonne in March, continuing the downward trend seen in February. Conversely, the need for product imports was one factor which supported clean rates to the US from the Caribbean and North Europe. Charter rates for 33,000-tonne clean vessels on the latter route rose from $24/tonne to $28/tonne in March. Although US gasoline imports were actually no higher than average seasonal levels, Atlantic Basin clean rates were supported by continued competition for European gasoline from West African refiners. East of Suez clean tanker rates were flat or slightly weaker, despite firm Asian naphtha demand. Maintenance at certain Middle East Gulf product export terminals reduced available cargoes.

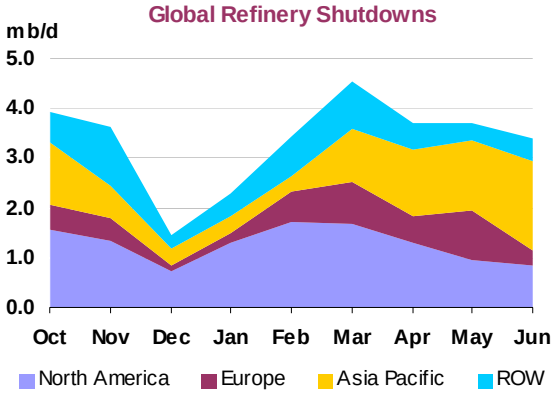
REFINING

Summary

- **OECD throughputs fell by 0.6 mb/d in February, to an estimated 38.5 mb/d**, as heavier refinery maintenance in the US and Europe and a spate of unplanned shutdowns reduced crude throughput. Crude runs in the OECD are expected to have fallen further in March to around 38.2 mb/d, but should recover in April to 38.7 mb/d, before dipping again in May as maintenance work in the Pacific reaches its seasonal peak. February crude throughput in Russia and China increased by a combined 0.5 mb/d, to a new record level of 11.3 mb/d.

- **Ongoing refinery problems in North America kept regional product markets tight**. The disruption caused by Valero's McKee refinery boosted product cracks on the US West and Gulf Coasts, while simultaneously depressing the value of WTI at Cushing, Oklahoma.





- **OECD refinery yield data for January point to declining fuel oil production,** in line with the latter part of 2006, driven by refiners in the Pacific. Middle distillate yields remain strong as Pacific refiners convert an increasing amount of their crude slate into light products. In the Atlantic Basin gasoline yields remain under pressure, with stronger naphtha yields in the US indicative of the changing balance in the gasoline pool, following the increased use of ethanol.

- **Global offline capacity is estimated to have peaked in March at 4.6 mb/d.** Current projections suggest that idled capacity will decline towards 3.5 mb/d by June. Delays to refinery restarts in the US and the Fos port strike in France have added to our estimate of first-quarter offline capacity.

Refinery Throughput

OECD refinery runs declined in February as planned work in North America and Europe, plus a spate of unplanned outages, dragged down operating rates. Refinery maintenance increased over January's level in the US and Europe, while voluntary cuts restrained runs in the Pacific. February crude throughput averaged 38.5 mb/d, a drop of 0.6 mb/d compared with January, leaving runs flat compared with February 2006 - broadly in line with last month's expectation. However, the anticipated bounce in runs during March has been deferred to April, following extensions to planned work in the US, and the impact of the port strike in southern France. Runs are expected to dip in March to 38.2 mb/d, before recovering to 38.7 mb/d in April and drop again in May as Pacific maintenance reaches its seasonal peak. Increasing runs in the US and Europe in the second quarter will more than offset the decline in the Pacific as Japan and Korea gear up for peak maintenance.

OECD North America

North American crude throughputs in February fell for the second month running to average 17.6 mb/d, a decline of 0.4 mb/d from January, as maintenance work increased and fires damaged several refineries in the US and Canada to various degrees. US crude runs in February fell as expected, as maintenance work deepened. West Coast crude runs were affected by almost 500 kb/d of capacity taken offline during the month, most notably at Chevron's Richmond and Tesoro's Golden Eagle refineries, but also problems at BP's Carson and Exxon's Torrance operations. The Gulf Coast region saw a higher level of outages than expected, with over 900 kb/d estimated to have been offline. Refineries either in

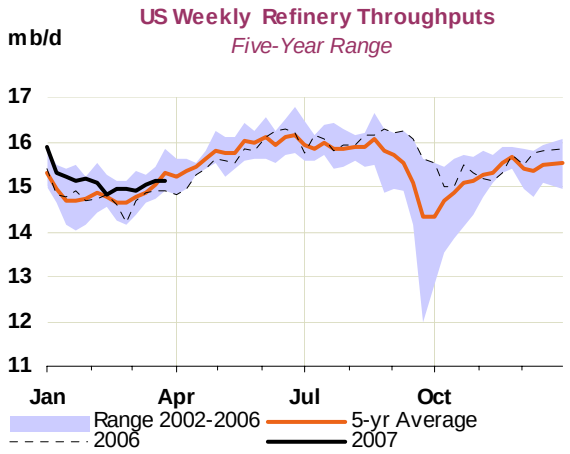
turnaround, or hampered by problems, include Shell's Deer Park, Lyondell's Houston and Valero's McKee. The latter plant suffered a serious fire in mid-February, which tightened product markets in south-western states. This boosted refinery margins on the West and Gulf Coasts, while depressing WTI values at Cushing in Oklahoma, as normal crude trade flows were reversed, as some crude was shipped up to Cushing. The partial restart of the refinery in mid-April will restore crude runs to around 85 kb/d, but full production may not be resumed much before year-end.

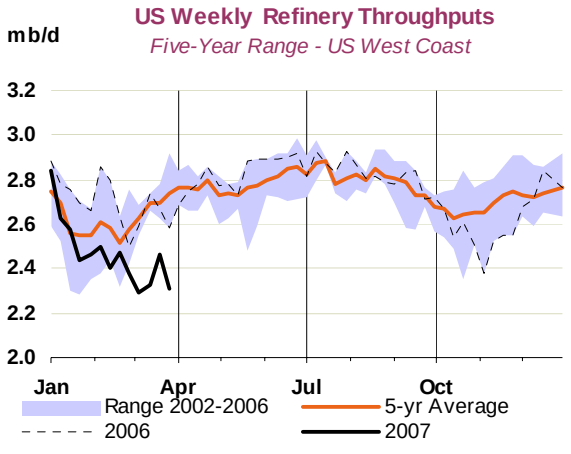
Refinery Crude Throughput and Utilisation in OECD Countries

	million barrels per day						*Change from*		Utilisation rate[2]	
	Sep 06	Oct 06	Nov 06	Dec 06	Jan 07	Feb 07	*Jan 07*	*Feb 06*	Feb 07	Feb 06
OECD North America										
US[3]	15.74	15.00	15.01	15.37	14.96	14.66	-0.30	0.08	84.30	85.11
Canada	1.85	1.82	1.81	1.82	1.78	1.72	-0.06	-0.11	85.01	90.53
Mexico	1.18	1.14	1.24	1.31	1.27	1.26	-0.02	0.03	81.70	71.96
Total	18.77	17.95	18.06	18.50	18.02	17.63	-0.38	-0.01	84.18	84.68
OECD Europe										
France	1.86	1.74	1.81	1.80	1.79	1.71	-0.08	0.17	87.34	77.91
Germany	2.18	2.19	2.41	2.32	2.24	2.30	0.06	-0.01	95.11	94.96
Italy	1.88	1.95	1.98	1.95	1.91	1.92	0.01	0.04	82.11	80.76
Netherlands	1.03	1.02	1.04	1.03	0.99	0.94	-0.05	-0.10	77.86	85.36
Spain	1.22	1.17	1.11	1.15	1.19	1.18	-0.01	-0.02	93.13	94.85
UK	1.64	1.35	1.50	1.63	1.59	1.42	-0.17	-0.15	75.16	83.48
Other OECD Europe	4.10	4.04	3.91	4.02	4.05	4.08	0.03	0.19	85.13	80.62
Total	13.92	13.46	13.76	13.93	13.76	13.55	-0.21	0.12	85.38	84.33
OECD Pacific										
Japan	3.92	3.44	3.87	4.18	4.13	4.12	0.00	-0.15	88.19	91.45
Korea	2.46	2.42	2.51	2.47	2.49	2.51	0.02	0.07	97.61	94.77
Other OECD Pacific	0.70	0.72	0.72	0.78	0.76	0.70	-0.06	0.03	87.43	83.67
Total	7.08	6.59	7.10	7.43	7.38	7.34	-0.04	-0.04	91.12	91.73
OECD Total	39.77	38.00	38.92	39.85	39.16	38.53	-0.63	0.07	85.85	85.82

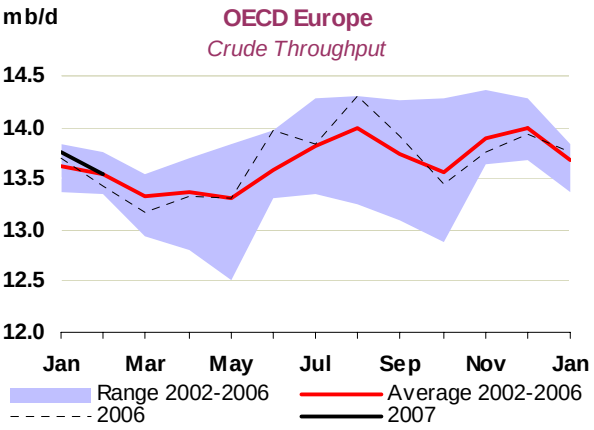
1 Estimate
2 Based on crude throughput and current operable refining capacity
3 US50

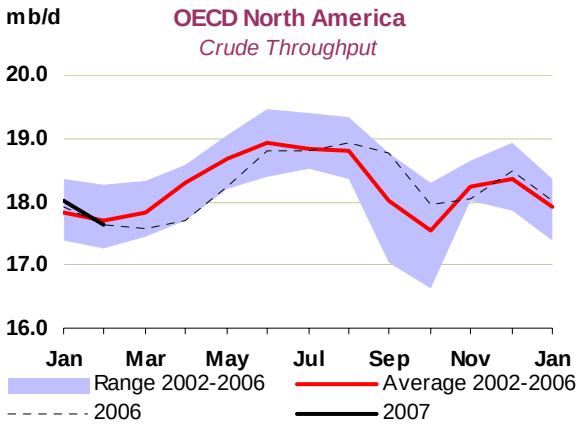
Canadian refineries are estimated to have lowered crude runs following disruptions to Imperial Oil and Shell refineries supplying the Ontario market, leading to reports of some supply problems at some retail stations.





Weekly US data indicate that crude runs increased over the course of March, to 14.8 mb/d, driven largely by a recovery in Gulf Coast throughputs. The West Coast turned in a weaker performance, with crude throughputs falling to their lowest level in five years, following the delayed restart of Chevron's Richmond refinery to early April. On the East Coast, the turnaround of Sunoco's 200 kb/d Girard Point refinery also reduced throughputs. Crude runs should increase further over the course of April, reaching 15.2 mb/d and 15.5 mb/d during May, subject to, as always, the level of unplanned outages.





OECD Europe

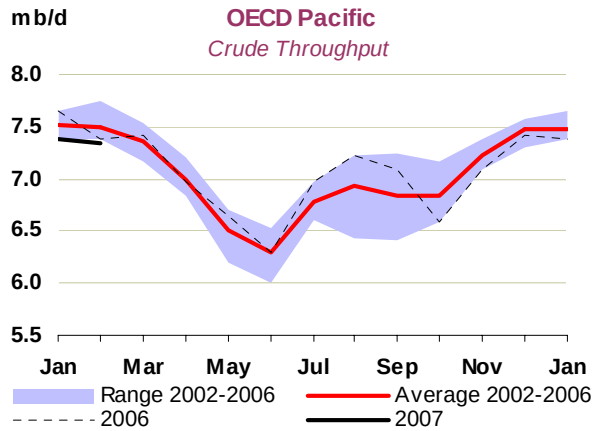
European crude throughputs averaged 13.6 mb/d in February, down slightly from January's downwardly revised (-112 kb/d) level of 13.8 mb/d. Planned maintenance work at Shell's refineries in the UK, the Netherlands and France, and ExxonMobil's Rotterdam refinery all contributed to lower runs. February maintenance was lighter than in February 2006, by around 140 kb/d, largely explaining why runs were correspondingly 120 kb/d higher than a year ago.

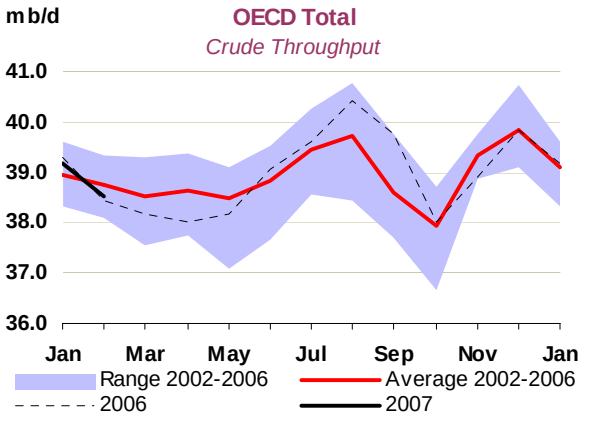
Maintenance work at French refineries picked up in March, with Shell's Berre l'Etaing and Reichstett plants closed for maintenance. Furthermore, a port workers strike during the second-half of March cut runs by around 45 kb/d on average over the course of the month. The industrial action affected refiners both in and around Marseille and also those supplied by the SPSE pipeline, which include refineries in southern and eastern France and Switzerland. Crude runs were reduced by around 200 kb/d, or one third of capacity, during the latter stages of the month, due to restricted crude supplies. In addition, by the time the strike was resolved, refiners were preparing for a total shutdown. Consequently, French crude runs in March should have dipped below 1.6 mb/d, as seasonal maintenance reaches a peak and as a result of the port strike.

Anecdotally, spring 2008 could see a heavier European maintenance schedule than in 2007. Europe's biggest refinery operator Total is reported to be lining up a heavy turnaround programme for its French plants. In addition, discussions with industry participants suggest that the German refining industry is also planning a heavy maintenance schedule. However, little concrete detail is available at this point.

OECD Pacific

February crude throughput in the OECD Pacific region was broadly unchanged, at 7.3 mb/d, for the third month running. The decline of 40 kb/d from January is largely attributable to voluntary run cuts as weak demand for kerosene and poor hydroskimming margins in the region curtailed runs.

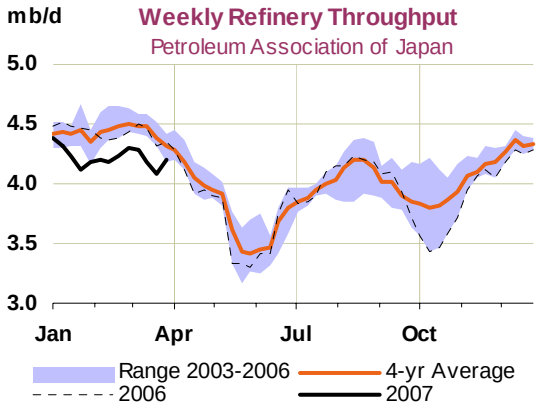




Japanese crude runs of 4.1 mb/d in February are estimated to be unchanged from January's level. Voluntary run cuts remained at about 150 kb/d for the second month running before increasing to

175 kb/d in March. Consequently crude runs were 147 kb/d below February 2006's level and capacity utilisation was similarly lower than last year.

Weekly data from the Petroleum Association of Japan suggest that these voluntary run cuts increased in March, as runs eased, due to waning kerosene demand and the start of spring maintenance. April crude runs are expected to drop further as maintenance activity ratchets up to a seasonal peak in May.

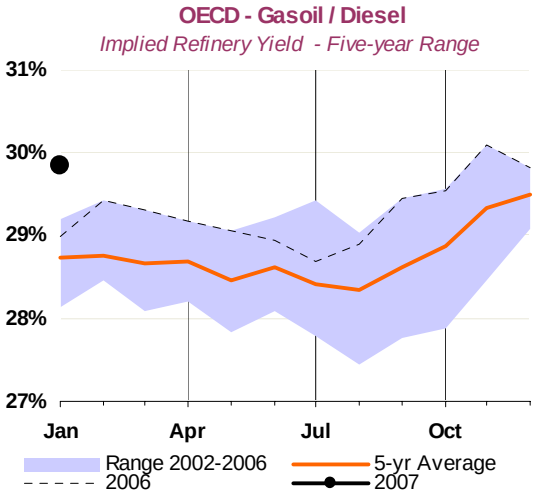


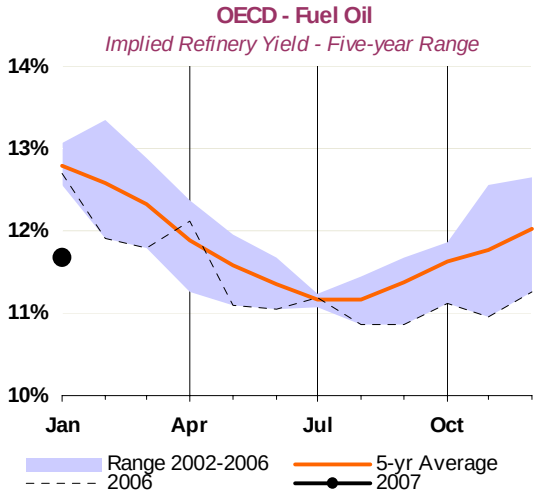
Korean runs in February were also largely unchanged, rising 21 kb/d to an average of 2.5 mb/d, despite our estimate that voluntary run cuts rose by around 20 kb/d to 107 kb/d during the month. Voluntary run cuts are estimated to have increased further in March to 128 kb/d, before declining in April with the start of the spring maintenance programme.

OECD Refinery Yields

The trend towards lower fuel oil yields continued in January, driven by a substantial decline in the Pacific, where yields reached new five-year lows. The reduction reflects the progress refiners have made in reducing unprofitable fuel oil production through investment in upgrading capacity and as a response to mild weather. Strong middle distillate production during January was centred on the Pacific, and in particular Korea, which substantially boosted yields at the expense of fuel oil. Notably the trend for weaker kerosene and stronger jet fuel production continued during January in the Pacific.

Atlantic Basin refiners registered lower gasoline yields in January, reflecting the shift in transportation demand to middle distillates. Naphtha yields in the Pacific in January recovered to their highest seasonally adjusted level in five years. During 2006 Pacific refiners registered 10 out of 12 months with naphtha yields at new five-year highs, as increasing demand from newly constructed petrochemical complexes in Asia boosted naphtha cracks.

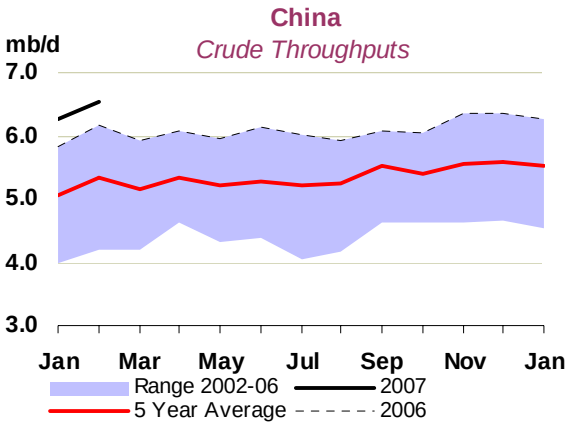


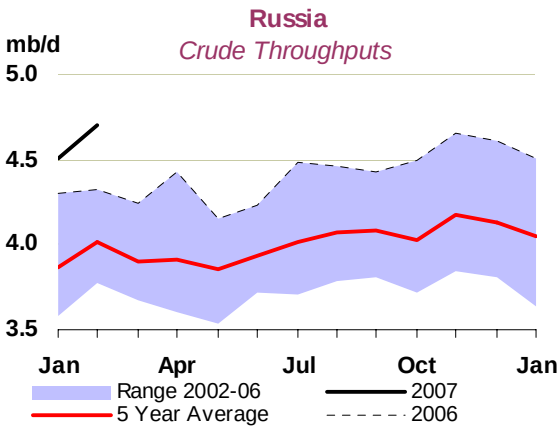


North American refiners have partly followed this trend, with increased naphtha yields during 2006 and early 2007. Although the absolute change remains small, the switch in North American production possibly reflects the changing pressures on the gasoline blending pool. Following the introduction of ethanol as a replacement for MTBE in spring 2006, refiners may now be looking to remove high volatility blend-stocks such as light naphtha to balance out the higher volatility associated with ethanol blending. The strength in naphtha cracks since the beginning of the year offers the prospect for further gains in naphtha yields, in the Pacific, albeit ultimately at the expense of gasoline production

Non-OECD Throughput

Crude throughput in Russia and China increased by a total of 0.5 mb/d, to a new record level of 11.3 mb/d in February. Official data for **Chinese** refinery activity confirm last month's estimate from provisional data that crude runs fell slightly in January, to an average of 6.3 mb/d, before increasing to a new record level of 6.5 mb/d in February. Maintenance work at several of China's largest refineries is thought to have curtailed March throughputs, with several refineries working on upgrading units during the month. February data indicate that **Indian** crude runs averaged 3.0 mb/d, a slight increase on the previous month. For the second month running, higher crude runs at Reliance's Jamnagar refinery accounted for much of the net increase, with runs reaching an average of 735 kb/d.

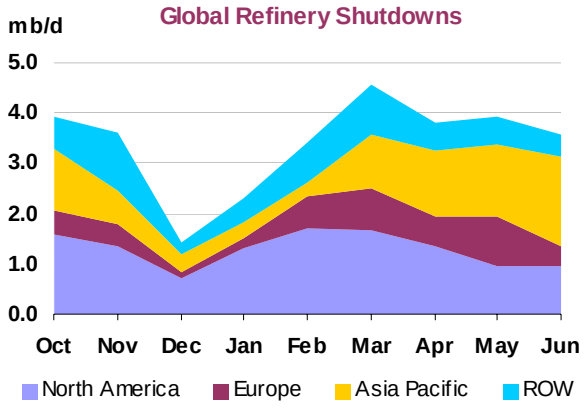


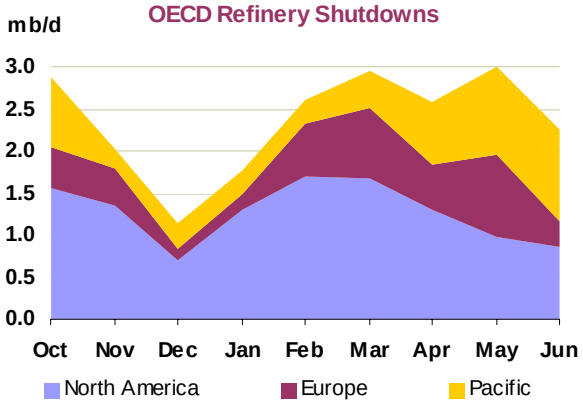


Russian crude runs similarly increased to a new (post-Soviet) record of 4.7 mb/d in February, a 4% rise from January's level of 4.5 mb/d. The 40 kb/d rebound at Surgutneftegas's Kirishi facility, which reversed January's decline, was partly responsible, as was the 26 kb/d increase at the Moscow refinery. FSU products exports increased correspondingly in February. March runs will be reduced by the fire at Lukoil's Volgograd refinery which has seriously curtailed operations.

Offline Refinery Capacity

Global offline capacity is currently expected to have peaked in March at 4.6 mb/d and is forecast to decline towards 3.5 mb/d by June. Refinery maintenance in the second quarter will be concentrated in the Asia Pacific region, which in addition to capacity offline in the Middle East will account for almost half the total.





North American and European refiners have confirmed additional planned work over the first half of 2007, raising estimates of offline capacity. Consequently OECD forecasts have been revised up, and now suggest that offline capacity will oscillate between 2.5 mb/d and 3 mb/d over the second quarter, before refiners gear up for the peak Northern Hemisphere driving season. Furthermore, the port strike in southern France has also raised our estimates of offline capacity in the first and second quarters. Further details emerged on planned maintenance in France as a consequence of the strike action in Fos, with several refineries which had previously started unreported maintenance work confirming maintenance plans.

Tighter and Tighter

The European Commission's recent Fuel Quality Directive Review raises the prospect of further rapid tightening of distillate quality requirements in Europe. It comes at a time when anecdotal evidence suggests refinery reliability is deteriorating due to existing sulphur removal requirements, lowering average utilisation rates. Furthermore, continued discussion abounds about transferring marine bunker demand from fuel oil into distillate. However, although refiners have "cried wolf" before about the impact of tighter specifications on refinery operations, progress in catalyst technology is unlikely to again provide them with another easy solution. This raises the prospect of significant investment in hydrotreating, hydrocracking (both of heavy distillate and residue) and hydrogen production capacity and will entail significantly higher emissions of greenhouse gases than current specifications.

The move by the US to limit sulphur in non-road gasoil to 500 ppm from this summer has been well flagged, as has Europe's reduction of sulphur limits for non-road gasoil, to 1,000 ppm starting in January 2008. However, the recent publication of the Fuel Quality Directive Review by the European Commission proposes further significant tightening of quality standards in a relatively short timeframe.

The proposals are essentially that:

- Non-road gasoil specifications adopt a 10 ppm sulphur limit by end 2009, one year later than the mandatory tightening of automotive diesel.
- Inland marine diesel would be cut to 300 ppm sulphur by end 2009 and move to 10 ppm in 2011.
- In addition to the tighter sulphur specification, refiners would also be required to reduce Greenhouse Gas emissions (GHG) by 1% per annum from 2011 onwards in an effort to help Europe meet its commitments on GHG. This could boost biofuels use significantly.
- The mandated biofuels content of at least 10% in transportation fuels by 2020 would be facilitated by a new gasoline blend containing up to 10% ethanol. A volatility waiver, (of between 3.65 kilopascals (KPa) and up to 8 KPa above the current maximum of 60 KPa), would be introduced for ethanol blends.

In addition to these proposals Europe's biggest heating oil market, Germany, will introduce 50 ppm heating oil from January 2008. This will further reduce the demand for 2,000 ppm gasoil, adding more pressure on the ultra-low sulphur diesel pool. The changes to gasoil specifications in Europe would effectively increase European desulphurisation requirements by almost 50%.

If the problem were simply a question of sulphur content in the different distillate streams the solution would be sufficient investment in upgrading and hydrotreating capacity. However, atmospheric gasoil, (i.e. from the crude distillation unit) typically has lower sulphur and higher cetane values than gasoil produced from upgrading units. Consequently, to meet current diesel production refiners rely on selective blending of these various distillate streams, in order to meet the specifications.

The inferior quality gasoil, from cokers or catalytic crackers, can have very high sulphur, nitrogen and even metals contamination. Obviously these can be reduced or removed through further processing. Crucially though, some of the sulphur in these cracked gasoils requires very severe (high pressure and temperature) hydro-treating, or possibly hydrocracking. These processes involve significant amounts of hydrogen and energy; neither of which is inexpensive, or without significant GHG emissions. Essentially, the cost of removing the last 50 ppm of sulphur in distillates can be significantly higher than removing the first 50 ppm.

Furthermore, anecdotal evidence points to existing ultra-low sulphur specifications causing problems for refinery reliability. Hydro-treating units with expected life cycles (the period between necessary shut-down for catalyst change etc) of two years are being taken out of service after 18 months as they are no longer capable of making on-spec product. Similarly, the need to run these units harder to meet the tighter specifications is leading to a higher incidence of unit failures, posing additional problems for refiners

Previously a refiner may have had spare hydro-treating capacity, so that temporary problems with a unit could be accommodated by reprocessing product later. Now a problem with hydro-treating could potentially lead to refineries having to reduce throughputs temporarily since there is no alternative outlet for off-spec product. Similarly, refiners had become quite adept at minimising product supply outages through partial turnarounds, keeping parts of the refinery online while others were offline. However, the growing interdependence, partly driven by the hydrogen balance across the refinery, may force some refiners to revert to "all or nothing" shut-downs. Consequently the proposed changes will undoubtedly result in lower sulphur levels in gasoil, but they could have far-reaching and possibly unintended consequences in terms of reduced product supply and higher greenhouse gas emissions.

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

	2003	2004	1Q05	2Q05	3Q05	4Q05	2005	1Q06	2Q06	3Q06	4Q06	2006	1Q07	2Q07	3Q07	4Q07	2007
OECD DEMAND																	
North America	24.5	25.4	25.6	25.3	25.6	25.5	25.5	25.1	25.1	25.5	25.4	25.3	25.8	25.3	25.9	26.0	25.8
Europe	15.4	15.5	15.6	15.2	15.6	15.7	15.5	15.8	15.0	15.5	15.6	15.5	15.2	15.1	15.5	15.7	15.4
Pacific	8.6	8.5	9.4	8.1	8.1	8.8	8.6	9.3	7.9	7.9	8.8	8.5	8.8	7.8	8.0	8.9	8.4
Total OECD	48.6	49.3	50.7	48.6	49.3	50.0	49.6	50.2	48.0	48.8	49.7	49.2	49.8	48.2	49.4	50.6	49.5
NON-OECD DEMAND																	
FSU	3.6	3.8	3.8	3.7	3.8	3.9	3.8	3.9	3.7	4.0	4.3	4.0	3.6	3.8	4.0	4.5	4.0
Europe	0.7	0.7	0.8	0.7	0.7	0.7	0.7	0.8	0.7	0.7	0.7	0.7	0.8	0.7	0.7	0.7	0.7
China	5.5	6.4	6.7	6.5	6.7	6.9	6.7	7.0	7.3	7.2	7.2	7.2	7.6	7.7	7.6	7.7	7.6
Other Asia	8.1	8.6	8.8	8.8	8.6	8.5	8.7	8.8	8.8	8.5	8.7	8.7	8.9	9.0	8.8	9.0	8.9
Latin America	4.7	5.0	5.0	5.1	5.2	5.1	5.1	5.1	5.2	5.3	5.3	5.2	5.2	5.3	5.5	5.4	5.3
Middle East	5.4	5.7	5.9	6.0	6.3	6.0	6.1	6.2	6.4	6.6	6.3	6.4	6.5	6.7	7.0	6.6	6.7
Africa	2.7	2.8	2.9	2.9	2.8	2.9	2.9	2.9	2.9	2.9	2.9	2.9	3.0	3.0	2.9	3.0	3.0
Total Non-OECD	30.6	32.9	33.8	33.8	34.0	34.0	33.9	34.7	35.1	35.1	35.5	35.1	35.7	36.2	36.3	37.0	36.3
Total Demand[1]	79.2	82.3	84.5	82.4	83.3	84.0	83.5	84.9	83.1	84.0	85.2	84.3	85.5	84.4	85.7	87.6	85.8
OECD SUPPLY																	
North America	14.6	14.6	14.5	14.7	13.7	13.8	14.1	14.2	14.2	14.3	14.3	14.2	14.3	14.1	14.2	14.3	14.2
Europe	6.3	6.1	5.9	5.7	5.4	5.5	5.6	5.5	5.1	4.9	5.2	5.2	5.2	5.1	5.1	5.3	5.2
Pacific	0.7	0.6	0.5	0.6	0.6	0.6	0.6	0.5	0.5	0.7	0.6	0.6	0.6	0.6	0.7	0.7	0.7
Total OECD	21.6	21.2	20.9	21.0	19.7	19.8	20.3	20.2	19.8	19.9	20.1	20.0	20.1	19.9	20.0	20.3	20.1
NON-OECD SUPPLY																	
FSU	10.3	11.2	11.5	11.5	11.7	11.9	11.6	11.8	12.0	12.2	12.4	12.1	12.5	12.6	12.5	12.7	12.6
Europe	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
China	3.4	3.5	3.6	3.6	3.6	3.6	3.6	3.7	3.7	3.7	3.6	3.7	3.8	3.8	3.8	3.8	3.8
Other Asia	2.6	2.7	2.7	2.6	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.8	2.8	2.8	2.8	2.8
Latin America	4.0	4.1	4.2	4.4	4.3	4.3	4.3	4.3	4.4	4.4	4.4	4.4	4.4	4.5	4.5	4.6	4.5
Middle East	2.0	1.9	1.9	1.9	1.9	1.8	1.9	1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.6	1.7
Africa[2]	3.0	3.4	3.5	3.6	3.8	3.9	3.7	3.9	3.9	4.0	4.0	4.0	2.6	2.7	2.7	2.8	2.7
Total Non-OECD	25.6	27.0	27.5	27.7	28.1	28.4	27.9	28.4	28.6	28.8	29.0	28.7	27.9	28.1	28.1	28.4	28.1
Processing Gains[3]	1.8	1.8	1.9	1.9	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
Other Biofuels[4]	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3
Total Non-OPEC[5]	49.1	50.1	50.4	50.6	49.8	50.2	50.2	50.7	50.5	50.8	51.1	50.8	50.3	50.2	50.3	50.9	50.4
Non-OPEC excl. Angola[2]	48.2	49.2	49.3	49.5	48.4	48.8	49.0	49.3	49.2	49.3	49.7	49.4	50.3	50.2	50.3	50.9	50.4
OPEC																	
Crude[6]	27.1	28.9	29.3	29.7	30.0	29.9	29.7	29.9	29.8	30.0	29.2	29.7	30.2				
NGLs	3.7	4.2	4.4	4.4	4.5	4.5	4.5	4.6	4.7	4.7	4.7	4.7	4.9	4.9	5.0	5.1	4.9
Total OPEC	30.8	33.1	33.7	34.2	34.5	34.5	34.2	34.5	34.5	34.7	34.0	34.4	35.1				
OPEC incl. Angola[2]	31.7	34.1	34.8	35.3	35.8	35.9	35.4	35.9	35.8	36.2	35.4	35.8	35.1				
Total Supply[7]	79.8	83.2	84.1	84.8	84.2	84.7	84.5	85.2	85.0	85.5	85.1	85.2	85.4				
STOCK CHANGES AND MISCELLANEOUS																	
Reported OECD																	
Industry	0.1	0.1	0.0	0.9	0.2	-0.4	0.1	0.0	0.6	1.2	-0.9	0.2					
Government	0.2	0.1	0.1	0.3	0.0	-0.1	0.1	0.0	0.1	0.0	0.0	0.0					
Total	0.3	0.2	0.1	1.2	0.2	-0.5	0.2	0.0	0.7	1.2	-0.9	0.3					
Floating Storage/Oil in Transit	0.2	0.0	-0.4	0.1	0.0	0.1	-0.1	0.1	-0.1	0.3	-0.6	-0.1					
Miscellaneous to balance[8]	0.2	0.7	-0.1	1.1	0.8	1.1	0.7	0.2	1.2	0.1	1.4	0.7					
Total Stock Ch. & Misc	0.6	0.9	-0.4	2.4	0.9	0.7	0.9	0.3	1.8	1.5	-0.1	0.9	-0.1				
Memo items:																	
Call on OPEC crude + Stock ch.[9]	26.5	28.0	29.7	27.4	29.1	29.3	28.8	29.6	28.0	28.5	29.3	28.8	30.3	29.3	30.5	31.6	30.4
Adjusted Call on OPEC + Stock ch.[10]	26.7	28.7	29.6	28.4	29.9	30.4	29.6	29.7	29.2	28.5	30.7	29.5	31.4	30.4	31.6	32.6	31.5
"Call" incl. Angola[2]	27.4	29.0	30.8	28.5	30.4	30.7	30.1	31.0	29.3	29.9	30.7	30.2	30.3	29.3	30.5	31.6	30.4
"Adjusted Call" incl. Angola[2]	27.5	29.7	30.7	29.6	31.2	31.7	30.8	31.1	30.5	30.0	32.2	30.9	31.4	30.4	31.6	32.6	31.5

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 With effect from OMR of 13 February 2007, Angolan production will be reclassified within OPEC and excluded from the Non-OPEC and Africa totals, for the period January 2007 onwards. Secondary aggregates allow comparison with previous year totals by including Angola within OPEC retroactively.
3 Net volumetric gains and losses in the refining process (excludes net gain/loss in former USSR, China and non-OECD Europe) and marine transportation losses
4 Biofuels from sources outside Brazil and US.
5 Non-OPEC supplies include crude oil, condensates, NGL and non-conventional sources of supply such as synthetic crude, ethanol and MTBE. No allowance is made in the non-OPEC forecast for exceptional events which have, at certain times historically, reduced non-OPEC supply by 300-400 kbd on an annual basis
6 As of the March 2006 OMR, Venezuelan Orinoco heavy crude production is included within Venezuelan crude estimates. Orimulsion fuel remains within the OPEC NGL & non-conventional category, but Orimulsion production will reportedly cease from January 2007.
7 Comprises crude oil, condensates, NGLs, oil from non-conventional sources and other sources of supply
8 Includes changes in non-reported stocks in OECD and non-OECD areas
9 Equals the arithmetic difference between total demand minus total non-OPEC supply minus OPEC NGLs
10 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 plus an extra 350 kb/d allowance for average understatement of non-OPEC supply added for forecast periods.

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

(million barrels per day)

	2003	2004	1Q05	2Q05	3Q05	4Q05	2005	1Q06	2Q06	3Q06	4Q06	2006	1Q07	2Q07	3Q07	4Q07	2007
OECD DEMAND																	
North America	-	-	-	-	-	-	-	-	-	-	0.1	-	0.2	-	-	-	0.1
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-0.3	-	-	-	-0.1
Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-0.2	-	-	-	-
Total OECD	-	-	-	-	-	-	-	-	-	-	0.1	-	-0.3	-	-	-	-0.1
NON-OECD DEMAND																	
FSU	-	-	-	-	-	-	-	-	-	-	-	-	-0.3	-	-	-	-0.1
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-	-	-	0.3	-0.1	-0.1	0.1	-
Other Asia	-	-	-0.1	-	-0.1	-0.2	-0.1	-	-0.1	-0.1	-0.3	-0.1	-0.1	-0.1	-0.1	-0.2	-0.1
Latin America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	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	-0.1	-0.1	-0.1	-0.1	-0.1
Africa	-	-	-	-	-	-	-	-0.1	-	-	-	-	-	-	-	-	-
Total Non-OECD	-	-0.1	-0.2	-0.1	-0.1	-0.3	-0.1	-0.2	-0.2	-0.2	-0.4	-0.2	-0.1	-0.2	-0.2	-0.1	-0.2
Total Demand	-	-0.1	-0.2	-0.1	-0.1	-0.2	-0.1	-0.2	-0.2	-0.2	-0.3	-0.2	-0.4	-0.2	-0.2	-0.2	-0.2
OECD SUPPLY																	
North America	-	-	-	-	-	-	-	-	-	-	-	-	-	-0.1	0.1	-	-
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	0.1	-	-	-
Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total OECD	-	-	-	-	-	-	-	-	-	-	-	-	-0.1	-	0.1	0.1	-
NON-OECD SUPPLY																	
FSU	-	-	-	-	-	-	-	-	-	-	-	-	0.1	-	-0.1	-	-
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Asia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Latin America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Middle East	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Africa	-	-	-	-	-	-	-	-	-	-	-0.1	-	-0.1	-0.1	-	-	-
Total Non-OECD	-	-	-	-	-	-	-	-	-	-0.1	-0.2	-0.1	-0.1	-0.1	-0.1	-	-0.1
Processing Gains	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Biofuels	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Non-OPEC	-	-	-	-	-	-	-	-	-	-0.1	-0.2	-0.1	-0.2	-0.1	-	0.1	-0.1
Non-OPEC excl. Angola	-	-	-	-	-	-	-	-	-	-0.1	-0.2	-0.1	-0.2	-0.1	-	0.1	-0.1
OPEC																	
Crude	-	-	-	-	-	-	-	-	-	-	-	-					
NGLs	-	-	-	-	-	-	-	-	-	-	-	-	0.1	0.1	-	-	0.1
Total OPEC	-	-	-	-	-	-	-	-	-	-	-	-					
OPEC incl. Angola	-	-	-	-	-	-	-	-	-	-	-	-					
Total Supply	-	-	-	-	-	-	-	-	-	-0.1	-0.2	-0.1					
STOCK CHANGES AND MISCELLANEOUS REPORTED OECD																	
Industry	-	-	-	-	-	-	-	-	-	-	-	-					
Government	-	-	-	-	-	-	-	-	-	-	-	-					
Total	-	-	-	-	-	-	-	-	-	-	-	-					
Floating Storage/Oil in Transit	-	-	-	-	-	-	-	-	-	-	-	-					
Miscellaneous to balance	-	0.1	0.2	0.1	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.1					
Total Stock Ch. & Misc	-	0.1	0.2	0.1	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.1					
Memo items:																	
Call on OPEC crude + Stock ch.	-	-0.1	-0.2	-0.1	-0.1	-0.2	-0.1	-0.2	-0.1	-0.1	-0.1	-0.1	-0.3	-0.2	-0.2	-0.3	-0.2
Adjusted Call on OPEC + Stock ch.	-	-	-	-	-	-	-	-	-	-	-	-	-0.2	-0.1	-0.1	-0.1	-0.1
"Call" incl. Angola[2]	-	-0.1	-0.2	-0.1	-0.1	-0.2	-0.1	-0.2	-0.1	-0.1	-0.1	-0.1	-0.3	-0.2	-0.2	-0.3	-0.2
"Adjusted Call" incl. Angola	-	-	-	-	-	-	-	-	-	-	-	-	-0.2	-0.1	-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

	2004	1Q05	2Q05	3Q05	4Q05	2005	1Q06	2Q06	3Q06	4Q06	2006	1Q07	2Q07	3Q07	4Q07	2007
Demand (mb/d)																
North America	25.37	25.61	25.33	25.61	25.53	25.52	25.12	25.09	25.47	25.41	25.28	25.78	25.32	25.93	26.00	25.76
Europe	15.47	15.62	15.17	15.57	15.70	15.52	15.78	15.05	15.47	15.56	15.46	15.17	15.06	15.49	15.71	15.36
Pacific	8.49	9.45	8.06	8.07	8.79	8.59	9.30	7.87	7.90	8.76	8.46	8.83	7.79	7.98	8.88	8.37
Total OECD	49.33	50.68	48.56	49.25	50.02	49.63	50.20	48.01	48.84	49.74	49.20	49.78	48.18	49.40	50.60	49.49
FSU	3.76	3.82	3.71	3.79	3.89	3.80	3.91	3.73	3.97	4.29	3.98	3.62	3.79	3.98	4.45	3.96
Europe	0.70	0.76	0.71	0.66	0.71	0.71	0.78	0.72	0.67	0.72	0.72	0.79	0.73	0.68	0.73	0.73
China	6.42	6.68	6.50	6.70	6.89	6.69	6.96	7.29	7.17	7.20	7.16	7.61	7.70	7.57	7.70	7.64
Other Asia	8.58	8.79	8.82	8.58	8.53	8.68	8.82	8.85	8.53	8.70	8.72	8.93	8.98	8.77	9.00	8.92
Latin America	4.97	4.95	5.11	5.22	5.13	5.10	5.08	5.22	5.32	5.29	5.23	5.18	5.33	5.46	5.40	5.34
Middle East	5.73	5.90	6.04	6.29	5.98	6.05	6.21	6.36	6.63	6.31	6.38	6.52	6.66	6.96	6.64	6.70
Africa	2.79	2.91	2.94	2.82	2.88	2.89	2.91	2.94	2.86	2.95	2.91	3.02	3.00	2.92	3.02	2.99
Total Non-OECD	32.94	33.81	33.83	34.04	34.00	33.92	34.68	35.12	35.15	35.46	35.10	35.67	36.19	36.34	36.96	36.29
World	82.27	84.49	82.39	83.30	84.02	83.55	84.88	83.13	83.98	85.20	84.30	85.45	84.37	85.74	87.55	85.78
of which:																
US50	*20.73*	*20.84*	*20.65*	*20.92*	*20.79*	*20.80*	*20.49*	*20.60*	*20.86*	*20.73*	*20.67*	*21.06*	*20.75*	*21.23*	*21.19*	*21.05*
Euro4	*8.25*	*8.25*	*7.95*	*8.26*	*8.21*	*8.17*	*8.42*	*7.88*	*8.07*	*8.14*	*8.13*	*7.83*	*7.85*	*8.09*	*8.20*	*7.99*
Japan	*5.29*	*6.00*	*4.94*	*5.03*	*5.46*	*5.35*	*5.96*	*4.78*	*4.81*	*5.35*	*5.22*	*5.41*	*4.65*	*4.83*	*5.41*	*5.08*
Korea	*2.16*	*2.40*	*2.07*	*2.01*	*2.23*	*2.18*	*2.28*	*2.03*	*2.02*	*2.30*	*2.16*	*2.33*	*2.06*	*2.06*	*2.34*	*2.20*
Mexico	*2.00*	*2.04*	*2.11*	*2.06*	*2.10*	*2.08*	*2.08*	*2.02*	*1.99*	*2.03*	*2.03*	*2.07*	*2.05*	*2.06*	*2.11*	*2.07*
Canada	*2.30*	*2.36*	*2.24*	*2.28*	*2.28*	*2.29*	*2.18*	*2.14*	*2.27*	*2.29*	*2.22*	*2.27*	*2.19*	*2.29*	*2.33*	*2.27*
Brazil	*2.15*	*2.12*	*2.18*	*2.25*	*2.21*	*2.19*	*2.18*	*2.20*	*2.28*	*2.29*	*2.24*	*2.23*	*2.26*	*2.34*	*2.34*	*2.29*
India	*2.57*	*2.71*	*2.58*	*2.46*	*2.55*	*2.57*	*2.71*	*2.67*	*2.48*	*2.70*	*2.64*	*2.83*	*2.76*	*2.54*	*2.79*	*2.73*
Annual Change (% per annum)																
North America	3.5	1.4	1.0	0.7	-0.7	0.6	-1.9	-0.9	-0.6	-0.5	-1.0	2.6	0.9	1.8	2.3	1.9
Europe	0.3	0.8	0.9	0.7	-1.1	0.3	1.0	-0.8	-0.7	-0.9	-0.3	-3.9	0.1	0.1	1.0	-0.7
Pacific	-1.6	2.3	2.3	-0.5	0.7	1.2	-1.6	-2.4	-2.1	-0.3	-1.6	-5.0	-1.0	1.0	1.3	-1.0
Total OECD	1.5	1.4	1.2	0.5	-0.6	0.6	-1.0	-1.1	-0.8	-0.6	-0.9	-0.8	0.4	1.2	1.7	0.6
FSU	4.7	8.6	-0.3	-0.1	-2.7	1.2	2.4	0.6	4.8	10.3	4.6	-7.5	1.5	0.4	3.8	-0.3
Europe	1.2	2.1	2.1	1.7	1.6	1.9	2.5	1.4	1.6	1.6	1.8	1.0	2.0	2.0	1.7	1.7
China	15.8	6.4	-0.4	6.4	4.5	4.2	4.2	12.1	7.1	4.6	6.9	9.4	5.5	5.6	6.9	6.8
Other Asia	6.1	2.9	1.8	2.3	-2.2	1.2	0.3	0.4	-0.5	1.9	0.5	1.3	1.4	2.7	3.6	2.3
Latin America	6.1	2.9	2.8	2.8	2.3	2.7	2.6	2.1	1.9	3.3	2.5	1.9	2.0	2.5	2.1	2.1
Middle East	6.8	5.7	5.8	5.6	5.3	5.6	5.4	5.4	5.4	5.6	5.4	4.9	4.8	5.0	5.3	5.0
Africa	4.1	4.2	5.1	2.7	1.9	3.5	0.2	0.1	1.5	2.3	1.0	3.7	2.0	2.3	2.5	2.6
Total Non-OECD	7.5	4.8	2.3	3.5	1.4	3.0	2.6	3.8	3.2	4.3	3.5	2.9	3.1	3.4	4.2	3.4
World	3.9	2.7	1.6	1.7	0.2	1.6	0.5	0.9	0.8	1.4	0.9	0.7	1.5	2.1	2.8	1.8
Annual Change (mb/d)																
North America	0.85	0.35	0.26	0.17	-0.18	0.15	-0.49	-0.23	-0.14	-0.12	-0.24	0.66	0.23	0.46	0.59	0.48
Europe	0.04	0.13	0.14	0.12	-0.18	0.05	0.16	-0.12	-0.10	-0.14	-0.05	-0.61	0.02	0.02	0.15	-0.10
Pacific	-0.14	0.21	0.18	-0.04	0.06	0.10	-0.15	-0.19	-0.17	-0.03	-0.13	-0.46	-0.08	0.08	0.12	-0.08
Total OECD	0.75	0.69	0.58	0.24	-0.30	0.30	-0.48	-0.54	-0.42	-0.28	-0.43	-0.42	0.17	0.56	0.86	0.30
FSU	0.17	0.30	-0.01	0.00	-0.11	0.05	0.09	0.02	0.18	0.40	0.17	-0.29	0.06	0.01	0.16	-0.01
Europe	0.01	0.02	0.01	0.01	0.01	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
China	0.88	0.40	-0.03	0.40	0.30	0.27	0.28	0.79	0.47	0.32	0.46	0.65	0.40	0.40	0.50	0.49
Other Asia	0.49	0.25	0.16	0.20	-0.19	0.10	0.02	0.03	-0.04	0.16	0.04	0.12	0.13	0.23	0.31	0.20
Latin America	0.28	0.14	0.14	0.14	0.12	0.13	0.13	0.11	0.10	0.17	0.13	0.10	0.11	0.13	0.11	0.11
Middle East	0.37	0.32	0.33	0.33	0.30	0.32	0.32	0.32	0.34	0.33	0.33	0.31	0.30	0.33	0.33	0.32
Africa	0.11	0.12	0.14	0.07	0.05	0.10	0.00	0.00	0.04	0.07	0.03	0.11	0.06	0.07	0.07	0.08
Total Non-OECD	2.31	1.54	0.74	1.15	0.48	0.98	0.86	1.29	1.10	1.46	1.18	0.99	1.07	1.19	1.50	1.19
World	3.05	2.23	1.32	1.39	0.18	1.28	0.38	0.74	0.69	1.18	0.75	0.58	1.24	1.76	2.36	1.49
Revisions to Oil Demand from Last Month's Report (mb/d)																
North America	-	-	-	-	0.02	0.01	-	-	-	0.07	0.02	0.18	0.03	0.05	0.00	0.06
Europe	-	-	-	0.00	0.00	0.00	0.01	0.01	0.03	0.01	0.02	(0.31)	0.01	(0.04)	(0.03)	(0.09)
Pacific	-	-	-	-	-	-	-	-	-	(0.00)	(0.00)	(0.15)	(0.02)	0.02	(0.00)	(0.04)
Total OECD	-	-	-	0.00	0.02	0.01	0.01	0.01	0.03	0.07	0.03	(0.29)	0.02	0.03	(0.03)	(0.07)
FSU	-	-	-	-	-	-	-	-	0.00	(0.01)	(0.00)	(0.25)	-	-	-	(0.06)
Europe	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
China	-	-	-	-	-	-	-	-	-	-	-	0.30	(0.06)	(0.11)	0.07	0.05
Other Asia	(0.04)	(0.09)	(0.02)	(0.06)	(0.17)	(0.09)	(0.03)	(0.06)	(0.15)	(0.30)	(0.14)	(0.11)	(0.10)	(0.09)	(0.18)	(0.12)
Latin America	0.01	(0.01)	(0.01)	0.04	0.03	0.01	0.00	0.01	0.04	0.05	0.03	0.02	0.04	0.07	0.07	0.05
Middle East	(0.07)	(0.07)	(0.07)	(0.07)	(0.07)	(0.07)	(0.07)	(0.07)	(0.07)	(0.07)	(0.07)	(0.07)	(0.07)	(0.08)	(0.07)	(0.07)
Africa	(0.00)	0.01	0.03	0.02	(0.02)	0.01	(0.05)	(0.04)	0.00	(0.03)	(0.03)	(0.02)	(0.03)	0.01	(0.02)	(0.02)
Total Non-OECD	(0.11)	(0.16)	(0.08)	(0.07)	(0.25)	(0.14)	(0.17)	(0.17)	(0.18)	(0.37)	(0.22)	(0.15)	(0.24)	(0.21)	(0.13)	(0.18)
World	(0.11)	(0.16)	(0.08)	(0.07)	(0.23)	(0.14)	(0.15)	(0.15)	(0.15)	(0.30)	(0.19)	(0.44)	(0.22)	(0.18)	(0.16)	(0.25)
Revisions to Oil Demand Growth from Last Month's Report (mb/d)																
World	(0.06)	(0.09)	(0.01)	0.02	(0.03)	(0.03)	0.01	(0.07)	(0.08)	(0.07)	(0.05)	(0.29)	(0.07)	(0.03)	0.14	(0.06)

Table 3
WORLD OIL PRODUCTION
(million barrels per day)

	2005	2006	2007	4Q06	1Q07	2Q07	3Q07	4Q07	Jan 07	Feb 07	Mar 07
OPEC											
Crude Oil											
Saudi Arabia	9.06	8.96		8.60	8.34				8.42	8.32	8.27
Iran	3.88	3.89		3.88	3.86				3.90	3.86	3.81
Iraq	1.81	1.90		1.85	1.88				1.70	1.98	1.97
UAE	2.46	2.62		2.60	2.57				2.60	2.54	2.57
Kuwait	2.13	2.21		2.20	2.15				2.18	2.14	2.12
Neutral Zone	0.58	0.58		0.57	0.56				0.56	0.56	0.56
Qatar	0.77	0.82		0.81	0.80				0.81	0.80	0.80
Angola[6]					1.54				1.51	1.54	1.57
Nigeria	2.40	2.24		2.26	2.22				2.28	2.25	2.15
Libya	1.64	1.71		1.74	1.69				1.70	1.69	1.69
Algeria	1.34	1.35		1.34	1.33				1.34	1.32	1.32
Venezuela	2.71	2.56		2.50	2.44				2.49	2.43	2.42
Indonesia	0.94	0.89		0.86	0.85				0.86	0.84	0.85
Total Crude Oil	29.74	29.72		29.22	30.22				30.34	30.25	30.08
Total NGLs[1]	4.46	4.69	4.94	4.75	4.86	4.89	4.96	5.06	4.86	4.85	4.86
Total OPEC	34.20	34.41		33.97	35.08				35.19	35.10	34.94
OPEC incl. Angola[6]	35.45	35.82		35.40	35.08				35.19	35.10	34.94
NON-OPEC[2]											
OECD											
North America	14.14	14.23	14.21	14.25	14.31	14.10	14.19	14.26	14.20	14.37	14.35
United States	7.32	7.37	7.45	7.47	7.47	7.55	7.37	7.40	7.40	7.51	7.49
Mexico	3.76	3.68	3.46	3.50	3.53	3.50	3.43	3.38	3.55	3.55	3.50
Canada	3.06	3.18	3.31	3.28	3.31	3.05	3.39	3.48	3.25	3.31	3.36
Europe	5.61	5.20	5.19	5.19	5.24	5.13	5.09	5.31	5.20	5.27	5.25
UK	1.84	1.66	1.71	1.66	1.73	1.69	1.63	1.79	1.70	1.75	1.74
Norway	2.97	2.78	2.73	2.76	2.75	2.69	2.70	2.77	2.75	2.77	2.75
Others	0.80	0.76	0.75	0.77	0.76	0.75	0.76	0.75	0.76	0.75	0.76
Pacific	0.58	0.57	0.65	0.62	0.60	0.63	0.68	0.70	0.58	0.65	0.58
Australia	0.54	0.53	0.60	0.58	0.56	0.59	0.61	0.62	0.54	0.61	0.54
Others	0.04	0.04	0.06	0.04	0.04	0.04	0.06	0.08	0.04	0.04	0.04
Total OECD	20.33	20.00	20.06	20.06	20.15	19.86	19.95	20.26	19.99	20.29	20.18
NON-OECD											
Former USSR	11.64	12.09	12.60	12.36	12.53	12.61	12.53	12.73	12.44	12.58	12.58
Russia	9.48	9.69	9.97	9.80	9.91	9.95	10.02	10.00	9.89	9.92	9.92
Others	2.16	2.40	2.63	2.56	2.62	2.66	2.51	2.73	2.55	2.66	2.66
Asia	6.27	6.38	6.52	6.38	6.52	6.51	6.52	6.55	6.57	6.50	6.49
China	3.62	3.67	3.77	3.64	3.76	3.75	3.77	3.78	3.81	3.74	3.73
Malaysia	0.74	0.75	0.78	0.78	0.78	0.77	0.77	0.79	0.78	0.78	0.78
India	0.78	0.79	0.82	0.82	0.82	0.82	0.82	0.82	0.81	0.82	0.82
Others	1.13	1.16	1.16	1.15	1.17	1.17	1.16	1.15	1.16	1.17	1.17
Europe	0.16	0.15	0.13	0.14	0.14	0.14	0.13	0.13	0.14	0.14	0.14
Latin America	4.29	4.40	4.51	4.42	4.42	4.48	4.52	4.60	4.40	4.40	4.44
Brazil	1.99	2.10	2.28	2.15	2.17	2.25	2.30	2.40	2.13	2.15	2.23
Argentina	0.78	0.77	0.76	0.77	0.76	0.76	0.76	0.75	0.77	0.76	0.76
Colombia	0.53	0.53	0.52	0.53	0.52	0.52	0.52	0.52	0.53	0.52	0.52
Ecuador	0.53	0.54	0.50	0.53	0.51	0.51	0.50	0.48	0.52	0.52	0.49
Others	0.46	0.46	0.45	0.45	0.45	0.45	0.45	0.44	0.46	0.45	0.44
Middle East[3]	1.86	1.73	1.65	1.69	1.67	1.65	1.66	1.63	1.67	1.66	1.66
Oman	0.79	0.74	0.72	0.73	0.72	0.72	0.71	0.71	0.73	0.72	0.72
Syria	0.46	0.42	0.38	0.40	0.39	0.38	0.38	0.37	0.40	0.39	0.39
Yemen	0.42	0.38	0.37	0.36	0.36	0.36	0.38	0.37	0.36	0.35	0.36
Africa	3.72	3.95	2.68	4.00	2.59	2.66	2.72	2.76	2.58	2.60	2.59
Egypt	0.70	0.67	0.66	0.66	0.66	0.66	0.66	0.65	0.66	0.66	0.66
Angola[6]	1.23	1.37		1.38	1.54						
Gabon	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23
Others	1.56	1.67	1.79	1.72	0.16	1.77	1.84	1.87	1.69	1.71	1.70
Total Non-OECD	27.94	28.70	28.10	28.98	27.87	28.05	28.08	28.40	27.82	27.89	27.90
Processing Gains[4]	1.86	1.90	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92
Other Biofuels[5]	0.12	0.18	0.34	0.18	0.34	0.34	0.34	0.34	0.34	0.34	0.34
TOTAL NON-OPEC	50.25	50.78	50.42	51.14	50.28	50.18	50.30	50.93	50.07	50.45	50.34
Non-OPEC excl. Angola[6]	49.00	49.37	50.42	49.70	50.28	50.18	50.30	50.93	50.07	50.45	50.34
TOTAL SUPPLY	84.45	85.19		85.10	85.36				85.27	85.55	85.28

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 will reportedly cease from January 2007.
2 Comprises crude oil, condensates, NGLs and oil from non-conventional sources. No allowance is made in the non-OPEC forecast for exceptional events, which have, at certain times historically, reduced non-OPEC supply by 300-400 kbd on an annual basis.
3 Includes small amounts of production from Israel, Jordan and Bahrain.
4 Net volumetric gains and losses in refining (excludes net gain/loss in FSU, China and non-OECD Europe) and marine transportation losses.
5 Comprises Fuel Ethanol and Biodiesel supply from outside Brazil and US.
6 With effect from OMR of 13 February 2007, Angolan production will be reclassified within OPEC and excluded from the Non-OPEC total, for the period January 2007 onwards. Secondary aggregates allow comparison with previous year totals by including Angola within OPEC retroactively

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			
	Oct2006	Nov2006	Dec2006	Jan2007	Feb2007*	Feb2004	Feb2005	Feb2006	1Q2006	2Q2006	3Q2006	4Q2006
North America												
Crude	468.3	466.6	436.4	449.6	449.9	400.3	424.5	467.8	0.07	-0.05	0.02	-0.26
Motor Gasoline	233.1	234.8	242.5	256.4	245.6	234.9	260.4	257.5	0.07	-0.01	0.03	-0.03
Middle Distillate	216.2	210.2	217.3	210.6	196.9	180.0	190.7	213.5	-0.20	0.06	0.26	-0.08
Residual Fuel Oil	51.9	51.9	50.2	51.3	43.9	49.1	50.1	53.1	0.07	0.02	0.01	-0.03
Total Products[3]	701.6	688.8	694.0	687.4	637.1	601.0	655.9	676.6	-0.26	0.38	0.60	-0.33
Total[4]	1328.9	1309.1	1274.3	1276.0	1227.7	1143.4	1215.6	1280.0	-0.20	0.40	0.77	-0.79
Europe												
Crude	333.0	332.9	339.8	309.4	310.7	320.0	330.2	339.3	0.18	-0.07	-0.11	0.13
Motor Gasoline	106.1	110.6	113.0	118.0	114.2	122.3	128.1	120.5	-0.01	-0.12	0.04	0.10
Middle Distillate	263.3	260.8	273.7	278.1	276.7	229.3	238.3	262.0	-0.11	0.11	0.16	0.03
Residual Fuel Oil	77.5	76.9	75.6	83.2	78.6	74.2	70.0	70.9	-0.04	0.06	-0.02	0.03
Total Products[3]	551.7	554.5	567.1	584.5	574.8	525.0	540.0	555.5	-0.16	0.04	0.25	0.12
Total[4]	953.9	959.4	974.2	964.8	955.5	919.0	938.5	971.1	0.05	-0.06	0.15	0.19
Pacific												
Crude	178.0	184.4	173.3	171.0	160.5	181.9	168.4	157.6	0.13	0.11	-0.07	-0.02
Motor Gasoline	23.8	23.2	22.2	26.3	25.3	26.3	27.1	24.9	0.02	0.00	-0.01	-0.01
Middle Distillate	87.4	82.5	73.4	81.3	70.7	60.9	58.2	63.7	0.00	0.10	0.18	-0.14
Residual Fuel Oil	23.5	21.9	22.6	21.7	21.8	21.9	21.6	21.0	-0.01	0.04	0.01	-0.01
Total Products[3]	209.6	199.1	183.4	191.5	179.2	171.1	171.3	171.8	0.01	0.16	0.30	-0.30
Total[4]	459.5	456.0	428.2	436.7	413.8	421.8	407.0	395.6	0.15	0.30	0.25	-0.33
Total OECD												
Crude	979.3	983.8	949.4	930.1	921.0	902.2	923.1	964.6	0.39	-0.01	-0.16	-0.15
Motor Gasoline	363.0	368.6	377.6	400.8	385.0	383.5	415.6	403.0	0.08	-0.13	0.06	0.06
Middle Distillate	567.0	553.5	564.4	570.0	544.4	470.2	487.1	539.1	-0.32	0.27	0.60	-0.18
Residual Fuel Oil	152.8	150.7	148.5	156.2	144.3	145.2	141.7	145.0	0.01	0.12	-0.01	-0.01
Total Products[3]	1462.8	1442.4	1444.4	1463.4	1391.1	1297.1	1367.1	1403.9	-0.42	0.58	1.15	-0.51
Total[4]	2742.3	2724.5	2676.7	2677.6	2597.1	2484.2	2561.1	2646.6	0.00	0.64	1.17	-0.93

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			
	Oct2006	Nov2006	Dec2006	Jan2007	Feb2007*	Feb2004	Feb2005	Feb2006	1Q2006	2Q2006	3Q2006	4Q2006
North America												
Crude	688.6	688.6	688.6	688.6	688.6	646.9	682.0	684.8	0.02	0.02	0.00	0.01
Products	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	0.00	0.00	0.00	0.00
Europe												
Crude	174.7	174.9	175.0	174.4	174.4	156.9	164.0	170.2	0.04	0.04	0.02	-0.01
Products	234.7	233.3	235.3	235.9	235.9	213.7	211.5	235.2	-0.03	0.00	-0.01	0.00
Pacific												
Crude	381.5	381.6	384.5	384.6	384.6	384.7	384.5	380.0	-0.01	0.00	0.01	0.03
Products	11.8	11.8	11.8	11.8	11.8	11.0	11.0	11.3	0.00	0.00	0.00	0.00
Total OECD												
Crude	1244.8	1245.1	1248.1	1247.6	1247.6	1188.5	1230.5	1234.9	0.04	0.06	0.03	0.04
Products	248.5	247.1	249.1	249.8	249.8	226.8	224.5	248.5	-0.04	0.01	-0.01	0.00
Total[4]	1494.3	1493.2	1498.2	1498.3	1498.3	1416.2	1456.0	1484.5	0.01	0.07	0.02	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 December 2005		End March 2006		End June 2006		End September 2006		End December 2006 [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	178.1	82	169.7	79	169.7	75	179.2	78	177.6	-
Mexico	43.9	21	41.7	21	42.1	21	47.0	23	42.3	-
United States[4]	1699.6	83	1693.7	83	1731.6	83	1788.3	87	1722.9	-
Total[4]	1943.7	78	1927.2	77	1965.5	77	2036.5	80	1964.9	76
Pacific										
Australia	32.7	36	35.5	39	38.9	42	35.3	37	34.8	-
Japan	612.1	103	620.1	130	627.2	130	649.1	121	630.8	-
Korea	134.9	59	137.4	68	155.4	77	160.5	70	151.8	-
New Zealand	8.5	53	7.3	47	6.8	46	7.0	44	7.0	-
Total	788.2	85	800.3	102	828.3	105	851.9	97	824.5	93
Europe[5]										
Austria	20.4	69	19.0	63	19.7	62	19.0	65	21.5	-
Belgium	28.6	45	27.3	52	30.4	57	30.5	56	30.2	-
Czech Republic	18.8	98	19.6	90	19.5	88	19.3	94	19.7	-
Denmark	20.3	102	19.5	99	20.4	106	21.1	111	19.0	-
Finland	25.1	113	26.7	120	30.5	136	26.8	116	26.6	-
France	195.6	93	196.2	104	188.7	97	187.5	96	192.4	-
Germany	282.6	111	279.9	110	281.4	104	278.5	103	276.5	-
Greece	33.1	69	35.4	93	34.9	86	38.2	80	39.2	-
Hungary	17.6	120	20.8	127	17.6	110	17.4	100	16.5	-
Ireland	11.6	55	13.1	72	12.6	71	13.9	70	12.5	-
Italy	132.0	71	131.5	81	126.0	76	134.1	79	133.1	-
Luxembourg	0.8	11	0.9	15	1.0	17	0.9	15	1.0	-
Netherlands	116.4	116	120.5	121	123.1	119	121.1	119	118.7	-
Norway	30.7	123	21.9	91	21.8	90	29.4	123	35.1	-
Poland	35.2	79	35.5	74	35.7	67	37.3	71	41.5	-
Portugal	25.7	78	24.7	83	24.7	81	23.8	83	24.0	-
Slovak Republic	6.5	83	8.3	102	7.7	89	7.4	94	7.5	-
Spain	128.6	79	130.2	84	129.2	82	133.9	85	134.8	-
Sweden	38.0	102	38.4	109	39.6	113	38.6	102	33.7	-
Switzerland	37.7	128	37.7	144	39.3	141	38.9	133	38.1	-
Turkey	51.1	100	51.6	79	51.6	78	53.7	83	55.5	-
United Kingdom	95.2	50	97.4	54	99.0	56	97.4	54	108.5	-
Total	1351.2	86	1356.1	90	1354.3	88	1368.6	88	1385.5	91
Total OECD	4083.1	82	4083.6	85	4148.2	85	4257.1	86	4174.9	84
DAYS OF IEA Net Imports[6]	-	114	-	115	-	116	-	119	-	121

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 2006 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. 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]*		
4Q2003	3928	1411	2517	79	28	50
1Q2004	3888	1423	2465	81	30	51
2Q2004	3974	1429	2545	81	29	52
3Q2004	4016	1435	2581	80	29	51
4Q2004	3997	1450	2547	79	29	50
1Q2005	4005	1462	2543	82	30	52
2Q2005	4116	1494	2623	84	30	53
3Q2005	4132	1494	2638	83	30	53
4Q2005	4083	1487	2597	82	30	52
1Q2006	4084	1487	2597	85	31	54
2Q2006	4148	1493	2655	85	31	54
3Q2006	4257	1495	2762	86	30	56
4Q2006	4175	1498	2677	84	30	54

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 4Q2006 (when latest forecasts are used).

Table 6

IEA Member Country Destinations of Selected Crude Streams[1]

(million barrels per day)

	2004	2005	2006	1Q06	2Q06	3Q06	4Q06	Nov 06	Dec 06	Jan 07	Year Earlier Jan 06	Year Earlier change
Saudi Light & Extra Light												
North America	0.55	0.46	0.60	0.51	0.68	0.62	0.60	0.73	0.53	0.72	0.40	0.32
Europe	1.03	0.90	0.78	0.83	0.80	0.72	0.78	0.72	0.73	0.77	0.80	-0.03
Pacific	1.24	1.31	1.32	1.40	1.33	1.29	1.28	1.28	1.26	1.07	1.33	-0.26
Saudi Medium												
North America	0.80	0.81	0.64	0.65	0.61	0.68	0.61	0.65	0.64	0.65	0.60	0.04
Europe	0.11	0.16	0.14	0.17	0.14	0.14	0.10	0.08	0.08	0.08	0.19	-0.11
Pacific	0.23	0.26	0.35	0.38	0.35	0.35	0.32	0.33	0.31	0.28	0.35	-0.07
Saudi Heavy												
North America	0.22	0.17	0.21	0.21	0.21	0.21	0.19	0.19	0.17	0.20	0.22	-0.02
Europe	0.23	0.23	0.18	0.14	0.22	0.21	0.14	0.11	0.11	0.12	0.09	0.03
Pacific	0.15	0.25	0.23	0.25	0.20	0.22	0.23	0.21	0.23	0.20	0.23	-0.04
Iraqi Basrah Light[2]												
North America	0.71	0.60	0.52	0.44	0.60	0.60	0.46	0.52	0.39	0.59	0.46	0.13
Europe	0.21	0.23	0.32	0.24	0.29	0.40	0.36	0.39	0.32	0.29	0.29	0.00
Pacific	0.12	0.06	0.08	0.08	0.09	0.10	0.07	0.06	0.09	0.06	0.08	-0.02
Iraqi Kirkuk												
North America	0.02	..	0.00	..	..	0.01	..	..	..	..	..	..
Europe	0.08	0.05	0.01	..	..	0.04	0.01	..	..	0.03	..	..
Pacific	..	..	..	..	..	..	..	..	..	..	..	..
Iranian Light												
North America	..	..	..	..	..	..	..	..	..	..	..	..
Europe	0.24	0.20	0.26	0.20	0.27	0.31	0.27	0.16	0.35	0.34	0.12	0.22
Pacific	0.16	0.15	0.13	0.19	0.12	0.10	0.11	0.09	0.16	0.11	0.16	-0.04
Iranian Heavy[3]												
North America	..	..	..	..	..	..	..	..	..	..	..	..
Europe	0.57	0.63	0.58	0.48	0.57	0.67	0.60	0.74	0.57	0.58	0.50	0.07
Pacific	0.65	0.62	0.56	0.64	0.48	0.51	0.61	0.65	0.60	0.59	0.52	0.08
Venezuelan Light & Medium												
North America	0.67	0.82	0.66	0.76	0.68	0.62	0.57	0.53	0.51	0.62	0.71	-0.09
Europe	0.01	0.04	0.11	0.12	0.15	0.08	0.11	0.14	0.11	0.08	0.11	-0.03
Pacific	..	..	..	..	..	..	..	..	..	..	..	..
Venezuelan 22 API and heavier												
North America	0.88	0.72	0.72	0.72	0.72	0.74	0.70	0.72	0.73	0.44	0.80	-0.36
Europe	0.05	0.06	0.06	0.08	0.05	0.06	0.05	0.05	0.06	0.07	0.10	-0.03
Pacific	..	..	..	..	..	..	..	..	..	..	..	..
Mexican Maya												
North America	1.36	1.27	1.24	1.26	1.24	1.30	1.15	1.19	1.02	1.19	1.22	-0.03
Europe	0.16	0.17	0.16	0.13	0.20	0.16	0.15	0.13	0.12	0.14	0.14	-0.01
Pacific	0.00	..	..	..	..	..	..	..	..	..	..	..
Mexican Isthmus												
North America	..	0.03	0.04	0.09	0.03	0.01	0.02	0.04	0.01	0.03	0.07	-0.04
Europe	0.01	0.03	0.01	0.01	0.00	0.00	0.01	0.01	0.01	..	0.02	..
Pacific	0.00	..	..	..	..	..	..	..	..	..	..	..
Russian Urals												
North America	0.12	0.13	0.09	..	0.16	0.16	0.05	..	0.11	0.08	..	..
Europe	1.86	1.77	1.68	1.68	1.83	1.66	1.54	1.62	1.59	1.75	1.62	0.13
Pacific	0.01	0.00	0.00	..	..	0.01	..	..	..	..	..	..
Nigerian Light[4]												
North America	0.80	0.90	0.79	0.87	0.79	0.78	0.72	0.67	0.71	1.04	0.84	0.20
Europe	0.28	0.35	0.33	0.28	0.27	0.39	0.37	0.37	0.36	0.27	0.22	0.05
Pacific	0.11	0.05	0.04	0.09	0.03	0.02	0.03	..	0.06	0.03	0.14	-0.10
Nigerian Medium												
North America	0.23	0.17	0.17	0.19	0.17	0.16	0.17	0.24	0.09	0.16	0.19	-0.03
Europe	0.04	0.07	0.10	0.08	0.08	0.08	0.14	0.14	0.20	0.02	0.07	-0.04
Pacific	0.01	0.01	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 North America includes United States and Canada.
IEA Europe includes all countries in OECD Europe except Hungary, Poland and the Slovak Republic.
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)

	2004	2005	2006	1Q2006	2Q2006	3Q2006	4Q2006	Nov-06	Dec-06	Jan-07	Year Earlier Jan-06	% change
Crude Oil												
North America	8431	8384	8154	7740	8265	8686	7919	7734	7814	8327	7274	14%
Europe	9478	9792	9771	9400	9747	10159	9770	9703	9783	9322	9773	-5%
Pacific	6659	6801	6813	7400	6508	6680	6674	6967	6859	6973	7243	-4%
Total OECD	24569	24978	24738	24540	24520	25524	24363	24404	24456	24622	24610	0%
LPG												
North America	24	18	14	8	8	12	28	33	38	17	4	275%
Europe	225	248	249	279	243	210	263	315	248	264	312	-15%
Pacific	541	527	579	651	576	595	497	495	503	589	593	-1%
Total OECD	790	793	842	938	826	818	788	843	790	870	909	-4%
Naphtha												
North America	99	110	62	41	49	64	96	101	73	44	71	-38%
Europe	282	273	311	352	277	304	313	340	284	348	375	-7%
Pacific	769	746	754	692	731	810	783	794	815	794	701	13%
Total OECD	1150	1129	1128	1085	1057	1177	1192	1236	1172	1186	1147	3%
Gasoline[3]												
North America	794	1016	1147	1113	1365	1166	946	982	912	923	1074	-14%
Europe	137	165	155	194	149	122	157	162	173	197	233	-16%
Pacific	105	102	97	84	135	74	96	70	120	71	80	-11%
Total OECD	1035	1283	1400	1391	1648	1363	1199	1215	1205	1191	1387	-14%
Jet & Kerosene												
North America	101	130	151	79	191	203	129	74	170	138	119	15%
Europe	293	375	375	313	382	398	408	406	388	254	351	-28%
Pacific	77	66	71	129	39	43	76	50	111	87	136	-36%
Total OECD	471	571	598	521	612	644	613	530	668	478	606	-21%
Gasoil/Diesel												
North America	123	142	170	210	173	181	116	103	103	125	350	-64%
Europe	751	845	966	1079	949	901	937	933	880	937	1059	-12%
Pacific	74	79	81	78	100	65	81	82	93	78	74	6%
Total OECD	947	1066	1216	1366	1222	1147	1134	1118	1076	1140	1483	-23%
Heavy Fuel Oil												
North America	453	525	340	481	320	309	254	242	246	357	607	-41%
Europe	397	491	480	520	479	421	502	435	553	414	468	-11%
Pacific	76	85	92	122	105	76	65	61	70	83	121	-31%
Total OECD	926	1101	912	1122	904	806	821	737	868	854	1196	-29%
Other Products												
North America	872	1005	1106	972	1162	1298	991	988	946	1074	1121	-4%
Europe	676	781	898	894	866	920	914	986	863	1016	902	13%
Pacific	256	248	243	270	209	224	267	284	247	245	280	-13%
Total OECD	1805	2033	2247	2136	2236	2441	2173	2258	2056	2335	2303	1%
Total Products												
North America	2466	2947	2991	2903	3268	3233	2560	2524	2487	2678	3347	-20%
Europe	2759	3177	3435	3630	3343	3275	3494	3576	3388	3430	3699	-7%
Pacific	1898	1852	1918	2026	1894	1888	1865	1836	1959	1947	1985	-2%
Total OECD	7123	7976	8343	8559	8505	8397	7919	7937	7835	8054	9032	-11%
Total Oil												
North America	10897	11332	11145	10643	11533	11919	10479	10258	10302	11005	10941	1%
Europe	12237	12969	13206	13029	13089	13434	13264	13279	13171	12752	13473	-5%
Pacific	8558	8654	8731	9426	8402	8568	8539	8804	8818	8920	9229	-3%
Total OECD	31692	32954	33082	33099	33025	33921	32283	32341	32290	32676	33642	-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

OIL MARKET REPORT CONTACTS

Editorial Enquiries

Editor — Lawrence Eagles
Head, Oil Industry & Markets Division
(+33) 0*1 40 57 65 90
e-mail: lawrence.eagles@iea.org

Demand — Eduardo Lopez
(+33) 0*1 40 57 65 93
e-mail: eduardo.lopez@iea.org

Supply — David Fyfe
(+33) 0*1 40 57 65 94
e-mail: david.fyfe@iea.org

Prices/OECD Stocks — Julius Walker
(+33) 0*1 40 57 65 22
e-mail: julius.walker@iea.org

Refinery Activity — David Martin
(+33) 0*1 40 57 65 95
e-mail: david.martin@iea.org

OECD Stocks/Trade — Toril Ekeland Bosoni
(+33) 0*1 40 57 66 36
e-mail: toril.bosoni@iea.org

Statistics/Freight/Trade — James Ryder
(+33) 0*1 40 57 66 18
e-mail: james.ryder@iea.org

End-User Prices/Statistical Support — Miklos Bankuti
(+33) 0*1 40 57 67 76
e-mail: miklos.bankuti @iea.org

Editorial Assistant — Anne Mayne
(+33) 0*1 40 57 65 96
e-mail: anne.mayne@iea.org

Fax: *(+33) 0*1 40 57 65 99/40 57 65 09*

* 0 only within France

Media Enquiries

Press Office — Gwyn Darling
(+33) 0*1 40 57 65 54
e-mail: ieapressoffice@iea.org

Subscription and Delivery Enquiries

Oil Market Report Subscriptions (Attn: Ms. Sandra Coleman)
International Energy Agency
BP 586-75726 PARIS Cedex 15, France

Tel. +33 (0) 1 40 57 65 57
Fax. +33 (0) 1 40 57 65 59

e-mail: sandra.coleman@iea.org

Users' Guide to the IEA Oil Market Report

Readers are referred to the *Users' Guide*, published in conjunction with the *Annual Statistical Supplement* (current issue dated 11 August 2006), for information on the data sources, definitions, technical terms and general approach used in preparing the Report. 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 (© 2007 Platts - a division of McGraw-Hill Inc.).

INTERNATIONAL ENERGY AGENCY/AGENCE INTERNATIONALE DE L'ENERGIE

OIL MARKET REPORT

www.oilmarketreport.org

11 May 2007

HIGHLIGHTS

- **Nigerian crude capacity shut-ins** rose to 815 kb/d in early May, adding to pressures caused by a gasoline market already tightened by an unusually high level of unplanned refinery outages. Unsurprisingly, gasoline remains the primary driver behind oil prices, with cracks and US retail prices reaching levels not seen since the post-Hurricane Katrina spike in September 2005.

- **Seasonal refinery maintenance** and a spate of unplanned outages is expected to depress global throughputs. This implies, with demand increasing in June, that there will be a further tightening of product stocks. Refinery runs, and therefore crude demand, should rise sharply in July (2.5 mb/d over March) as refiners seek to meet peak summer demand.

- **Preliminary OECD stock data** continue to point to a 930 kb/d draw in first-quarter total oil stocks, following on from a draw of similar magnitude in the previous quarter. Forward demand cover provided by total oil inventories remains around the five-year average, but gasoline stocks are low in all regions.

- **April world oil output** rose by 55 kb/d to 85.5 mb/d, with OPEC supply levelling off near 30.3 mb/d. Non-OPEC growth in 2007 is trimmed to 1.0 mb/d, plus 0.2 mb/d of OPEC NGLs, which leaves the 2.3 mb/d rise in the 'call on OPEC' by 4Q running well ahead of expected OPEC capacity additions. This implies lower spare capacity later in the year.

- **Global oil product demand** is revised down marginally to 84.2 mb/d in 2006 and 85.7 mb/d in 2007 following adjustments to baseline historical data. Changes are centred in the Middle East, but Chinese demand has also been revised down, despite strong 1Q growth.

Next Issue: 12 June 2007

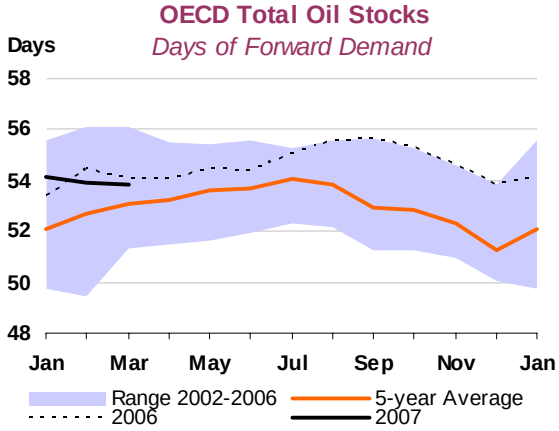
CONTENTS

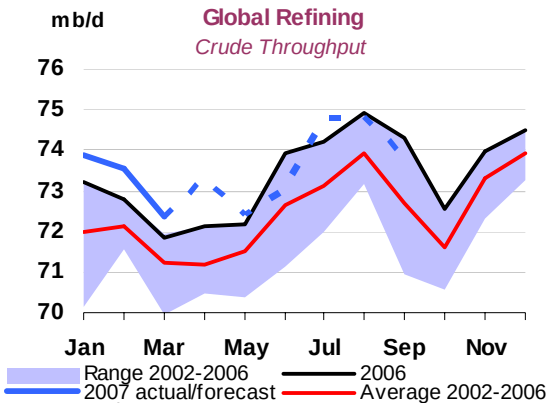
HALF-FULL OR HALF-EMPTY?

Preliminary first quarter data in this report do little to answer the debate on oil market tightness. Some argue that stocks are adequate, the market is balanced and there is little cause for concern. Others (like us) argue that it is tightening.

Nominally, stocks appear comfortable: OECD crude oil and product stocks are in the upper portion of the five-year range but there is little doubt that a 930 kb/d stock draw in the first quarter - hot on the heels of a 890 kb/d draw in 4Q06 - is dramatic. This leads on to an academic debate as to whether the build in stocks over the past few years represents increased demand cover for low spare capacity and additional supply risks, or whether it is a phenomenon financed by fund money. However, we will leave this for another time.

Forward inventory cover has also flattened and looks to be less concerning than a month ago, following small upward revisions to stocks and downward revisions to demand. However, that should not be too surprising considering the incredibly mild winter, which moderated the impact of significant OPEC cutbacks. No analyst, however, will dispute the low level of gasoline stocks in all OECD regions. In particular, US gasoline stock cover is at a 16-year low for this time of year - pushing pump prices to near record levels.



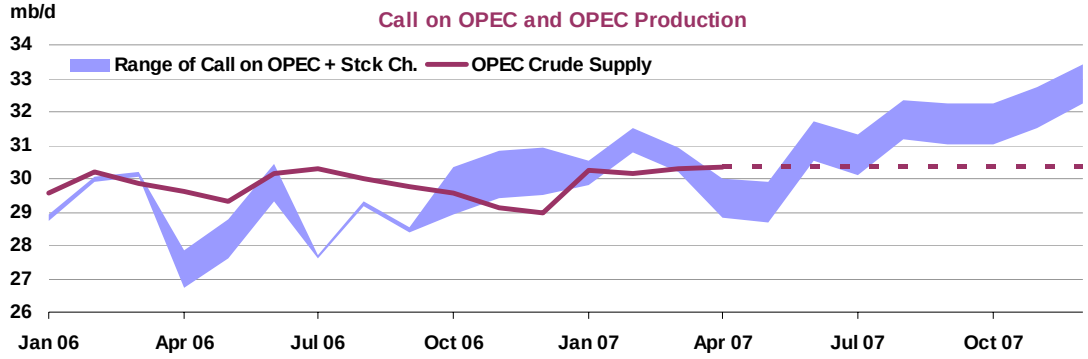


Yet, the recent trend in stocks and current stock levels are less of a concern than the outlook for the next two quarters. The preliminary 8.2 mb build in key OECD country stocks in April represents a surplus of less than 300 kb/d, around a third of the level expected. As with final February stock data, revisions are likely, but these could equally apply to supply or demand as to stocks. More importantly, there is the need for a significant increase in supplies to match the forecast 1.6 mb/d jump in June oil product demand, which looks unlikely to happen.

From a refining perspective, things look slightly different. Seasonally, refinery throughputs tend to hit a low between March and May and then rise through to August. Therefore, while increased crude availability in the first quarter may have influenced prices, it would have done little to rectify the current tightness in gasoline supplies, given a high level of outages, particularly in gasoline-producing catalytic cracking units.

By June, global refinery throughputs should have risen by (a maintenance-constrained) 660 kb/d from May, and although there may be some upside to this figure (see Refinery section), the growth in runs is expected to lag the 1.6 mb/d jump in global product demand. That certainly implies a tightening of product stocks, but also in total oil stocks if crude supplies remain at current levels. Unplanned outages permitting, there should be plenty of available capacity to meet forecast product demand increases in July and August, but to achieve this without causing a steep decline in crude stocks, requires an increase in OPEC output before the summer.

Further, there are some disquieting signs for supplies of high gasoline-yielding light sweet crudes from Nigeria. A spate of bombings and kidnappings in early May has shut a further 220 kb/d on top of the 600 kb/d of capacity that was offline on average during April. Further, reports of an imminent restart of 350 kb/d of Forcados production seem premature in the current environment.



While oil analysts will continue to debate the adequacy of current stocks, some things are very clear:

- The observed OECD stock draw of around 900 kb/d over the past six months is unusually high;
- Gasoline stocks are tight and may tighten further in June unless refinery capacity rises more sharply than current forecasts suggest;
- Crude stocks will tighten if OPEC production stays at current levels through to the end of the third quarter - as some officials have suggested;
- Recent developments in Nigeria highlight ongoing supply risks.

While the optimist can point to the glass being half-full, this report anticipates a thirsty market in the months ahead.

DEMAND

Summary

- **Global oil product demand** has been revised down marginally to 84.2 mb/d in 2006 and 85.7 mb/d in 2007 (approximately -100 kb/d in both years). Changes in 2006 are related to baseline adjustments in various, mostly non-OECD, countries, particularly in the Middle East. Overall, world demand is estimated to have grown by 0.8% or 0.7 mb/d in 2006, and is expected to rise by 1.8% in 2007 or 1.5 mb/d.

Global Oil Demand (2005-2007)

(million barrels per day)

	1Q05	2Q05	3Q05	4Q05	2005	1Q06	2Q06	3Q06	4Q06	2006	1Q07	2Q07	3Q07	4Q07	2007
Africa	3.0	2.9	2.8	2.9	2.9	2.9	2.9	2.8	2.9	2.9	3.0	3.0	2.9	3.0	3.0
Americas*	30.6	30.4	30.8	30.7	30.6	30.2	30.3	30.8	30.7	30.5	31.0	30.7	31.4	31.4	31.2
Asia/Pacific**	24.9	23.4	23.4	24.2	24.0	25.1	24.0	23.6	24.7	24.3	25.2	24.5	24.4	25.6	24.9
Europe***	16.4	15.9	16.2	16.4	16.2	16.6	15.8	16.2	16.3	16.2	15.9	15.8	16.2	16.5	16.1
FSU	3.8	3.7	3.8	3.9	3.8	3.9	3.7	4.0	4.3	4.0	3.8	3.6	4.1	4.4	4.0
Middle East	5.9	6.0	6.2	6.0	6.0	6.1	6.2	6.5	6.3	6.3	6.4	6.5	6.8	6.5	6.5
World	**84.6**	**82.3**	**83.2**	**84.0**	**83.5**	**84.9**	**83.0**	**83.8**	**85.1**	**84.2**	**85.3**	**84.3**	**85.8**	**87.5**	**85.7**
Annual Chg (%)	2.7	1.5	1.6	0.2	1.5	0.4	0.8	0.8	1.3	0.8	0.5	1.5	2.3	2.8	1.8
Annual Chg (mb/d)	2.2	1.3	1.3	0.1	1.2	0.3	0.7	0.6	1.1	0.7	0.5	1.3	1.9	2.4	1.5
Changes from last month's report (mb/d)	0.06	-0.04	-0.10	0.01	-0.02	0.00	-0.13	-0.14	-0.05	-0.08	-0.12	-0.12	0.02	-0.06	-0.07

- **OECD oil product demand** remains essentially unchanged in 2006 at 49.2 mb/d, but is revised up slightly in 2007 by about 100 kb/d to 49.6 mb/d given upward revisions to Germany's 2006 baseline, which are carried forward in the forecast. Across all regions, March temperatures continued to be much milder than the ten-year average, but the trends appears to have diverged in April, with the Pacific getting cooler and Europe much warmer.

- **Non-OECD oil product demand** has been adjusted downwards slightly by some 100 kb/d in both 2006 and 2007. Historical and forecast data were reassessed following the submission of preliminary 2005 data and revisions to previous years, which were particularly marked in the Middle East, but do not resolve all of the outstanding data issues in the region. Chinese 1Q07 demand was also adjusted down by some 250 kb/d following data revisions, but was slightly offset by higher Indian growth. Non-OECD oil product consumption is now estimated at 35.0 mb/d in 2006, an increase of 3.2% or +1.1 mb/d, and is forecast to rise to 36.2 mb/d in 2007 (+3.3% or +1.2 mb/d).

- **April's International Monetary Fund worldwide economic forecasts** – which together with OECD data form the foundation of our econometric demand model – are incorporated in this report. The IMF's *World Economic Outlook* assessment implies a continuation of robust global oil product demand, with only marginal changes compared with the September 2006 edition, with stronger non-OECD growth compensating for weaker OECD gains

- **China's apparent demand** has been revised down slightly to 7.6 mb/d for 2007 (6.4% growth) following revisions to February and March estimates. March demand rose by an estimated 4.7% year-on-year, driven by petrochemical demand (especially for ethylene production), the start of the agricultural season and the build-up of infrastructure construction.

- **The planned introduction of a fuel rationing system in Iran** has the potential to curb demand, increase fuel efficiency and move the country closer towards free market pricing. However, there remain considerable political and social hurdles to be overcome.

The World Economy: The Party Is Not Over Yet

The general tone of the IMF's April 2007 *World Economic Outlook* is optimistic, painting a portrait of a world economy that should be able to withstand some turbulence. Of course, as the Fund quickly points out, there are downside risks that could derail these forecasts, notably the "disorderly" unwinding of global imbalances, financial market volatility, a more pronounced slowdown in the US, renewed inflationary pressures, and last but not least, a sustained hike in oil prices.

Still, the IMF sees US growth slowing moderately; its GDP forecast for 2007 is now put at 2.2% (compared with 2.9% in the September 2006 edition of the *World Economic Outlook*). The country's 1Q07 GDP grew at a relatively weak 1.3% pace, but this is a preliminary estimate, and may be revised upwards as March data is compiled. Moreover, inflationary pressures seem to be building up.

Nevertheless, there is no clear evidence that the US housing market woes are spilling over to the rest of the economy – notably via the banking system, which according to most measures remains strong. As such, economic activity should hold its ground over the coming quarters, supported by private consumption and, to a greater extent, by exports, buoyed by a weakening dollar.

Meanwhile, the Eurozone looks stronger than anticipated, with the German economy consolidating the growth trend observed since last year. In Asia, Japan's prospects continue to look relatively healthy, despite concerns about the yen's depreciation and capital outflows, prompted by low interest rates.

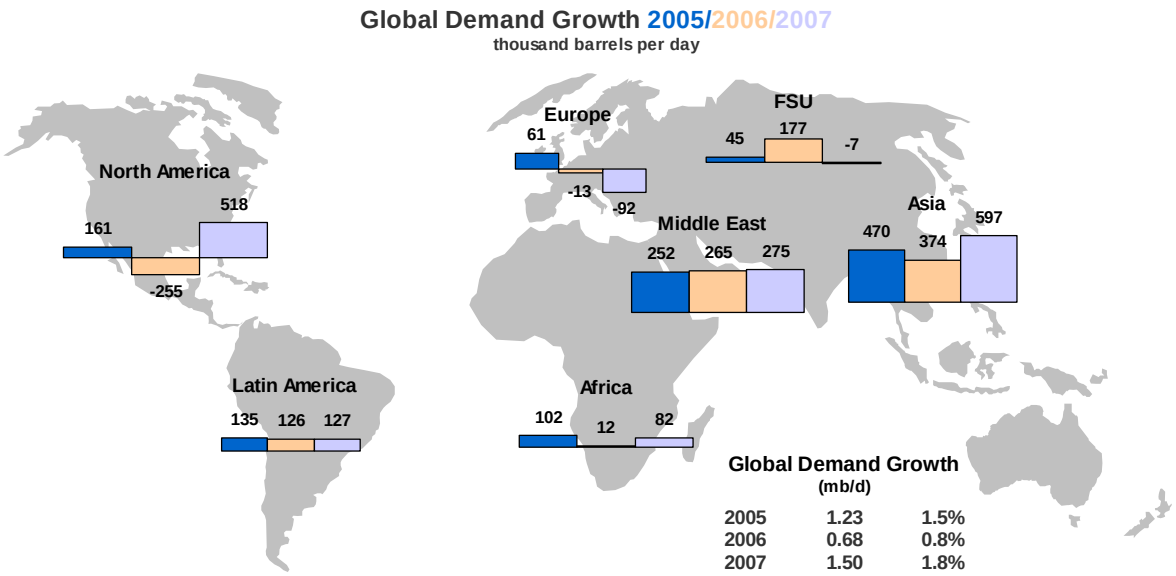
More interestingly, China's expansion is not seen abating over the next few years, suggesting that the Fund's economists think that the economy will be able to withstand the risks of overheating and associated undesirable consequences, such as mounting inflation. Indeed, Chinese GDP growth in 1Q07 reached 11.1% on an annual basis, much higher than the "harmonious" rate targeted by government officials (around 8%).

Although the US slowdown could conceivably curb Chinese net exports (which contribute to almost half of GDP growth, the rest being mostly driven by investment), it must be pointed out that the US accounts for only a quarter of Chinese exports. The rest are bought by other countries, particularly the European Union and Japan, which as noted above feature a relatively positive economic outlook.

The World's Ten Largest Economies	GDP Annual Change, %			Difference vs. Previous	
	2006	2007	2008	2007	2008
Brazil	3.70	4.45	4.20	0.49	0.32
Canada	2.75	2.41	2.93	(0.54)	0.07
China	10.70	10.00	9.50	(0.00)	0.00
France	1.96	2.05	2.41	(0.25)	(0.00)
Germany	2.68	1.85	1.88	0.55	0.39
Italy	1.87	1.84	1.74	0.50	0.34
Japan	2.21	2.34	1.86	0.22	(0.07)
Spain	3.85	3.55	3.38	0.60	0.34
United Kingdom	2.74	2.86	2.71	0.11	0.18
United States	3.30	2.19	2.76	(0.74)	(0.36)

Source: International Monetary Fund, World Economic Outlook September 2006 & April 2007 editions

What do these forecasts imply for oil demand? The erratic weather aside, which depressed demand in OECD in the last two quarters, the IMF economic assumptions suggest that oil consumption will remain strong, particularly in non-OECD countries – notably China and the Middle East, where economic activity remains buoyant. In the US, meanwhile, oil product deliveries remain robust, although rising gasoline prices ahead of the summer could lead to lower leisure or marginal driving, as observed last year.



OECD

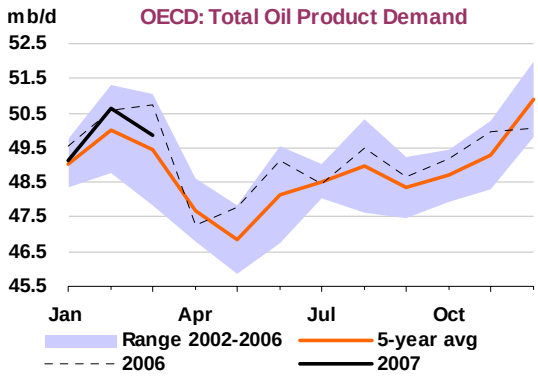
According to preliminary data, total OECD demand fell in March by 1.7% versus the same month in 2006. The decrease was mostly related to continuing mild temperatures across all regions. Inland deliveries fell by 6.1% in Europe and by 2.8% in the Pacific, and rose by only 1.5% in North America.

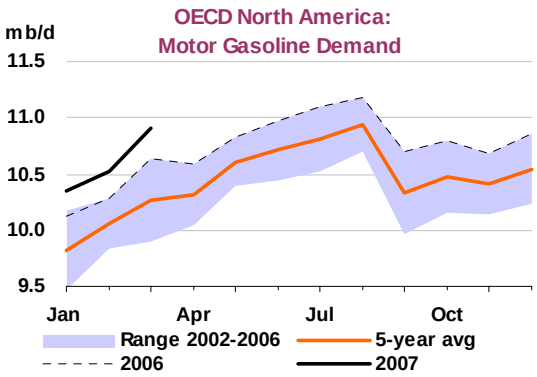
OECD Demand based on Adjusted Preliminary Submissions - March 2007
(million barrels per day)

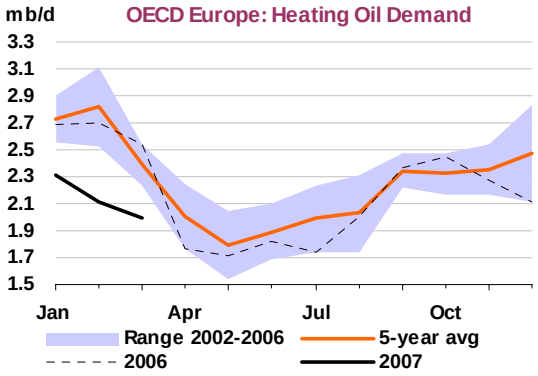
	Gasoline		Jet/Kerosene		Diesel		Other Gasoil		RFO		Other		Total Products	
	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa
OECD North America*	**10.91**	**2.6**	**1.93**	**0.9**	**4.19**	**12.6**	**1.62**	**-12.4**	**1.40**	**-2.9**	**5.93**	**-1.59**	**25.97**	**1.5**
US50	9.38	2.4	1.69	0.5	3.66	14.6	1.07	-17.9	0.84	-0.9	4.48	-2.9	21.11	1.5
Canada	0.69	1.1	0.12	0.9	0.18	-2.9	0.39	0.3	0.15	-4.8	0.74	6.5	2.27	1.9
Mexico	0.75	6.4	0.07	10.9	0.28	3.3	0.12	3.3	0.29	-8.9	0.63	-1.4	2.13	1.3
OECD Europe	**2.47**	**-2.4**	**1.28**	**1.8**	**4.20**	**2.3**	**1.99**	**-21.9**	**1.62**	**-19.8**	**3.58**	**-2.5**	**15.14**	**-6.1**
Germany	0.52	2.2	0.18	6.0	0.61	3.9	0.36	-41.3	0.18	1.0	0.61	3.4	2.45	-7.0
United Kingdom	0.44	-0.5	0.39	-1.2	0.47	2.5	0.14	-6.8	0.07	-36.1	0.39	-15.3	1.90	-5.7
France	0.22	-3.0	0.15	3.1	0.67	2.1	0.33	-24.2	0.06	-54.4	0.46	-7.1	1.90	-9.4
Italy	0.28	-9.2	0.08	4.8	0.56	-0.4	0.10	-23.3	0.18	-59.3	0.35	-10.4	1.55	-18.6
Spain	0.15	-5.0	0.11	4.1	0.54	3.2	0.23	-9.8	0.21	-6.6	0.39	-0.9	1.63	-1.8
OECD Pacific	**1.58**	**-1.9**	**1.16**	**-4.2**	**1.30**	**-0.6**	**0.61**	**-14.0**	**0.98**	**-8.9**	**3.12**	**0.9**	**8.75**	**-2.8**
Japan	1.03	-2.5	0.84	-5.4	0.65	-3.0	0.48	-14.0	0.48	-21.3	1.89	-2.3	5.37	-6.1
Korea	0.17	4.4	0.19	-2.1	0.30	1.1	0.13	-14.9	0.47	7.7	1.01	6.8	2.27	3.8
Australia	0.33	-1.9	0.10	2.5	0.30	2.1	0.00	1.5	0.02	-3.2	0.19	2.9	0.94	0.8
OECD Total	**14.96**	**1.2**	**4.37**	**-0.3**	**9.69**	**6.1**	**4.22**	**-17.4**	**4.00**	**-11.8**	**12.62**	**-1.3**	**49.86**	**-1.7**

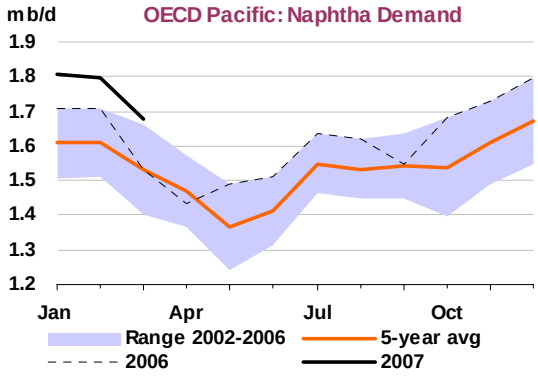
* Including US territories

Demand weakness was centred on both lower deliveries of heating fuels (heating and fuel oil in North America and Europe, and jet/kerosene in the Pacific) and residual fuel oil, due to the temperate weather. Overall, jet/kerosene contracted by 0.3% on a yearly basis, other gasoil by 17.4% and residual fuel oil by 11.8%. Only naphtha and gasoline registered gains (+4.7% and +1.2%, respectively), the former buoyed by petrochemical demand and firm gasoline blending in North America and the Pacific, and the latter lifted by sustained North American consumption, which countered Europe's structural decline. Moreover, given Germany's upward baseline revisions to 2006 data, we have slightly raised our OECD demand forecast for 2007 to 49.6 mb/d (+0.7% over 2006, assuming normal temperatures throughout the rest of this year).









Total OECD Demand by Product

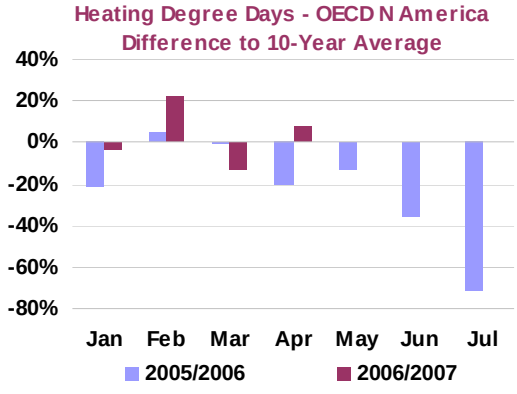
(million barrels per day)

	2005	2006	1Q06	2Q06	3Q06	4Q06	Dec 06	Jan 07	Feb 07*	Latest month vs. Jan 07	Latest month vs. Feb 06
LPG & Ethane	4.75	4.64	5.06	4.44	4.37	4.71	5.10	5.27	5.41	0.13	0.13
Naphtha	3.22	3.17	3.23	2.95	3.15	3.35	3.42	3.48	3.45	-0.04	0.16
Motor Gasoline	14.84	14.88	14.35	14.96	15.28	14.94	15.11	14.06	14.50	0.44	0.21
Jet & Kerosene	4.25	4.18	4.48	3.99	3.98	4.27	4.58	4.42	4.47	0.04	-0.02
Gas/Diesel Oil	13.06	13.22	13.76	12.67	12.90	13.57	13.19	13.11	13.96	0.85	0.08
Residual Fuel Oil	4.44	4.02	4.65	3.79	3.81	3.83	3.98	4.18	4.36	0.18	-0.39
Other Products	5.06	5.10	4.73	5.23	5.39	5.05	4.69	4.60	4.49	-0.10	-0.13
Total Products	**49.64**	**49.22**	**50.26**	**48.04**	**48.87**	**49.72**	**50.07**	**49.12**	**50.63**	**1.50**	**0.04**

* Latest official OECD submissions (MOS)

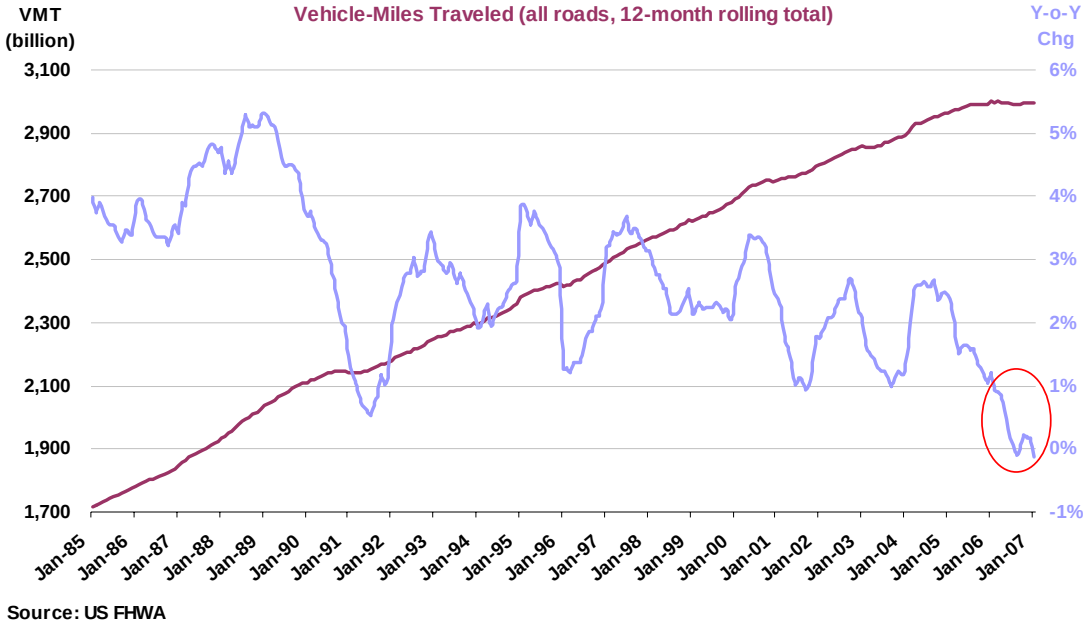
North America

According to adjusted preliminary data, March's inland deliveries in the continental **United States** – a proxy of demand – rose by 1.5% versus March 2006. Diesel demand growth was particularly strong (+14.6%), indicating enduring economic activity. Meanwhile, both heating and residual fuel oil deliveries were down on an annual basis (by 17.9% and 0.9%, respectively), as temperatures became warmer (in OECD North America, the number of 'heating-degree days' or HDDs in March was 13% lower than the ten-year average, and 15% lower in the US).



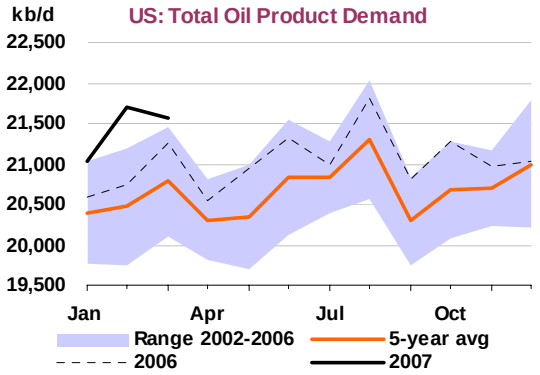
More interestingly, gasoline deliveries posted a healthy 2.4% gain, despite concerns that rising retail prices would curb demand. Temporary price hikes, however, have a relatively marginal effect in the US, where income elasticity plays a greater role as prices are relatively low compared with other OECD countries. During last year's summer price spike, consumers reacted mostly by cutting leisure or marginal driving, as

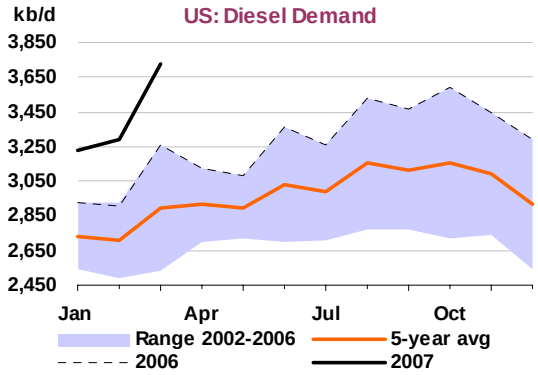
suggested by the number of miles driven (the so-called 'vehicle-miles travelled' or VMT), which recorded virtually no growth instead of the seasonal +2-3% increase. Since the latest VMT figure available corresponds to January 2007, it is too early to properly assess the impact of the current price spike. Nevertheless, in the longer term, sustained high prices could arguably dent demand in a more significant way.



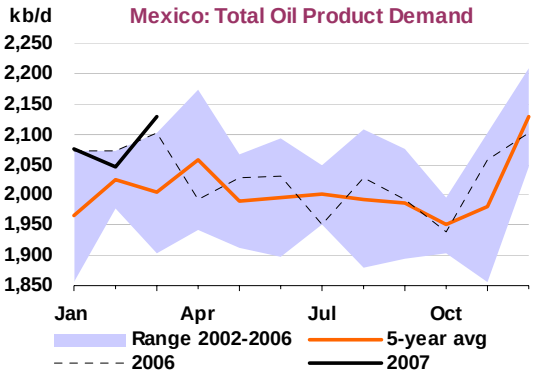
Source: US FHWA

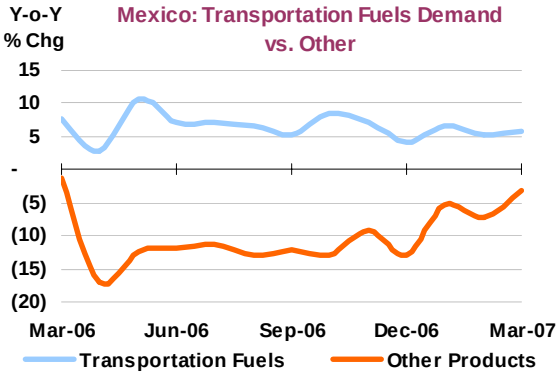
Preliminary March data indicate that inland deliveries in **Mexico** increased by 1.3% versus the same month in 2006, pulled up by strong transportation fuel demand. Gasoline rose by 6.4% year-on-year, while jet fuel/kerosene jumped by 10.9% and diesel climbed by 3.3%. Sustained growth in transportation fuels is a testimony to both strong economic growth and a growing vehicle fleet. Admittedly, growth may taper off somewhat as the US economy slows down, but that will probably affect highway diesel (truck freighting to and from the US-Mexico border) more than gasoline use.





Still, this fast pace of growth appears to preoccupy Mexico's Congress, amid growing gasoline import expenditures and concerns that the country will become a net crude oil importer given the decline of its major oil producing field, Cantarell. As such, in late April ruling-party legislators and their allies passed a law in the Lower Chamber aiming at promoting the production and use of ethanol from both corn and sugar. However, the law – already passed by the Senate and only needing President Calderón's signature to be promulgated – is notably vague in terms of targets, and was stridently opposed by the opposition, which claims it will endanger food supplies and foster another 'Tortilla crisis' as corn prices rise.





Despite the bill, it is unlikely that ethanol will make inroads in Mexico in the short- to medium-term, given the lack of infrastructure. Since ethanol is highly corrosive, new storage facilities and pipelines would need to be built – a tall order for Pemex, the state-owned monopoly, already struggling with growing debt and a high tax burden. At most, according to some observers, the country could hope to introduce ETBE (a mix of ethanol and isobutene used as an oxygenate additive in gasoline), but the magnitude of the required investment is a potential deterrent.

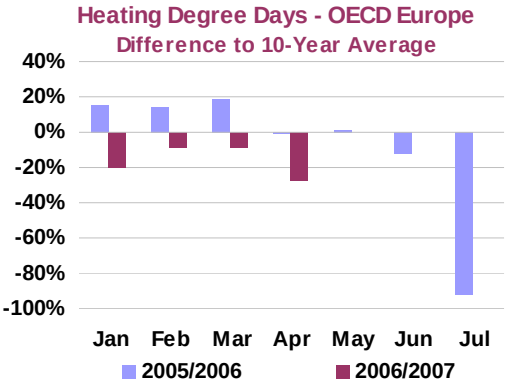
OECD North America Demand by Product
(million barrels per day)

	2005	2006	1Q06	2Q06	3Q06	4Q06	Dec 06	Jan 07	Feb 07*	Latest month vs. Jan 07	Latest month vs. Feb 06
LPG & Ethane	2.84	2.80	3.01	2.65	2.66	2.89	3.04	3.33	3.45	0.12	0.32
Naphtha	0.46	0.43	0.37	0.41	0.45	0.48	0.46	0.43	0.40	-0.03	0.04
Motor Gasoline	10.59	10.73	10.35	10.80	11.00	10.78	10.86	10.35	10.53	0.17	0.24
Jet & Kerosene	1.97	1.91	1.87	1.95	1.94	1.89	1.89	1.89	1.91	0.02	0.03
Gas/Diesel Oil	5.09	5.17	5.35	5.01	5.06	5.27	5.21	5.29	5.71	0.42	0.36
Residual Fuel Oil	1.56	1.21	1.43	1.15	1.17	1.11	1.19	1.34	1.49	0.15	0.14
Other Products	3.02	3.02	2.78	3.14	3.18	2.97	2.75	2.77	2.72	-0.05	0.05
Total Products	**25.53**	**25.28**	**25.15**	**25.09**	**25.47**	**25.39**	**25.41**	**25.41**	**26.21**	**0.80**	**1.17**

* Latest official OECD submissions (MOS)

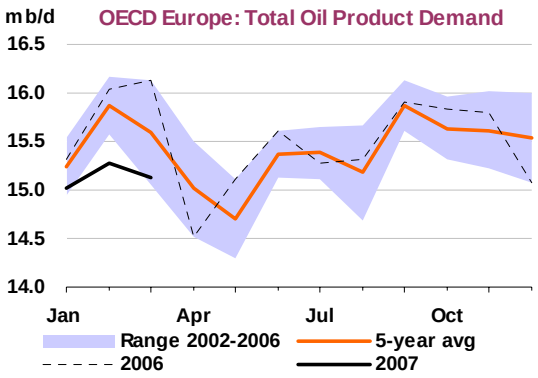
Europe

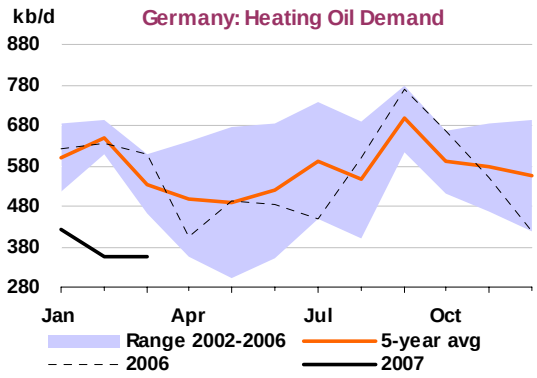
Preliminary figures indicate that total oil product demand in Europe shrank by 6.1% in March on a yearly basis, mostly as a result of the continuing weakness in heating and residual oil use (-21.9% and -19.8%, respectively). Temperatures were mild on average (HDDs were some 8% lower than the 10-year average) and electricity demand was consequently weak. Only jet fuel and diesel recorded modest gains (+1.8% and 2.3%, respectively).



In **Germany**, in a pattern that is becoming all too familiar given the unusually warm 2006-2007 winter, March preliminary data highlight the ongoing contraction of heating oil deliveries (-41.3% on an annual basis). German household stocks remain quite ample by historical standards, with tanks filled at approximately 54% of capacity by month-end, three percentage points less than in February and well above the five-year average. Since temperatures were also benign in April, heating oil deliveries in April have probably been quite weak.

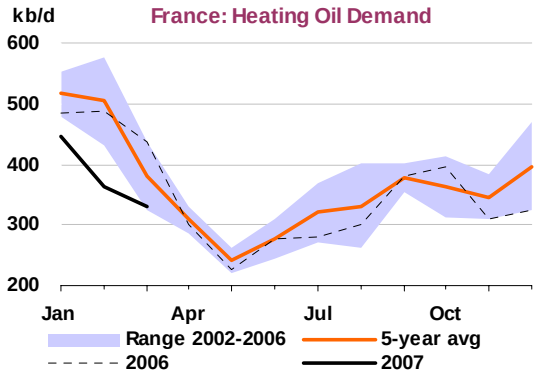
By contrast, transportation fuel deliveries remained strong in March (gasoline rose by 2.2%, jet/kerosene by 6.0% and diesel by 3.9%), further strengthening the case of a blossoming German economy (whose outlook, as noted earlier, was revised upwards by the IMF).

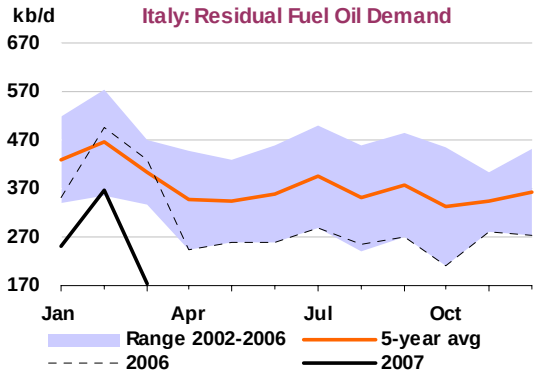




Unsurprisingly, heating and fuel oil deliveries in **France** and **Italy** mirrored Germany's pattern, given the prevailing warm weather. Heating oil deliveries shrank by 24.2% and 23.3%, respectively, compared with March 2006, while residual fuel oil demand plummeted by 54.4% and 59.3%, respectively. Moreover, some reports suggest that water reservoirs have been replenished and that hydropower will be plentiful in the months ahead. If this is confirmed, it could herald a continued weakness in fuel oil consumption for power generation, especially in Italy and Spain, although it should be noted that in other countries, such as Austria, low water levels remain a concern.

Finally, in France and Italy gasoline demand continues to be structurally weak given the gradual 'dieselisation' of their vehicle fleets. Deliveries shrank by 3.0% in France and by 9.2% in Italy (in the latter this trend is compounded by seasonal factors).





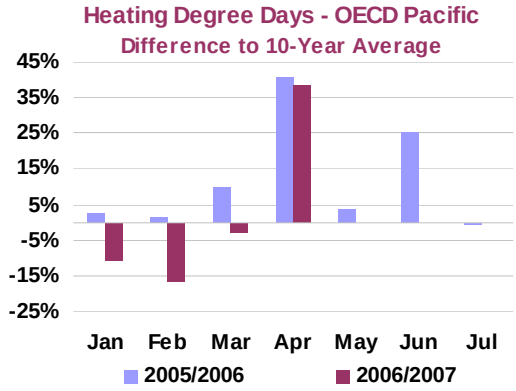
OECD Europe Demand by Product
(million barrels per day)

	2005	2006	1Q06	2Q06	3Q06	4Q06	Dec 06	Jan 07	Feb 07*	Latest month vs. Jan 07	Latest month vs. Feb 06
LPG & Ethane	1.03	0.96	1.13	0.96	0.83	0.91	1.02	0.99	0.99	-0.01	-0.20
Naphtha	1.18	1.13	1.22	1.06	1.09	1.13	1.17	1.24	1.25	0.00	0.03
Motor Gasoline	2.64	2.56	2.44	2.61	2.65	2.54	2.54	2.25	2.37	0.11	-0.07
Jet & Kerosene	1.24	1.28	1.19	1.28	1.37	1.28	1.23	1.25	1.25	0.00	0.09
Gas/Diesel Oil	6.10	6.23	6.49	5.87	6.15	6.42	6.03	6.15	6.30	0.15	-0.28
Residual Fuel Oil	1.84	1.81	2.06	1.70	1.73	1.73	1.72	1.81	1.87	0.07	-0.32
Other Products	1.50	1.53	1.28	1.59	1.68	1.55	1.37	1.32	1.25	-0.07	-0.01
Total Products	**15.52**	**15.49**	**15.82**	**15.08**	**15.50**	**15.57**	**15.08**	**15.02**	**15.27**	**0.25**	**-0.76**

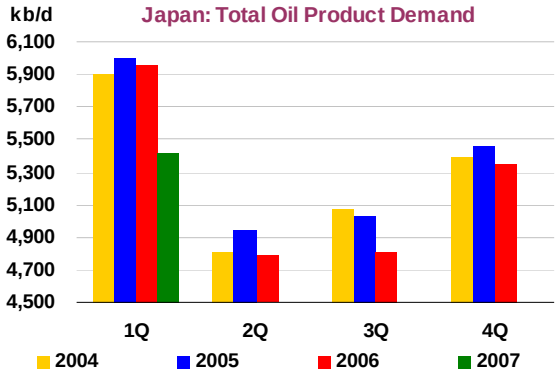
* Latest official OECD submissions (MOS)

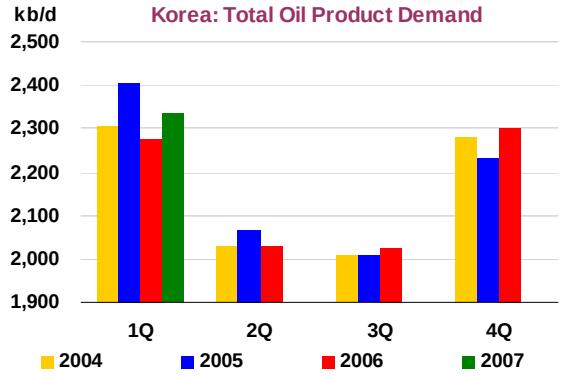
Pacific

According to preliminary data, oil product demand in the Pacific declined by 2.8% in March on an annual basis, due to continuing weak demand for heating fuels (kerosene in Japan and Korea, and other gasoil elsewhere) and fuel oil as a result of mild temperatures across the region (HDDs were some 3% lower than normal in March). Overall, jet/kerosene deliveries fell by 4.2% compared with the same month in 2006, while those of other gasoil fell by 14.0%. Residual fuel oil deliveries, meanwhile, shrank by 8.9%. In April, however, this pattern probably reversed, given a cold snap that began affecting the region (notably Japan and Korea) in late March.



In **Japan**, oil product demand contracted in March (-6.1% on an annual basis) for the fifth month in a row. The mild weather has played a large part in this decline; inland deliveries of jet/kerosene, which is mostly used for heating, contracted by 5.4% in March. This, in turn, depressed electricity demand and reduced the usage of residual fuel oil (-21.3%), other low-sulphur gasoil (-14.0%) and direct crude for power generation (included in 'other products', which contracted by 20.1%). In addition, utilities burned more natural gas, thus further weighing down on oil-based fuels.





Regarding transportation fuels, Japan's structural demand weakness continues. Gasoline and diesel deliveries fell by 2.5% and 3.0%, respectively. Nevertheless, the seasonal rebound in gasoline demand (typically during the holidays in late April and early May and in the summer weeks from late July to August) could be stronger this year when compared with 2006, as a result of warmer temperatures. Indeed, the country's official weather agency recently forecast that most parts of Japan are bound to experience normal or higher-than-normal temperatures from May to July.

OECD Pacific Demand by Product
(million barrels per day)

	2005	2006	1Q06	2Q06	3Q06	4Q06	Dec 06	Jan 07	Feb 07*	Latest month vs. Jan 07	Latest month vs. Feb 06
LPG & Ethane	0.89	0.89	0.92	0.84	0.88	0.91	1.04	0.95	0.97	0.02	0.02
Naphtha	1.58	1.62	1.65	1.48	1.60	1.73	1.79	1.81	1.80	-0.01	0.09
Motor Gasoline	1.61	1.59	1.56	1.55	1.63	1.62	1.71	1.45	1.61	0.15	0.04
Jet & Kerosene	1.04	0.98	1.42	0.75	0.67	1.10	1.45	1.28	1.30	0.02	-0.14
Gas/Diesel Oil	1.87	1.82	1.92	1.80	1.69	1.88	1.95	1.67	1.95	0.28	0.00
Residual Fuel Oil	1.05	1.00	1.16	0.95	0.91	0.99	1.08	1.03	0.99	-0.03	-0.22
Other Products	0.55	0.56	0.67	0.50	0.52	0.53	0.57	0.51	0.53	0.02	-0.17
Total Products	**8.59**	**8.46**	**9.30**	**7.87**	**7.90**	**8.76**	**9.59**	**8.69**	**9.14**	**0.45**	**-0.38**

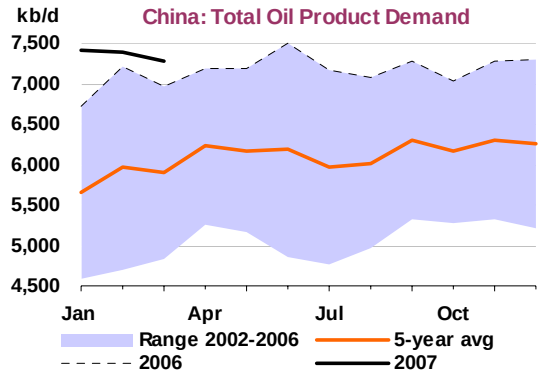
* Latest official OECD submissions (MOS)

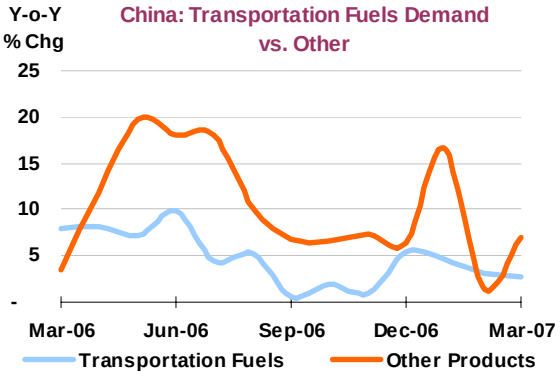
In **Korea**, total oil product deliveries rose in March by 3.8% on an annual basis, essentially supported by naphtha (+5.6%), gasoline (+4.4%) and diesel (+1.1%). By contrast, as in Japan, jet/kerosene demand was weak (-2.1% year-on-year) given the temperate weather.

Non-OECD

China

Apparent demand in China (defined as refinery output plus net oil product imports, adjusted for fuel oil and direct crude burning, smuggling and stock changes) rose by an estimated 4.7% year-on-year in March, on the back of strong naphtha and gasoil deliveries (+11.1% and +8.1%, respectively), buoyed by petrochemical demand (especially for ethylene production), the start of the agricultural season and the build-up of infrastructure construction. Coupled with revisions to February estimates, we have adjusted slightly downwards our overall 2007 forecast; we expect total Chinese oil product demand to rise by 6.4% to roughly 7.6 mb/d.





It should be noted that February's aggregated figures and preliminary March data were weaker than anticipated, bringing down quarterly demand by some 250 kb/d, compared with previous estimates. However, although demand grew by a respectable 5.7% year-on-year in 1Q07, this rate contrasts with the quarter's high GDP growth (11.1%), suggesting unreported stock draws, rather than a shift in income elasticity, unlikely in a country with such high energy intensity as China.

Is demand understated or GDP growth overstated? Our adjustment attempts as much as possible to account for some of the statistical unknowns, under a consistent methodology with data gathered from independent sources. Nevertheless, the bulk of our apparent demand calculation is essentially based on official refinery and trade figures. Moreover, we do not arbitrarily change our methodology in order to reflect what we think should be the 'real' Chinese demand in a given month.

China Demand by Product
(thousand barrels per day)

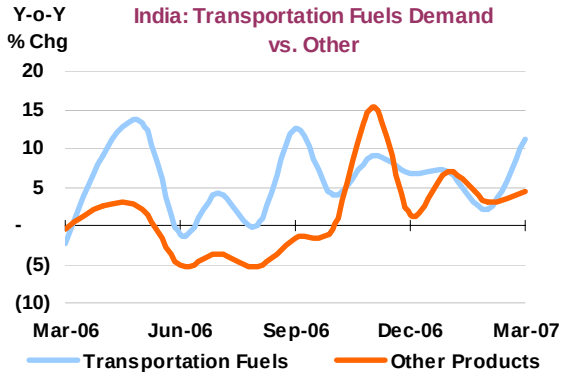
	Demand			Annual Chg (kb/d)		Annual Chg (%)	
	2005	2006	2007	2006	2007	2006	2007
LPG & Ethane	650.0	633.4	674.7	-16.7	41.4	-2.6	6.5
Naphtha	706.8	825.6	927.9	118.8	102.3	16.8	12.4
Motor Gasoline	1,130.8	1,169.5	1,217.8	38.8	48.3	3.4	4.1
Jet & Kerosene	245.8	279.6	298.0	33.8	18.4	13.8	6.6
Gas/Diesel Oil	2,238.8	2,338.0	2,479.4	99.2	141.4	4.4	6.0
Residual Fuel Oil	778.0	776.1	790.9	-1.8	14.7	-0.2	1.9
Other Products	943.1	1,134.6	1,223.0	191.5	88.4	20.3	7.8
Total Products	**6,693.2**	**7,156.8**	**7,611.7**	**463.6**	**454.9**	**6.9**	**6.4**

As such, the main question mark pertains to the completeness and reliability of official Chinese data. There are no stock data, which exaggerates shifts in apparent demand. Trade figures are also implausibly precise – they are rarely revised as would be expected and sometimes conflict with other sources. For

example, in February the General Administration of Customs reported no exports of crude, but independent sources claim to have tracked at least three outbound cargos; moreover, there are reports that crude imports are tagged as fuel oil. Meanwhile, refinery data, as we have often noted, systematically excludes 'teapot' refineries, which tend to use fuel oil as feedstock and have arguably become the 'swing' suppliers of lower-quality products in times of high farming and fishing activity. And if teapots are burning crude rather than fuel oil, then product demand is understated. Finally, further uncertainties revolve around estimates for smuggling or military consumption. Thus, without an improvement in official statistics, the volatility and uncertainty regarding Chinese oil product demand will persist.

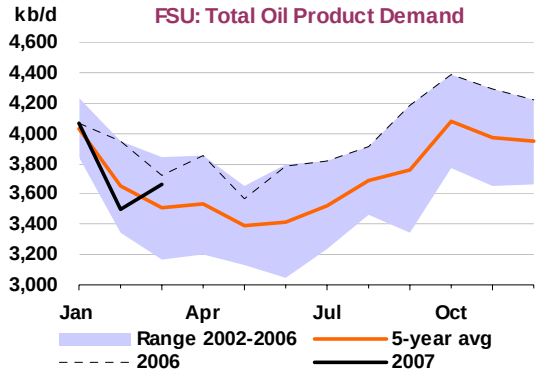
Other Non-OECD

According to preliminary data, **India's** oil product sales – a proxy of demand – jumped by 7.8% year-on-year in March. All product categories bar residual fuel oil and 'other' recorded strong gains. Naphtha sales were particularly buoyant (+22.1%), as well as transportation fuels (gasoline deliveries rose by 15.8% and diesel sales by 11.5%). In light of these developments, we have marginally raised our 2007 growth forecast, to 3.8%.



Although the vigorous increase in naphtha could be explained by reported power shortages in industry, as well as by limited availability of natural gas, the figure must be taken with caution, as it has tended in the past to be subsequently revised down sharply. By contrast, the buoyant growth in transportation fuels is arguably related to the effects of February's retail price cut and to the expanding vehicle fleet (which rose by about 13% in 2006).

FSU apparent demand – defined as domestic crude production minus net exports of crude and oil products – has been revised upwards by 129 kb/d in 1Q07 and downwards by 163 kb/d in 2Q07. As in previous months, these changes are related to the volatility of monthly FSU trade data, since supply adjustments have been relatively minor. Overall, the region's apparent demand in 2007 is virtually unchanged from last month's report, and is expected to average 4.0 mb/d (0.2% lower than in 2006).



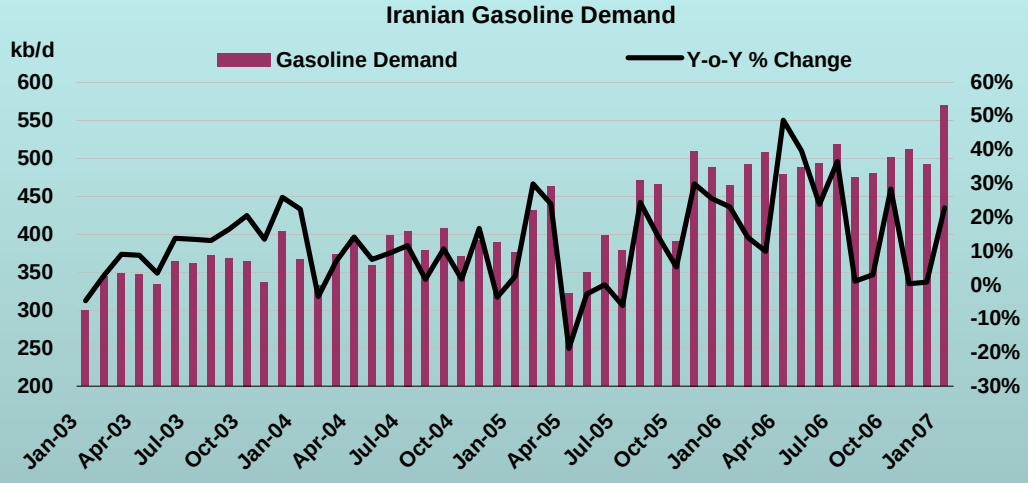
The picture that emerges, though, is that FSU net exports have indeed reached peaks not seen since Soviet times. In February, net exports averaged 9.1 mb/d (some 120 kb/d less than anticipated but almost 700 kb/d higher than in January) and are estimated to have remained in the vicinity of 9.0 mb/d in both March and April.

The surge is due to several factors: 1) relatively subdued domestic demand because of milder-than-normal temperatures; 2) higher oil product exports (about 2.7 mb/d in March), notably of fuel oil (1.1 mb/d); 3) higher crude exports via several pipelines (Druzhba, BTC and CPC); 4) reductions in domestic refinery runs; and 5) lower export duties since 1 April. It should be noted, however, that duties are bound to increase from 1 June, and this is likely to curb net exports.

Gasoline Rationing in Iran: A Durable Solution?

In our last commentary on Iran's gasoline market (*Oil Market Report* dated 11 October 2006), we speculated about how the country would tackle its galloping gasoline demand, which had led to a significant surge in imports (some 40% of total demand, given the lack of domestic refining capacity) and which was being prompted by possibly the cheapest retail prices in the world (as in many oil producing countries, cheap fuel is almost considered an entitlement). The issue was quite sensitive, we then argued, because the government had to balance financial imperatives (the growing burden of subsidies and imports) and political considerations (triggering social unrest by rationing demand and/or raising prices, which would also likely stoke inflation), not to mention the issue of tackling waste (spills at service stations and the poor fuel economy of most of the Iranian vehicle fleet).

The government, though, prevaricated for a few months, releasing instead extra funds in January 2007 (about $2.5 billion) to finance gasoline imports until March (the end of the Iranian fiscal year). In late March, however, both the Majlis (parliament) and the Council of Guardians finally approved a long-debated scheme to ration supply and raise prices, which will reportedly be implemented from mid-May. Under the scheme, private car owners will be allocated 90 litres per month (300 litres for taxis), priced at Rials 1,000 per litre (approximately 12 cents) instead of Rials 800 per litre (that is, a 25% price increase). Supply above the quota will be priced at Rials 5,000 per litre (five times more than subsidized prices and roughly equal to gasoline's import cost). In addition, the National Iranian Oil Refining and Distribution Company (NIORDC) intends to launch a five-year refinery upgrade and expansion plan, aimed at raising throughput to 2.9 mb/d from the current 1.6 mb/d.



The big question, however, is whether these measures will succeed in effectively curbing gasoline demand without provoking a political backlash. The quota has been tacitly designed to reduce import demand and is therefore well below daily consumption. Iran's vehicle fleet currently counts some 15 million units, and demand is estimated at about 78 million litres per day (roughly 490 kb/d in 2006) – that is, on average, about 5.2 litres per day per vehicle or three-quarters higher than the 3 litres per day quota. On average, therefore, the quota will last around 17-18 days. Heavy users who are unable to find transportation alternatives will be highly penalized, but there will be some drivers who will manage to curb their own consumption and feed what will likely become a highly profitable black market with their own quota surpluses.

The scheme includes "smart cards" at service stations to reduce both smuggling to neighbouring countries (currently around 10% of gasoline imports per year) and fraud, but the technology is untested and may be liable to malfunctioning. According to some reports, the company in charge of such cards has gone bankrupt. In reality, the government would not have a real incentive to tackle the black market: if marginal users could curb consumption and resell their quotas, heavier users would gradually become accustomed to paying higher prices and overall demand would fall. By contrast, eliminating cheating incentives would be costly, if not impossible: the government would need to increase prices sharply – an even more unpalatable move than rationing.

The new rationing plan should be seen as a clever move towards gradually adopting market prices, encouraging greater fuel efficiency and curbing demand. However, the change will entail considerable social and political hurdles, which will need to be overcome if it is to be a success.

SUPPLY

Summary

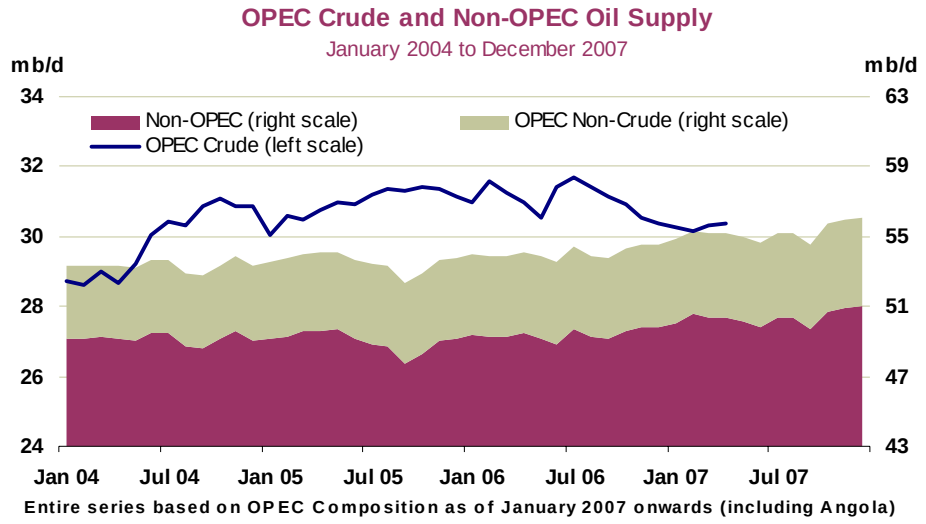
- **World oil supply** gained 55 kb/d in April to average 85.5 mb/d as higher OPEC and other non-OECD production countered sharply lower Russian, North American and North Sea supply. Latest data leave global 1Q07 supply largely unchanged at 85.3 mb/d, as higher OECD and OPEC crude production are compensated for by a weaker OPEC NGL baseline, and lower non-OECD supply.

- **Non-OPEC supply growth for 2007** is forecast at 1.0 mb/d, after 0.4 mb/d in 2006 (both excluding Angola). Annual growth of 950 kb/d evident since mid-2006 could now ease towards 770 kb/d in 3Q amid maintenance and seasonal outages. Resurgent growth in 4Q07 centres on North America, the North Sea, FSU and Latin America. Additionally, OPEC gas liquids growth eased to 0.1 mb/d in 2006, but should recover to 0.2 mb/d in 2007. OPEC 2007 NGL supply of 4.8 mb/d rises to 7.1 mb/d by 2012.

- **Adjustments to non-OPEC supply** add 30 kb/d for 2006, as refinery blendstock data for South Korea and Portugal are included. But the 2007 total is revised down by 70 kb/d to 50.4 mb/d with lower expectations now for the US, Norway, Brazil, Malaysia and Russia. Nonetheless, the 2007 OECD forecast is sustained by counteracting upward revisions for Canada, Mexico and the UK.

- **Total OPEC crude supply** stabilised at 30.3 mb/d in April after stronger performances from Iraq and Nigeria. Lower supply from Iran and Venezuela was also offset by higher output from Saudi Arabia, UAE, Qatar and Angola. Worsening ethnic unrest in Nigeria since late April elections however leaves some 815 kb/d of early May capacity shut in. Effective OPEC spare capacity stood at 2.8 mb/d in April, while sustainable capacity levels are expected to rise from 34.1 mb/d to 34.8 mb/d by 4Q.

- **The 'call on OPEC crude and stock change'** is revised up by 0.1 mb/d for 2007 (0.2 mb/d for the adjusted call), now averaging 30.5-31.7 mb/d for the year. Weaker 1Q demand combines with a now-lower forecast for non-OPEC supply, most noticeably in 3Q, when the call is revised up by 0.3-0.4 mb/d. The call rises by 2.3 mb/d between 2Q and 4Q, implying a tightening margin of OPEC spare capacity in the absence of markedly weaker-than-expected demand or a sizeable draw in stocks.



All world oil supply figures for April discussed in this report are IEA estimates. Estimates for OPEC countries, Alaska 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. 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. These aside, no contingency allowance for random events is subtracted from the supply forecast. While upside variations can occur, experience in recent years indicates that the random events listed above may cause supply losses of between 300 kb/d and 400 kb/d for non-OPEC supply each year.

OPEC

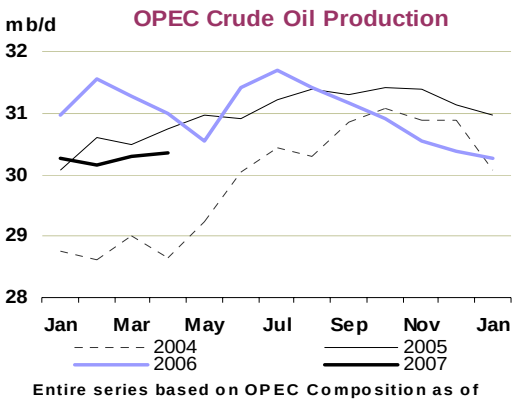
OPEC April crude supply, including Angola, matched upwardly-revised March levels of 30.3 mb/d as lower supply from Iran and Venezuela countered increases from Saudi Arabia and Nigeria. March estimates were raised by 220 kb/d, largely on revised export estimates from Iran. Iraqi and Kuwaiti supply for March is also revised up, while indications of falling Orinoco crude supply trim 25 kb/d from the March Venezuela estimate. April production in Nigeria recovered after reinstatement of earlier-shuttered Bonny crude volumes, although disruptions in early May, if sustained, are likely to result in renewed monthly decline. UAE, Angola, Qatar, Iraq and Algeria also nudged supply higher in April. With OPEC sustainable capacity estimates unchanged, implied spare capacity in April came to 3.7 mb/d on a nominal basis and 2.8 mb/d on an effective basis, excluding Indonesia, Iraq, Nigeria and Venezuela.

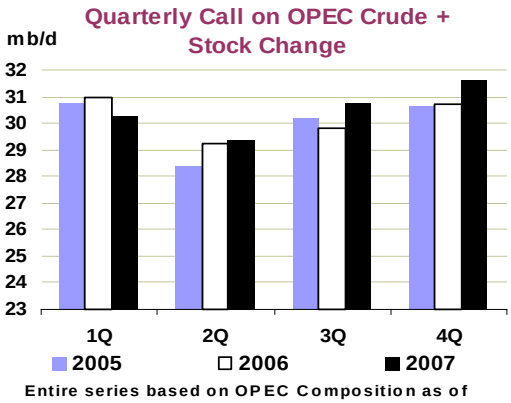
OPEC Crude Production[1]
(million barrels per day)

	April 2007 Production	Sustainable Production Capacity[2]	Spare Capacity vs Apr 2007 Production
Algeria	1.34	1.38	0.04
Indonesia	0.84	0.87	0.03
Iran	3.90	3.95	0.05
Kuwait[3]	2.40	2.64	0.24
Libya	1.69	1.73	0.04
Nigeria[4]	2.25	2.49	0.24
Qatar	0.80	0.90	0.10
Saudi Arabia[3]	8.60	10.80	2.20
UAE	2.59	2.75	0.16
Venezuela[5]	2.35	2.60	0.26
Subtotal	**26.75**	**30.10**	**3.34**
Angola[1]	1.58	1.58	0.00
Iraq	2.02	2.40	0.39
Total	**30.35**	**34.08**	**3.73**
(excluding Iraq, Nigeria, Venezuela, Indonesia			*2.82)*

1 Angola joins OPEC effective 1January 2007.
2 Capacity levels can be reached within 30 days and sustained for 90 days.
3 Includes half of Neutral Zone Production.
4 Nigerian capacity excludes some 545 kb/d of long-term shut-in capacity.
5 Includes Orinoco extra-heavy oil assumed at 455 kb/d in April.

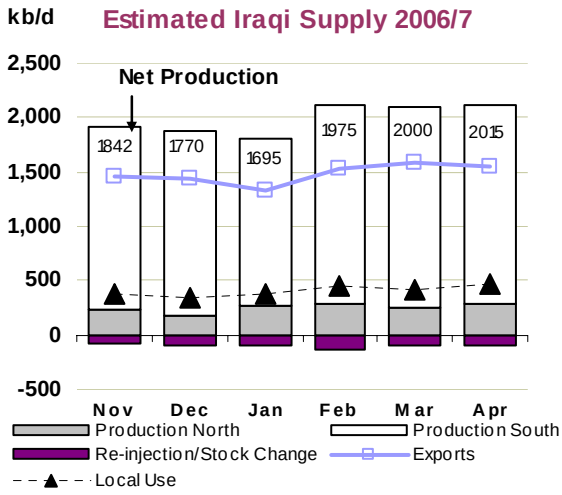
The Asian Ministerial Energy Roundtable in Riyadh saw renewed emphasis by producers on demand security. Uncertainty over future demand is cited as impeding upstream investment. We noted last month that incremental crude capacity from OPEC could amount to a relatively modest 700 kb/d for the remainder of 2007. Moreover, the increase in the expected call on OPEC crude plus stock change looks likely to amount to 2.3 mb/d between the expected 2Q low and the 4Q high point. OPEC spare capacity has steadily increased since 2004/2005 lows, but on this basis seems unlikely to widen further in 2007. Claims by OPEC sources in April that there was no need to increase production appear wide of the mark, unless they signal a preference for informal increases rather than overt changes in production targets.





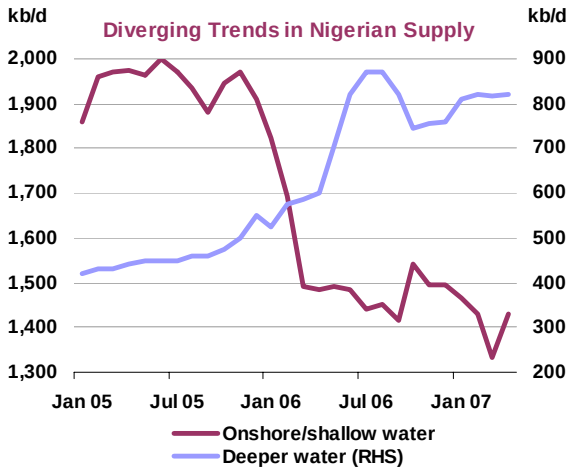
Iranian crude supply for March has been revised up by 215 kb/d to 4.03 mb/d as exports now appear to have been markedly higher than initially thought, at 2.64 mb/d. The higher exports support earlier reports of sales from floating storage, although our tanker tracking data do not support the higher March export levels reported by some analysts. Moreover, March crude runs likely remained constrained by reported maintenance at the Abadan refinery. Preliminary indications are that lower crude exports offset higher domestic crude runs in April, and supply averaged close to 3.9 mb/d.

March supply from **Iraq,** based on crude exports plus domestic use, is revised up to 2.0 mb/d on higher exports. April supply is estimated marginally higher at 2.02 mb/d. Although exports declined from 1.59 mb/d to 1.55 mb/d, this was likely offset by a similar rise in domestic crude use, averaging some 465 kb/d in April. Again, exports remain concentrated on the southern ports of Basrah and Khor al-Amaya, augmented by around 10 kb/d of cross-border pipeline deliveries into Syria. The northbound pipeline to Ceyhan remains offline due to repeated attacks by insurgents.



The fate of future upstream investment in Iraq remains in the balance as law makers attempt to reach agreement on a draft hydrocarbon law. Disagreements between the oil ministry and Kurdish regional authorities on oilfield categorisation and the relative allocation of control between the Iraq National Oil Company (INOC) and the regions point towards a 31 May deadline for the law's adoption being missed.

Production of crude oil from **Nigeria** staged a modest, 100 kb/d recovery in April to average 2.25 mb/d. This followed the reinstatement in late March of 187 kb/d of Bonny Light output after an earlier Nembe Creek pipeline spill. Ahead of late April elections, state NNPC announced that Shell would resume exports from the Forcados terminal in June, with sales of four 950 kb cargoes. This was interpreted in some quarters as signalling the imminent restart of 360 kb/d of Forcados production which has been shut-in since early 2006. However, it now appears that sales will be made entirely from storage, and that although Shell has been working to reinstate Forcados facilities, no production restart has yet been scheduled. Security concerns remain, while it is also reported that extensive theft of pipework could further delay restart. Nor has any restart at the shuttered EA FPSO (110 kb/d) been scheduled.

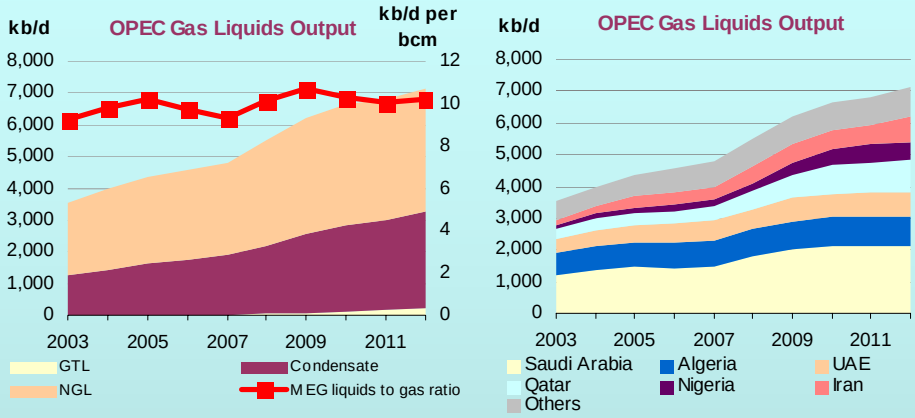


The more bullish prognoses emerging in April have subsequently given way to a more down-beat outlook in early May. A spate of kidnappings after the elections and attacks on production and export facilities has extended production outages to nearly 820 kb/d as at early May. Estimates of the volumes of crude production which are currently offline can be summarised as follows:

To date, offshore production has been less prone to disruption than onshore pipeline, pumping station and export facilities. However, with the EA, Okono and Funiwa FPSO facilities all now shut, rebel group attacks may be taking on more of an offshore slant. Rising deep water production has helped to sustain Nigerian capacity levels in the face of four years of disruptions in the Niger Delta and is much less easy to attack for Delta-based insurgent groups. However, the apparently increasing capability of rebel groups to target offshore facilities may mean no Nigerian capacity is entirely free from the risk of attack.

Pace of OPEC NGL Growth to Match Crude Oil

Looking at OPEC crude additions for 2006-2012 tells only half the story for potential capacity growth. Gas liquids (ethane, propane, butane and pentanes from gas processing plants plus field gas condensates) are expected to match crude's increase, rising by +2.6 mb/d (+7.8% pa) and taking potential OPEC NGL supply to 7.1 mb/d by 2012. The rate of increase matches growth evident during 2001-2006, as attempts to boost natural gas utilisation and to reduce flaring continue. Moreover, rising OPEC condensate supplies defer an eventual global shift to heavier and sourer global crude.



The gas liquids supply forecast focuses on specific gas processing plant and condensate capacity projects, on a country-by-country basis. The results are tested against aggregate natural gas supply projections, as contained in *WEO 2006*. In this instance, our forecast suggests the liquids–to-gas output ratio for the Middle East Gulf (MEG) region will remain around a current 10 kb/d per bcm. Although this looks conservative, a degree of caution over future NGL availability is in order. Firstly, the current tight market for raw materials, labour, services and fabrication capacity renders some gas and NGL supply projects as risk-prone as those for crude oil. Gas re-injection requirements for oil production may rise. Baseline NGL supply data is notoriously opaque, with ambiguities over the inclusion of ethane and condensate. Regulatory delays in consuming countries are undermining earlier strong expectations for future demand growth and exports. Finally, analysts partly rely on capacity rather than production in forecasting future increments, with data on decline rates at existing gas fields as scarce as those for oil. However, offsetting factors should sustain OPEC NGL growth in the next five to six years:

- The impetus to minimise gas flaring is growing.
- Much Middle Eastern gas is stranded gas, with a clear incentive to strip out liquids to maximise early revenue flows. Wet gas streams are preferentially developed ahead of dry gas for this reason.
- OPEC gas development is targeting local, just as much as export, markets, diminishing the potential impact of international demand uncertainty.
- Qatar, Iran and others are tending towards modular gas supply and export infrastructure, which should be less prone to time and cost over-runs than stand-alone projects.
- Although much of the NGL increase from associated gas will be dependent on related crude capacity, a significant and growing amount will also come from non-associated gas, being less prone to delays if crude capacity plans are deferred.

Over 50% of the expected increase in gas liquids supply by 2012 will come from **Saudi Arabia** and **Qatar**. A further combined 30% comes from **Iran** and **Nigeria**, even though our projections for these two countries have been revised down since the July 2006 *Medium Term Oil Market Report (MTOMR*). These four producers hold 35% of global natural gas reserves and account for 80% of gas liquids growth. The rate of growth from other heavyweight OPEC NGL producers such as **Algeria** and **UAE** looks more modest in comparison, although these two combined will produce around 1.5 mb/d of NGL by 2012, similar to current volumes. Replicating our approach to crude capacity, the uncertain investment environment in **Iraq** and **Venezuela** is reflected by a flat forecast NGL profile, though both could see much higher production over time. The forecast will be examined in greater project- and country-specific detail in the forthcoming *MTOMR*.

Estimated Shut-In Crude Volumes

Production System	Field/Facility	Volume	Affected
Forcados	various	358 kb/d	long term
Bonny	Obagi & Nun River	52 kb/d	since early 2007
Brass River	Tebida	40 kb/d	since early 2007
Brass River	Akri & Oshi	80 kb/d	8 May 2007
Offshore	EA	110 kb/d	long term
Offshore	Okono	65 kb/d	3 May 2007
Escravos	various	55 kb/d	long term
Escravos	Ebite	41 kb/d	7 May 2007
Pennington	Funiwa	15 kb/d	1 May 2007
Estimated Total Shut		**816 kb/d**	**early May**

April **Saudi Arabian** supply is estimated to have risen by 55 kb/d from March, at 8.6 mb/d. Higher domestic refinery throughputs countered lower eastbound crude sales. However, heavier refinery maintenance is scheduled for Ras Tanura in May, potentially opening the way for higher exports.

As noted last month, Saudi Aramco replaced production in 2006, maintaining crude and condensate reserves just under 260 billion bbls. The release of Aramco annual data for 2006 leads to a 30 kb/d downward adjustment to this report's crude supply estimate, focused on 2Q06. Our estimate of 2006 Saudi NGL supply is revised down by 55 kb/d to 1.44 mb/d, with 2007 gas liquids cut by 50 kb/d to 1.47 mb/d.

Aramco announced earlier in April that the Manifa project is on schedule for 2011 completion, with targeted output of 900 kb/d of Arab Heavy crude, 90 Mcfd of gas and 65 kb/d of condensate. Manifa was already included in this report's medium-term capacity estimate in the April *OMR*. A later announcement by Oil Minister al-Naimi suggested that longer-term demand restraint measures in consuming countries could cap Saudi Arabia's capacity at the 2009 target level of 12.5 mb/d. Implicitly this suggests a scaling back of capacity growth plans, as Manifa was originally a component of later-phase expansion beyond 12.5 mb/d. This report assumes crude capacity reaches 12.5 mb/d by 2012.

State PDVSA officially took over operational control of **Venezuela's** four Orinoco crude upgrader projects on 1 May. Terms for future participation by, and financial compensation for, international operating companies remain unclear. However, with Venezuela's tax authorities now seeking payment of alleged tax arrears for 2002 from ExxonMobil for the Cerro Negro upgrader, it appears that Venezuela is attempting to offset its liabilities. PDVSA has already said that it will only recognise the book value of the upgrader projects, not future worth. At peak operating levels, the upgraders process 630 kb/d of extra heavy Orinoco crude, but a combination of OPEC supply curbs and uncertainty over the future operating regime have reportedly cut April output closer to 450 kb/d. Estimates for Venezuelan crude supply (including heavy Orinoco supply) are trimmed to 2.39 mb/d for March and 2.35 mb/d for April. Venezuelan gas liquids supply contributes an additional 220 kb/d.

Hormuz Crude Bypass Routes*

International political tensions over Iran's nuclear programme have arguably eased in the last two months, but the UAE has become the first regional state to put in place contingency plans to shield its oil exports from the threat of any future escalation across the Gulf.

In the last month, the Abu Dhabi-owned International Petroleum Investment Company (IPIC) has awarded Germany's ILF the project management contract for construction of the 360 km pipeline from the Habshan oil fields to the port of Fujairah on the Gulf of Oman, where a large downstream and bunkering development is envisaged. The pipeline will have capacity of up to 1.5 mb/d of crude a day – just over half of UAE's production capacity, reducing dependence on transit through the Straits of Hormuz.

The decision to finance this project and the wider Fujairah complex shows the impact on regional thinking of Iranian President Ahmedinejad's references last year to the 'oil weapon'. While some interpreted this as a threat to cut off Iranian supplies, others saw it as a threat to all Gulf oil supplies shipped via the Hormuz Straits. Some 17% of world oil supplies transits this 280 km route, which measures barely 50 km at its narrowest.

'Hormuz ' exporters	Approx. crude transit volumes, mb/d	Possible Hormuz bypass capacity, mb/d	Details
Iran	2.5	0.1	Caspian Neka terminal currently used for imports
Iraq	1.6	0.3 +	Syria & Kirkuk-Ceyhan (frequently targeted by insurgents)
Saudi Arabia	4.5	2.4	50% of Abqaiq-Yanbu line currently dedicated to gas
Kuwait	1.5	0	
UAE	2.6	0 - 1.5	Fujairah link to provide 1.5 million b/d bypass capacity
Qatar	0.7	0	
	13.4	**2.8 - 4.3**	

.

The rationale for further large-scale Hormuz bypasses is limited for now – not least because of financing. While Iranian tensions have seen plans dusted off for a 5 mb/d Trans-Gulf pipeline starting in Iraq and running south to the coast of Oman, the trans-national nature of the link and its vulnerability to political and insurgent tensions render it more problematic than the domestic UAE route.

One of the largest potential financiers, Saudi Arabia, already has its own Hormuz bypass route in the form of the Abqaiq-Yanbu line, with potential to take some 4.8 mb/d of Saudi crude – over half of current Saudi production – through the Red Sea. With only 2.4 mb/d of this capacity currently in use, this would be the first recourse for Saudi oil in the event of shipping problems.

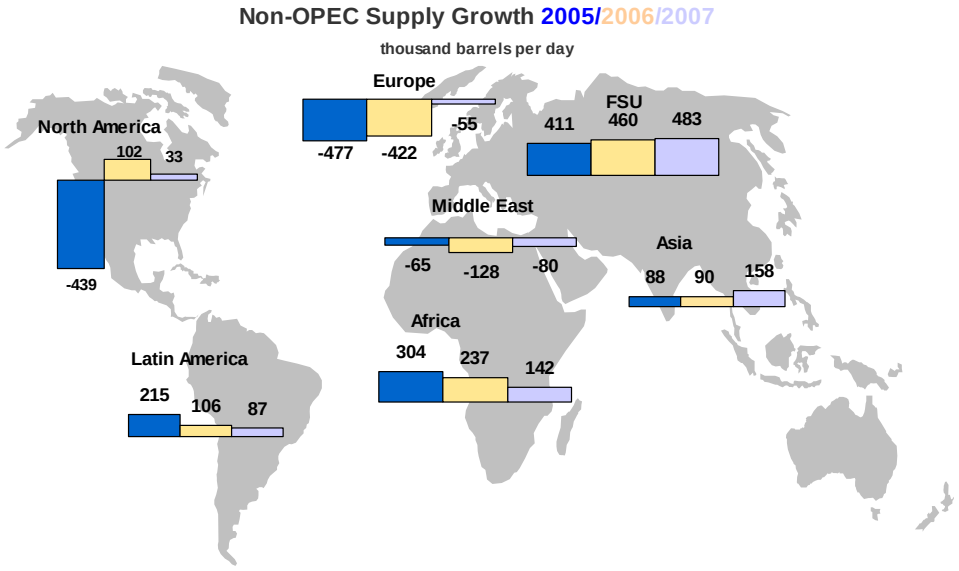
Iraq too has the potential to route oil through the Kirkuk-Ceyhan pipelines to the Mediterranean. But with only a maximum 300 kb/d of an installed 1 mb/d-plus of capacity useable since the US-led invasion of 2003, this remains a vulnerable alternative. Further limited capacity exists through Syria, with 10 kb/d of trade in April. That leaves Kuwait and Qatar most vulnerable to tensions around Hormuz. But with Kuwait struggling to advance core projects at home, and Qatar likely to focus more on the security of its 31 million tonnes per year LNG exports than 700 kb/d of crude, prospects for co-operation remain limited, unless Iran's deployment of the 'oil weapon' comes closer to reality.

* Contributed by Catherine Hunter, Office of Global Energy Dialogue, International Energy Agency

Non-OPEC Overview

Non-OPEC supply growth for 2007 is adjusted down this month to 1.0 mb/d, albeit partly due to a higher 2006 baseline. On a like-for-like basis (excluding Angola) this nonetheless represents a marked recovery from 2006's 0.4 mb/d growth and the decline of 0.1 mb/d seen in 2005. The FSU generates nearly half of 2007's growth, with more modest 100-150 kb/d contributions coming from Asia, Africa and Latin America. Equally importantly however, the sluggish performance evident from OECD supply in 2005 and 2006 is expected to level off. New production from the UK, Canada and Australia, alongside an assumption that 'normal' operating conditions prevail (less unscheduled field shut-downs), underpin this forecast. By implication, we see the tendency for OECD supply to under-perform initial forecasts in the past few years being due to unforeseen outages and delays as much as to underlying decline rates. OECD projections now look more robust, and indeed changes for 2007 have largely been confined to January's downward adjustment to account for latest Norwegian and Mexican government forecasts.

Moreover, much of the expected 2007 non-OPEC rebound is already evident, with quarterly growth averaging 950 kb/d since mid-2006. Northern hemisphere field maintenance and seasonal production

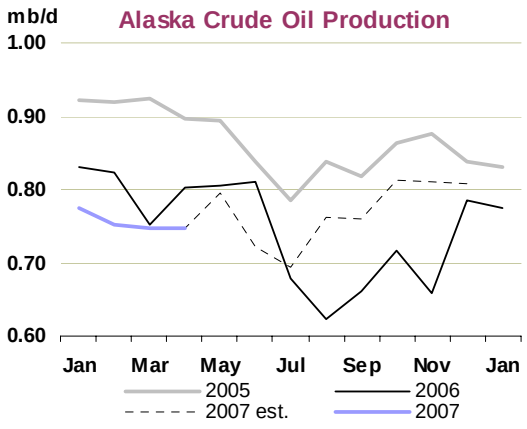


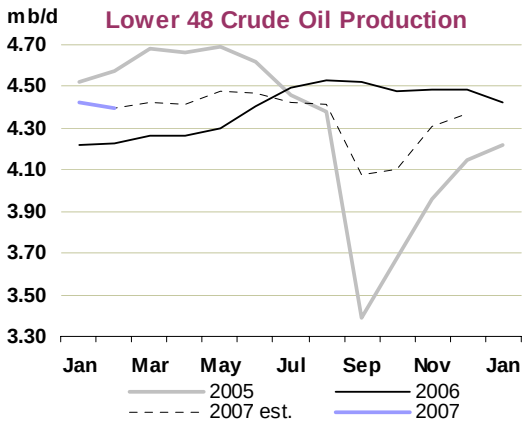
stoppages may now hold non-OPEC supply flat at 50.1 mb/d, until a surge to 50.8 mb/d in 4Q. The late-year increase derives from seasonal OECD recovery, plus new production from Canada, the Caspian, Brazil and Sudan. Of course, in the current environment of higher costs and delays, slippage from this profile is always possible. Nonetheless, new production increments envisaged for 4Q are now sufficiently advanced to be less prone to delay than projects at an earlier stage of development. Our customary downside risk proviso for unforeseen events remains, but is now explicitly included in the forecast adjusted 'call on OPEC' in Table 1, rather than hidden in regional adjustments to the base forecast.

OECD

North America

US – April Alaska actual, others estimated: Total US oil supply in 1Q07 of 7.4 mb/d (5.2 mb/d of crude) remains well below first-half 2005 levels of 7.8 mb/d, prior to the arrival of Hurricanes Katrina and Rita. Supply of NGL and crude from the GOM and Alaska each stands around 0.1 mb/d below levels from two years ago. Recovery from Alaska in April was stalled by a power outage at a 90 kb/d gathering centre at the Prudhoe Bay field, and by mild temperatures which tend to impede reinjection. Prudhoe facilities were operating normally again by early May, but Alaskan production rebound could be short-lived, as pipeline replacement is scheduled for the Alpine field this summer.

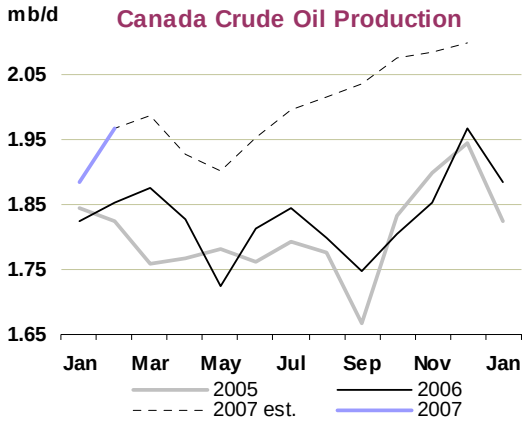


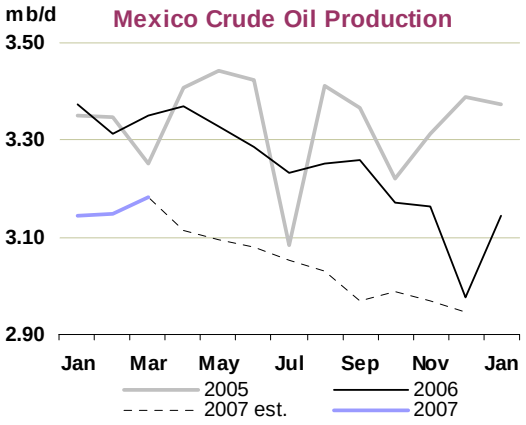


Total US supply growth in 2006 amounted to around 50 kb/d, with ethanol, NGL, and GOM growth offsetting decline elsewhere. This report foresees a similar trend in 2007, with crude supply averaging 5.1 mb/d and total oil production 7.42 mb/d. There is some upside potential for the GOM forecast, as for

now we retain an aggressive hurricane outage assumption for 2007, at 160 kb/d for 3Q and 215 kb/d for 4Q based on the five year average. The US Minerals Management Service sees GOM production potential attaining 2.1 mb/d within 10 years, a trend similar to the 1.8 mb/d by 2011 envisaged in the last *MTOMR*.

Canada – Newfoundland March actual, others February actual: Stronger-than-expected February/March supply from Alberta and offshore Newfoundland boosts the 2007 Canadian production forecast by 65 kb/d. Alberta bitumen and non-mined syncrude, plus higher offshore east coast output from Terra Nova and White Rose, account for the bulk of 2007's near-200 kb/d growth. This takes crude supply to 2.0 mb/d and total oil (including NGL and mined syncrude) to 3.4 mb/d. Offshore east coast production, recently around 350 kb/d, faces maintenance in 2Q and 3Q, but could rebound towards 440 kb/d by year-end. Husky Energy in April announced regulatory approval to increase average annual production capacity for White Rose to 140 kb/d from 100 kb/d. The net impact on production may be less, since actual production in 1Q07 averaged 124 kb/d, while the *OMR* already assumed 135 kb/d from late 2007.



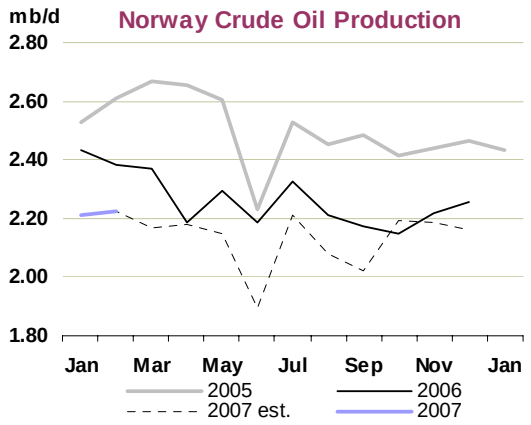


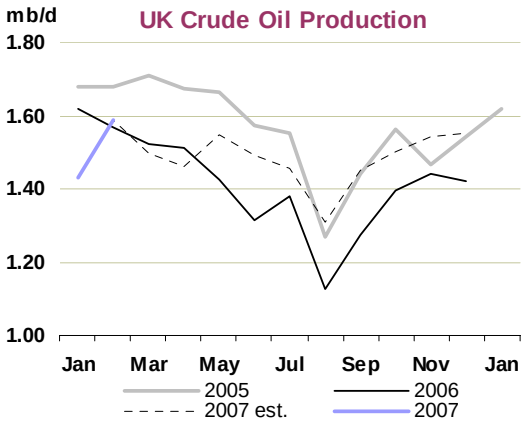
Mexico – March actual: Mexican oil supply is expected to fall by some 200 kb/d in 2007, more than double the rate seen in 2005 and 2006. This is despite higher-than-expected March output, when crude averaged 3.18 mb/d and NGL some 415 kb/d. March's recovery also led to rising crude exports, which touched 1.78 mb/d, their highest since last November. Exports of heavy/sour Maya crude to the Americas have recovered earlier low levels. Recent data confirm that the December/January dip in Mexican supply was exaggerated by production outages. However crude decline from the Cantarell field, which accounts for over 50% of Mexican supply, is accelerating. Latest estimates put 2007 Cantarell decline at 15%, which easily eclipses increases from other deep water supply at Ku-Maloob-Zaap. Pemex cited in early May an over-onerous tax burden as preventing the doubling in investment needed to arrest production decline.

North Sea

Norway – February actual, March provisional: Unscheduled outages and project overrun have cut forecast Norwegian liquids supply for 2007 by 75 kb/d. Total output now averages 2.65 mb/d in 2007, from 2.78 mb/d in 2006 and 2.97 mb/d in 2005. Condensate and gas liquids account for 0.5 mb/d of the total. State operator Statoil announced in late April it would miss its 2007 production target, partly due to an extended outage at the Kvitebjorn gas and condensate field. This report previously factored in reduced supply at Kvitebjorn through mid-year due to a drilling programme. However, the field will now be shut completely from May until 4Q to address reservoir pressure problems. Kvitebjorn produced some 50 kb/d of condensate in 2006. Also affecting 2007 supply are installation delays at Marathon's Alvheim FPSO, deferring start-up until 3Q. Alvheim peak liquids supply is also trimmed from 80 kb/d to 50 kb/d.

UK – February actual: UK offshore production enjoys a temporary hiatus from decline in 2007, as Nexen's Buzzard field in the Forties system builds to peak. First quarter 2007 offshore output averaged 1.75 mb/d, its highest level in a year. Average offshore supply in 2007 is estimated at 1.72 mb/d, after the



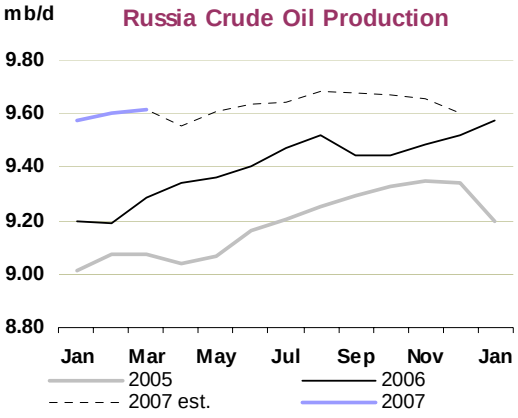


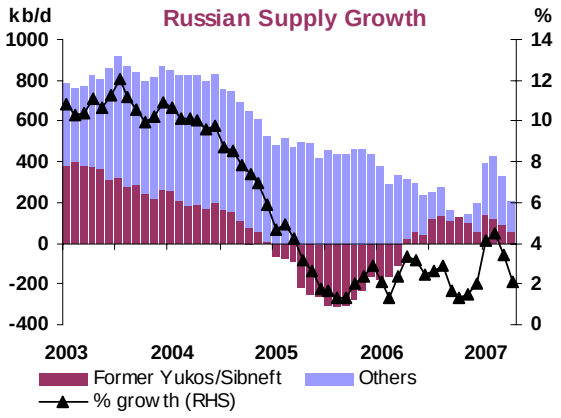
1.63 mb/d seen in 2006 and 1.81 mb/d in 2005. Buzzard was reportedly producing above 150 kb/d in early May and should attain near-200 kb/d capacity by mid-year. Data from BP, the Forties pipeline operator, suggest that Buzzard inclusion has cut Forties gravity by 3.7°API to 40.9°API, while raising sulphur from 0.2% to 0.45%. Earlier concerns that hydrogen sulphide (H_2S) content would impede early Buzzard production have been unfounded, but may affect later production when sourer wells are tapped.

Former Soviet Union (FSU)

Russia – March actual, April provisional: April saw lower-than-expected output from Lukoil, Surgutneftegaz, Rosneft and a number of smaller producers. Together with now-weaker guidance on 2007 production prospects from Lukoil and Surgutneftegaz, this results in a 30 kb/d downward revision to this report's Russian forecast, which now comes in at 9.94 mb/d of crude and condensate. That equates to 2.6% growth versus 2006, continuing the slowdown seen in the past two years. The Ministry for Economic Development revised down its own expectations for crude production and exports through 2010. However, actual 1Q production already seems to be close to the Ministry's 2007 average, and with incremental volumes expected later in 2007, we retain a slightly stronger growth profile than the Ministry.

Preliminary March trade data reveal FSU net exports of 8.93 mb/d, 160 kb/d lower than February. February's net export total was revised down by 120 kb/d with finalised rail export data, but still marked a post-Soviet high of 9.1 mb/d.





Monthly crude exports via Transneft were down by 180 kb/d in March, to 4.12 mb/d, with 90 kb/d less heading to central Europe. March maintenance on the pipeline to Primorsk cut Baltic seaborne crude exports by 70 kb/d, while Black Sea exports were off by 30 kb/d. However, extra Caspian crude provided a 30 kb/d offset, as BTC transits continue to rise. Products exports hit a record 2.7 mb/d in March, 40 kb/d up from February. Fuel oil exports of 1.13 mb/d were especially strong, 180 kb/d higher than March 2006.

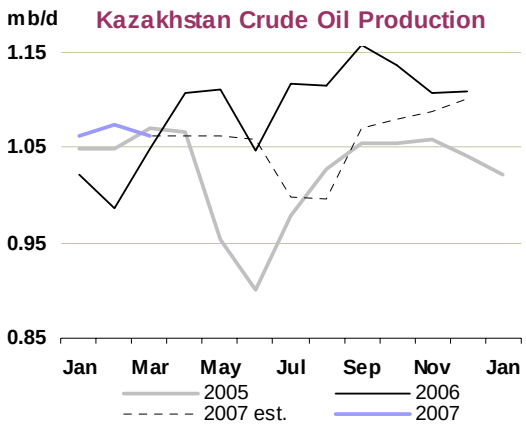
April exports likely nudged above March levels, as new reductions to Russian export duty came into effect on 1 April. With pipeline maintenance ending, and cuts in domestic refinery runs exceeding a drop in output, crude exports to rise. A scheduled June export duty rise could push May exports higher still.

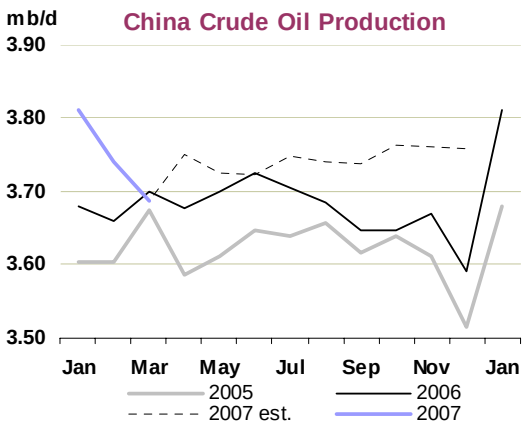
FSU Net Exports of Crude & Petroleum Products
(million barrels per day)

	2005	2006	2Q2006	3Q2006	4Q2006	1Q2007	Jan 07	Feb 07	Mar 07	Latest month vs. Feb 07	Latest month vs. Mar 06
Crude											
Black Sea	2.27	2.22	2.26	2.27	2.08	2.31	2.19	2.39	2.36	-0.03	-0.09
Baltic	1.59	1.55	1.73	1.49	1.43	1.58	1.61	1.59	1.52	-0.07	-0.06
Arctic/FarEast	0.19	0.15	0.11	0.20	0.19	0.29	0.26	0.31	0.30	-0.01	0.17
BTC	0.00	0.00	0.01	0.22	0.38	0.43	0.33	0.48	0.50	0.03	0.50
Crude Seaborne	4.05	4.07	4.11	4.18	4.08	4.61	4.39	4.77	4.69	-0.08	0.52
Druzhba Pipeline	1.15	1.20	1.16	1.23	1.19	1.17	1.11	1.25	1.16	-0.09	-0.02
Other Routes	0.25	0.38	0.38	0.38	0.45	0.47	0.55	0.44	0.41	-0.03	0.09
Total Crude Exports	5.45	5.64	5.65	5.80	5.71	6.25	6.05	6.46	6.26	-0.20	0.59
Of Which: Transneft	4.04	4.09	4.23	4.16	3.94	4.21	4.22	4.30	4.12	-0.18	0.02
Products											
Fuel oil	0.93	0.95	1.05	0.94	0.95	1.03	0.91	1.05	1.13	0.07	0.18
Gasoil	0.87	0.95	0.95	0.94	0.91	0.94	0.86	0.99	0.96	-0.03	-0.02
Other Products	0.58	0.61	0.70	0.63	0.54	0.60	0.59	0.61	0.61	-0.01	0.04
Total Product	2.38	2.51	2.69	2.50	2.40	2.57	2.36	2.65	2.70	0.04	0.20
Total Exports	7.83	8.16	8.34	8.30	8.11	8.82	8.40	9.12	8.96	-0.16	0.78
Imports	0.02	0.04	0.03	0.05	0.04	0.02	0.02	0.02	0.03	0.01	0.00
Net Exports	7.81	8.12	8.31	8.25	8.07	8.79	8.38	9.10	8.93	-0.17	0.78

Sources: Petro-Logistics, IEA estimates
Note: Transneft data has been revised to exclude Russian CPC volumes.

Next month's report will review Russian pipeline developments as a prelude to a new medium-term production forecast for the *MTOMR*. However, Transneft in late April announced that one third of the 600 kb/d pipeline being built from Eastern Siberia to Skovorodino on the Chinese border has been constructed. Completion is expected by end-2008, with 50% of deliveries travelling by spur line to China and the remainder likely to be railed to the Pacific coast. Completion of a second phase of the pipeline, taking total capacity to 1.6 mb/d, will be dependent upon exploration successes in Eastern Siberia.





Kazakhstan – March actual: Kazakh oil production is seen levelling off in 2007 at 1.34 mb/d, despite modestly higher output from the Tengiz and Karachaganak fields. The country's Energy Ministry, on the strength of 1Q performance, revised expected 2007 production up by 3%, suggesting growth of around 40 kb/d. Maintenance work assumed for July-September potentially accounts for our flatter 2007 profile.

Export and processing capacity remain a potential constraint on future Kazakh growth. Russian pipeline monopoly Transneft took over Russia's 24% stake in the 700 kb/d CPC pipeline, which moves much of Kazakhstan's oil output to western markets. Russia has long blocked a doubling of CPC capacity, arguing for higher pipeline tariffs and progress on a Turkish Straits bypass to ease shipping bottlenecks. Operators of Kazakhstan's much-delayed Kashagan project are now seeking alternative export routes before the field comes online at the turn of the decade. Expansion at the Karachaganak oil and gas field is

also partly dependent on negotiations with Russia. Karachaganak oil exports use the CPC pipeline but gas liquids also depend on northbound gas shipments to Russia's Orenburg processing facility. Initial plans to expand Orenburg have stalled, with Kazakhstan now considering a processing facility of its own.

Other Non-OPEC

China – March actual: China has enjoyed an unbroken, if modest, run of production growth this decade, averaging 70 kb/d per year. The trend is expected to continue in 2007, with output reaching 3.75 mb/d, a level that was already attained in 1Q. Rising western onshore production and developments offshore counter easterly onshore decline. CNPC on 3 May announced a major discovery in the northerly Bohai Bay, with proven reserves estimated at three billion barrels and early production potential of 200 kb/d.

Revisions to Non-OPEC Estimates

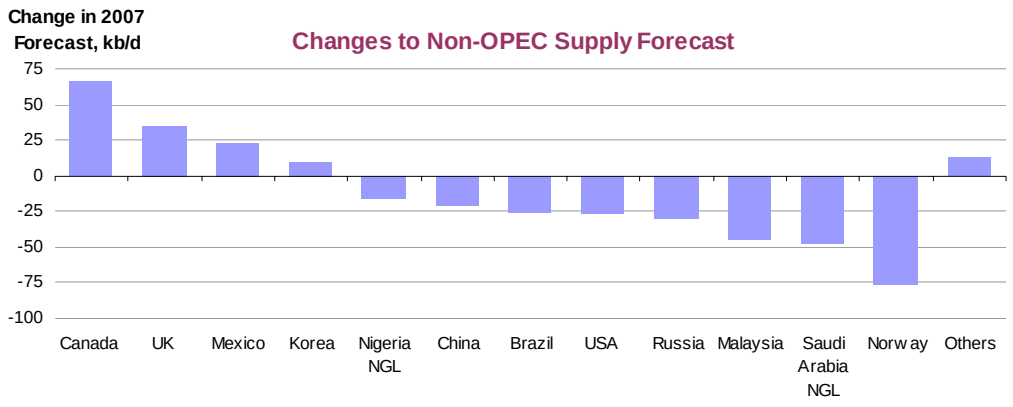
Non-OPEC supply is revised up by 30 kb/d for 2006 but down by 70 kb/d for 2007. This cuts expected non-OPEC growth in 2007 to 1.0 mb/d from last month's 1.1 mb/d. Higher 1Q data for Canada and Mexico add a combined 90 kb/d to 2007 supply, in part offset by a 30 kb/d reduction for the USA. Lower Norwegian supplies due to delays and outages outstrip a higher UK baseline, leaving European 2007 supply revised down by 35 kb/d. The inclusion of previously omitted refinery blendstock and additives data for Korea adds some 10-15 kb/d to historical and forecast OECD Pacific supply.

Revisions to Non-OPEC Oil Supply
(million barrels per day)

	Last Month's OMR				This Month's OMR				This Month vs. Last Month			
	2006	2007	06 v 05	07 v 06	2006	2007	06 v 05	07 v 06	2006	2007	06 v 05	07 v 06
North America	14.23	14.21	0.09	-0.02	14.24	14.27	0.10	0.03	0.01	0.06	0.01	0.05
Europe	5.20	5.19	-0.41	-0.01	5.20	5.16	-0.41	-0.04	0.00	-0.04	0.00	-0.04
Pacific	0.57	0.65	-0.02	0.09	0.58	0.66	-0.01	0.08	0.01	0.01	0.00	0.00
Total OECD	**20.00**	**20.06**	**-0.33**	**0.06**	**20.02**	**20.09**	**-0.32**	**0.07**	**0.02**	**0.03**	**0.01**	**0.01**
Former USSR	12.09	12.60	0.46	0.51	12.10	12.58	0.46	0.48	0.00	-0.02	0.00	-0.02
Europe	0.15	0.13	-0.01	-0.01	0.15	0.13	-0.01	-0.01	0.00	0.00	0.00	0.00
China	3.67	3.77	0.06	0.09	3.67	3.75	0.06	0.07	0.00	-0.02	0.00	-0.02
Other Asia	2.70	2.76	0.05	0.05	2.71	2.72	0.05	0.00	0.01	-0.04	0.00	-0.05
Latin America	4.40	4.51	0.11	0.11	4.40	4.48	0.11	0.09	0.00	-0.02	0.00	-0.02
Middle East	1.73	1.65	-0.13	-0.08	1.73	1.65	-0.13	-0.08	0.00	0.00	0.00	0.00
Africa*	2.54	2.68	0.07	0.14	2.54	2.68	0.07	0.14	0.00	0.00	0.00	0.00
Total Non-OECD*	**27.29**	**28.10**	**0.60**	**0.81**	**27.30**	**28.00**	**0.60**	**0.70**	**0.01**	**-0.10**	**0.00**	**-0.11**
Processing Gains	1.90	1.92	0.04	0.02	1.90	1.92	0.04	0.02	0.00	0.00	0.00	0.00
Other Biofuels	0.18	0.34	0.06	0.17	0.18	0.34	0.06	0.17	0.00	0.00	0.00	0.00
Total Non-OPEC*	**49.37**	**50.42**	**0.37**	**1.05**	**49.40**	**50.35**	**0.38**	**0.95**	**0.03**	**-0.07**	**0.01**	**-0.10**

OMR = Oil Market Report
* adjusted to exclude Angola

Revised historical data for Nigerian Oso condensate and 2006 Aramco production data reduce 2006 OPEC NGL supply by a combined 60 kb/d. These, plus delays in the build up in Qatar's gas liquids supply, reduce the 2007 OPEC NGL total by 70 kb/d. Aside from China and Russia (already discussed, above) other key downward adjustments for 2007 come from Brazil and Malaysia. In both cases weaker baseline production data through March underpin the revision.



OECD STOCKS

Summary

- **Total OECD stocks fell another 17.1 mb in March** as a 35.9 mb product draw was only partly offset by a 16.3 mb increase in crude. Atlantic Basin downstream maintenance, a string of refinery glitches in the US and sustained demand growth have kept gasoline stocks at the bottom of their five-year average range. With the summer driving season due to begin at the end of May, this has been one of the main pillars of support for prices. OECD Pacific inventories in contrast rose on strong crude builds ahead of refinery maintenance.

Preliminary Industry Stock Change in March 2007 and First Quarter 2007

	March (preliminary) *(million barrels)*				March (preliminary) *(million barrels per day)*				First Quarter 2007 *(million barrels per day)*			
	N. Am	Europe	Pacific	Total	N. Am	Europe	Pacific	Total	N. Am	Europe	Pacific	Total
Crude Oil	**6.6**	**-7.5**	**17.3**	**16.3**	**0.21**	**-0.24**	**0.56**	**0.53**	**0.13**	**-0.18**	**0.15**	**0.10**
Gasoline	-13.2	0.0	-0.2	-13.4	-0.43	0.00	-0.01	-0.43	-0.15	0.06	0.03	-0.06
Distillates	-5.1	-8.8	-9.6	-23.4	-0.16	-0.28	-0.31	-0.75	-0.34	-0.06	-0.13	-0.53
Fuel Oil	3.0	0.3	-0.4	2.9	0.10	0.01	-0.01	0.09	-0.03	-0.02	-0.01	-0.05
Other Products	-2.0	-0.9	0.8	-2.1	-0.06	-0.03	0.03	-0.07	-0.32	0.00	-0.04	-0.36
Total Products	**-17.3**	**-9.2**	**-9.4**	**-35.9**	**-0.56**	**-0.30**	**-0.30**	**-1.16**	**-0.84**	**-0.01**	**-0.15**	**-1.00**
Other Oils[1]	4.2	-0.9	-0.8	2.5	0.14	-0.03	-0.03	0.08	-0.07	0.03	0.01	-0.03
Total Oil	**-6.5**	**-17.6**	**7.0**	**-17.1**	**-0.21**	**-0.57**	**0.23**	**-0.55**	**-0.78**	**-0.17**	**0.02**	**-0.93**

1 Other oils includes NGLs, feedstocks, and other hydrocarbons.

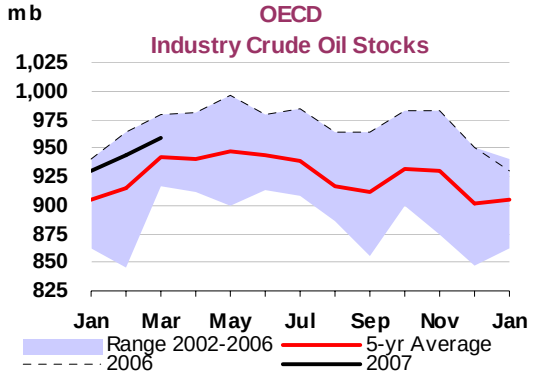
- **End-February OECD inventory data were revised up by 20.5 mb**, on higher crude numbers in Italy, Germany and Japan, while US crude figures came in lower. Nevertheless, preliminary first-quarter calculations still show a 930 kb/d stock draw, the largest first-quarter downturn since 1996, as flagged in our last two *Oil Market Reports*. Additional revisions to demand have flattened the decline in days of forward cover, which remained at 54 days at the end of March, unchanged from the end of February and levels of a year ago.

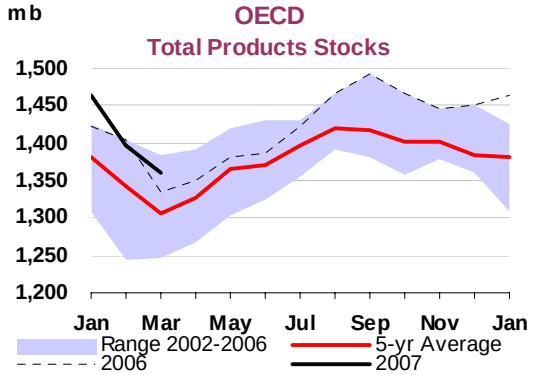
- **Preliminary April inventory data from the US, Japan and Europe showed an uptick** in total stocks of 8.2 mb, as a 10.2 mb crude build outweighed a small product draw of 2.4 mb. Latest US weekly data for the first week of May showed the first gasoline stock build in three months, and while inventories there are at their lowest in at least 16 years in terms of forward demand cover, the uptick could yet prove to be the turning point, after which stocks build until their seasonal peak in June.

OECD Industry Stock Changes in March 2007

OECD North America

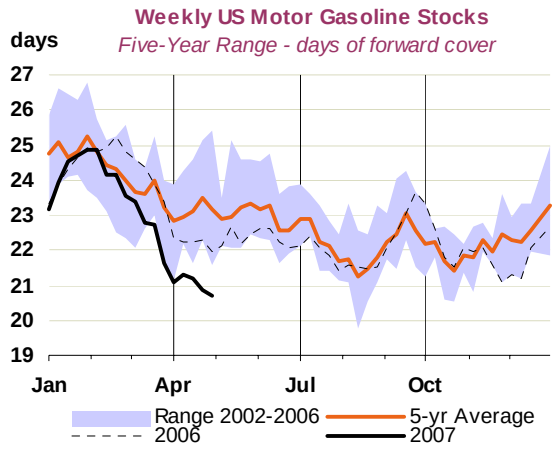
Total stocks in North America fell by 6.6 mb in March, as a strong decline in products was only partly balanced by increases in crude and 'other oils'. Crude stocks increased by 6.5 mb, as a build of 8.0 mb in the US outweighed a small 1.4 mb downturn in Mexico. Crude imports into the US have risen steadily since February as refineries prepare for their return from seasonal maintenance, and were on average

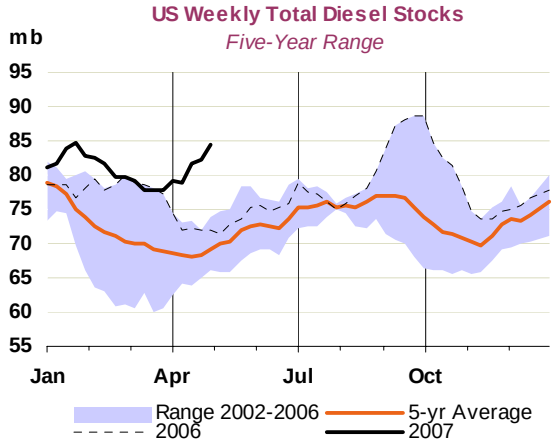




around 0.4 mb/d higher than the five-year average. In addition, a series of unplanned outages has kept utilisation at the bottom of its five-year average range. Despite the build in March, US crude stocks were still 16.3 mb down year-on-year.

Preliminary US inventory data for April show a crude build of 5.2 mb, as refinery throughputs followed their seasonal recovery. However, there remains concern that reduced OPEC output will tighten crude supplies ahead of peak runs in the high-demand summer season. In other news, the US Department of Energy rejected a second round of bids tendered to fill the Strategic Petroleum Reserve (SPR), again arguing that prices were too high. However, a small trickle of royalty-in-kind crude from oil produced on federal land has been put into the SPR in April, amounting to 772 kb, or around 26 kb/d. Meanwhile, although stocks at Cushing, Oklahoma, the delivery point for the NYMEX light sweet crude contract, dipped in mid-April they more recently returned to only slightly below their early April record-high of 28.0 mb. This remains the main reason for WTI's relative weakness to other benchmark crudes.





North American product stocks fell by a total of 17.3 mb in March, and are now 15.9 mb lower year-on-year. Virtually all of this stemmed from a decline in the US of 16.8 mb, while total products in Mexico dipped only by 0.5 mb. The main concern in the US is gasoline stocks, which fell by 13.3 mb in March, leaving total North American gasoline inventories below their five-year average range.

In April, preliminary data for the US show a further gasoline stock draw of 11.2 mb, additionally raising worries that cover might be tight in the summer. Heating oil stocks also fell by 5.3 mb on colder weather, though with increases in diesel (+5.2 mb) and fuel oil (+1.3 mb), as well as 'other oil' and unfinished products, the overall product stock draw only amounted by 2.4 mb. The disparity in heating oil and diesel stocks is worth noting, as while the former has fallen to the bottom of its five-year average range due to the cold temperatures in April, diesel stocks are well above their average range.

OECD Europe

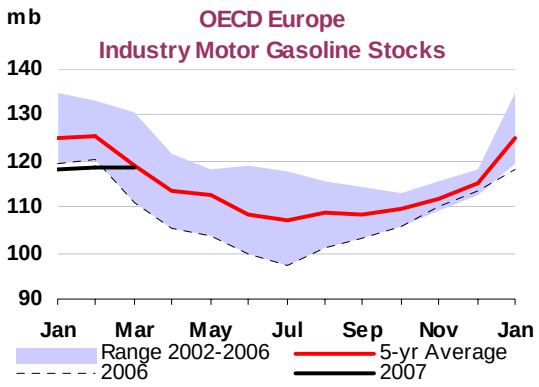
Total inventories in Europe fell by 17.6 mb in March on a decline in both crude and product stocks. Crude fell sharply in France (-7.0 mb), partly as a result of the dock workers' strike at southern import hub Fos, which delayed unloading. On the other hand, crude stocks were up in Italy by 3.0 mb, even though no reported maintenance was taking place, possibly due to some crude being diverted from southern France.

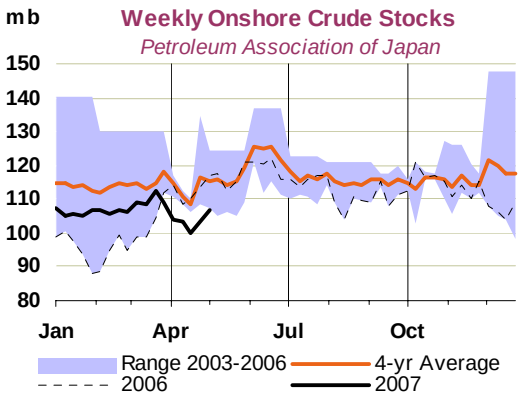
European product stocks fell by 9.2 mb in March because of a strong drawdown in middle distillate stocks. Seasonal refinery maintenance and some forced run cuts due to the Fos strike reduced product supply, even while Europe was experiencing an unusually warm spring (March saw 8% fewer heating degree days in Europe compared with the 10-year average). Nevertheless, European middle distillate stocks remain significantly higher than their five-year average.

Preliminary EU-16 data from Euroilstock show total inventories rising by 9.5 mb in April due to a 9.8 mb increase in crude. While total refined products were down slightly, gasoline stocks fell by 2.7 mb and fuel oil by 1.4 mb. These changes were balanced by a total middle distillate build of 3.8 mb.

OECD Pacific

In the Pacific, in contrast, total inventories rose by 7.0 mb in March. Crude stocks increased by 17.3 mb on strong gains in both Korea (+9.7 mb) and Japan (+7.6 mb), outweighing a product drawdown of 9.4 mb, largely in middle distillates. The crude increase came despite approaching seasonal refinery maintenance, which in Asia-Pacific ramps up from March towards a June peak. At the end of March, Pacific crude inventories stood above their five-year average range.





Preliminary April data from the Petroleum Association of Japan (PAJ) indicate a reversal of March developments, as a 4.6 mb crude draw far outweighed a marginal product increase of 0.6 mb. Despite unusually cold weather in April, heating fuel kerosene stocks only fell by 0.7 mb. Jet fuel also declined by 0.8 mb, balancing increases in gasoil/diesel (+0.8 mb), residue (+0.8 mb), naphtha (+0.2 mb) and gasoline (+0.1 mb).

OECD Inventory Position at End-March and Revisions to Preliminary Data

Total OECD industry stocks stood at 2,600 mb at the end of March, down by 17.1 mb from an upwardly-revised end-February figure and roughly unchanged (3.5 mb higher) year-on-year. Crude inventories came in at 959 mb, 16.3 mb higher than the previous month, but 19.1 mb lower on the year. Total products were 1,361 mb, 35.9 mb lower than end-February, but 27.6 mb higher than end-March 2006. 'Other oils' meanwhile were down by 2.1 mb from February and 8.3 mb higher on the year. Forward demand cover remained at 54 days, unchanged from end-February and the previous year. Based on this preliminary data for March, the total OECD first-quarter stock draw was 930 kb/d, the highest since 1996, and only slightly lower than our estimate published in last month's report.

Year-on-Year OECD Industry Stock Comparisons for March 2007

	(million barrels)					*(Days of Forward Demand)*			
	North America	Europe	Pacific	Total		North America	Europe	Pacific	Total
Crude Oil	**-14.8**	**-20.8**	**16.5**	**-19.1**	**Total Oil**	**-1.9**	**1.0**	**3.2**	**-0.2**
Total Products	-15.9	42.0	1.6	27.6	*Versus 2005*	0.0	1.2	6.8	1.5
Other Oils[1]	-3.0	-5.2	3.1	-5.1	*Versus 2004*	1.8	2.8	4.3	2.5
Total Oil	**-33.6**	**16.0**	**21.2**	**3.5**	**Total Products**	**-0.9**	**2.7**	**0.4**	**0.4**
Versus 2005	4.0	13.5	40.2	57.8	*Versus 2005*	-0.5	2.5	2.6	1.0
Versus 2004	60.8	45.9	29.3	135.9	*Versus 2004*	0.8	4.4	1.8	2.1

1 Other oils includes NGLs, feedstocks, and other hydrocarbons.

Revisions to February data amounted to +20.5 mb, mostly in crude, though a small increase in product stocks was also noted. The crude increase was mainly centred on Europe (+20.3 mb), where large revisions were noted for Italy (+10.0 mb) and Germany (+5.1 mb), the former in part stemming from stocks

held under bilateral agreement but not captured by preliminary data. Japanese crude stocks were also revised up by 8.4 mb, while US crude was adjusted down by 5.9 mb. In addition, European product inventories were also revised up by 6.3 mb, after adjustments to middle distillate (+4.9 mb), gasoline (+4.4 mb) and fuel oil (-3.6 mb) inventories.

Revisions versus 12 April 2007 Oil Market Report

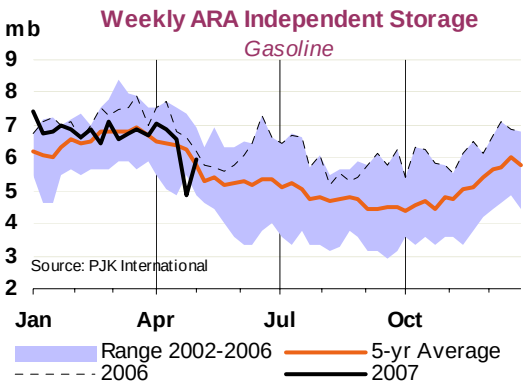
(million barrels)

	North America		*Europe*		*Pacific*		*OECD*	
	Jan 07	Feb 07	Jan 07	Feb 07	Jan 07	Feb 07	Jan 07	Feb 07
Crude Oil	**0.2**	**-7.7**	**0.4**	**20.3**	**0.0**	**9.4**	**0.6**	**22.1**
Gasoline	0.0	-2.9	0.2	4.4	0.0	0.0	0.2	1.5
Distillates	0.0	-5.3	-0.4	4.9	0.0	0.5	-0.5	0.1
Residual Fuel Oil	0.0	0.8	0.0	-3.6	0.0	0.5	0.0	-2.3
Other Products	0.0	6.8	-0.2	0.6	0.0	-0.9	-0.2	6.5
Total Products	**0.0**	**-0.6**	**-0.4**	**6.3**	**0.0**	**0.2**	**-0.4**	**5.8**
Other Oils[1]	0.2	-7.5	0.1	0.8	0.0	-0.7	0.2	-7.4
Total Oil	**0.3**	**-15.7**	**0.0**	**27.4**	**0.0**	**8.9**	**0.4**	**20.5**

1 Other oils includes NGLs, feedstocks, and other hydrocarbons.

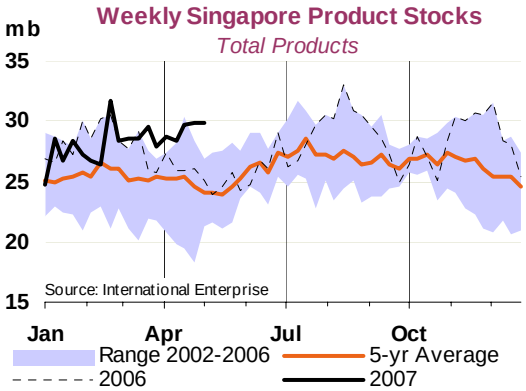
Recent Developments in ARA Independent Storage

Total oil product inventories held in independent storage in the Amsterdam-Rotterdam-Antwerp (ARA) area fell by 0.6 mb in April, but at 27.1 mb, remain above their five-year average. The most noticeable development was a 1.3 mb drawdown in gasoline, including a particularly sharp dip of 1.7 mb in the week ended 26 April. While Europe itself is structurally long in gasoline, the tight market in the US has attracted fixings across the Atlantic whenever the economics are right – although from mid-April, Rotterdam prices have occasionally been at premia to New York Harbor. But flows from Europe to other destinations have also been reported, notably West Africa, Mexico and some Mediterranean countries. Jet-kerosene stocks also fell by 0.2 mb. Meanwhile, increases were seen in gasoil (+0.5 mb), naphtha (+0.3 mb) and fuel oil (+0.1 mb).



Recent Developments in Singapore Stocks

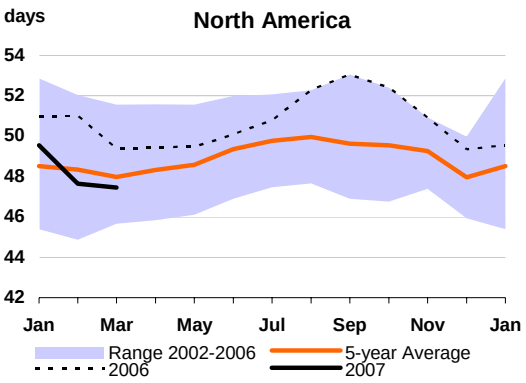
Total product stocks held in Singapore rose by 1.6 mb in April, according to International Enterprise, and remain around the top of their respective five-year ranges in all three categories. Light distillates rose by 0.9 mb as higher naphtha exports flowed in from India and petrochemical crackers in the region geared up for seasonal maintenance. Fuel oil inventories also increased by 0.8 mb, while middle distillates dropped by a more marginal 0.1 mb.

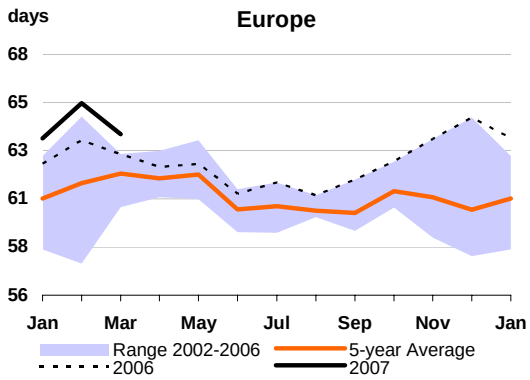


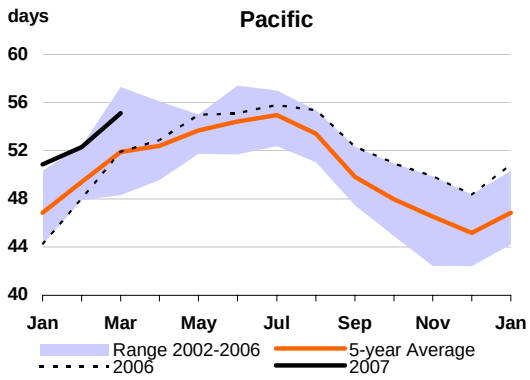
Regional OECD End-of-Month Industry Stocks

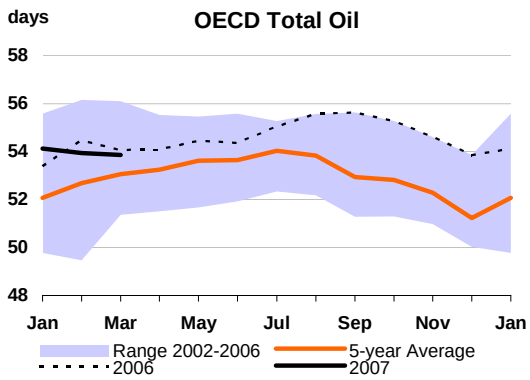
(in days of forward demand and millions barrels of total oil)

Days[1]

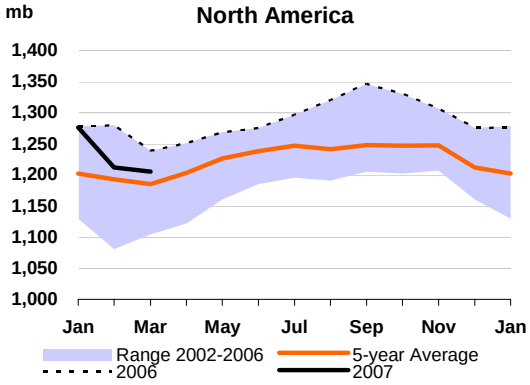


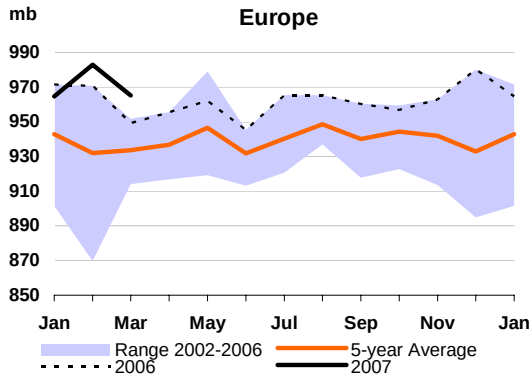


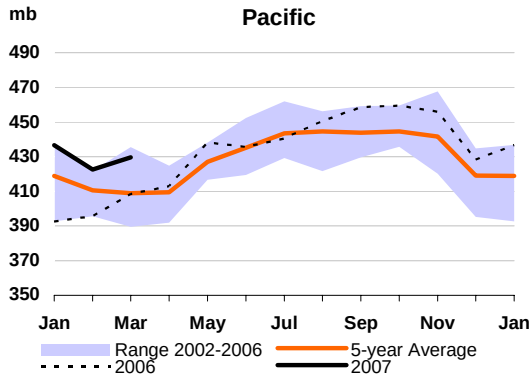


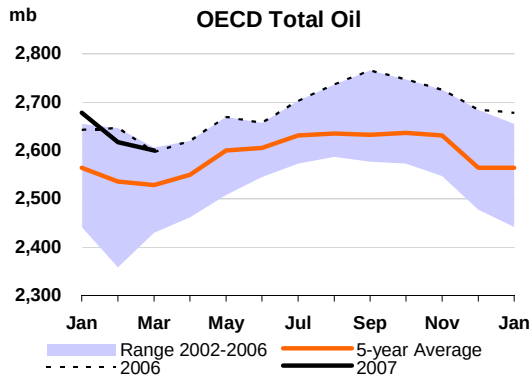


Million Barrels









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

PRICES

Summary

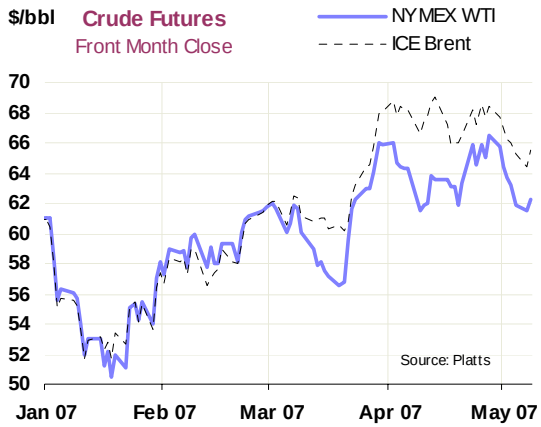
- **Prices traded sideways around $65/bbl in April and early May**, supported by a tight Atlantic Basin gasoline market and ongoing geopolitical worries. Continued refinery glitches in the US kept gasoline stocks low ahead of the summer driving season, while further Nigerian supply outages and constrained OPEC supply raised concerns that crude supplies would be tight when refineries need to run at peak summer levels.

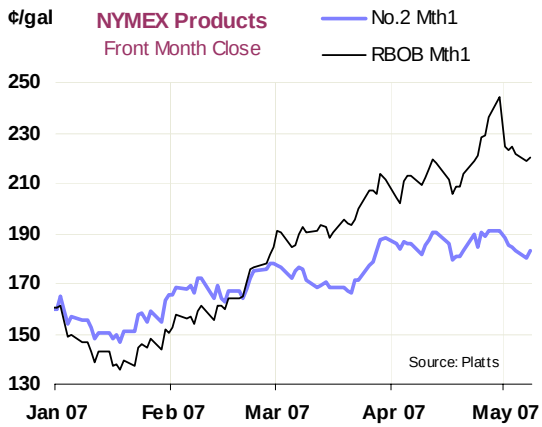
- **Crude prices rose, supported by gasoline's gains** and correspondingly healthy refining margins. WTI's unusual discount to Brent has narrowed but persists, while Asian sour benchmark Dubai nearly reached parity with Brent in early May, making eastward shipments of Brent-priced crude attractive.

- **Refining margins rose on strong product price gains, and remain high in most markets**. Most notably, European and Singapore Dubai hydroskimming margins turned positive in early May, indicating the need for less sophisticated plants to hike runs in a tight product market. This is a further indication of a product, rather than crude-led, market.

- **Product prices rose across the barrel**, led by gasoline in the US and Europe and naphtha in Asia. Jet and fuel oil cracks also increased, the latter on colder-than-average weather in Asia in particular in April. Only diesel prices were relatively lacklustre amid high stocks in the US.

- **Volatile VLCC rates recovered** in early May from deep mid-April troughs, as Middle East Gulf exports to the West increased modestly. High US gasoline prices failed to support clean tanker rates as tightness in Europe restricted incremental transatlantic shipments.





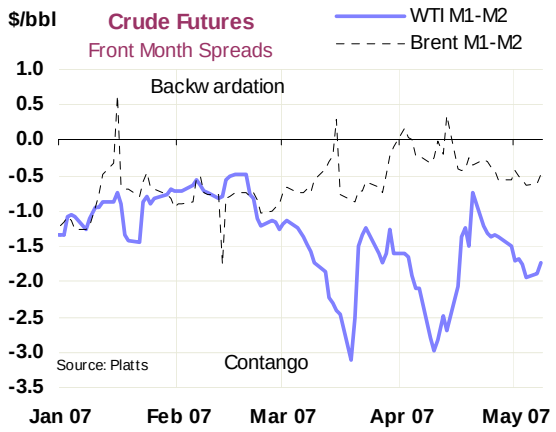
Overview

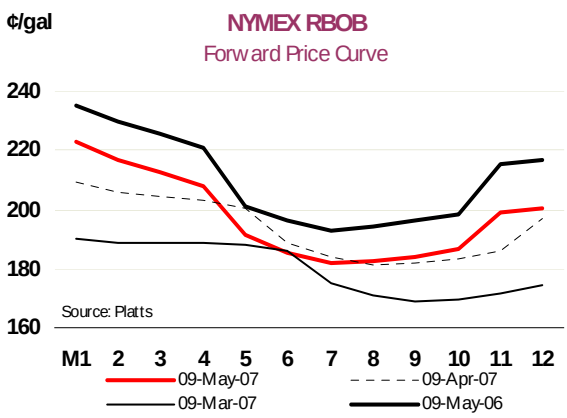
Markets remain product-driven, as gasoline crack spreads reached their highest levels since Hurricanes Katrina and Rita hit the US Gulf Coast in the summer of 2005. Particularly in the US, longer-lasting Atlantic Basin refinery maintenance and increasingly frequent unplanned outages, as well as healthy demand growth and only-average gasoline imports have dragged down industry stocks and boosted prices. With average retail prices in the US near record-highs at just over $3/gallon several weeks ahead of the start to the summer driving season (on Memorial Day in late May), concerns over supplies are being raised.

Unusually moreover, the European gasoline market, which is structurally long, is also showing its highest gasoline cracks since the hurricanes, even on occasion pushing up prices to a premium over the US, and thus discouraging the all-important flow of incremental European barrels over the Atlantic to complement US production. US gasoline inventories have seen a steep decline in the past three months to well below their five-year average range for this time of year. However, early-May weekly data, which showed the first build since late January, could herald a gradual build up, and change the market's perspective. European markets relaxed after a strike by Belgian refinery workers was avoided in early May, which had threatened to affect operations in the crucial Antwerp area.

But underlying worries about product availability in the summer are concerns that geopolitics could threaten crude supplies, most recently in Nigeria. A further 215 kb/d is now offline, in addition to the estimated 600 kb/d already shut-in during April. Meanwhile, the planned restart of Shell's Forcados stream, while initially seen by the market as a sign of an imminent return to normal production levels, now looks to be at best a slow process.

When Saudi Arabia announced in late April that it had arrested 172 suspected terrorists and foiled various plots to attack civilian and oil installations, the market (as opposed to some security observers) appeared reassured that the security situation in the world's largest producer was under control. Nevertheless, with OPEC apparently unconvinced of the need to review crude production before its scheduled September meeting, steady output at current levels would lead to the group undershooting our calculated range for the call on its crude, and thus tightening stocks further.

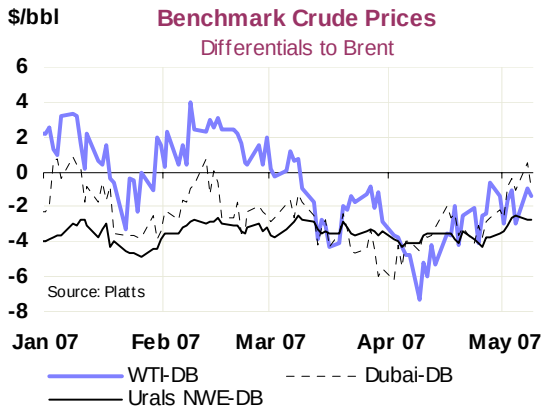


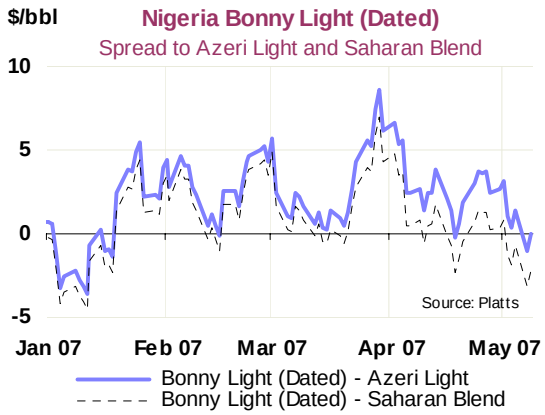


In the short term however, while refinery maintenance is at its peak, an easing has been noted in the front end of Brent spreads and WTI's exceptionally wide contango has narrowed. NYMEX RBOB in contrast has been in backwardation since early March due to the gasoline market's tightness. In other futures news, the Dubai Mercantile Exchange (DME) has postponed the launch of its Oman contract to 1 June, apparently pending the resolution of outstanding regulatory issues. Rival ICE meanwhile reportedly plans to launch its own Middle Eastern sour crude contract from late May, based on Dubai price assessments. The NYMEX has also announced a new US Gulf Coast gasoline, and Gulf Coast and New York Harbor ultra-low-sulphur diesel (ULSD) contracts, to start trading from 13 May. Meanwhile, from 8 June Platts will include Ekofisk in its basket of crudes that underlie the North Sea Dated BFO benchmark. This report will take a closer look at these developments in future issues.

Spot Crude Oil Prices

Crude markets remain underpinned by gasoline's strength at a time of near-peak global refinery shutdowns due to seasonal maintenance and a string of unplanned outages. WTI's unusual discount to Brent is still in place (see Report dated 12 April 2007), even though it has narrowed considerably along the forward curve. Crude oil inventories in Cushing, Oklahoma, have dipped slightly from their early-April all-time high, following the restart of Valero's McKee refinery, while front-end Brent tightness has also eased somewhat. Nevertheless, markets have increasingly focused on Brent (paper and physical) as the dominant global benchmark. Meanwhile, Asian marker Dubai, buoyed by fuel oil's strength and constrained OPEC output, has sharply narrowed its discount to Dated Brent.





Dubai's and also light sweet Tapis's relative strength versus Brent should encourage the flow of Atlantic Basin crudes to Asia, despite June's peak in refinery maintenance there. West African sweets are at record high premia as a consequence, though given the problems surrounding Nigeria, rival Mediterranean crudes have also seen strong interest. Despite increasing volumes flowing through the Baku-Tbilisi-Ceyhan (BTC) pipeline into the Mediterranean, Azeri Light has swung from an $8/bbl discount to Bonny Light in late March to a $1/bbl premium recently. Tapis in turn is still taking strength from recent cyclone-induced outages in Australia.

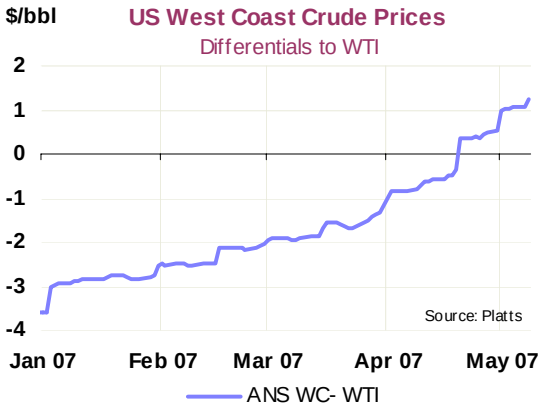
Spot Crude Oil Prices and Differentials

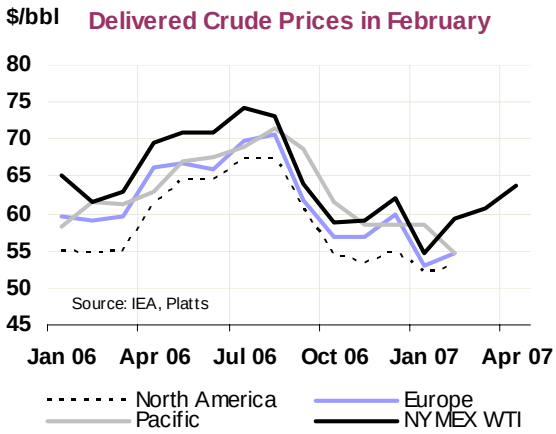
(monthly and weekly averages, $/bbl)

	Feb	Mar	Apr	Apr-Mar Avg Change	%	Week Commencing: 09 Apr	16 Apr	23 Apr	30 Apr	07 May
Crudes										
Dated Brent	57.43	62.15	67.51	5.36	8.6	68.05	66.14	67.45	65.68	63.02
Brent (Asia) Mth1 adjusted	58.21	62.20	67.76	5.56	8.9	68.18	66.94	67.75	67.19	65.31
WTI (Cushing) Mth1 adjusted	59.20	60.62	63.84	3.22	5.3	62.47	62.98	65.09	63.69	61.86
Urals (Mediterranean)	53.81	58.80	63.92	5.12	8.7	64.62	62.63	63.59	62.21	60.33
Dubai Mth1 adjusted	55.75	58.80	63.97	5.17	8.8	64.33	63.39	64.17	64.13	62.78
Tapis (Dated)	64.09	67.87	74.74	6.87	10.1	75.28	74.01	74.84	74.23	72.66
Differential to Dated Brent										
WTI (Cushing) Mth1 adjusted	1.77	-1.53	-3.66	-2.14		-5.58	-3.16	-2.35	-2.00	-1.17
Urals (Mediterranean)	-3.61	-3.35	-3.59	-0.24		-3.43	-3.52	-3.85	-3.48	-2.70
Dubai Mth1 adjusted - Dated Brent	-1.67	-3.35	-3.54	-0.19		-3.72	-2.75	-3.27	-1.56	-0.25
Tapis (Dated)	6.67	5.72	7.23	1.51		7.23	7.87	7.39	8.55	9.64
Prompt Month Differential										
Forward Cash Brent Mth1-Mth2 adj.	-0.82	-0.25	-0.11	0.14		-0.15	-0.17	-0.16	-0.44	-0.61
Forward WTI Cushing Mth1-Mth2 adj	-0.72	-1.67	-1.68	-0.01		-2.72	-1.31	-0.96	-1.68	-1.81

Source: Platts

Russian crude exports meanwhile have been at record highs after a dip in export tariffs from 1 April and ahead of a new rise from 1 June. Urals has benefited from a sharp rise in hydroskimming margins in Europe and its discount to Dated Brent has narrowed by around $1/bbl since early April. Dubai's strength however has seen it shift from a $2/bbl discount to a $3/bbl premium versus Urals over the past month.

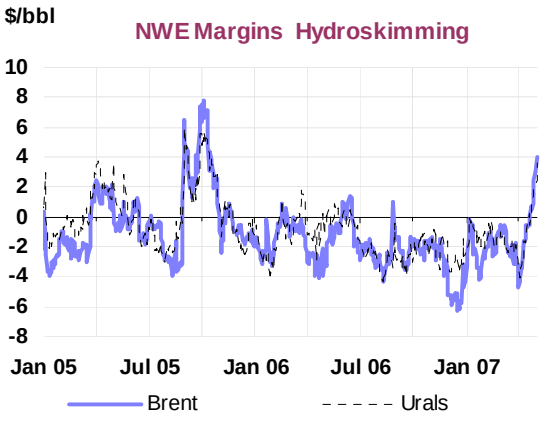


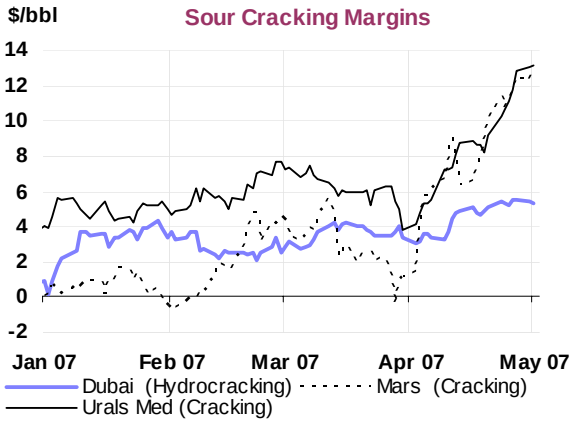


WTI's return to more normal levels has seen its position versus other US crudes normalise. LLS's premium to WTI has narrowed to around $5/bbl and Gulf Coast sour crude Mars is hovering around a $3.50/bbl discount. On the West Coast however, a short-lived outage to Alaskan Prudhoe Bay production curbed ANS supply, just as refineries were ramping up throughputs after maintenance and a spate of problems. As a consequence, ANS has risen to a rarely-seen premium to WTI in recent weeks. In other US-related news, the Department of Energy rejected a second round of bids to fill the Strategic Petroleum Reserve (SPR) as being too expensive. This postponed the purchase of crude until after the summer driving season, thus taking an expected 133 kb/d of implied crude demand from the market in June. The SPR has however been filled with around 26 kb/d of royalty-in-kind crude during April.

Refining Margins

Refining margins rose in the US Gulf Coast and Europe on soaring gasoline prices and generally remain very high in the Atlantic Basin. Product prices all rose on average in April, though less so on the US West Coast, slightly trimming what were already the highest margins in the world. Most interesting this month was the rise in European hydroskimming margins. Long depressed, early May saw them swing into positive territory for the first time since August 2006, and to their highest level since October 2005, after Hurricanes Katrina and Rita. This was largely due to gasoline's unusually strong performance in April, with Premium Unleaded rising $10/bbl in April over March, but also in response to price gains for naphtha, jet and fuel oil. The rise in hydroskimming margins would appear to indicate less complex plants need to boost runs in order to cover demand in a constrained product market.





Selected Refining Margins in Major Refining Centres

($/bbl)

		Monthly Average			Change	Average for week ending:				
		Feb 07	Mar 07	Apr 07	Apr 07-Mar 07	04 Apr	11 Apr	18 Apr	25 Apr	02 May
NW Europe	Brent (Cracking)	3.76	4.98	6.77	1.79	3.46	5.05	7.00	8.50	11.15
	Urals (Cracking)	5.70	6.55	8.67	2.12	5.55	7.02	8.73	10.41	12.53
	Brent (Hydroskimming)	-1.81	-1.98	-1.23	0.76	-3.90	-2.72	-0.89	0.09	2.37
	Urals (Hydroskimming)	-1.25	-2.00	-0.87	1.12	-3.41	-2.36	-0.60	0.39	2.29
Mediterranean	Es Sider (Cracking)	4.54	4.73	6.68	1.96	2.36	5.06	6.82	8.28	11.50
	Urals (Cracking)	5.83	6.34	7.98	1.63	4.60	6.11	8.34	9.39	12.37
	Es Sider (Hydroskimming)	-1.41	-2.61	-1.53	1.08	-5.42	-3.09	-1.28	-0.09	2.62
	Urals (Hydroskimming)	-1.14	-1.96	-1.35	0.61	-4.17	-3.02	-0.91	-0.30	2.36
US Gulf Coast	Bonny (Cracking)	0.77	3.97	7.61	3.64	4.34	7.08	7.67	8.30	10.04
	Brent (Cracking)	0.87	3.13	6.99	3.86	2.06	5.82	7.36	8.54	10.94
	LLS (Cracking)	2.21	6.29	11.17	4.88	5.54	10.56	11.74	13.02	13.44
	Mars (Cracking)	1.69	2.93	7.59	4.66	1.40	6.34	7.46	9.76	12.06
	Mars (Coking)	8.29	11.30	16.22	4.92	10.41	15.58	16.20	17.86	19.49
	Maya (Coking)	11.05	17.07	22.82	5.75	18.51	23.23	22.85	23.53	24.27
US West Coast	ANS (Cracking)	11.43	17.00	16.59	-0.41	15.41	16.90	18.12	15.64	17.89
	Kern (Cracking)	11.91	16.06	15.28	-0.78	14.69	16.18	16.47	14.10	15.46
	Oman (Cracking)	9.59	12.88	12.30	-0.58	12.50	10.47	12.90	12.64	15.27
	Kern (Coking)	25.66	36.42	37.19	0.78	35.95	35.62	39.24	37.11	40.67
Singapore	Dubai (Hydroskimming)	-0.98	-1.20	-0.49	0.71	-1.05	-1.26	-0.14	-0.07	0.27
	Tapis (Hydroskimming)	-5.06	-4.27	-5.66	-1.39	-6.22	-6.62	-5.35	-4.97	-4.51
	Dubai (Hydrocracking)	2.85	3.55	4.41	0.87	3.48	3.50	4.79	5.06	5.38
	Tapis (Hydrocracking)	-1.60	-0.42	-1.74	-1.32	-2.46	-2.87	-1.39	-0.95	-0.36
China	Cabinda (Hydroskimming)	-5.49	-6.04	-5.36	0.68	-7.51	-6.20	-4.44	-4.90	-4.03
	Daqing (Hydroskimming)	-7.98	-8.51	-9.18	-0.67	-9.50	-9.53	-8.88	-8.87	-8.91
	Dubai (Hydroskimming)	-1.49	-1.94	-0.96	0.98	-1.74	-1.78	-0.59	-0.42	-0.15
	Daqing (Hydrocracking)	-2.39	-1.68	-2.27	-0.59	-3.00	-2.92	-2.02	-1.73	-1.36
	Dubai (Hydrocracking)	2.33	2.82	3.96	1.14	2.80	2.98	4.35	4.72	4.97

For the purposes of this report, refining margins are calculated for various complexity configurations, each optimized 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.

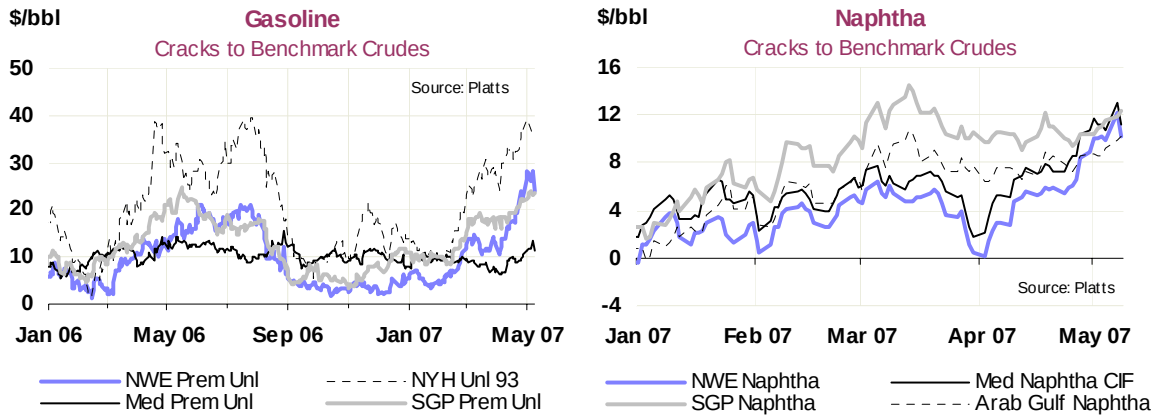
Sources: IEA, Purvin & Gertz Inc.

In the US, refining margin gains were strongest on the US Gulf Coast on healthy gasoline demand and an average dip in refining runs of over 120 kb/d in April over March due to maintenance and outages. Gasoline, jet and even fuel oil cracks increased, while only gasoil/diesel spreads remained flat, despite some additional late-season heating oil demand. West Coast margins mostly declined slightly in April, partly due to ANS's strength, but nevertheless remain high. In Asia, margins were mixed, partly due to crude's relative strength, but also due to a relatively weaker light distillate market, as naphtha cracks fell from record heights. In early May, Dubai hydroskimming margins also moved into positive territory for the first time since early February.

Spot Product Prices

Gasoline's strength is leading product markets (and oil prices in general) higher - particularly in the US. The lowest level of forward gasoline stock cover since Hurricanes Katrina and Rita, and the lowest ever level ahead of the summer driving season in at least 16 years – at 21 days – is causing some concern. Refinery utilisation is still only at weak levels of a year ago, as are gasoline imports, and inventories have declined steadily for three months in a row (showing their first build in latest weekly US data just ahead of publication). A series of refinery problems has dogged the US industry, arguably also because of tighter specifications, which amplify the effect of any outages.

US gasoline retail prices are already at their highest levels since the late summer of 2005, at over $3/gallon. Partly in response, European gasoline prices have risen too, recently attaining a premium over US prices, hampering the usual transatlantic arbitrage. And in Asia, naphtha cracks remain near the record-high levels seen in early April, driven by undimmed petrochemical demand. The gasoline arbitrage from East Asia to the US West Coast remains open, with volumes reportedly sent from Taiwan and South Korea. Venezuela is also set to restart gasoline exports to the US, after a seven-month hiatus, following refinery problems.



Middle distillate prices were more muted, with diesel staying more or less flat in both absolute and crack spread terms. The exceptions were spreads for jet, which rose quite strongly, and heating oil in the US, the latter due to a colder-than-average April. Fuel oil meanwhile narrowed its discount to crude. It

Spot Product Prices

(monthly and weekly averages, $/bbl)

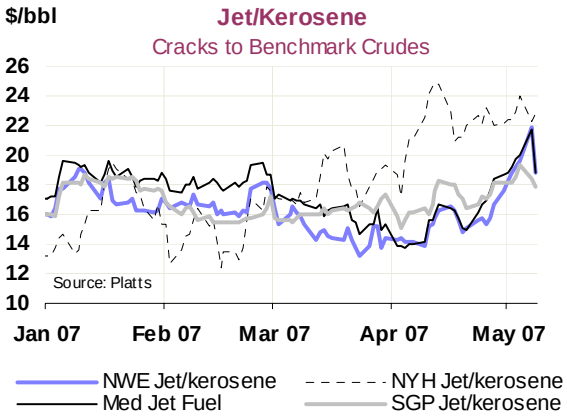
	Feb	Mar	Apr	Apr-Mar Change	Apr-Mar %	Week Commencing: 09 Apr	16 Apr	23 Apr	30 Apr	07 May	Feb	Mar	Apr
Rotterdam, Barges FOB											**Differential to Brent**		
Premium Unleaded	64.97	74.89	85.57	10.68	14.3	84.22	84.42	90.21	92.81	87.60	7.54	12.74	18.07
Naphtha	60.80	66.66	72.53	5.87	8.8	72.99	71.77	73.91	75.49	73.70	3.37	4.51	5.02
Jet/Kerosene	74.17	77.03	82.93	5.90	7.7	83.53	81.79	83.26	84.38	82.34	16.74	14.88	15.42
ULSD	72.51	76.23	81.65	5.43	7.1	82.56	80.62	81.98	81.51	79.43	15.08	14.08	14.15
Gasoil .2%	69.44	72.62	78.37	5.75	7.9	79.24	77.33	79.02	78.85	76.71	12.01	10.47	10.86
LSFO 1%	36.04	40.80	44.61	3.82	9.4	44.23	43.65	45.23	48.12	48.45	-21.38	-21.35	-22.89
HSFO 3.5%	39.61	42.07	48.44	6.37	15.2	47.66	48.13	50.54	51.33	49.37	-17.81	-20.08	-19.07
Mediterranean, FOB Cargoes											**Differential to Urals**		
Premium 50 ppm	64.17	73.46	83.69	10.23	13.9	82.46	82.37	88.10	90.90	87.28	10.35	14.66	19.77
Naphtha	59.13	64.85	70.70	5.86	9.0	71.31	69.91	72.04	73.77	72.05	5.31	6.04	6.78
Jet Aviation fuel	72.03	75.03	79.75	4.72	6.3	80.44	78.29	80.73	81.47	79.66	18.21	16.23	15.83
Gasoil .2%	68.95	73.06	79.56	6.50	8.9	79.97	78.95	80.63	80.64	78.38	15.14	14.25	15.64
LSFO 1%	39.72	43.10	48.88	5.78	13.4	47.73	48.67	51.17	52.40	50.68	-14.10	-15.70	-15.05
HSFO 3.5%	38.89	42.67	48.51	5.84	13.7	47.39	48.42	50.58	49.92	48.58	-14.92	-16.13	-15.41
New York Harbour, Barges											**Differential to WTI**		
Super Unleaded	73.84	87.49	96.10	8.61	9.8	94.69	94.89	100.87	102.07	97.42	14.64	26.86	32.26
Unleaded	69.13	81.16	87.73	6.56	8.1	88.52	85.05	90.81	92.07	89.52	9.93	20.54	23.88
Jet/Kerosene	74.19	78.80	85.85	7.04	8.9	86.59	84.61	87.62	86.49	84.38	14.99	18.18	22.00
No. 2 (Heating Oil)	71.20	73.09	78.19	5.10	7.0	78.58	76.60	79.37	78.31	76.51	12.00	12.47	14.34
LSFO 1%	40.07	42.70	47.18	4.47	10.5	45.52	47.02	49.69	52.17	51.35	-19.13	-17.92	-16.67
No. 6 3%	41.19	42.35	46.95	4.59	10.8	45.22	47.30	49.42	51.81	51.20	-18.01	-18.27	-16.90
Singapore, Cargoes											**Differential to Dubai**		
Premium Unleaded	66.80	76.62	83.49	6.88	9.0	82.53	82.96	86.01	87.16	86.14	11.04	17.81	19.52
Naphtha	63.81	70.56	74.22	3.66	5.2	74.25	74.50	74.06	75.07	74.88	8.06	11.76	10.25
Jet/Kerosene	71.77	75.02	80.91	5.90	7.9	81.29	80.78	81.44	82.65	80.95	16.02	16.21	16.94
Gasoil .5%	70.61	73.46	80.24	6.78	9.2	80.25	79.98	81.09	80.74	79.82	14.86	14.66	16.27
LSWR Cracked	43.27	46.20	51.91	5.71	12.4	52.12	51.57	52.32	52.08	50.73	-12.49	-12.60	-12.06
HSFO 180 CST	45.67	47.63	53.24	5.61	11.8	53.34	52.68	53.73	54.58	53.66	-10.08	-11.17	-10.73
HSFO 380 CST 4%	45.80	47.67	53.32	5.65	11.8	53.13	52.72	53.76	54.74	53.54	-9.95	-11.13	-10.65

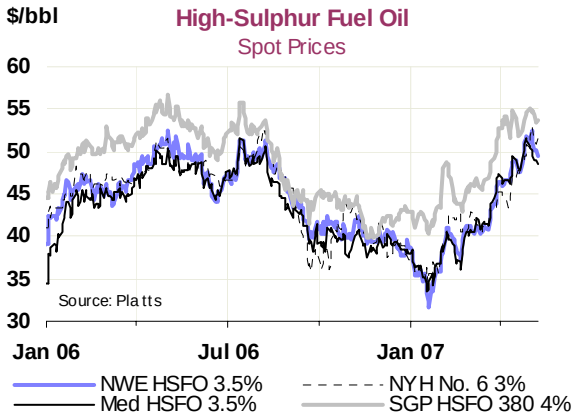
Source: Platts

remains particularly strong in Asia, where the influx from Europe has been lower than usual in April, and demand in Japan rose on higher utility use due to low temperatures. Higher refinery shutdowns in the Asia-Pacific region in June are likely to increase this tightness.

End-User Product Prices in April

End user product prices in April showed strong increases in OECD North America and Europe, both in national currency and US dollar terms. Ex-tax gasoline prices in US dollars rose by 10.5% in Europe on average, 7.6% in Canada and 14.5% in the US. With the exception of Japan, diesel retail prices in US dollars rose 7.0% on average across the OECD, matched by a 5.6% increase in heating oil prices. Japanese retail prices were flat in April, excepting a 0.7% decline in heating oil prices. More significant was the increase in low-sulphur fuel oil retail prices, which increased by 10.3% on average across Europe. *(A detailed breakdown of prices by OECD Member countries is available in Table 14 in the Tables section of* **www.oilmarketreport.org**.*)*





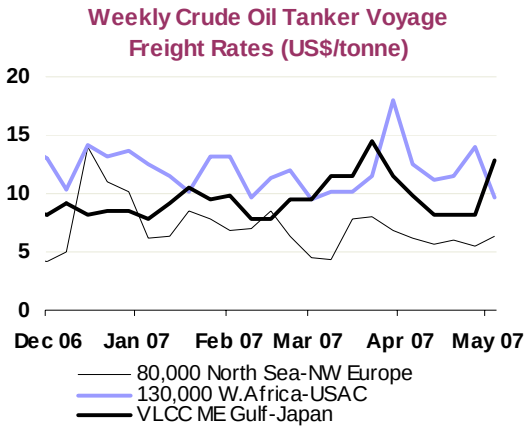
Freight

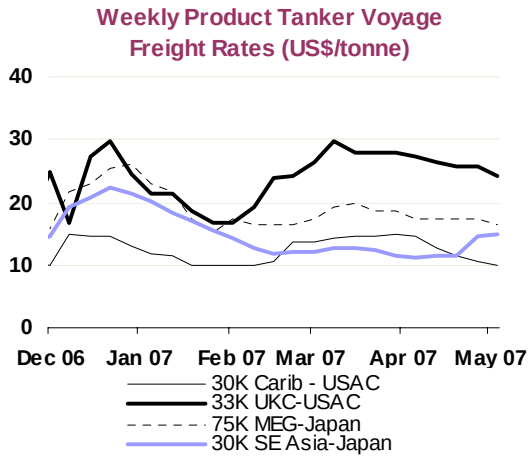
Volatile VLCC rates recovered from near first-quarter lows in mid-April to reach above-average values in early May. Interest in May-loading vessels was boosted by a mild upturn in Middle East Gulf exports to the West, where refinery maintenance has now peaked. High US gasoline prices failed to support clean tanker rates as gasoline tightness in Europe restricted incremental transatlantic arbitrage opportunities.

From multi-month highs of almost $15/tonne at the end of March, VLCC rates from the Middle East Gulf to Japan dropped by 40% in three weeks to $8/tonne. Falling by a similar proportion, VLCC rates to the US Gulf bottomed out near $13/tonne in mid-April, almost a two-year low. However, by early May, rates had recovered to above-average levels of $13/tonne and $19/tonne for Eastern and Western routes respectively. VLCC rates for trades from West Africa to the US followed similar trends. Such rate volatility in March and April is in notable contrast to the gradual downtrend seen between September and February, which was prompted by decreasing OPEC exports.

An upswing in long-haul tanker rates is usual during the second quarter as refinery maintenance finishes in the West and peaks in the East, boosting demand for crude transportation. This year, however, heavy maintenance and unplanned outages at Western refineries have pushed margins extremely high and increased the potential for a more dramatic rebound in post-maintenance crude imports. Limited OPEC exports have exacerbated this potential by preventing crude stocks from building at usual seasonal rates. Ultimately, though, even if more OPEC cargoes are made available, greater spare vessel capacity provided by an expanding fleet of VLCCs may dilute any dramatic upside to rates. There are now 18 more VLCCs in operation compared with 12 months ago. This has boosted the active VLCC fleet by around 4% in vessel terms, over the year.

Eastbound West African VLCC rates ended April at under $17/tonne, well below seasonal averages and $5/tonne down on the month. Loading volumes for April and May were reportedly lower than March, but Angola has announced record-high volumes scheduled for June. Suezmax rates in the Mediterranean and Atlantic fell from end-March highs as the vessel backlog caused by strikes at Fos cleared. In the second quarter, rates for these trades should gain support from increased Western crude needs (especially for sweeter grades from FSU, North and West Africa and the North Sea) and the continual rise of FSU exports. Caribbean to US Gulf Aframax rates rose from $9/tonne to $12/tonne in April, as PADD 3 refiners replenished crude stocks in anticipation of higher May throughputs.





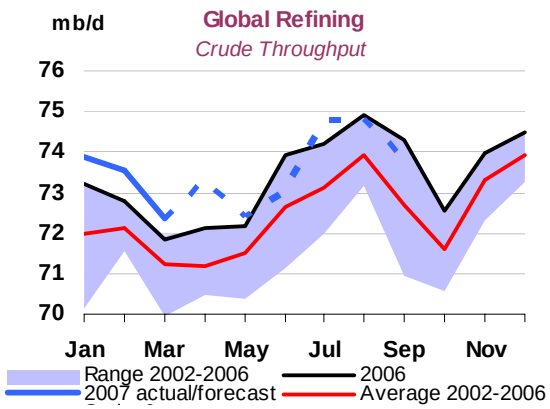
High product prices in Eastern and Western markets did not translate into higher clean product tanker rates in April. Record naphtha prices in Asia reflected regional tightness but clean rates only rose in early May when extra volumes from India became available, although there have also been some shipments from Europe. High US gasoline prices did not draw above-average flows of gasoline across the Atlantic because supply was tight in Europe too, leaving transatlantic clean rates fairly flat in April. However, increased flows of feedstocks may provide support in the next few weeks. Some gasoline moved across the Pacific from Asia to the US West Coast, reducing Asian vessel supply.

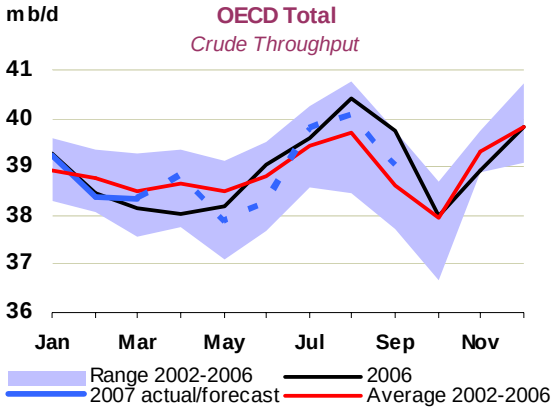
REFINING

Summary

- **Global refinery crude throughput is estimated to have averaged 72.3 mb/d in March,** a decline of 1.3mb/d from February, as crude runs declined in most non-OECD regions, particularly in Asia and the FSU.

- **OECD refinery crude throughput** was also slightly weaker in March at an estimated 38.3 mb/d**.** Runs declined in Europe and the Pacific, largely due to maintenance, more than offsetting the rebound in North America. Current tightness in contractor and oil-service sectors could be contributing to refinery unreliability in the US.





- **Global refinery throughput is expected to increase by 2.5mb/d from March through to July**, largely driven by the OECD regions, but with significant contributions from the Middle East and Latin America.

- **OECD refinery yields suggest that gasoline production is under pressure** from increasing demand for naphtha from petrochemical plants in Asia, resulting in higher naphtha yields in the Pacific and, more recently, Europe. First-quarter OECD Pacific runs cuts may have resulted in dramatically lower fuel oil yields.

- **The possible change of marine fuel oil bunkers to distillate** could have significant implications for the refining industry, oil markets and carbon dioxide emissions.

Global Refinery Throughput

This month, we introduce a more comprehensive survey and forecast of global refinery crude runs. Combining our forecasts for the OECD with estimates for non-OECD crude runs and our offline capacity forecasts, we have derived a forecast for global crude runs. This expanded survey of crude throughputs is based on the JODI database together with estimates from industry sources and annual data where necessary. Our forecast, currently through to Q3 2007, also uses a combination of offline capacity data and planned expansions. Where necessary gaps are filled using historical seasonal trends.

Global crude runs fell by an estimated 1.3 mb/d in March to 72.3 mb/d, pulled down by planned maintenance in Asia, the Middle East and FSU, but rebounded by 1.0 mb/d in April on higher OECD throughput. This rebound is likely to be brief, with global crude throughput seen reaching a second-quarter low of 72.4 mb/d in May before rising seasonally to 74.8 mb/d by July.

FSU April crude runs are estimated to have declined as work continues at the Kirishi, Yanos and Novokubishev refineries in Russia. The start of turnarounds at the TNK-BP Ryazan facility and a fire at Lukoil's Volgograd plants have also contributed to lower activity, but runs should increase to 5.9 mb/d by the middle of the third quarter as plants return to full operations.

Global Refinery Crude Throughput[1]

million barrels per day

	Jan 07	Feb 07	Mar 07	*Apr 07*	*May 07*	*Jun 07*	*Jul 07*	*Aug 07*	*Sep 07*
OECD Crude Runs									
North America	18.0	17.4	17.8	*18.1*	*18.1*	*18.0*	*18.7*	*18.8*	*18.8*
Europe	13.9	13.7	13.3	*13.8*	*13.3*	*13.8*	*14.0*	*14.0*	*13.4*
Pacific	7.4	7.3	7.2	*6.9*	*6.5*	*6.5*	*7.2*	*7.3*	*6.8*
Total OECD	39.2	38.4	38.3	*38.8*	*37.9*	*38.3*	*39.8*	*40.1*	*39.0*
NON-OECD Crude Runs									
FSU	5.7	5.9	5.8	*5.5*	*5.8*	*5.8*	*5.9*	*5.9*	*5.7*
Europe	1.0	1.0	1.0	*0.9*	*0.9*	*1.0*	*1.0*	*1.0*	*1.0*
China	6.2	6.5	6.4	*6.3*	*6.4*	*6.5*	*6.5*	*6.4*	*6.2*
Other Asia	8.1	8.2	7.6	*7.9*	*7.9*	*7.6*	*7.4*	*7.4*	*7.8*
Latin America	5.2	5.3	5.2	*5.6*	*5.5*	*5.6*	*5.6*	*5.6*	*5.6*
Middle East	6.0	5.8	5.7	*6.1*	*5.7*	*6.0*	*6.2*	*6.1*	*6.1*
Africa	2.4	2.4	2.3	*2.2*	*2.4*	*2.4*	*2.4*	*2.4*	*2.4*
Total Non-OECD	34.6	35.2	34.0	*34.5*	*34.5*	*34.7*	*35.0*	*34.7*	*34.8*
Total Crude Runs	73.9	73.6	72.3	*73.3*	*72.4*	*73.0*	*74.8*	*74.8*	*73.9*

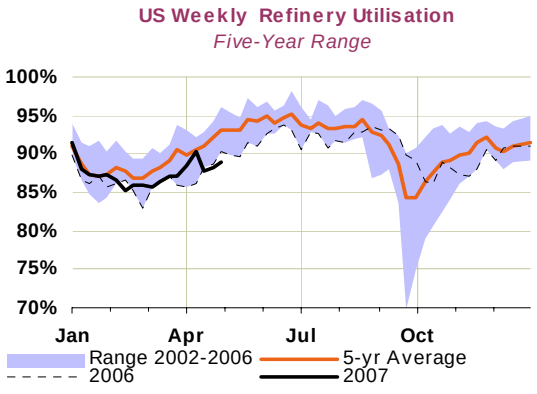
1 Crude runs in Italics are forecast estimates

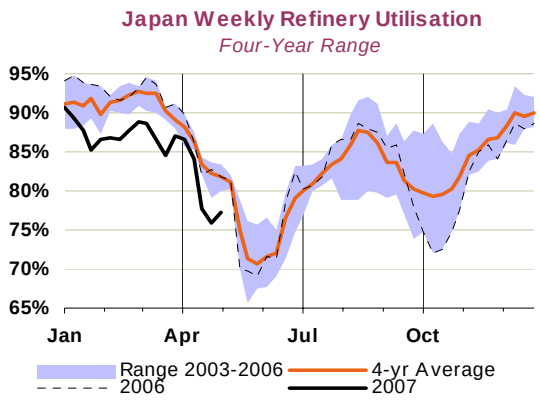
Middle East crude runs should increase from May's forecast level of 5.7 mb/d, to around 6.2 mb/d by July, following the completion of planned work at Saudi Aramco's Ras Tanura refinery in June. Chinese crude throughputs increase through to June as maintenance at the WEPEC and Zenhai refineries is completed, but should dip in August when work starts at Sinopec's Gaoqiao refinery starts.

OECD Refinery Throughput

OECD Second- and Third-Quarter Forecast

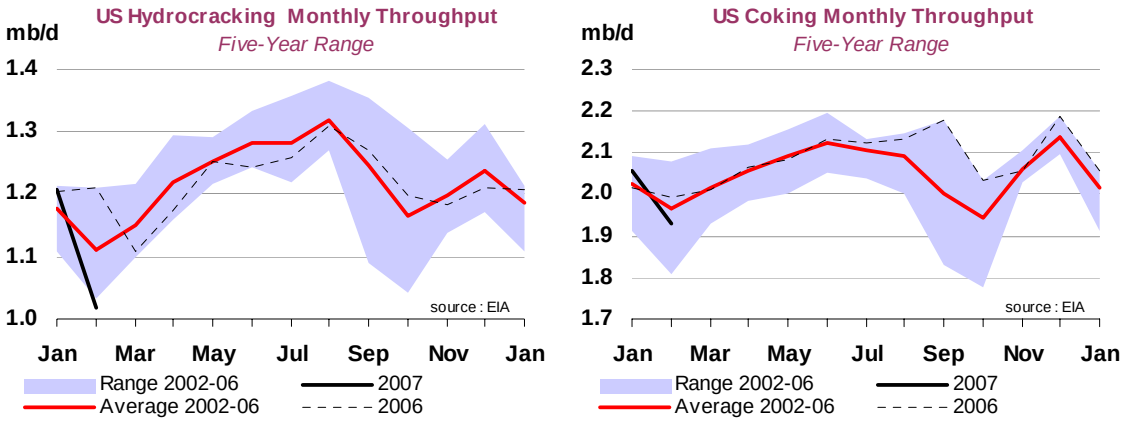
Forecast OECD crude runs average 38.3 mb/d over the second quarter, as increased estimates for maintenance in the OECD Pacific dampen an easing maintenance workload in the US. Runs are expected to increase from May onwards, reaching 40.1 mb/d by August, as refineries return from work in Europe and latterly the Pacific, but the rate of recovery will to a large extent depend on whether the recent high level of unplanned outages becomes entrenched.





In the US, a spate of problems has hampered the expected recovery in crude throughputs from the seasonal first-quarter trough in runs. Noticeable additions to the casualty list include BP's Whiting and ExxonMobil's Beaumont refineries where operational problems have cut May crude runs by a total of

350 kb/d from previously expected levels. BP has cited problems in sourcing replacement equipment, such as compressors, in today's tight oil services sector - a contributory factor to our estimate that a full restart for the Whiting refinery will not be seen until the third quarter. Despite these and other unplanned outages, April refinery throughputs were around 0.3 mb/d higher than a year earlier. Utilisation rates are broadly in line with last year, but remain at the bottom, or below, the five-year range. However, outages in May have the potential to drag runs lower year-on-year by the same amount.



These disruptions to US operations are more serious for the gasoline market than the headline crude unit outages would suggest, as they appear to have affected a large number of catalytic cracking units. Confirmation of this trend will not be available for several months, but we note that February's low level of crude runs was matched by low feed rates into refinery upgrading units. In particular, feed rates into hydrocrackers reached the lowest level since February 2000 and coking and catalytic cracking capacity was similarly constrained.

Refinery Reliability – Cyclical Downturn or Long-Term Trend?

Recent reports of increased unreliability of refineries, particularly in the US, may be partly a function of the industry cycle: Higher margins boost cashflow, and investment spending increases, raising demand for contractors and service companies. Refiners are now stepping up capital expenditure on upgrading equipment having previously spent substantial amounts on environmental and product quality improvements.

Consequently, service companies have struggled to keep pace with demand. Most report increased order books, order backlogs and increased competition for skilled workers, leading, as some refinery operators have pointed out, to a deterioration in the quality of personnel available. Some refiners have suggested that this is contributing to delays and cost increases both for planned capacity additions and maintenance. Valero recently estimated that Gulf Coast skilled labour productivity was 35% lower than in 2004, but that its cost had risen by 60%.

Furthermore, the tighter fuel specifications and the increasing complexity of refineries in OECD member countries and elsewhere results in a greater interdependence between units, and across refining complexes. Two consequences of this development are that refineries require longer turnarounds and maintenance periods to complete work on the more complex units. This in itself exacerbates the problem, adding to the demand for skilled personnel during what is often a massively complex project that can involve thousands of temporary workers being on-site for a temporary period.

Tightness in the contractor market and shortages of skilled personnel, can result in unplanned outages taking longer to fix. And with an increased potential for refinery-wide impacts (as a result of the tighter product specifications reducing refiners ability to blend away product that is slightly off-spec), the net result is higher product prices.

Crude runs in Europe should increase over the balance of the second quarter from March's seasonal low of 13.3 mb/d. April runs should be around 13.8 mb/d and decline again in May, before strengthening into June and the third quarter. Work is expected in Northern Europe at PKN's Plock, Total's Vlissingen and PCK Schwedt's refineries in May. In Southern Europe, BP's Castellon and Sarras's Sarroch refineries are also expected to close for planned work. Little maintenance activity is reportedly planned in June, July and August, but a heavy turnaround programme is forecast for September (and indeed into the fourth quarter) and is set to cut runs by 600 kb/d from the August level.

Pacific maintenance of just over 1 mb/d during the second quarter is slightly higher than last year and is dominated by Japanese refineries. The peak in Japan's offline capacity comes in May at just under 1 mb/d, equivalent to 20% of capacity, before declining to around 0.7 mb/d in June. Lower levels of planned work in Korea follow sequentially, peaking in June at around 0.3 mb/d, before dropping slightly in July.

March Data

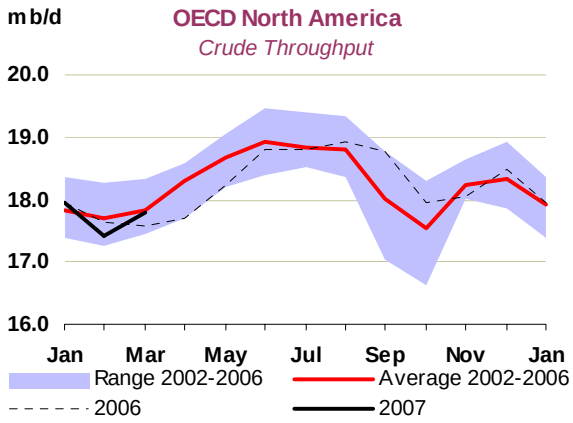
OECD refinery runs fell by 0.1 mb/d in March, to an average of 38.3 mb/d, as declines in Europe and the Pacific outweighed a slight rebound in North American activity. March crude runs were 0.2 mb/d higher than a year ago, largely driven by higher runs in Germany and the US, but the performance is much less positive than this would suggest considering that the US in 2006 still had around 0.8 mb/d of capacity offline the from the 2005 hurricane season.

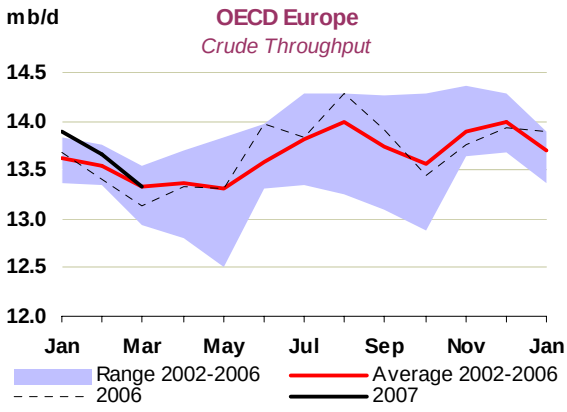
Refinery Crude Throughput and Utilisation in OECD Countries

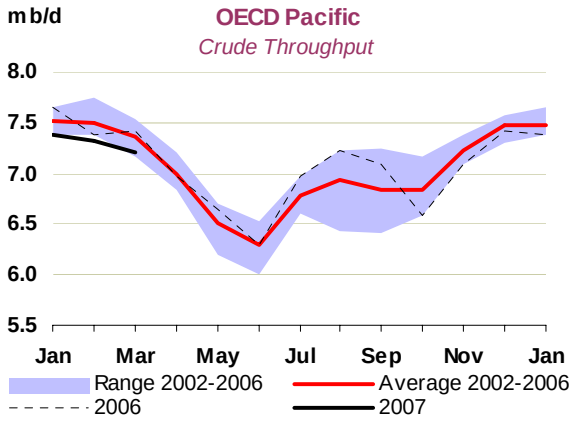
	million barrels per day						*Change from*		Utilisation rate[2]	
	Oct 06	Nov 06	Dec 06	Jan 07	Feb 07	Mar 07	*Feb 07*	*Mar 06*	Mar 07	Mar 06
OECD North America										
US[3]	15.00	15.01	15.37	14.96	14.43	14.81	0.38	0.23	85.17	85.12
Canada	1.82	1.81	1.80	1.73	1.72	1.76	0.04	-0.04	87.24	89.32
Mexico	1.14	1.24	1.31	1.27	1.26	1.24	-0.02	0.04	80.20	71.96
Total	17.95	18.06	18.47	17.97	17.41	17.81	0.40	0.23	85.01	84.38
OECD Europe										
France	1.74	1.81	1.80	1.79	1.71	1.50	-0.21	-0.07	76.83	79.33
Germany	2.19	2.41	2.32	2.26	2.31	2.20	-0.10	0.14	91.04	84.99
Italy	1.95	1.98	1.95	1.91	1.93	1.88	-0.05	0.06	80.26	78.33
Netherlands	1.02	1.04	1.03	1.01	0.97	1.04	0.07	0.04	85.80	81.84
Spain	1.17	1.11	1.15	1.19	1.14	1.20	0.06	-0.04	94.29	97.60
UK	1.35	1.50	1.63	1.59	1.42	1.49	0.08	0.05	79.21	76.71
Other OECD Europe	4.04	3.91	4.02	4.14	4.19	4.02	-0.17	0.01	83.88	83.03
Total	13.46	13.76	13.93	13.89	13.66	13.33	-0.33	0.19	83.99	82.51
OECD Pacific										
Japan	3.44	3.87	4.18	4.13	4.11	4.04	-0.06	-0.26	86.46	92.20
Korea	2.42	2.51	2.47	2.49	2.51	2.48	-0.03	0.07	96.27	93.62
Other OECD Pacific	0.72	0.72	0.78	0.76	0.70	0.68	-0.02	-0.01	84.86	86.24
Total	6.59	7.10	7.43	7.38	7.32	7.21	-0.12	-0.21	89.44	92.06
OECD Total	38.00	38.92	39.83	39.24	38.40	38.34	-0.05	0.21	85.44	85.10

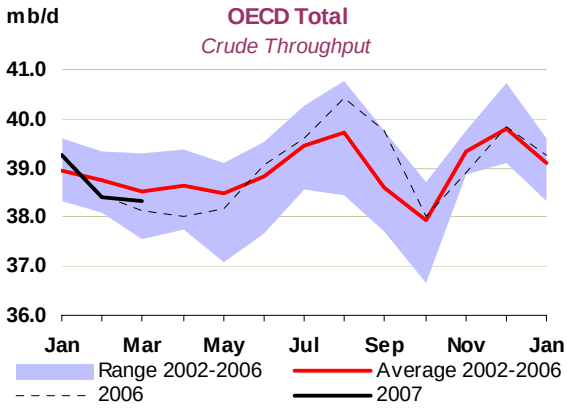
1 Estimate
2 Based on crude throughput and current operable refining capacity
3 US50

OECD Europe crude runs fell by a smaller-than-forecast 0.3 mb/d to 13.3 mb/d during March. Most of the decline occurred in France, partly due to the Fos port strike, and Germany, due to planned maintenance. UK crude runs recovered from February's level of 1.4 mb/d, but remained weaker than anticipated suggesting that maintenance work at Shell's Stanlow refinery overran its planned restart date, or that other, unreported, work started elsewhere.





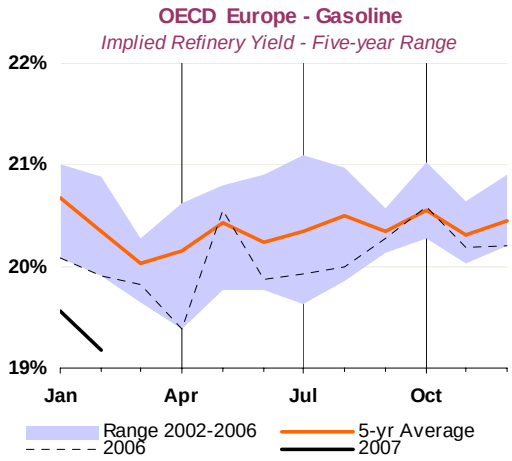


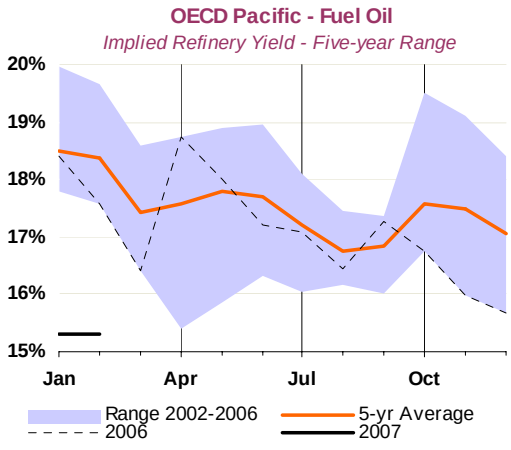


North American crude runs gained on stronger US refinery activity, particularly in the US Gulf Coast and despite weak crude runs on the East and West Coasts. Pacific crude runs edged down in March as Japan's spring maintenance programme started, with work at Cosmo's Chiba refinery. In addition, lingering run cuts following this winter's warm weather and high kerosene stocks, reduced runs by 175 kb/d. March crude runs were 260 kb/d below 2006 levels and since the beginning of the year have averaged some 200 kb/d below last year.

OECD Refinery Yields

Refinery yield data for February highlight some interesting changes that are occurring in OECD refineries. Firstly, as mentioned last month, OECD naphtha yields are rising, in response to strong demand growth from Asian petrochemical producers. Pacific naphtha yields are some 11.4%, well above the five-year





range, driven by strong increases in both Japan and Korea. European naphtha yields have also increased: after setting new five-year lows for much of 2006, they are now towards the top of their five-year range. Consequently, European gasoline yields have fallen to 19.2% - their lowest level since 2001. The subsequent (i.e. post February) strengthening of naphtha prices would indicate that these trends may continue, possibly constraining gasoline exports to the US from Europe.

OECD Pacific Refiners – Reducing Their Use of Marginal Hydroskimming Capacity?

Japanese and Korean refinery yields have shown a remarkable drop in fuel oil production over the latter part of 2006 and into the early part of 2007. While Korean refiners appear to have lightened their crude marginally, anecdotal evidence suggests no material change to Japanese crude selection in terms of API and sulphur and there are no reports of large upgrading projects over this period.

Given the stability in crude diet and refinery configuration there is a possibility that the run cuts which Japanese and Korean refineries enforced over the latter part of 2006 reduced the use of marginal hydroskimming capacity. This capacity, at existing complex refineries, arises where there is crude distillation capacity in excess of the levels needed to supply upgrading units at the site. The resulting product yields are effectively hydroskimming in nature and can, at times provide the incremental supplies of fuel oil, naphtha and kerosene.

The weak demand for kerosene was a result of warm weather for much of the winter, while weak fuel oil demand resulted from high utilisation of nuclear generating capacity. This weak demand pattern appears to have resulted in refiners cutting runs to rebalance their production pattern. Japanese and Korean fuel oil yields averaged 13.9% and 23.6% respectively during the fourth quarter of 2006, a decline of 1.1% and 0.4% respectively from prior year levels. The first two months of 2007 have seen an even larger 2.4% decline in fuel oil yields for both countries from the same period in 2006.

This suggests that refiners may utilise marginal hydroskimming (or topping) capacity as an effective way to meet product supply commitments. Consequently, restricting crude runs so that only upgrading units are fully supplied may appear to be the most attractive option, leading to materially lower fuel oil yields.

Fuel Oil Demand – Change on the Horizon?

The International Maritime Organisation's (IMO) Marine Environment Protection Committee is considering a range of options to improve the environmental footprint of the global shipping industry. Bunker fuel use by the industry is seen by some as a major source of carbon dioxide (CO_2), particulate matter and sulphur emissions. However, the shipping industry arguably achieves a very high environmental standard when assessed in terms of CO_2 that is emitted per tonne-mile of goods moved, relative to other industries such as haulage, or the airline industry. Furthermore, shipping is invaluable in facilitating trade, which is the kernel of economic growth. In seeking to further reduce the shipping industry's environmental impact the IMO is to consider the possible use of distillate fuel in place of fuel oil in marine bunkers. This proposal, if approved, would have a global remit and could be implemented as early as 2012.

Supporters of the proposal see three key benefits in a forced migration to distillate fuels. Firstly, it would reduce CO_2 emissions, secondly particulate matter emissions and Sulphur are lower and thirdly, it would remove, or at least minimise, any competitive disadvantage from the adoption of higher quality fuels. This last point is crucial for the shipping industry. Despite recent improvements in fleet utilisation and profitability, due to robust growth in global trade, no ship operator is likely to adopt distillate fuels if it results in lower profitability, in both absolute terms and indeed vis-à-vis their competitors.

Marine bunker demand is estimated to have been 3.6 mb/d in 2004, accounting for roughly 30% of global fuel oil demand. Crucially, it is perhaps the only area of fuel oil demand that is growing, with some estimates suggesting growth of around 5-7%, as global trade expands. Some forecasters expect this growth to continue in the medium term, possibly reaching 5.5 mb/d by early next decade.

From a refining industry perspective, the loss of such a large part of the demand for fuel oil and, perhaps more importantly, additional distillate demand has massive implications, in terms of investment requirements, crude selection and environmental constraints. The obvious (but overly simplistic) route to boost distillate yields and reduce fuel oil production is for hydroskimming refineries to invest in upgrading capacity, by adding hydrocrackers and cokers. However, to remove such a significant quantity of fuel oil may require an investment programme on a scale that would equal or exceed that required to meet the clean fuels programmes that have been implemented in recent years, at a time when manufacturers of such refining hardware are already reporting full order books and lead times of three years.

Using recent investment announcements as a guide, the required incremental investment by the refining industry could be in the order of $100-150 bn, depending on availability of hydrogen supplies and the level of post-treatment of sulphur levels in distillates. Even this figure probably understates the size of the challenge that the refining industry would face. One further problem with such an investment proposition is that it would not necessarily generate sufficient distillate for the marine industry given the product yield these units deliver, raising the possibility of further substantial investment being required to avoid an even tighter distillate market.

From a CO_2 emissions perspective the proposal would actually increase the overall level of emissions, although those attributable to the shipping industry would decline. Previous case studies used by the IEA suggest that converting sufficient hydroskimming capacity into complex refining capacity to meet existing demand for marine bunkers, (3.6 mb/d), would at a minimum create an incremental 53 million tonnes (mt) of CO_2 per annum. However, the switch to gasoil as a marine bunker fuel could reduce CO_2 emission by as little as 27 mt.

The IMO is considering a range of possible alternatives which include the introduction of post-treatment of flue gas for particulate matter and sulphur removal, either through installation of onboard scrubbers, or particulate traps. Furthermore an initial reduction in NO_X emissions of 3-5% may be possible through more widespread use of currently available additives in the fuel oil to improve fuel economy. The IMO's proposal sets out to take into consideration the overall cost of any possible solution. However, while a move to reduce the environmental impact is to be applauded, the cost to the shipping industry, its customers and the oil market in general, may be higher than anticipated. In addition to a significant net increase in CO_2 emissions from a global shift, it may also require an additional 2 mb/d of crude runs which would be the equivalent of finding 'another Kuwait'. Quite possibly the impact on global warming may be the opposite of what is intended and the impact on oil prices could be dramatic.

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

	2003	2004	1Q05	2Q05	3Q05	4Q05	2005	1Q06	2Q06	3Q06	4Q06	2006	1Q07	2Q07	3Q07	4Q07	2007
OECD DEMAND																	
North America	24.5	25.4	25.6	25.3	25.6	25.6	25.5	25.2	25.1	25.5	25.4	25.3	25.9	25.4	25.9	26.0	25.8
Europe	15.4	15.5	15.6	15.2	15.6	15.7	15.5	15.8	15.1	15.5	15.6	15.5	15.1	15.1	15.5	15.8	15.4
Pacific	8.6	8.5	9.4	8.1	8.1	8.8	8.6	9.3	7.9	7.9	8.8	8.5	8.9	7.8	8.0	8.9	8.4
Total OECD	48.6	49.3	50.7	48.6	49.3	50.1	49.6	50.3	48.0	48.9	49.7	49.2	49.8	48.3	49.4	50.6	49.6
NON-OECD DEMAND																	
FSU	3.6	3.8	3.8	3.7	3.8	3.9	3.8	3.9	3.7	4.0	4.3	4.0	3.8	3.6	4.1	4.4	4.0
Europe	0.7	0.7	0.8	0.7	0.7	0.7	0.7	0.8	0.7	0.7	0.7	0.7	0.8	0.7	0.7	0.7	0.7
China	5.5	6.4	6.7	6.5	6.7	6.9	6.7	7.0	7.3	7.2	7.2	7.2	7.4	7.7	7.6	7.7	7.6
Other Asia	8.1	8.6	8.8	8.8	8.6	8.5	8.7	8.8	8.9	8.5	8.7	8.7	9.0	9.0	8.8	9.0	8.9
Latin America	4.7	5.0	5.0	5.1	5.2	5.1	5.1	5.1	5.2	5.3	5.3	5.2	5.2	5.3	5.5	5.4	5.4
Middle East	5.4	5.8	5.9	6.0	6.2	6.0	6.0	6.1	6.2	6.5	6.3	6.3	6.4	6.5	6.8	6.5	6.5
Africa	2.7	2.8	3.0	2.9	2.8	2.9	2.9	2.9	2.9	2.8	2.9	2.9	3.0	3.0	2.9	3.0	3.0
Total Non-OECD	30.7	33.0	33.9	33.8	33.9	34.0	33.9	34.6	35.0	35.0	35.4	35.0	35.5	36.0	36.3	36.9	36.2
Total Demand[1]	79.2	82.3	84.6	82.3	83.2	84.0	83.5	84.9	83.0	83.8	85.1	84.2	85.3	84.3	85.8	87.5	85.7
OECD SUPPLY																	
North America	14.6	14.6	14.5	14.7	13.7	13.8	14.1	14.2	14.2	14.3	14.3	14.2	14.4	14.2	14.2	14.3	14.3
Europe	6.3	6.1	5.9	5.7	5.4	5.5	5.6	5.5	5.1	4.9	5.2	5.2	5.3	5.1	5.0	5.3	5.2
Pacific	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.7	0.6	0.6	0.6	0.6	0.7	0.7	0.7
Total OECD	21.6	21.2	20.9	21.0	19.7	19.8	20.3	20.2	19.8	19.9	20.1	20.0	20.3	19.9	19.9	20.3	20.1
NON-OECD SUPPLY																	
FSU	10.3	11.2	11.5	11.5	11.7	11.9	11.6	11.8	12.0	12.2	12.4	12.1	12.5	12.6	12.5	12.7	12.6
Europe	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
China	3.4	3.5	3.6	3.6	3.6	3.6	3.6	3.7	3.7	3.7	3.6	3.7	3.7	3.7	3.7	3.8	3.7
Other Asia	2.6	2.7	2.7	2.6	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
Latin America	4.0	4.1	4.2	4.4	4.3	4.3	4.3	4.3	4.4	4.4	4.4	4.4	4.4	4.5	4.5	4.6	4.5
Middle East	2.0	1.9	1.9	1.9	1.9	1.8	1.9	1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.6	1.7
Africa[2]	3.0	3.4	3.5	3.6	3.8	3.9	3.7	3.9	3.9	4.0	4.0	4.0	2.6	2.7	2.7	2.8	2.7
Total Non-OECD	25.6	27.0	27.5	27.7	28.1	28.4	27.9	28.4	28.6	28.9	29.0	28.7	27.8	27.9	28.0	28.3	28.0
Processing Gains[3]	1.8	1.8	1.9	1.9	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
Other Biofuels[4]	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3
Total Non-OPEC[5]	49.1	50.2	50.5	50.6	49.8	50.2	50.3	50.7	50.5	50.8	51.2	50.8	50.3	50.1	50.1	50.8	50.4
Non-OPEC excl. Angola[2]	48.2	49.2	49.3	49.5	48.5	48.8	49.0	49.3	49.2	49.4	49.8	49.4	50.3	50.1	50.1	50.8	50.4
OPEC																	
Crude[6]	27.1	28.9	29.3	29.7	30.0	29.9	29.7	29.9	29.7	30.0	29.2	29.7	30.2				
NGLs	3.7	4.2	4.4	4.5	4.6	4.5	4.5	4.6	4.6	4.6	4.7	4.6	4.8	4.8	4.9	5.0	4.9
Total OPEC	30.8	33.1	33.7	34.2	34.6	34.5	34.2	34.5	34.3	34.7	33.9	34.3	35.0				
OPEC incl. Angola[2]	31.7	34.1	34.8	35.4	35.9	35.9	35.5	35.9	35.6	36.1	35.3	35.7	35.0				
Total Supply[7]	79.9	83.2	84.2	84.8	84.3	84.7	84.5	85.2	84.8	85.5	85.1	85.1	85.3				
STOCK CHANGES AND MISCELLANEOUS																	
Reported OECD																	
Industry	0.1	0.1	0.0	0.9	0.2	-0.4	0.1	0.0	0.7	1.2	-0.9	0.2	-0.9				
Government	0.2	0.1	0.1	0.3	0.0	-0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0				
Total	0.3	0.2	0.1	1.2	0.2	-0.5	0.2	0.0	0.7	1.2	-0.8	0.3	-0.9				
Floating Storage/Oil in Transit	0.2	0.0	-0.4	0.1	0.0	0.1	-0.1	0.1	-0.1	0.3	-0.6	-0.1	0.2				
Miscellaneous to balance[8]	0.2	0.7	-0.1	1.2	1.0	1.1	0.8	0.2	1.1	0.1	1.4	0.7	0.7				
Total Stock Ch. & Misc	0.6	0.9	-0.4	2.5	1.1	0.7	1.0	0.3	1.8	1.6	-0.1	0.9	0.0				
Memo items:																	
Call on OPEC crude + Stock ch.[9]	26.5	28.0	29.7	27.2	28.9	29.3	28.8	29.6	27.9	28.4	29.3	28.8	30.2	29.3	30.8	31.6	30.5
Adjusted Call on OPEC + Stock ch.[10]	26.7	28.7	29.6	28.4	29.9	30.4	29.6	29.7	29.0	28.5	30.7	29.5	31.0	30.5	32.0	32.8	31.7
"Call" incl. Angola[2]	27.4	29.0	30.8	28.4	30.2	30.7	30.0	31.0	29.2	29.8	30.7	30.2	30.2	29.3	30.8	31.6	30.5
"Adjusted Call" incl. Angola[2]	27.5	29.7	30.7	29.6	31.2	31.7	30.8	31.1	30.4	30.0	32.1	30.9	31.0	30.5	32.0	32.8	31.7

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 With effect from OMR of 13 February 2007, Angolan production will be reclassified within OPEC and excluded from the Non-OPEC and Africa totals, for the period January 2007 onwards. Secondary aggregates allow comparison with previous year totals by including Angola within OPEC retroactively.
3 Net volumetric gains and losses in the refining process (excludes net gain/loss in former USSR, China and non-OECD Europe) and marine transportation losses
4 Biofuels from sources outside Brazil and US.
5 Non-OPEC supplies include crude oil, condensates, NGL and non-conventional sources of supply such as synthetic crude, ethanol and MTBE. No allowance is made in the non-OPEC forecast for exceptional events which have, at certain times historically, reduced non-OPEC supply by 300-400 kbd on an annual basis
6 As of the March 2006 OMR, Venezuelan Orinoco heavy crude production is included within Venezuelan crude estimates. Orimulsion fuel remains within the OPEC NGL & non-conventional category, but Orimulsion production will reportedly cease from January 2007.
7 Comprises crude oil, condensates, NGLs, oil from non-conventional sources and other sources of supply
8 Includes changes in non-reported stocks in OECD and non-OECD areas
9 Equals the arithmetic difference between total demand minus total non-OPEC supply minus OPEC NGLs
10 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 plus an extra 350 kb/d allowance for average understatement of non-OPEC supply added for forecast periods.

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

(million barrels per day)

	2003	2004	1Q05	2Q05	3Q05	4Q05	2005	1Q06	2Q06	3Q06	4Q06	2006	1Q07	2Q07	3Q07	4Q07	2007
OECD DEMAND																	
North America	-	-	-	-	-	0.1	-	-	-	-	-	-	0.1	0.1	-	-	-
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.1	-	-
Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total OECD	-	-	-	-	-	0.1	-	0.1	-	-	-	-	0.1	0.1	-	-	0.1
NON-OECD DEMAND																	
FSU	-	-	-	-	-	-	-	-	-	-	-	-	0.1	-0.2	0.1	-	-
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-	-	-	-0.3	-	-	-	-
Other Asia	-	-	-	-	-	-	-	-	-	-	-	-	0.1	-	-	-	-
Latin America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Middle East	-	-	-	-0.1	-0.1	-	-	-0.1	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1	-0.2	-0.1	-0.2
Africa	-	-	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Non-OECD	-	-	0.1	-	-0.1	-	-	-0.1	-0.2	-0.2	-	-0.1	-0.2	-0.2	-	-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
OECD SUPPLY																	
North America	-	-	-	-	-	-	-	-	-	-	-	-	0.1	0.1	-	0.1	0.1
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-0.1	-0.1	-
Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total OECD	-	-	-	-	-	-	-	-	-	-	-	-	0.1	-	-	-	-
NON-OECD SUPPLY																	
FSU	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Asia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Latin America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Middle East	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Non-OECD	-	-	-	-	-	-	-	-	-	-	-	-	-0.1	-0.1	-0.1	-0.1	-0.1
Processing Gains	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Biofuels	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Non-OPEC	-	-	-	-	-	-	-	-	-	-	0.1	-	-	-0.1	-0.2	-0.1	-0.1
Non-OPEC excl. Angola	-	-	-	-	-	-	-	-	-	-	0.1	-	-	-0.1	-0.2	-0.1	-0.1
OPEC																	
Crude	-	-	-	-	-	-	-	-	-0.1	-	-	-	-				
NGLs	-	-	-	-	0.1	-	-	-	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-	-0.1
Total OPEC	-	-	-	-	0.1	-	-	-	-0.2	-0.1	-0.1	-0.1	-0.1				
OPEC incl. Angola	-	-	-	-	0.1	-	-	-	-0.2	-0.1	-0.1	-0.1	-0.1				
Total Supply	-	-	-	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	0.2	-	0.1	-	-	0.1	-	-					
Total Stock Ch. & Misc	-	-	-	0.1	0.2	-	0.1	-	-	0.1	-	-	0.1				
Memo items:																	
Call on OPEC crude + Stock ch.	-	-	-	-0.1	-0.2	-	-0.1	-	-0.1	-0.1	-	-	-0.1	-	0.3	-	0.1
Adjusted Call on OPEC + Stock ch.	-	-	-	-	-	-	-	-	-0.1	-	-	-0.1	-0.4	0.2	0.4	0.2	0.2
"Call" incl. Angola[2]	-	-	-	-0.1	-0.2	-	-0.1	-	-0.1	-0.1	-	-	-0.1	-	0.3	-	0.1
"Adjusted Call" incl. Angola	-	-	-	-	-	-	-	-	-0.1	-	-	-0.1	-0.4	0.2	0.4	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

	2004	1Q05	2Q05	3Q05	4Q05	2005	1Q06	2Q06	3Q06	4Q06	2006	1Q07	2Q07	3Q07	4Q07	2007
Demand (mb/d)																
North America	25.37	25.61	25.33	25.61	25.58	25.53	25.15	25.09	25.47	25.39	25.28	25.85	25.40	25.92	26.01	25.80
Europe	15.47	15.62	15.17	15.57	15.70	15.52	15.82	15.08	15.50	15.57	15.49	15.14	15.10	15.54	15.75	15.38
Pacific	8.49	9.45	8.06	8.07	8.79	8.59	9.30	7.87	7.90	8.76	8.46	8.85	7.79	7.99	8.88	8.38
Total OECD	49.33	50.68	48.56	49.25	50.07	49.64	50.26	48.04	48.87	49.72	49.22	49.85	48.29	49.45	50.64	49.56
FSU	3.76	3.82	3.71	3.79	3.89	3.80	3.91	3.73	3.97	4.30	3.98	3.75	3.63	4.07	4.43	3.97
Europe	0.70	0.76	0.71	0.66	0.71	0.71	0.78	0.72	0.67	0.72	0.72	0.79	0.73	0.68	0.73	0.73
China	6.42	6.68	6.50	6.70	6.89	6.69	6.96	7.29	7.17	7.20	7.16	7.36	7.75	7.61	7.73	7.61
Other Asia	8.58	8.80	8.82	8.58	8.54	8.69	8.83	8.86	8.54	8.70	8.73	9.00	9.00	8.79	9.02	8.95
Latin America	4.97	4.95	5.11	5.23	5.13	5.10	5.08	5.22	5.32	5.29	5.23	5.20	5.34	5.47	5.42	5.36
Middle East	5.75	5.89	5.98	6.19	5.95	6.00	6.14	6.20	6.46	6.26	6.27	6.39	6.52	6.76	6.50	6.54
Africa	2.80	2.97	2.95	2.81	2.86	2.90	2.91	2.94	2.84	2.95	2.91	3.01	3.00	2.93	3.03	2.99
Total Non-OECD	32.98	33.88	33.79	33.95	33.96	33.89	34.61	34.96	34.97	35.42	34.99	35.49	35.96	36.31	36.85	36.16
World	82.31	84.56	82.34	83.20	84.03	83.53	84.88	83.00	83.85	85.14	84.22	85.34	84.25	85.76	87.49	85.72
of which:																
US50	*20.73*	*20.84*	*20.65*	*20.92*	*20.79*	*20.80*	*20.49*	*20.60*	*20.86*	*20.73*	*20.67*	*21.05*	*20.81*	*21.22*	*21.18*	*21.07*
Euro4	*8.25*	*8.25*	*7.95*	*8.26*	*8.21*	*8.17*	*8.45*	*7.90*	*8.11*	*8.15*	*8.15*	*7.81*	*7.88*	*8.13*	*8.23*	*8.01*
Japan	*5.29*	*6.00*	*4.94*	*5.03*	*5.46*	*5.35*	*5.96*	*4.78*	*4.81*	*5.35*	*5.22*	*5.42*	*4.65*	*4.84*	*5.41*	*5.08*
Korea	*2.16*	*2.40*	*2.07*	*2.01*	*2.23*	*2.18*	*2.28*	*2.03*	*2.02*	*2.30*	*2.16*	*2.34*	*2.06*	*2.06*	*2.34*	*2.20*
Mexico	*2.00*	*2.04*	*2.11*	*2.06*	*2.10*	*2.08*	*2.08*	*2.02*	*1.99*	*2.03*	*2.03*	*2.08*	*2.05*	*2.06*	*2.11*	*2.08*
Canada	*2.30*	*2.36*	*2.24*	*2.28*	*2.33*	*2.30*	*2.21*	*2.14*	*2.27*	*2.26*	*2.22*	*2.34*	*2.20*	*2.29*	*2.34*	*2.29*
Brazil	*2.15*	*2.12*	*2.18*	*2.25*	*2.21*	*2.19*	*2.18*	*2.20*	*2.28*	*2.29*	*2.24*	*2.23*	*2.26*	*2.35*	*2.34*	*2.30*
India	*2.57*	*2.71*	*2.58*	*2.46*	*2.55*	*2.57*	*2.71*	*2.67*	*2.48*	*2.70*	*2.64*	*2.87*	*2.76*	*2.54*	*2.78*	*2.74*
Annual Change (% per annum)																
North America	3.5	1.4	1.0	0.7	-0.5	0.6	-1.8	-0.9	-0.6	-0.7	-1.0	2.8	1.2	1.8	2.4	2.0
Europe	0.3	0.8	0.9	0.7	-1.1	0.3	1.2	-0.6	-0.4	-0.9	-0.2	-4.3	0.1	0.3	1.2	-0.7
Pacific	-1.6	2.3	2.3	-0.5	0.7	1.2	-1.6	-2.4	-2.1	-0.3	-1.6	-4.8	-1.0	1.0	1.4	-0.9
Total OECD	1.5	1.4	1.2	0.5	-0.5	0.6	-0.8	-1.1	-0.8	-0.7	-0.8	-0.8	0.5	1.2	1.9	0.7
FSU	4.7	8.6	-0.3	-0.1	-2.7	1.2	2.4	0.6	4.8	10.5	4.6	-4.1	-2.8	2.6	3.1	-0.2
Europe	1.2	2.1	2.1	1.7	1.6	1.9	2.5	1.4	1.6	1.6	1.8	1.1	2.1	2.2	1.9	1.8
China	15.8	6.4	-0.4	6.4	4.5	4.2	4.2	12.1	7.1	4.6	6.9	5.7	6.2	6.2	7.2	6.4
Other Asia	6.1	2.9	1.8	2.3	-2.2	1.2	0.3	0.4	-0.5	1.9	0.5	1.9	1.6	2.9	3.6	2.5
Latin America	6.1	2.9	2.8	2.8	2.3	2.7	2.6	2.1	1.9	3.3	2.5	2.2	2.3	2.8	2.3	2.4
Middle East	6.9	4.2	4.6	4.4	4.3	4.4	4.3	3.7	4.5	5.2	4.4	4.0	5.2	4.5	3.8	4.4
Africa	4.3	6.6	4.9	2.3	0.8	3.6	-2.2	-0.3	1.0	3.1	0.4	3.5	1.9	3.2	2.8	2.8
Total Non-OECD	7.6	4.7	2.0	3.3	1.2	2.8	2.2	3.5	3.0	4.3	3.2	2.5	2.9	3.8	4.0	3.3
World	3.9	2.7	1.5	1.6	0.2	1.5	0.4	0.8	0.8	1.3	0.8	0.5	1.5	2.3	2.8	1.8
Annual Change (mb/d)																
North America	0.85	0.35	0.26	0.17	-0.13	0.16	-0.46	-0.23	-0.14	-0.19	-0.26	0.70	0.30	0.45	0.62	0.52
Europe	0.04	0.13	0.14	0.12	-0.18	0.05	0.19	-0.09	-0.07	-0.13	-0.03	-0.68	0.02	0.04	0.19	-0.10
Pacific	-0.14	0.21	0.18	-0.04	0.06	0.10	-0.15	-0.19	-0.17	-0.03	-0.13	-0.44	-0.08	0.08	0.12	-0.08
Total OECD	0.75	0.69	0.58	0.24	-0.25	0.31	-0.42	-0.51	-0.38	-0.35	-0.42	-0.42	0.25	0.58	0.92	0.34
FSU	0.17	0.30	-0.01	0.00	-0.11	0.05	0.09	0.02	0.18	0.41	0.18	-0.16	-0.10	0.10	0.13	-0.01
Europe	0.01	0.02	0.01	0.01	0.01	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.02	0.01	0.01	0.01
China	0.88	0.40	-0.03	0.40	0.30	0.27	0.28	0.79	0.47	0.32	0.46	0.40	0.45	0.45	0.52	0.45
Other Asia	0.49	0.25	0.16	0.20	-0.19	0.10	0.02	0.03	-0.04	0.16	0.05	0.17	0.14	0.24	0.32	0.22
Latin America	0.28	0.14	0.14	0.14	0.12	0.13	0.13	0.11	0.10	0.17	0.13	0.11	0.12	0.15	0.12	0.13
Middle East	0.37	0.24	0.26	0.26	0.25	0.25	0.26	0.22	0.28	0.31	0.26	0.25	0.32	0.29	0.24	0.27
Africa	0.12	0.19	0.14	0.06	0.02	0.10	-0.06	-0.01	0.03	0.09	0.01	0.10	0.05	0.09	0.08	0.08
Total Non-OECD	2.32	1.53	0.67	1.07	0.39	0.92	0.74	1.17	1.03	1.46	1.10	0.88	1.00	1.34	1.43	1.16
World	3.07	2.22	1.25	1.31	0.14	1.23	0.32	0.66	0.64	1.11	0.68	0.46	1.25	1.91	2.35	1.50
Revisions to Oil Demand from Last Month's Report (mb/d)																
North America	-	-	-	-	0.05	0.01	0.03	-	-	(0.02)	0.00	0.08	0.07	(0.00)	0.00	0.04
Europe	-	-	-	-	-	-	0.03	0.03	0.03	0.00	0.03	(0.03)	0.04	0.05	0.04	0.02
Pacific	-	-	-	-	-	-	-	-	-	-	-	0.02	0.00	0.00	0.00	0.01
Total OECD	-	-	-	-	0.05	0.01	0.07	0.03	0.03	(0.02)	0.03	0.07	0.11	0.05	0.05	0.07
FSU	-	-	-	-	-	-	(0.00)	(0.00)	(0.00)	0.01	0.00	0.13	(0.16)	0.09	(0.02)	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
China	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	(0.25)	0.05	0.04	0.03	(0.03)
Other Asia	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.06	0.02	0.02	0.02	0.03
Latin America	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.02	0.01	0.02	0.02
Middle East	0.02	(0.01)	(0.06)	(0.10)	(0.03)	(0.05)	(0.07)	(0.16)	(0.16)	(0.05)	(0.11)	(0.13)	(0.14)	(0.20)	(0.15)	(0.16)
Africa	0.01	0.07	0.01	(0.00)	(0.02)	0.01	(0.00)	(0.00)	(0.02)	0.00	(0.01)	(0.01)	(0.01)	0.01	0.01	(0.00)
Total Non-OECD	0.04	0.07	(0.04)	(0.10)	(0.04)	(0.03)	(0.06)	(0.16)	(0.17)	(0.03)	(0.11)	(0.18)	(0.23)	(0.03)	(0.10)	(0.13)
World	0.04	0.07	(0.04)	(0.10)	0.01	(0.02)	0.00	(0.13)	(0.14)	(0.05)	(0.08)	(0.12)	(0.12)	0.02	(0.06)	(0.07)
Revisions to Oil Demand Growth from Last Month's Report (mb/d)																
World	0.01	(0.01)	(0.07)	(0.08)	(0.04)	(0.05)	(0.06)	(0.08)	(0.04)	(0.06)	(0.06)	(0.12)	0.01	0.16	(0.00)	0.01

Table 3
WORLD OIL PRODUCTION
(million barrels per day)

	2005	2006	2007	4Q06	1Q07	2Q07	3Q07	4Q07	Feb 07	Mar 07	Apr 07
OPEC											
Crude Oil											
Saudi Arabia	9.06	8.93		8.60	8.34				8.32	8.27	8.33
Iran	3.88	3.89		3.88	3.88				3.78	4.03	3.90
Iraq	1.81	1.90		1.85	1.89				1.98	2.00	2.02
UAE	2.46	2.62		2.60	2.57				2.54	2.57	2.59
Kuwait	2.13	2.21		2.20	2.16				2.14	2.15	2.13
Neutral Zone	0.58	0.58		0.57	0.55				0.56	0.55	0.55
Qatar	0.77	0.82		0.81	0.80				0.80	0.78	0.80
Angola[6]					1.53				1.54	1.56	1.58
Nigeria	2.40	2.24		2.26	2.22				2.25	2.15	2.25
Libya	1.64	1.71		1.74	1.69				1.69	1.69	1.69
Algeria	1.34	1.35		1.34	1.33				1.32	1.33	1.34
Venezuela	2.71	2.56		2.50	2.44				2.43	2.39	2.35
Indonesia	0.94	0.89		0.86	0.85				0.84	0.85	0.84
Total Crude Oil	29.74	29.69		29.22	30.25				30.17	30.30	30.35
Total NGLs[1]	4.50	4.63	4.87	4.66	4.76	4.80	4.86	5.05	4.76	4.76	4.80
Total OPEC	34.24	34.32		33.87	35.01				34.93	35.07	35.15
OPEC incl. Angola[6]	35.48	35.73		35.31	35.01				34.93	35.07	35.15
NON-OPEC[2]											
OECD											
North America	14.14	14.24	14.27	14.29	14.38	14.17	14.21	14.33	14.42	14.51	14.38
United States	7.32	7.37	7.42	7.47	7.42	7.50	7.36	7.39	7.39	7.45	7.45
Mexico	3.76	3.68	3.48	3.50	3.57	3.53	3.45	3.40	3.55	3.60	3.54
Canada	3.06	3.18	3.37	3.31	3.40	3.14	3.41	3.54	3.47	3.46	3.39
Europe	5.61	5.20	5.16	5.20	5.27	5.10	5.01	5.25	5.37	5.23	5.19
UK	1.84	1.66	1.74	1.66	1.77	1.75	1.65	1.80	1.85	1.78	1.72
Norway	2.97	2.78	2.65	2.76	2.73	2.58	2.60	2.70	2.77	2.68	2.71
Others	0.80	0.76	0.76	0.77	0.76	0.76	0.76	0.75	0.76	0.76	0.77
Pacific	0.59	0.58	0.66	0.63	0.61	0.64	0.69	0.71	0.66	0.58	0.63
Australia	0.54	0.53	0.59	0.58	0.56	0.58	0.61	0.62	0.60	0.53	0.58
Others	0.05	0.05	0.07	0.05	0.05	0.05	0.07	0.09	0.06	0.05	0.05
Total OECD	20.34	20.02	20.09	20.11	20.26	19.90	19.91	20.30	20.44	20.33	20.21
NON-OECD											
Former USSR	11.64	12.10	12.58	12.37	12.54	12.58	12.50	12.69	12.60	12.59	12.53
Russia	9.48	9.69	9.94	9.80	9.91	9.91	9.98	9.96	9.92	9.93	9.86
Others	2.16	2.40	2.64	2.57	2.63	2.67	2.51	2.74	2.67	2.66	2.67
Asia	6.28	6.39	6.46	6.38	6.46	6.45	6.45	6.48	6.47	6.42	6.48
China	3.62	3.67	3.75	3.64	3.75	3.73	3.74	3.76	3.74	3.69	3.75
Malaysia	0.74	0.75	0.73	0.78	0.74	0.73	0.72	0.74	0.74	0.74	0.73
India	0.78	0.79	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Others	1.14	1.17	1.17	1.15	1.16	1.17	1.17	1.16	1.17	1.18	1.18
Europe	0.16	0.15	0.13	0.14	0.14	0.14	0.13	0.13	0.14	0.14	0.14
Latin America	4.29	4.40	4.48	4.42	4.41	4.45	4.50	4.58	4.41	4.41	4.44
Brazil	1.99	2.10	2.26	2.15	2.16	2.21	2.27	2.37	2.16	2.20	2.20
Argentina	0.78	0.77	0.76	0.77	0.77	0.76	0.76	0.76	0.77	0.77	0.77
Colombia	0.53	0.53	0.52	0.53	0.52	0.52	0.52	0.52	0.52	0.52	0.52
Ecuador	0.53	0.54	0.50	0.53	0.51	0.51	0.50	0.48	0.51	0.49	0.51
Others	0.46	0.46	0.45	0.45	0.45	0.45	0.45	0.44	0.45	0.44	0.45
Middle East[3]	1.86	1.73	1.65	1.69	1.67	1.65	1.66	1.63	1.66	1.66	1.66
Oman	0.79	0.74	0.72	0.73	0.72	0.72	0.71	0.71	0.72	0.72	0.72
Syria	0.46	0.42	0.38	0.40	0.39	0.38	0.38	0.37	0.39	0.39	0.39
Yemen	0.42	0.38	0.37	0.36	0.36	0.36	0.38	0.37	0.35	0.36	0.36
Africa	3.72	3.95	2.68	4.00	2.59	2.66	2.72	2.76	2.60	2.59	2.65
Egypt	0.70	0.67	0.66	0.66	0.66	0.66	0.66	0.65	0.66	0.66	0.66
Angola[6]	1.23	1.37		1.38							
Gabon	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23
Others	1.56	1.67	1.79	1.72	1.70	1.77	1.84	1.87	1.71	1.70	1.75
Total Non-OECD	27.94	28.71	28.00	28.99	27.81	27.94	27.96	28.28	27.87	27.81	27.90
Processing Gains[4]	1.86	1.90	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92
Other Biofuels[5]	0.12	0.18	0.34	0.18	0.34	0.34	0.34	0.34	0.34	0.34	0.34
TOTAL NON-OPEC	50.27	50.81	50.35	51.20	50.33	50.11	50.13	50.84	50.57	50.40	50.37
Non-OPEC excl. Angola[6]	49.02	49.40	50.35	49.76	50.33	50.11	50.13	50.84	50.57	50.40	50.37
TOTAL SUPPLY	84.51	85.13		85.07	85.34				85.50	85.46	85.52

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 will reportedly cease from January 2007.
2 Comprises crude oil, condensates, NGLs and oil from non-conventional sources. No allowance is made in the non-OPEC forecast for exceptional events, which have, at certain times historically, reduced non-OPEC supply by 300-400 kbd on an annual basis.
3 Includes small amounts of production from Israel, Jordan and Bahrain.
4 Net volumetric gains and losses in refining (excludes net gain/loss in FSU, China and non-OECD Europe) and marine transportation losses.
5 Comprises Fuel Ethanol and Biodiesel supply from outside Brazil and US.
6 With effect from OMR of 13 February 2007, Angolan production will be reclassified within OPEC and excluded from the Non-OPEC total, for the period January 2007 onwards. Secondary aggregates allow comparison with previous year totals by including Angola within OPEC retroactively

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			
	Nov2006	Dec2006	Jan2007	Feb2007	Mar2007*	Mar2004	Mar2005	Mar2006	2Q2006	3Q2006	4Q2006	1Q2007
North America												
Crude	463.9	437.3	449.8	442.2	448.8	415.3	433.7	463.5	-0.05	0.02	-0.25	0.13
Motor Gasoline	234.8	242.6	256.4	242.7	229.4	231.9	246.7	242.2	-0.01	0.03	-0.02	-0.15
Middle Distillate	210.2	217.3	210.6	191.7	186.6	170.1	176.1	194.5	0.06	0.26	-0.08	-0.34
Residual Fuel Oil	51.9	50.3	51.3	44.7	47.6	47.3	49.0	50.5	0.02	0.01	-0.03	-0.03
Total Products[3]	688.8	694.5	687.4	636.6	619.3	591.3	629.0	635.2	0.38	0.60	-0.33	-0.84
Total[4]	1306.5	1275.8	1276.4	1212.0	1205.5	1144.7	1201.5	1239.1	0.40	0.77	-0.77	-0.78
Europe												
Crude	333.7	339.8	309.8	331.0	323.5	338.9	343.5	344.3	-0.06	-0.10	0.11	-0.18
Motor Gasoline	110.1	113.4	118.3	118.6	118.7	114.8	119.6	111.0	-0.12	0.04	0.11	0.06
Middle Distillate	263.9	277.9	277.7	281.6	272.8	217.0	243.5	247.2	0.12	0.17	0.05	-0.06
Residual Fuel Oil	77.2	76.7	83.2	75.0	75.3	75.2	68.5	69.9	0.06	-0.03	0.04	-0.02
Total Products[3]	557.4	573.0	584.1	581.0	571.8	503.9	536.7	529.8	0.05	0.25	0.17	-0.01
Total[4]	963.1	980.2	964.8	982.9	965.3	919.4	951.8	949.4	-0.04	0.16	0.21	-0.17
Pacific												
Crude	184.4	173.3	171.0	169.9	187.2	175.1	169.0	170.7	0.11	-0.07	-0.02	0.15
Motor Gasoline	23.2	22.2	26.3	25.2	25.0	25.2	25.2	24.6	0.00	-0.01	-0.01	0.03
Middle Distillate	82.5	73.4	81.3	71.3	61.7	54.4	48.8	60.6	0.10	0.18	-0.14	-0.13
Residual Fuel Oil	21.9	22.6	21.7	22.3	21.9	20.0	21.2	19.2	0.04	0.01	-0.01	-0.01
Total Products[3]	199.1	183.4	191.5	179.3	169.9	157.4	154.9	168.3	0.16	0.30	-0.30	-0.15
Total[4]	456.0	428.2	436.7	422.7	429.7	400.4	389.5	408.5	0.30	0.25	-0.33	0.02
Total OECD												
Crude	981.9	950.3	930.6	943.1	959.4	929.2	946.2	978.5	0.00	-0.15	-0.16	0.10
Motor Gasoline	368.1	378.1	401.0	386.5	373.1	371.9	391.5	377.8	-0.13	0.06	0.07	-0.06
Middle Distillate	556.6	568.6	569.6	544.5	521.1	441.4	468.4	502.4	0.28	0.61	-0.16	-0.53
Residual Fuel Oil	151.0	149.6	156.1	142.0	144.9	142.5	138.7	139.6	0.13	-0.01	0.00	-0.05
Total Products[3]	1445.3	1450.9	1462.9	1396.9	1361.0	1252.7	1320.6	1333.4	0.59	1.15	-0.46	-1.00
Total[4]	2725.5	2684.2	2677.9	2617.6	2600.5	2464.5	2542.7	2597.0	0.66	1.18	-0.89	-0.93

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			
	Nov2006	Dec2006	Jan2007	Feb2007	Mar2007*	Mar2004	Mar2005	Mar2006	2Q2006	3Q2006	4Q2006	1Q2007
North America												
Crude	688.6	688.6	688.6	688.6	688.6	652.1	688.2	686.1	0.02	0.00	0.01	0.00
Products	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	0.00	0.00	0.00	0.00
Europe												
Crude	174.9	175.0	174.4	173.7	173.7	158.0	163.8	170.2	0.04	0.02	-0.01	-0.01
Products	233.3	235.6	235.9	237.8	237.8	212.2	211.7	236.0	0.00	-0.01	0.00	0.02
Pacific												
Crude	381.6	384.5	384.6	385.8	385.8	386.8	384.5	380.4	0.00	0.01	0.03	0.01
Products	11.8	11.8	11.8	11.8	11.8	11.0	11.0	11.4	0.00	0.00	0.00	0.00
Total OECD												
Crude	1245.1	1248.1	1247.6	1248.1	1248.1	1196.9	1236.5	1236.7	0.06	0.03	0.04	0.00
Products	247.1	249.4	249.8	251.6	251.6	225.3	224.8	249.4	0.01	-0.01	0.00	0.02
Total[4]	1493.2	1498.5	1498.3	1500.7	1500.7	1423.2	1462.2	1487.1	0.07	0.02	0.04	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 March 2006		End June 2006		End September 2006		End December 2006		End March 2007 [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	169.7	79	169.7	75	179.2	79	179.2	-	-	-
Mexico	41.7	21	42.1	21	47.0	23	42.3	-	-	-
United States[4]	1693.7	83	1731.6	83	1788.3	87	1722.9	-	-	-
Total[4]	1927.2	77	1965.5	77	2036.5	80	1966.4	76	1896.1	75
Pacific										
Australia	35.5	39	38.9	42	35.3	37	34.8	-	-	-
Japan	620.1	130	627.2	130	649.1	121	630.8	-	-	-
Korea	137.4	68	155.4	77	160.5	70	151.8	-	-	-
New Zealand	7.3	47	6.8	46	7.0	44	7.1	-	-	-
Total	800.3	102	828.3	105	851.9	97	824.6	93	827.3	106
Europe[5]										
Austria	19.0	63	19.7	62	19.0	65	21.5	-	-	-
Belgium	27.3	52	30.4	57	30.5	56	30.2	-	-	-
Czech Republic	19.6	90	19.5	88	19.3	94	19.7	-	-	-
Denmark	19.5	99	20.4	106	21.1	111	19.0	-	-	-
Finland	26.7	120	30.5	136	26.8	116	26.6	-	-	-
France	196.2	104	188.7	97	187.5	96	192.4	-	-	-
Germany	280.3	109	283.1	103	281.9	105	282.8	-	-	-
Greece	35.4	92	34.9	86	38.2	80	39.2	-	-	-
Hungary	20.8	127	17.6	110	17.4	100	16.5	-	-	-
Ireland	13.1	72	12.6	71	13.9	70	12.5	-	-	-
Italy	131.5	81	126.0	76	134.1	79	133.1	-	-	-
Luxembourg	0.9	15	1.0	17	0.9	15	1.0	-	-	-
Netherlands	120.5	121	123.1	119	121.1	119	118.7	-	-	-
Norway	21.9	91	21.8	90	29.4	123	35.1	-	-	-
Poland	35.5	74	35.7	67	37.3	71	41.5	-	-	-
Portugal	24.7	83	24.7	81	23.8	83	24.0	-	-	-
Slovak Republic	8.3	102	7.7	89	7.4	94	7.5	-	-	-
Spain	130.2	84	129.2	82	133.9	85	134.8	-	-	-
Sweden	38.4	109	39.6	113	38.6	102	33.8	-	-	-
Switzerland	37.7	144	39.3	141	38.9	133	38.1	-	-	-
Turkey	51.6	79	51.6	78	53.7	83	55.5	-	-	-
United Kingdom	97.4	54	99.0	56	97.4	54	108.5	-	-	-
Total	1356.5	90	1356.0	87	1372.0	88	1391.7	92	1377.7	91
Total OECD	4084.0	85	4149.9	85	4260.5	86	4182.7	84	4101.1	85
DAYS OF IEA Net Imports[6]	-	115	-	116	-	119	-	122	-	-

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 2006 and end March 2007 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. 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]*		
1Q2004	3888	1423	2465	81	30	51
2Q2004	3974	1429	2545	81	29	52
3Q2004	4016	1435	2581	80	29	51
4Q2004	3997	1450	2547	79	29	50
1Q2005	4005	1462	2543	82	30	52
2Q2005	4116	1494	2623	84	30	53
3Q2005	4132	1494	2638	83	30	53
4Q2005	4083	1487	2597	81	30	52
1Q2006	4084	1487	2597	85	31	54
2Q2006	4150	1493	2657	85	31	54
3Q2006	4260	1495	2766	86	30	56
4Q2006	4183	1499	2684	84	30	54
1Q2007	4101	1501	2600	85	31	54

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 4Q2006 and 1Q2007 (when latest forecasts are used).

Table 6

IEA Member Country Destinations of Selected Crude Streams[1]

(million barrels per day)

	2004	2005	2006	1Q06	2Q06	3Q06	4Q06	Dec 06	Jan 07	Feb 07	Year Earlier Feb 06	Year Earlier change
Saudi Light & Extra Light												
North America	0.55	0.46	0.60	0.51	0.68	0.62	0.60	0.53	0.71	0.69	0.58	0.11
Europe	1.03	0.90	0.78	0.83	0.80	0.72	0.78	0.73	0.77	0.60	0.87	-0.27
Pacific	1.24	1.31	1.32	1.40	1.33	1.29	1.28	1.26	1.07	1.21	1.38	-0.16
Saudi Medium												
North America	0.80	0.81	0.64	0.65	0.61	0.68	0.61	0.64	0.65	0.47	0.68	-0.21
Europe	0.11	0.16	0.14	0.17	0.14	0.14	0.10	0.08	0.08	0.03	0.14	-0.12
Pacific	0.23	0.26	0.35	0.38	0.35	0.35	0.32	0.31	0.28	0.36	0.43	-0.07
Saudi Heavy												
North America	0.22	0.17	0.21	0.21	0.21	0.21	0.19	0.17	0.20	0.21	0.22	0.00
Europe	0.23	0.23	0.18	0.14	0.22	0.21	0.14	0.11	0.12	0.09	0.16	-0.07
Pacific	0.15	0.25	0.23	0.25	0.20	0.22	0.23	0.23	0.20	0.22	0.32	-0.10
Iraqi Basrah Light[2]												
North America	0.71	0.60	0.52	0.44	0.60	0.60	0.46	0.39	0.59	0.41	0.38	0.03
Europe	0.21	0.23	0.32	0.24	0.29	0.40	0.36	0.32	0.29	0.39	0.19	0.20
Pacific	0.12	0.06	0.08	0.08	0.09	0.10	0.07	0.09	0.06	0.15	0.04	0.12
Iraqi Kirkuk												
North America	0.02	-	0.00	-	-	0.01	-	-	-	-	-	-
Europe	0.08	0.05	0.01	-	-	0.04	0.01	-	0.03	0.11	-	-
Pacific	-	-	-	-	-	-	-	-	-	-	-	-
Iranian Light												
North America	-	-	-	-	-	-	-	-	-	-	-	-
Europe	0.24	0.20	0.26	0.20	0.27	0.31	0.27	0.35	0.34	0.39	0.23	0.15
Pacific	0.16	0.15	0.13	0.19	0.12	0.10	0.11	0.16	0.11	0.09	0.21	-0.12
Iranian Heavy[3]												
North America	-	-	-	-	-	-	-	-	-	-	-	-
Europe	0.57	0.63	0.58	0.48	0.57	0.67	0.60	0.57	0.58	0.58	0.54	0.04
Pacific	0.65	0.62	0.56	0.64	0.48	0.51	0.61	0.60	0.59	0.60	0.73	-0.13
Venezuelan Light & Medium												
North America	0.67	0.82	0.66	0.76	0.68	0.62	0.57	0.51	0.62	0.58	0.79	-0.21
Europe	0.01	0.04	0.11	0.12	0.15	0.08	0.11	0.11	0.08	0.14	0.06	0.07
Pacific	-	-	-	-	-	-	-	-	-	-	-	-
Venezuelan 22 API and heavier												
North America	0.88	0.72	0.72	0.72	0.72	0.74	0.72	0.78	0.44	0.64	0.69	-0.05
Europe	0.05	0.06	0.06	0.08	0.05	0.06	0.05	0.06	0.07	0.06	0.06	0.00
Pacific	-	-	-	-	-	-	-	-	-	-	-	-
Mexican Maya												
North America	1.36	1.27	1.24	1.26	1.24	1.30	1.15	1.02	1.19	1.15	1.23	-0.09
Europe	0.16	0.17	0.16	0.13	0.20	0.16	0.15	0.12	0.14	0.14	0.13	0.01
Pacific	0.00	-	-	-	-	-	-	-	-	-	-	-
Mexican Isthmus												
North America	-	0.03	0.04	0.09	0.03	0.01	0.02	0.01	0.03	0.03	0.10	-0.07
Europe	0.01	0.03	0.01	0.01	0.00	0.00	0.01	0.01	-	-	-	-
Pacific	0.00	-	-	-	-	-	-	-	-	-	-	-
Russian Urals												
North America	0.12	0.13	0.09	-	0.16	0.16	0.05	0.11	0.08	0.08	-	-
Europe	1.86	1.77	1.68	1.68	1.83	1.66	1.54	1.59	1.75	2.10	1.54	0.56
Pacific	0.01	0.00	0.00	-	-	0.01	-	-	-	0.01	-	-
Nigerian Light[4]												
North America	0.80	0.90	0.79	0.87	0.79	0.78	0.72	0.71	1.04	1.01	1.00	0.01
Europe	0.28	0.35	0.33	0.28	0.27	0.39	0.37	0.36	0.27	0.26	0.36	-0.10
Pacific	0.11	0.05	0.04	0.09	0.03	0.02	0.03	0.06	0.03	0.03	0.10	-0.07
Nigerian Medium												
North America	0.23	0.17	0.17	0.19	0.17	0.16	0.17	0.09	0.16	0.22	0.22	-0.01
Europe	0.04	0.07	0.10	0.08	0.08	0.08	0.14	0.20	0.02	0.11	0.10	0.01
Pacific	0.01	0.01	0.00	-	-	0.01	-	-	-	0.03	-	-

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, Poland and the Slovak Republic.
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)

	2004	2005	2006	1Q2006	2Q2006	3Q2006	4Q2006	Dec-06	Jan-07	Feb-07	Year Earlier Feb-06	Year Earlier % change
Crude Oil												
North America	8431	8384	8159	7739	8265	8686	7937	7868	8327	7194	7273	-1%
Europe	9478	9792	9771	9400	9747	10158	9770	9783	9505	9957	9319	7%
Pacific	6659	6801	6813	7400	6508	6680	6674	6859	6968	6955	7338	-5%
Total OECD	24569	24978	24743	24539	24520	25524	24381	24509	24800	24106	24509	-2%
LPG												
North America	24	18	14	8	8	12	28	38	17	10	12	-14%
Europe	225	248	249	279	243	210	263	248	260	298	224	33%
Pacific	541	527	579	651	576	595	497	503	589	448	725	-38%
Total OECD	790	793	842	938	826	818	788	790	866	757	960	-21%
Naphtha												
North America	99	110	62	41	49	64	96	73	44	40	16	154%
Europe	282	273	311	352	277	304	313	284	307	344	362	-5%
Pacific	769	746	754	692	731	810	783	815	794	909	746	22%
Total OECD	1150	1129	1128	1085	1057	1178	1192	1172	1145	1294	1124	15%
Gasoline[3]												
North America	794	1016	1147	1113	1365	1166	944	906	923	791	1129	-30%
Europe	137	165	154	194	143	122	157	173	213	211	223	-6%
Pacific	105	102	97	84	135	74	96	120	73	86	70	23%
Total OECD	1035	1283	1398	1391	1643	1363	1197	1200	1209	1088	1422	-23%
Jet & Kerosene												
North America	101	130	152	81	191	203	130	172	135	187	17	985%
Europe	293	375	375	313	382	398	408	388	277	344	279	23%
Pacific	77	66	71	129	39	43	76	111	86	36	175	-79%
Total OECD	471	571	599	523	612	644	614	670	498	568	472	20%
Gasoil/Diesel												
North America	123	142	170	210	173	181	116	103	125	101	164	-38%
Europe	751	845	960	1079	926	901	937	878	926	1067	1135	-6%
Pacific	74	79	81	78	100	65	81	93	76	80	97	-17%
Total OECD	947	1066	1211	1367	1199	1147	1134	1074	1128	1248	1396	-11%
Heavy Fuel Oil												
North America	453	525	340	481	320	309	254	246	357	275	499	-45%
Europe	397	491	478	518	474	419	502	553	412	423	591	-28%
Pacific	76	85	92	122	105	76	65	70	83	108	126	-14%
Total OECD	926	1101	910	1121	899	804	821	868	852	806	1216	-34%
Other Products												
North America	872	1005	1106	972	1162	1298	991	946	1074	911	1051	-13%
Europe	676	781	897	895	854	922	914	863	1070	890	829	7%
Pacific	256	248	243	270	209	224	267	247	247	204	257	-21%
Total OECD	1805	2033	2245	2138	2225	2444	2173	2056	2391	2005	2138	-6%
Total Products												
North America	2466	2947	2991	2906	3268	3233	2559	2483	2675	2316	2888	-20%
Europe	2759	3177	3424	3630	3298	3277	3494	3387	3467	3578	3644	-2%
Pacific	1898	1852	1918	2026	1894	1888	1865	1959	1948	1871	2196	-15%
Total OECD	7123	7976	8333	8562	8461	8398	7918	7830	8090	7766	8727	-11%
Total Oil												
North America	10897	11332	11150	10645	11533	11919	10496	10352	11002	9510	10741	-11%
Europe	12237	12969	13195	13030	13045	13434	13264	13169	12971	13535	12963	4%
Pacific	8558	8654	8731	9426	8402	8568	8539	8818	8916	8827	9534	-7%
Total OECD	31692	32954	33076	33101	32981	33921	32299	32339	32890	31872	33237	-4%

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

OIL MARKET REPORT CONTACTS

Editorial Enquiries

Editor — Lawrence Eagles
Head, Oil Industry & Markets Division
(+33) 0*1 40 57 65 90
e-mail: lawrence.eagles@iea.org

Demand — Eduardo Lopez
(+33) 0*1 40 57 65 93
e-mail: eduardo.lopez@iea.org

Supply — David Fyfe
(+33) 0*1 40 57 65 94
e-mail: david.fyfe@iea.org

Prices/OECD Stocks — Julius Walker
(+33) 0*1 40 57 65 22
e-mail: julius.walker@iea.org

Refinery Activity — David Martin
(+33) 0*1 40 57 65 95
e-mail: david.martin@iea.org

OECD Stocks/Trade — Toril Ekeland Bosoni
(+33) 0*1 40 57 66 36
e-mail: toril.bosoni@iea.org

Statistics/Freight/Trade — James Ryder
(+33) 0*1 40 57 66 18
e-mail: james.ryder@iea.org

End-User Prices/Statistical Support — Miklos Bankuti
(+33) 0*1 40 57 67 76
e-mail: miklos.bankuti @iea.org

Editorial Assistant — Anne Mayne
(+33) 0*1 40 57 65 96
e-mail: anne.mayne@iea.org

Fax: *(+33) 0*1 40 57 65 99/40 57 65 09*

* 0 only within France

Media Enquiries

Press Office — Gwyn Darling
(+33) 0*1 40 57 65 54
e-mail: ieapressoffice@iea.org

Subscription and Delivery Enquiries

Oil Market Report Subscriptions (Attn: Ms. Sandra Coleman)
International Energy Agency
BP 586-75726 PARIS Cedex 15, France

Tel. +33 (0) 1 40 57 65 57
Fax. +33 (0) 1 40 57 65 59
e-mail: sandra.coleman@iea.org

Users' Guide to the IEA Oil Market Report

Readers are referred to the *Users' Guide*, published in conjunction with the *Annual Statistical Supplement* (current issue dated 11 August 2006), for information on the data sources, definitions, technical terms and general approach used in preparing the Report. 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 (© 2007 Platts - a division of McGraw-Hill Inc.).

INTERNATIONAL ENERGY AGENCY/AGENCE INTERNATIONALE DE L'ENERGIE

OIL MARKET REPORT

A MONTHLY OIL MARKET AND STOCKS ASSESSMENT

www.oilmarketreport.org

INTERNATIONAL ENERGY AGENCY

AGENCE INTERNATIONALE DE L'ENERGIE

12 June 2007

HIGHLIGHTS

- **Global oil product demand is revised up** to 84.5 mb/d for 2006 and 86.1 mb/d for 2007 (revisions of +250 kb/d and +420 kb/d, respectively). This results from baseline adjustments for non-OECD countries and also has the effect of reducing the *miscellaneous-to-balance*. World demand is now estimated to rise by 2.0% or 1.7 mb/d in 2007.

- **May world supply fell by 565 kb/d to 84.9 mb/d**. Seasonal OECD stoppages compounded weaker OPEC crude supply, notably in Nigeria, where outages are near 800 kb/d. Non-OPEC 2007 output is trimmed by 110 kb/d to 50.2 mb/d, with growth of 0.9 mb/d this year.

- **Nigerian outages cut OPEC crude supply by 425 kb/d to 30.1 mb/d**. While effective spare capacity stands at 2.8 mb/d, refining constraints imply much lower marketable spare capacity. Stronger demand raises 2007's 'call on OPEC crude and stock change' by 0.5 mb/d, with the seasonal rise in the call outstripping OPEC capacity additions by 4Q07.

- **Dated Brent rose above $70/bbl in late May as markets tightened** on stronger demand, lower supply, ongoing downstream tightness and early summer storms. Economic concerns, weaker commodities and the passing of Cyclone Gonu saw prices dip as the report went to press.

- **Global refinery crude throughput rose by 0.6 mb/d to 72.4 mb/d in April**. Higher refinery throughput in the OECD and China offset lower runs in the FSU and India. Global crude runs could rebound to an August peak of 75.2 mb/d on higher OECD throughput.

- **Total OECD industry inventories rose by 9.9 mb in April**, with a crude build offsetting a dip in product stocks. While forward cover stayed flat at 54 days, total OECD gasoline inventories are now well below their five-year average range.

Next Issue: 13 July 2007

CONTENTS

PAUSING FOR BREATH

Rising stocks during the seasonally weak second quarter can be deceptive. Total OECD stocks built by 9.9 mb in April and preliminary data show a 28 mb build in May. While the US gasoline market remains tight, stocks have begun to rebuild, and high crude stocks in parts of the US require heavy discounts to clear the spot market. These discounts are creating large forward premia that make it attractive for traders to put crude into floating storage in the Gulf of Mexico. So why the huffing and puffing about the need for more crude?

Regional discrepancies aside, it has been clear since 2004 that a large portion of higher prices is related to a mismatch between the pattern of demand growth, refinery output and spare capacity. For the latter of these issues, we should probably be more precise – *marketable* spare capacity. Spare crude capacity is of little use if it cannot be processed economically in order to meet rigid product specifications by the existing refinery infrastructure. Also, in the short-term capacity is only 'spare' if it is available to the market. Therefore, while it is clear that much of the recent rise in crude prices has been caused by US gasoline tightness, there is a portion which is related to tighter OPEC supply.

Hopes for a moderation in crude prices in the short term therefore lie both with OPEC and the US gasoline market. The Refining section of this report assesses that there is the potential for a modest inventory rebuild if the US and European refining industry can remain relatively trouble-free over the next few months, but we remain concerned that the system is stretched. Further, there may be some competition for stocks from the Pacific, where gasoline stock cover is as low as it is in the US.

With the exception of gasoline, cumulative OECD crude and product stocks are not particularly tight. The expected modest surplus in the weak April/May demand period adds to the inventory cushion. But it is important to look at the underlying trend. Stocks fell by 0.9 mb/d in 4Q06 and by 1 mb/d in 1Q07, but the magnitude of the draws could have been doubled if we had not had such a mild winter. This trend could re-emerge.

But the stock situation can change rapidly, and here is where our concern lies. This month's report includes a series of adjustments for non-OECD demand as annual surveys for the IEA's 2005 'Green Book' are processed. For our balances, these are predominantly accounting changes in Africa and 'Other Asia' apportioning barrels from the miscellaneous-to-balance to our demand baseline. However, they also lift the call on OPEC plus stock change in 2007.

Projecting OPEC output forward at 30.3 mb/d suggests the recent mild surplus should turn into a deficit in June, and then to a 3Q stock draw of around 1-1.5 mb/d. This would push forward stock cover down towards the low levels seen when prices accelerated higher in 2004. That is, by itself, a concern. But these low stocks would also come ahead of the fourth quarter, when OPEC spare capacity (assuming it raises output in line with the call) is poised to trend lower.

There are, of course, uncertainties, which could shift the market. Nigeria, geopolitics, economic growth and the weather (hurricanes, plus heating and cooling needs) could swing the balances in either direction. But, even with these caveats, it seems difficult to escape the conclusion that the oil market will be tight in the second half of the year. Refinery constraints are attracting investment, but shortages of skilled labour, capacity and equipment, are slowing progress. In the meantime, we have an oil system which needs every inch of flexibility to deliver the products we need. Constraining that flexibility by restricting supply or reducing stocks, risks provoking a price increase that would be detrimental to both producers and consumers alike.

DEMAND

Summary

- **Global oil product demand** has been revised up to 84.5 mb/d in 2006 and 86.1 mb/d in 2007 (+250 kb/d and +420 kb/d, respectively). These changes result from large baseline adjustments in 2005 and growth reappraisal in 2006 for various big non-OECD countries in light of new data. Overall, world demand is now estimated to have grown by 0.9% or 0.8 mb/d in 2006, and is expected to rise by 2.0% in 2007 or 1.7 mb/d.

Global Oil Demand (2005-2007)

(million barrels per day)

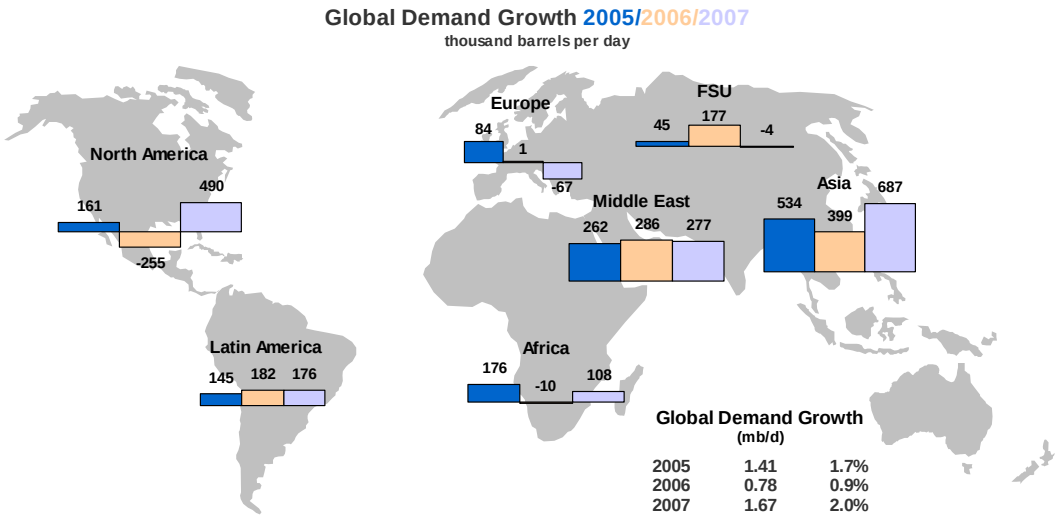
	1Q05	2Q05	3Q05	4Q05	2005	1Q06	2Q06	3Q06	4Q06	2006	1Q07	2Q07	3Q07	4Q07	2007
Africa	3.0	3.0	2.9	2.9	3.0	3.0	3.0	2.9	2.9	2.9	3.1	3.1	3.0	3.1	3.1
Americas	30.6	30.5	30.9	30.7	30.7	30.3	30.4	30.9	30.8	30.6	31.0	30.8	31.5	31.6	31.2
Asia/Pacific	25.1	23.5	23.3	24.3	24.0	25.2	24.1	23.7	24.8	24.4	25.3	24.8	24.6	25.8	25.1
Europe	16.4	15.9	16.2	16.4	16.2	16.6	15.8	16.2	16.3	16.2	16.0	15.8	16.3	16.6	16.2
FSU	3.8	3.7	3.8	3.9	3.8	3.9	3.7	4.0	4.3	4.0	3.8	3.6	4.1	4.4	4.0
Middle East	5.9	6.0	6.2	6.0	6.0	6.2	6.2	6.5	6.3	6.3	6.4	6.5	6.8	6.5	6.6
World	**84.8**	**82.6**	**83.2**	**84.2**	**83.7**	**85.1**	**83.2**	**84.1**	**85.4**	**84.5**	**85.6**	**84.6**	**86.3**	**88.0**	**86.1**
Annual Chg (%)	3.0	1.8	1.6	0.4	1.7	0.5	0.8	1.0	1.4	0.9	0.5	1.7	2.6	3.0	2.0
Annual Chg (mb/d)	2.5	1.5	1.3	0.3	1.4	0.4	0.7	0.9	1.2	0.8	0.4	1.4	2.2	2.6	1.7
Changes from last month's report (mb/d)	0.20	0.22	0.01	0.19	0.16	0.27	0.22	0.23	0.29	0.25	0.24	0.34	0.54	0.54	0.42

- **The OECD oil product demand forecast** remains unchanged in both 2006 and 2007, at 49.2 mb/d and 49.6 mb/d, respectively. In April, demand rebounded on seasonal factors on the back of higher motor fuel deliveries (gasoline and diesel). Gasoline demand was primarily supported by North America, while diesel deliveries were sustained in both North America and Europe.

- **Non-OECD oil product demand** has been adjusted upwards by some 250 kb/d in 2006 and 400 kb/d in 2007. Historical and forecast data were reassessed following the submission of final 2005 data and revisions to previous years. The changes were particularly significant among several key consuming countries, including Nigeria, Indonesia, Singapore, Venezuela and Former Yugoslavia, among others, where demand turned out to be much stronger than previously anticipated. Non-OECD oil product consumption is now estimated at 35.2 mb/d in 2006, an increase of 3.5% or +1.2 mb/d over 2005, and is forecast to reach 36.6 mb/d in 2007 (+3.7% or +1.3 mb/d).

- **China's apparent demand** has been adjusted slightly downwards, and is now expected to increase by 6.1% in 2007, to roughly 7.6 mb/d following revisions to March estimates. April demand rose by an estimated 4.8% year-on-year, driven by petrochemical demand (ethylene production), the start of the agricultural planting season and accelerating infrastructure construction. **India's oil product sales**, meanwhile, are forecast to reach 2.8 mb/d in 2007, +4.3% over 2006, on the back of strong transportation fuel demand.

- **The closure of small thermal plants, iron foundries and steel mills deemed too polluting is unlikely to boost Chinese oil demand**, particularly for diesel and fuel oil, since coal-based power generation capacity is being added at record speed. **The Middle East is also facing the challenge of meeting rapidly expanding power demand**, which is being fuelled by strong economic growth. Shortages of natural gas are forcing governments to consider alternatives such as coal, fuel oil, nuclear and even imported gas, but increased direct crude and fuel oil burning provide a short-term solution.



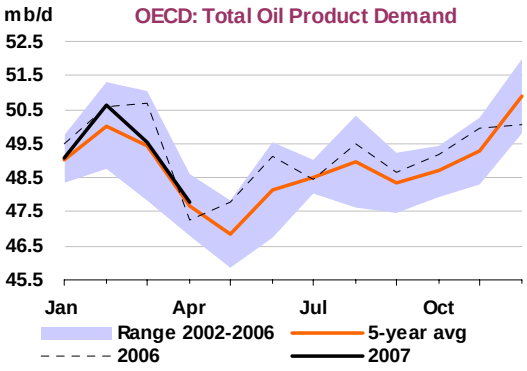
OECD

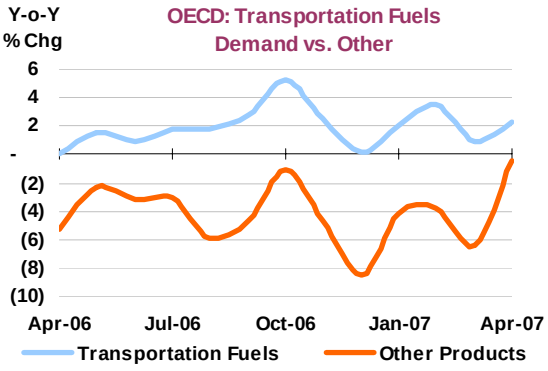
According to preliminary data, total OECD demand rose by 1.1% in April versus the same month in 2006. This small increase was mostly attributable to strong demand in North America, where inland deliveries increased by 2.1%, twice as fast as in Europe (+1.0%). Deliveries in the Pacific contracted by 1.4%, due to weakness across most product categories.

OECD Demand based on Adjusted Preliminary Submissions - April 2007
(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*	**10.78**	**1.8**	**1.90**	**-2.1**	**3.89**	**9.8**	**1.31**	**-7.2**	**1.22**	**3.1**	**6.01**	**1.30**	**25.10**	**2.1**
US50	9.32	1.6	1.69	-3.0	3.43	11.0	0.87	-11.9	0.72	5.3	4.65	1.0	20.67	1.9
Canada	0.70	1.5	0.11	1.7	0.17	1.4	0.31	4.4	0.13	-3.9	0.71	7.3	2.13	3.5
Mexico	0.71	5.4	0.07	15.6	0.25	2.6	0.11	2.6	0.30	1.4	0.60	-2.8	2.03	2.1
OECD Europe	**2.54**	**-1.3**	**1.26**	**5.6**	**4.09**	**5.7**	**1.60**	**-9.4**	**1.59**	**-3.9**	**3.57**	**3.5**	**14.66**	**1.0**
Germany	0.52	-0.4	0.20	8.9	0.59	2.8	0.23	-43.4	0.16	-17.3	0.56	-6.4	2.26	-8.7
United Kingdom	0.43	-1.0	0.35	10.5	0.44	4.1	0.13	19.3	0.09	6.4	0.36	0.5	1.81	4.3
France	0.24	-3.4	0.15	1.5	0.66	3.9	0.23	-24.8	0.07	-32.3	0.47	1.2	1.81	-4.3
Italy	0.29	-4.4	0.08	4.4	0.53	5.2	0.08	-10.3	0.18	-25.0	0.35	2.4	1.53	-2.9
Spain	0.16	-4.5	0.11	3.9	0.51	4.9	0.19	10.7	0.20	-2.2	0.37	-1.9	1.54	1.8
OECD Pacific	**1.57**	**0.0**	**0.85**	**-10.6**	**1.23**	**-1.1**	**0.54**	**-9.4**	**0.89**	**-10.5**	**2.95**	**5.7**	**8.04**	**-1.4**
Japan	1.03	-1.2	0.56	-14.2	0.61	-4.0	0.41	-16.5	0.47	-16.6	1.68	-3.1	4.76	-7.1
Korea	0.16	2.8	0.16	-7.6	0.30	-1.0	0.13	23.8	0.39	-2.1	1.06	23.9	2.20	10.5
Australia	0.32	1.9	0.10	4.5	0.28	5.2	0.00	21.4	0.02	3.2	0.19	4.3	0.92	3.7
OECD Total	**14.90**	**1.1**	**4.01**	**-1.8**	**9.22**	**6.4**	**3.45**	**-8.6**	**3.70**	**-3.5**	**12.52**	**2.9**	**47.80**	**1.1**

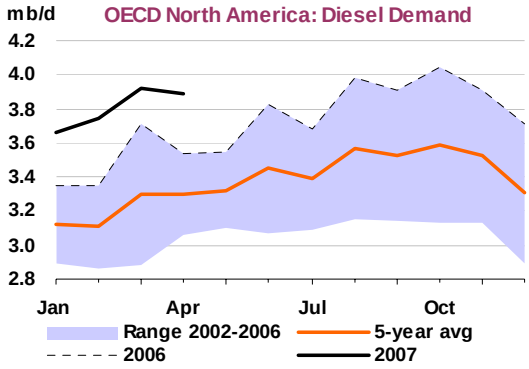
* Including US territories

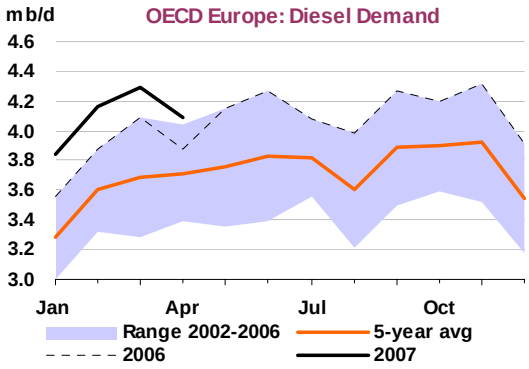




This rebound in demand is associated with higher deliveries of motor fuels (gasoline and diesel). Gasoline demand rose by 1.1% year-on-year in April, primarily supported by North America, while diesel deliveries jumped by 6.4%, sustained in both North America and Europe. Overall, offsetting minor

revisions leave our OECD demand forecast for 2007 largely unchanged at 49.6 mb/d (+0.7% over 2006), assuming normal temperatures throughout the rest of this year.





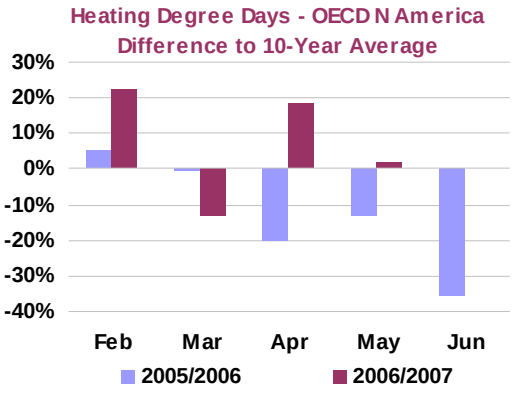
Total OECD Demand by Product
(million barrels per day)

	2006	2007	2Q06	3Q06	4Q06	1Q07	Jan 07	Feb 07	Mar 07*	Latest month vs. Feb 07	Latest month vs. Mar 06
LPG & Ethane	4.64	4.66	4.44	4.37	4.71	5.15	5.26	5.39	4.83	-0.55	-0.02
Naphtha	3.18	3.28	2.95	3.15	3.37	3.41	3.48	3.45	3.29	-0.15	0.16
Motor Gasoline	14.88	15.00	14.96	15.28	14.94	14.47	14.07	14.54	14.82	0.28	0.04
Jet & Kerosene	4.18	4.20	3.99	3.98	4.27	4.36	4.41	4.47	4.21	-0.26	-0.17
Gas/Diesel Oil	13.22	13.40	12.67	12.89	13.57	13.53	13.12	13.90	13.59	-0.32	-0.64
Residual Fuel Oil	4.02	3.93	3.79	3.81	3.83	4.19	4.16	4.36	4.05	-0.31	-0.48
Other Products	5.10	5.12	5.23	5.39	5.03	4.62	4.59	4.54	4.74	0.20	-0.06
Total Products	**49.22**	**49.58**	**48.04**	**48.87**	**49.72**	**49.73**	**49.10**	**50.64**	**49.54**	**-1.11**	**-1.17**

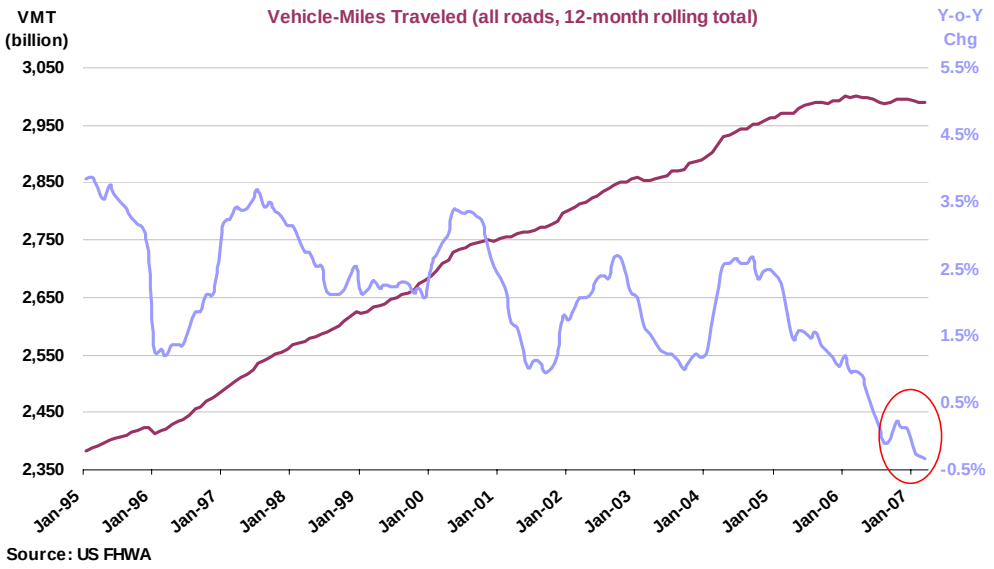
* Latest official OECD submissions (MOS)

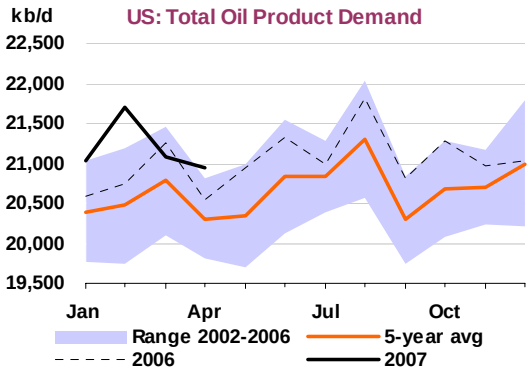
North America

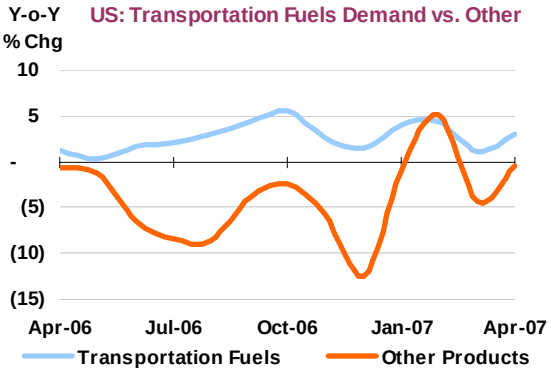
According to adjusted preliminary data for April, inland deliveries in the continental **United States** – a proxy of demand – rose by 1.9% versus April 2006. Both gasoline and diesel demand growth were particularly strong (+1.6% and +11.0%, respectively), indicating resilient economic conditions despite anecdotal but contradictory evidence of a gradual economic slowdown and rising retail prices. Although heating oil data show deliveries were down by 11.9% on an annual basis, this conflicts with colder-than-normal temperatures. In OECD North America, the number of 'heating-degree days' or HDDs in April was 18% higher than the ten-year average and 5% higher in the US, a trend that continued in May. Part of the explanation for this is the change in the sulphur specifications for off-road diesel, which were previously lumped in the heating oil category but now apportioned as diesel. Meanwhile, fuel oil deliveries increased by 5.3% year-on-year to help meet higher power demand, boosted by relatively high natural gas prices ($8.52/mmbtu in April versus $8.43/mmbtu for residual).



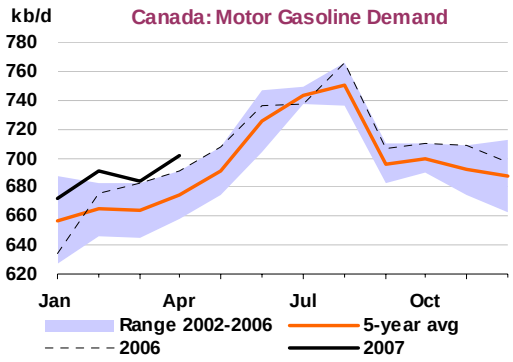
Gasoline deliveries continue to be strong despite rising retail prices. Nevertheless, the last available data (March) on the number of miles driven ('vehicle-miles travelled' or VMT) suggest that VMT remained essentially flat during 1Q07. These data, however, are liable to revisions, so it remains premature to draw conclusions from them rather than from recorded gasoline demand.



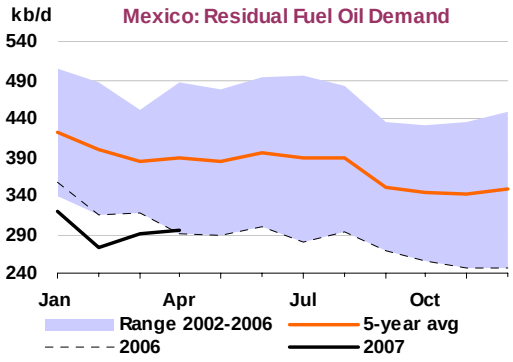




According to preliminary April data, **Canada's** inland deliveries rose by 3.5% versus April 2006, largely supported by gasoline (+1.5% year-on-year). Interestingly, February's outage of Imperial Oil's 118 kb/d refinery in Nanticoke, Ontario, which led to gasoline, diesel and heating oil rationing in the province and obliged the company to close some 20% of its 400 Esso retail stations, appeared to have a marginal impact in the country's overall oil product demand. The refinery resumed full operations in late March, and data show only a blip in February, suggesting that the contingency was well handled.



Preliminary April data reveal that inland deliveries in **Mexico** increased by 2.1% versus the same month in 2006. For the second month in a row, demand was supported by strong transportation fuel consumption. Gasoline rose by 5.4% year-on-year, jet fuel/kerosene jumped by 15.6% in the wake of the Easter holidays and diesel climbed by 2.6%. Residual fuel oil consumption, meanwhile, is still below the five-year average, mostly because of natural gas substitution.



Gas, and particularly LNG, is making inroads in electricity generation, mostly because of tighter environmental restrictions and greater efficiency (with combined-cycle technology). Shell's Gulf of Mexico, 750 mmcfd Altamira terminal, began operations in October 2006, bringing natural gas from Nigeria to feed several power stations belonging to state-owned monopoly CFE as well as to five independent power producers (IPP). Sempra's Baja California terminal, still under construction, will also supply both the CFE and IPPs, although some of the gas (and the electricity) are to be exported to the US (California and Arizona). Other projects, still under planning, would also basically supply utilities and industrial activities (Manzanillo and Lázaro Cárdenas in the Pacific Ocean, and Puerto Libertad and Topolobampo in the Sea of Cortés).

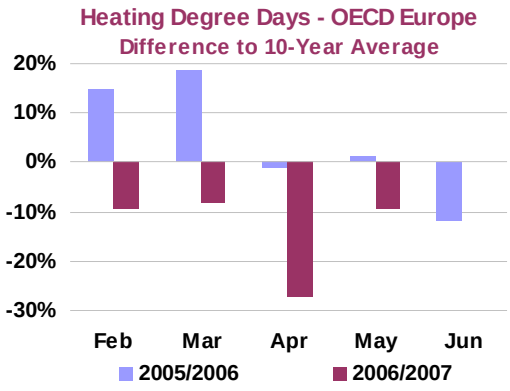
OECD North America Demand by Product
(million barrels per day)

	2006	2007	2Q06	3Q06	4Q06	1Q07	Jan 07	Feb 07	Mar 07*	Latest month vs. Feb 07	Latest month vs. Mar 06
LPG & Ethane	2.80	2.85	2.65	2.66	2.89	3.23	3.32	3.45	2.93	-0.52	0.04
Naphtha	0.43	0.44	0.41	0.45	0.48	0.41	0.43	0.40	0.39	-0.02	0.03
Motor Gasoline	10.73	10.89	10.80	11.00	10.78	10.54	10.36	10.53	10.72	0.19	0.09
Jet & Kerosene	1.91	1.93	1.95	1.94	1.89	1.88	1.88	1.91	1.84	-0.07	-0.08
Gas/Diesel Oil	5.17	5.36	5.01	5.06	5.27	5.48	5.30	5.71	5.44	-0.27	-0.12
Residual Fuel Oil	1.21	1.24	1.15	1.17	1.11	1.40	1.33	1.49	1.38	-0.11	-0.06
Other Products	3.02	3.06	3.14	3.18	2.97	2.78	2.76	2.72	2.86	0.14	0.09
Total Products	**25.28**	**25.77**	**25.09**	**25.47**	**25.39**	**25.71**	**25.39**	**26.22**	**25.56**	**-0.66**	**-0.02**

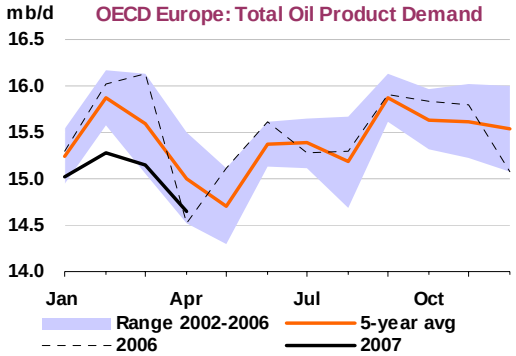
* Latest official OECD submissions (MOS)

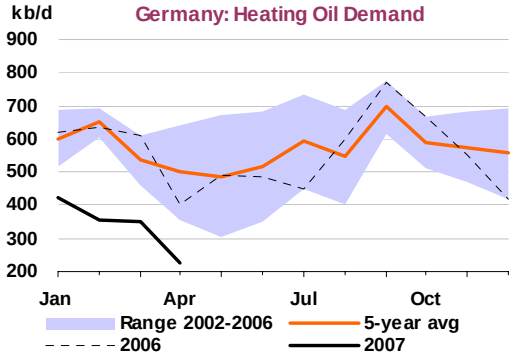
Europe

Preliminary figures indicate that total oil product demand in Europe rose by 1.0% in April on a yearly basis, sustained by strong diesel and jet/kerosene use (+5.7% and +5.6%, respectively). Temperatures were unusually warm on average during the month (HDDs were some 27% lower than the 10-year average) and electricity demand remained subdued. Similar conditions prevailed in May.

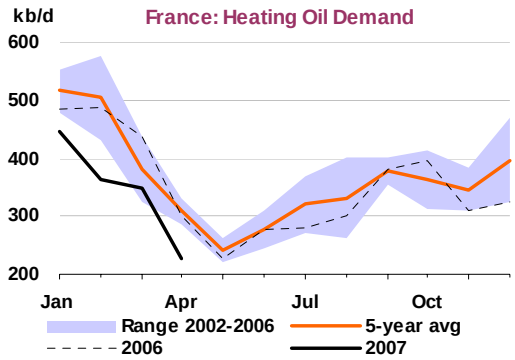


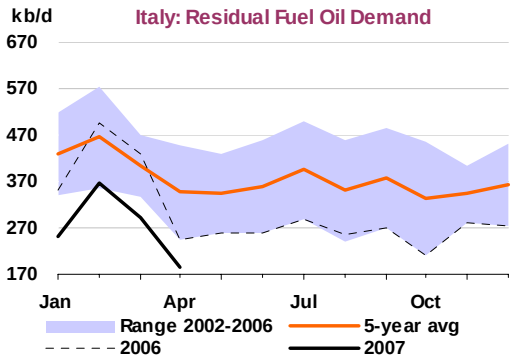
In **Germany**, oil product demand plummeted by 8.7% year-on-year in April, according to preliminary delivery data. As anticipated, once again the main culprit was heating oil, which contracted by 43.4% on an annual basis. German household stocks remained filled at approximately 53% of capacity by the end of the month, barely unchanged versus March (one percentage point less) and well above the five-year average. The Easter holidays also influenced demand, with jet/kerosene rising by 8.9%.





In **France** and **Italy**, similar patterns were observed in April, with continued weak heating and fuel oil deliveries, given the end of the mild winter. Heating oil deliveries shrank by 24.8% and 10.3%, respectively, compared with April 2006, while residual fuel oil demand plummeted by 32.3% and 25.0%, respectively. Nevertheless, fuel oil demand in Italy could rebound ahead in the summer if the dry season is particularly severe and dents hydropower supplies.





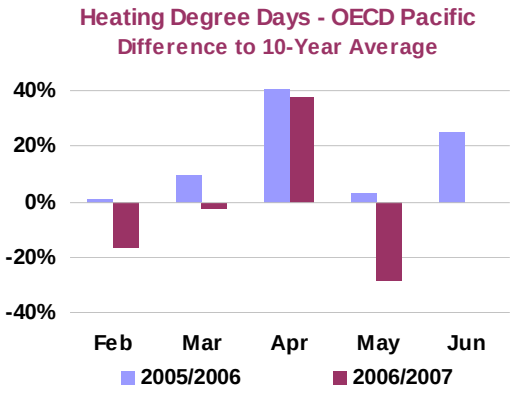
OECD Europe Demand by Product
(million barrels per day)

	2006	2007	2Q06	3Q06	4Q06	1Q07	Jan 07	Feb 07	Mar 07*	Latest month vs. Feb 07	Latest month vs. Mar 06
LPG & Ethane	0.96	0.94	0.96	0.83	0.91	0.98	1.00	0.97	0.99	0.02	-0.11
Naphtha	1.13	1.15	1.06	1.09	1.15	1.24	1.24	1.25	1.23	-0.02	-0.01
Motor Gasoline	2.56	2.51	2.61	2.65	2.54	2.38	2.25	2.40	2.49	0.10	-0.04
Jet & Kerosene	1.28	1.31	1.28	1.37	1.28	1.24	1.25	1.26	1.21	-0.05	-0.05
Gas/Diesel Oil	6.23	6.23	5.87	6.14	6.42	6.21	6.15	6.25	6.22	-0.02	-0.41
Residual Fuel Oil	1.81	1.73	1.70	1.73	1.73	1.79	1.81	1.88	1.68	-0.20	-0.33
Other Products	1.52	1.53	1.59	1.68	1.53	1.31	1.32	1.29	1.33	0.04	-0.01
Total Products	**15.49**	**15.40**	**15.08**	**15.49**	**15.57**	**15.15**	**15.01**	**15.29**	**15.15**	**-0.13**	**-0.97**

* Latest official OECD submissions (MOS)

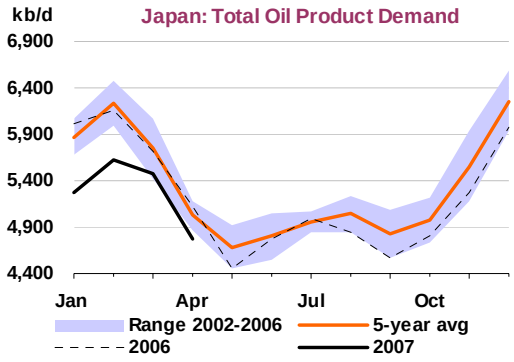
Pacific

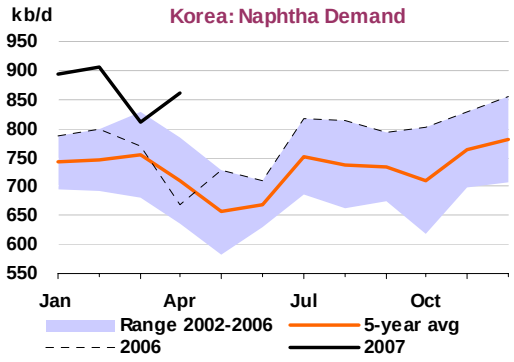
According to preliminary data, oil product demand in the Pacific shrank by 1.4% in April on a yearly basis. Despite a cold snap that hit Japan and Korea in late March and most of April (HDDs were some 38% higher-than-normal in April), demand for heating fuels (kerosene in Japan and Korea, and gasoil elsewhere) and fuel oil remained weak. Jet/kerosene deliveries fell by 10.6% compared with the same month in 2006, while those of other gasoil contracted by 9.4%. Residual fuel oil deliveries, meanwhile, plummeted by 10.5%.



In **Japan**, oil product demand contracted in April (-7.1% on an annual basis) for the sixth month in a row. As in previous months, the mild weather has been largely responsible for this weakness, compounded by Japan's structural demand weakness in transportation fuels. Inland deliveries of jet/kerosene, which is mostly used for heating, contracted by 14.2% in March. Lower electricity demand, in turn, curbed residual fuel oil (-16.6%), other low-sulphur gasoil (-16.5%) and direct crude for power generation (included in 'other products', which contracted by 12.5%).

In **Korea**, total oil product deliveries rose strongly in April (+10.5% on an annual basis), essentially buoyed by naphtha (+28.9%), gasoline (+2.8%) and diesel (+1.0%). As in neighbouring Japan, jet/kerosene demand was weak (-7.6% year-on-year) given mild temperatures.





OECD Pacific Demand by Product
(million barrels per day)

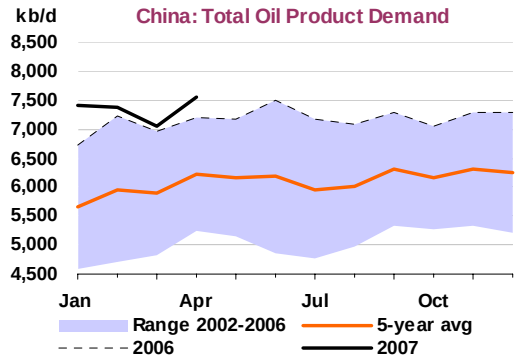
	2006	2007	2Q06	3Q06	4Q06	1Q07	Jan 07	Feb 07	Mar 07*	Latest month vs. Feb 07	Latest month vs. Mar 06
LPG & Ethane	0.89	0.87	0.84	0.88	0.91	0.94	0.95	0.97	0.92	-0.05	0.05
Naphtha	1.62	1.69	1.48	1.60	1.73	1.76	1.81	1.80	1.68	-0.12	0.15
Motor Gasoline	1.59	1.60	1.55	1.63	1.62	1.55	1.45	1.61	1.60	-0.01	-0.01
Jet & Kerosene	0.98	0.96	0.75	0.67	1.10	1.25	1.28	1.30	1.17	-0.14	-0.04
Gas/Diesel Oil	1.82	1.81	1.80	1.69	1.88	1.84	1.67	1.95	1.92	-0.02	-0.10
Residual Fuel Oil	1.00	0.96	0.95	0.91	0.99	1.00	1.03	0.99	0.99	0.00	-0.09
Other Products	0.56	0.52	0.50	0.52	0.53	0.53	0.51	0.52	0.55	0.02	-0.14
Total Products	**8.46**	**8.41**	**7.87**	**7.90**	**8.76**	**8.88**	**8.69**	**9.14**	**8.82**	**-0.32**	**-0.18**

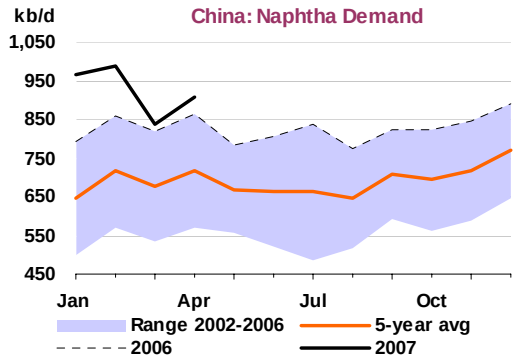
* Latest official OECD submissions (MOS)

Non-OECD

China

Apparent demand in China (defined as refinery output plus net oil product imports, adjusted for fuel oil and direct crude burning, smuggling and stock changes) increased by approximately 4.8% year-on-year in April, on the back of strong naphtha, gasoil and residual fuel oil deliveries (+5.2%, +4.7% and +20.3%, respectively). Demand was buoyed by continued petrochemical demand, agricultural and fishing activities, and construction. Nevertheless, minor revisions to March estimates have resulted in a slight downward adjustment to our short-term forecast. Total Chinese oil product demand is now expected to increase by 6.1% in 2007, to roughly 7.6 mb/d.





Some observers worry that China's ongoing double-digit growth in several industries using ethylene as a raw material (automobiles, textiles, chemicals, building materials and electronic industries) may lead to a shortage of naphtha. Indeed, the country's annual ethylene production capacity – which requires naphtha as an essential feedstock – is expected to double to 18.3 million tonnes in 2010, from 9.7 million tonnes in 2006. Domestic demand is forecast to reach 25.5 million tonnes by then: the government's efforts to improve automotive fuel quality standards will also further boost naphtha demand (which is also used to produce lighter gasoline).

But this ambitious target will necessitate securing cheap and stable supplies of naphtha – at a time of high international crude oil prices and expensive domestic production of the feedstock, given that most Chinese crude grades are relatively heavy. However, the country will most probably import ethylene from neighbouring Japan and Korea. It may also presumably try to purchase ethylene from Middle Eastern countries, such as Saudi Arabia, Iran and Qatar, where it would be cheaper given the abundance of feedstock (gas). However, petrochemical developments in the Middle East are likely to significantly curtail export surpluses.

China Demand by Product
(thousand barrels per day)

	Demand			Annual Chg (kb/d)		Annual Chg (%)	
	2005	2006	2007	2006	2007	2006	2007
LPG & Ethane	650.0	633.4	661.5	-16.7	28.1	-2.6	4.4
Naphtha	706.8	825.6	919.4	118.8	93.9	16.8	11.4
Motor Gasoline	1,130.8	1,169.5	1,208.5	38.8	39.0	3.4	3.3
Jet & Kerosene	245.8	279.6	296.0	33.8	16.3	13.8	5.8
Gas/Diesel Oil	2,238.8	2,338.0	2,472.2	99.2	134.2	4.4	5.7
Residual Fuel Oil	778.0	776.1	802.8	-1.8	26.7	-0.2	3.4
Other Products	943.1	1,134.6	1,232.2	191.5	97.6	20.3	8.6
Total Products	**6,693.2**	**7,156.8**	**7,592.6**	**463.6**	**435.8**	**6.9**	**6.1**

Challenges to China's Power Industry

The effects of China's relentless economic growth on global greenhouse emissions are gaining increased attention. Although China is adamantly opposed to specific targets that may curb economic development, it is acutely aware of the need to increase overall energy efficiency. One area of attention pertains to power consumption, particularly by industry. China's steel, non-ferrous, chemical, oil processing, coking and construction material industries accounted for approximately 64% of the country's total industrial power consumption in 1Q07.

Over the Eleventh Five-Year Plan (2007-2012), the government intends to shut down old production facilities – small thermal plants with total power generation capacity of 50 GW, of which 10 GW in 2007 – as well as backward iron foundries (with total production capacity of 100 million tonnes) and steel mills (with a total capacity of 55 million tons). Closure targets for foundries and mills stand at 30 million and 35 million, respectively, in 2007. In the same vein, the government intends to halt the construction of new coal-fired power plants below 300 MW. In January, the National Development and Reform Commission (NDRC) reportedly ordered the suspension of coal-fired power plants with a capacity of less than 50 MW, those with a capacity of less than 100 MW that have been running over 20 years, and plants with a capacity of 200 MW that have operated for a longer period. According to local reports, the country shut 101 small thermal power generators in the first four months of the year, accounting for 3.4 GW.

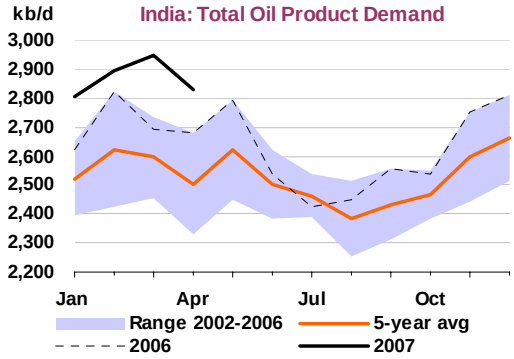
These closures are unlikely to adversely impact Chinese oil demand, particularly of diesel and fuel oil, since coal-based power generation capacity is being added at record speed – some 93 GW of generation capacity were added in 2006, with a further 90 GW expected to be installed during 2007, of which more than 90% is coal-based. China plans to have 840 GW of aggregate installed capacity by 2010, compared with 622 GW by end-2006.

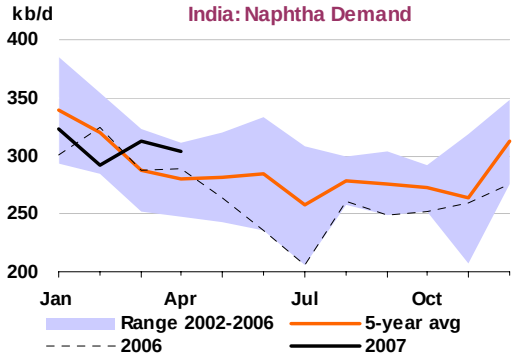
Nevertheless, regional imbalances are expected to remain, with the Beijing-Tianjin-Tangshan region in northern China expected to face power shortages this summer, northeastern areas roughly balanced and central and west China posting an electricity surplus. In 1Q07, twelve provinces were reportedly forced to implement measures limiting local consumption (but the shortfalls were also related to limited hydropower output in some areas). But these imbalances are unlikely to prompt a repeat of the diesel spike of 2004, when power shortages were extensive. Moreover, the government will probably continue to turn a blind eye to the legality of some new capacity additions (which are often built without prior local authorisation).

Other Non-OECD

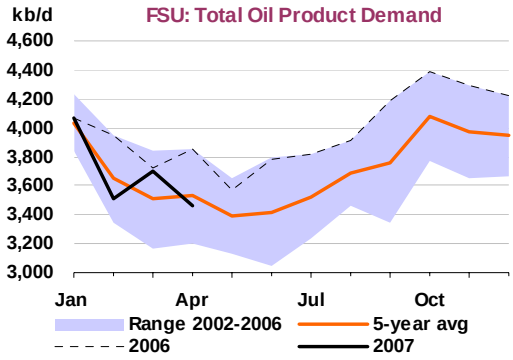
According to preliminary data, oil product sales in **India** – a proxy of demand – grew by 5.4% year-on-year in April. All product categories bar 'other' recorded strong gains. Transportation fuel sales were particularly buoyant, with gasoline deliveries rising by 10.8%, diesel sales by 8.2% and jet/kerosene by 6.7%. Given the observed demand strength, we have raised our 2007 growth forecast for India; demand is expected to reach 2.8 mb/d in 2007, +4.3% over 2006.

Forecasting Indian demand has been complicated by the recent rebound of naphtha, which until then had been facing a structural decline in favour of natural gas – which had, in turn, boosted naphtha exports. The lack of gas, due to natural disruptions and pricing issues, prompted petrochemical and fertiliser companies as well as utilities to switch back to naphtha. For example, a new generating unit commissioned by Ratnagiri Gas and Power (previously Dabhol Power) will use only naphtha. Similarly, some observers argue that the government's plan with regards to adding power generation capacity is insufficient, and if so this could herald a spike in oil demand, particularly diesel, of which some 20% serves to power small generators in the countryside. However, the main bone of contention – the price of gas, seen as too low – is apparently subsiding. Both LNG operators such as Shell or domestic producers such as ONGC have recently reported sales at international prices (around $6.0/mmbtu). This realignment of domestic prices, if sustained, could bring about the development of India's natural gas market, held back by suppliers with little incentive to develop local resources given subsidy constraints.

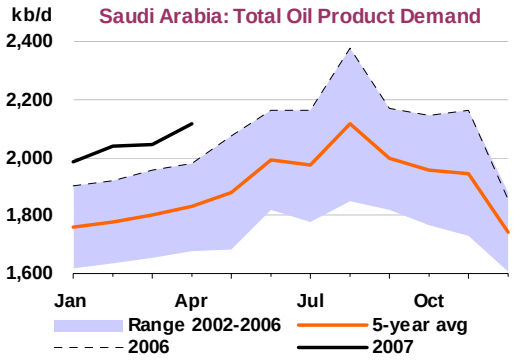


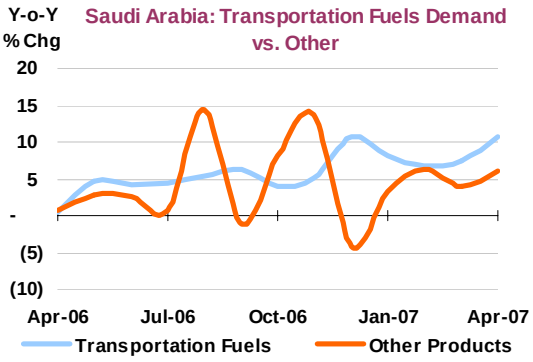


FSU apparent demand – defined as domestic crude production minus net exports of crude and oil products – has been marginally revised upwards by 16 kb/d in 1Q07 and downwards by 19 kb/d in 2Q07. Overall, the region's apparent demand in 2007 is virtually unchanged from last month's report, and is expected to average 4.0 mb/d (0.1% lower than in 2006). The region's net exports are expected to continue to peak at close to 9.0 mb/d during 2Q07. This would be the second quarter in a row of post-Soviet highs. It should also be noted that Russian duties fell from 1 April, further boosting net exports. Duties, however, are poised to increase again on 1 June.



As for most other countries in the Middle East, **Saudi Arabia's** oil product demand growth is racing ahead. Total consumption is expected to reach 2.2 mb/d in 2007, +4.5% over 2006. Unsurprisingly, given the Kingdom's low retail prices and ongoing economic boom, transportation fuels are driving demand, rising by over 10% on a yearly basis. Gasoline and gasoil, which together account for roughly 41% of total consumption, rose by 10.3% and 11.3%, respectively, in 1Q07.





In **Iran**, the plan to introduce gasoline rationing was postponed at the last minute, but on 22 May the government went ahead with a 25% increase on retail prices (on regular gasoline, +27% for premium), which are still very low by international standards (at some 12 cents per litre) Rationing is now expected in June at the earliest, assuming that the numerous logistical problems that have plagued smart cards are addressed – acute distribution delays, lack of adequate equipment and software in some 22% of the country's service stations, uncertainty regarding central gathering capabilities of daily rationing data and poor information and user training.

Meeting Power Demand in the Middle East

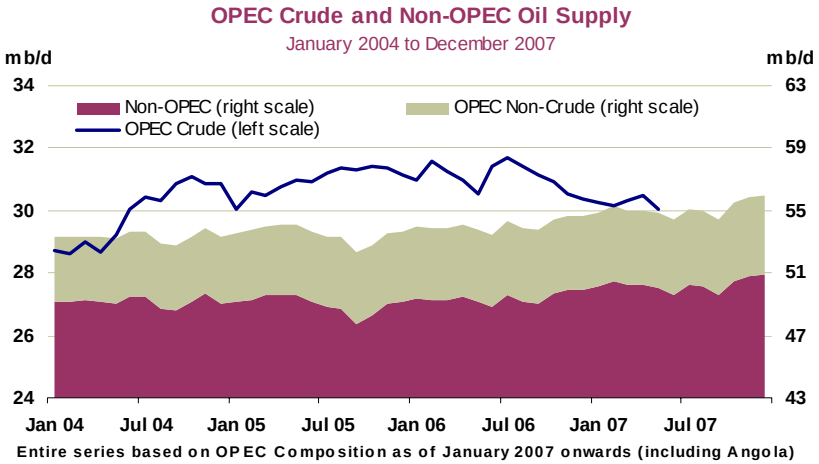
The Middle East, whose economies are flourishing on the back of an energy boom, is facing a worrying paradox: how to meet rapidly expanding power demand, itself fuelled by economic growth. Indeed, shortages of natural gas – hitherto the fuel of choice for electricity generation – have become a regular feature, forcing governments to consider alternatives such as coal, fuel oil, nuclear and even imported gas. For example, Abu Dhabi is expected to divert gas from its oil field injection programme this summer, in order to run power stations and desalination plants. A large eight-turbine, gas-fired power station that serves the UAE will be obliged to run two of its trains on gasoil (requiring some fifty tanker trucks per day). But gasoil itself is scarce: in Qatar, trucks must reportedly wait up to six hours to refuel. In Kuwait, meanwhile, the authorities have warned that there will be extensive power cuts this summer.

Since local gas is not a short-term option, because of lengthy development phases – except in the UAE, which will eventually be supplied with Qatari gas from the Dolphin project and with Iranian gas from the Crescent project (although both have been delayed) and in Qatar itself – coal is likely to be the most favoured alternative. Both Saudi Arabia and Oman are considering building coal-fired power plants – the former along the coast and the latter in its southern Raysut industrial complex. But LNG could also be encouraged, with Kuwait reportedly mulling the construction of a terminal with Shell and BG. Finally, other countries are envisaging power imports, with Bahrain willing to purchase electricity from Saudi Arabia.

SUPPLY

Summary

- **World oil supply** in May is estimated down by 565 kb/d versus April at 84.9 mb/d. Seasonal outages in the OECD compounded weaker OPEC crude supply, notably in Nigeria and Iraq. Non-OPEC supply could fall further, by up to 485 kb/d, in June as northern hemisphere summer maintenance kicks in.
- **Non-OPEC production for 2007** is trimmed by 110 kb/d to 50.2 mb/d, with annual growth of 0.9 mb/d this year after 0.4 mb/d in 2006. The 1.0 mb/d growth seen in the last three quarters eases to 0.7-0.9 mb/d for the rest of 2007 due to maintenance, seasonal shut-ins, project slippage and mature field decline, but is nonetheless an improvement on late 2004 to early 2006 performance. OECD and Africa drive 2007's downward revision, exceeding upward supply adjustments for Mexico, Sudan, Thailand and biofuels.
- **Russian supply growth** through 2012 should prove slower than in the early 2000s, albeit remaining a key driver for non-OPEC supply. Output could rise from 9.9 mb/d now to 10.6 mb/d by 2010, dipping modestly to 10.5 mb/d by 2012, based on analysis for the forthcoming *MTOMR*. Renewed growth after 2012 is possible. New pipeline capacity planned to accommodate growing Russian and Caspian supply comes with uncertainties over economics, timing, dedicated crude supply and geopolitical factors.
- **Total OPEC crude supply** slipped by 425 kb/d to 30.1 mb/d in May, as Nigeria and Iraq saw April's gains reversed. Preliminary data suggest Iran, Kuwait and Angola also produced less in May. Although effective producible spare capacity stands around 2.8 mb/d, allowing for refining capacity constraints and current prices, the true volume of current, *readily useable* spare capacity is probably much less. Moreover, expected net capacity additions by end-year are only some 0.7 mb/d.
- **Nigerian crude outages** peaked close to 1.0 mb/d around mid-May, and remain close to 800 kb/d in early June. From a market perspective this exacerbates tightness in gasoline-rich crudes, with North Sea maintenance now also getting into full swing. Although Niger Delta insurgents have temporarily ceased hostilities, their demands for jailed leaders to be released for now look unlikely to be met and the security situation remains precarious.
- **The 'call on OPEC crude and stock change'** is revised up by 0.2 mb/d for 2005/2006, with up to 0.5 mb/d added for 2007 (a lower historical *miscellaneous to balance* limits the adjustment for 2007 to 0.3 mb/d). The call rises by 2.5 mb/d between 2Q and 4Q07, markedly above an expected increase in OPEC capacity, regardless of the fate of currently shuttered Nigerian volumes. This would appear to be the key impending market dynamic, rather than a, likely temporary, crude stock overhang.



All world oil supply figures for May discussed in this report are IEA estimates. Estimates for OPEC countries, Alaska 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. 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. These aside, no contingency allowance for random events is subtracted from the supply forecast. While upside variations can occur, experience in recent years indicates that the random events listed above may cause supply losses of between 300 kb/d and 400 kb/d for non-OPEC supply each year.

OPEC

OPEC crude supply in May fell by 425 kb/d from April to average 30.1 mb/d. However, rather than representing proactive cuts from the cartel during the seasonal low in global demand, the reductions were largely involuntary, centred as they were on Nigeria (-245 kb/d) and Iraq (-100 kb/d). Nonetheless, OPEC-10 production stands at 26.5 mb/d, some 1.2 mb/d below last September's reference point for production curbs and 1.7 mb/d below last July's high point for production of 28.2 mb/d.

Notional spare capacity stands at 4.0 mb/d, while our measure of *effective* spare capacity (excluding Indonesia, Iraq, Nigeria and Venezuela) stands at 2.85 mb/d. Although these volumes are physically producible, even this lower figure likely overstates what OPEC could actually shift onto the market given current prices and shortages in refinery upgrading capacity. Heavy, sour Saudi Arabian and Kuwaiti crude accounts for 88% of the effective spare capacity figure. In the absence of substantial discounts, these volumes might struggle to find buyers while sizeable amounts of refinery upgrading capacity remain offline for scheduled and unscheduled maintenance. Readily marketable spare crude capacity may therefore be much lower, and a more accurate reflection of current market tightness.

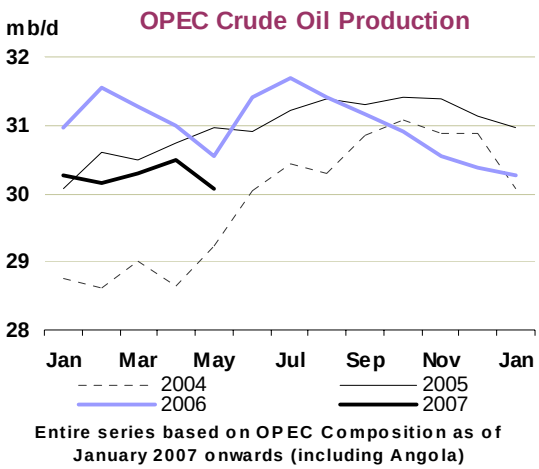
OPEC Crude Production[1]
(million barrels per day)

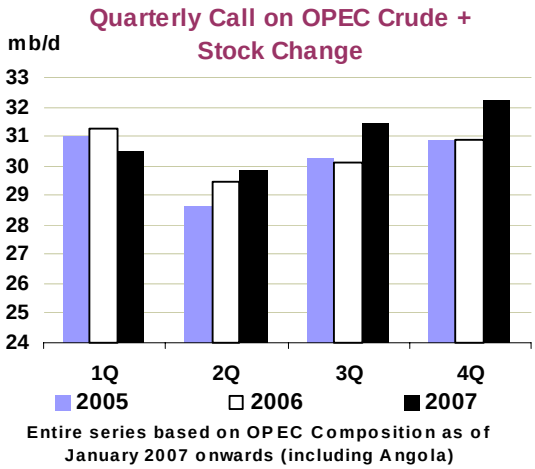
	May 2007 Production	Sustainable Production Capacity[2]	Spare Capacity vs May 2007 Production
Algeria	1.36	1.38	0.02
Indonesia	0.85	0.87	0.03
Iran	3.90	3.95	0.05
Kuwait[3]	2.34	2.64	0.30
Libya	1.71	1.73	0.02
Nigeria[4]	2.01	2.49	0.48
Qatar	0.80	0.90	0.10
Saudi Arabia[3]	8.60	10.80	2.20
UAE	2.59	2.75	0.17
Venezuela[5]	2.37	2.60	0.24
Subtotal	**26.51**	**30.10**	**3.59**
Angola[1]	1.56	1.56	0.00
Iraq	2.00	2.40	0.40
Total	**30.07**	**34.05**	**3.99**
(excluding Iraq, Nigeria, Venezuela, Indonesia			*2.85)*

1 Angola joins OPEC effective 1January 2007.
2 Capacity levels can be reached within 30 days and sustained for 90 days.
3 Includes half of Neutral Zone Production.
4 Nigerian capacity excludes some 545 kb/d of long-term shut-in capacity.
5 Includes Orinoco extra-heavy oil assumed at 455 kb/d in April.

Low spare capacity puts in context recent claims from OPEC that, rather than accelerating investment in new capacity, members might actually stall expansion plans in the longer term if consuming countries continue to pursue energy diversification policies such as the promotion of biofuels. While the OPEC Secretary General's comments in early June were aimed more at long-term trends than the current market, we already see there being a potential crude capacity crunch in the more immediate future, albeit one not wholly of OPEC's making (as noted above, available refinery upgrading capacity is another key factor).

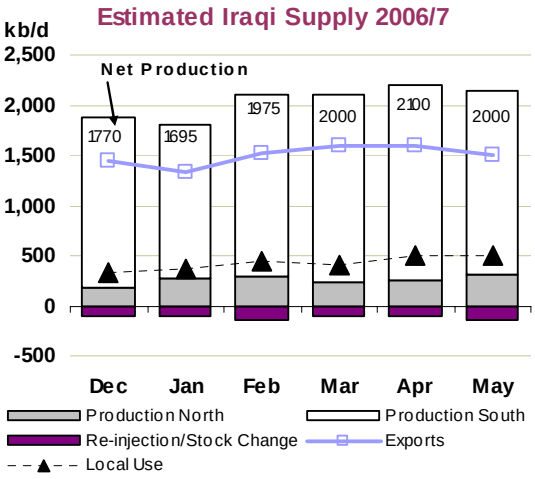
While biofuels production continues to grow strongly (+30% expected in 2007), global supply was nonetheless expected to remain below 2 mb/d by 2011 in the last *MTOMR*. The evolving 2007 global oil balance presents a more immediate challenge. The stark conclusion from our supply/demand balance is that the call on OPEC crude and stock change rises by 2.5 mb/d from its 2Q low to the 4Q07 high point. In contrast, without substantial recovery in Nigerian production capability by the end of the year, OPEC net crude capacity gains amount to only some 700 kb/d. Returning refining capacity may generate some extra supply flexibility, but OPEC spare capacity may have already hit a high-water mark for this year.





Iraq's crude supply in May is estimated off by 100 kb/d from an upward-revised April level of 2.1 mb/d. April's adjustment follows data showing increased local crude use, to a recent high of around 0.5 mb/d. Lower supply in May derived directly from weaker export liftings, assessed at 1.5 mb/d for the month, with domestic consumption assumed unchanged at April levels. Exports currently move via the southern ports of Basrah and Khor al-Amaya, with only some 10 kb/d moving cross-border by pipeline into Syria.

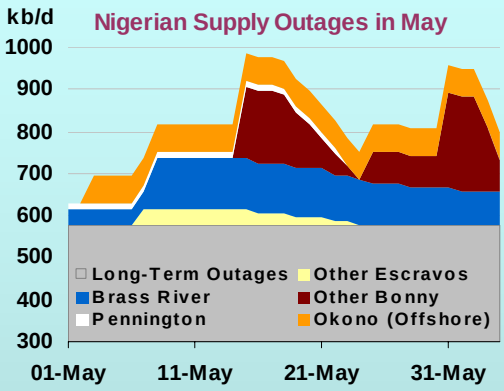
Although crude storage at Ceyhan in Turkey reached nearly 3 mb during May, northbound pipeline flows are still believed erratic and no cargoes are thought to have loaded from Ceyhan since January. Turkish military manoeuvres on Iraq's northern border, despite having little direct impact on oil sector operations for now, only add to the potential uncertainty concerning expansion of production and exports from the northern, Kurdish area. That said, Norway's DNO plans imminently to bring onstream the 50 kb/d Tawke field, although transport limitations will limit early flows to 15 kb/d. Progress on longer-term expansion from Iraqi Kurdistan, such as Addax's 100 kb/d Taq Taq field (possible 2009 start-up), awaits adoption of Iraq's delayed hydrocarbon law, plus improved security on the northern pipeline network.

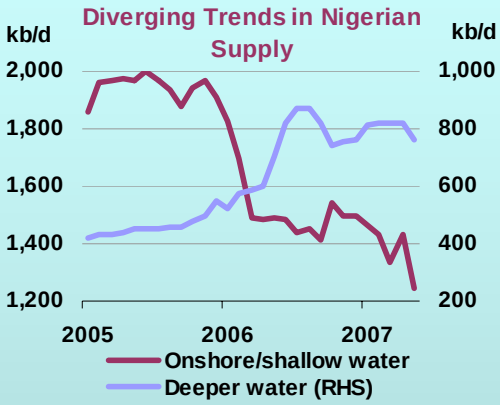


Aside from Nigeria and Iraq, changes elsewhere in May OPEC supply were more modest. **Iran's** April estimate was revised up by 70 kb/d to 3.97 mb/d on evidence of higher exports, with domestic crude runs also likely increasing after earlier maintenance at the Abadan refinery. Conversely, preliminary estimates suggest weaker exports in May. Scheduled work on the Soroush/Nowruz fields during 2Q also lends support to a lower supply number for May, at 3.9 mb/d. **Kuwaiti** May supply also fell by some 50 kb/d, while maintenance work ahead of the new Dalia field's start-up offshore **Angola** potentially curbed crude supply there to 1.55 mb/d. Heavier **Saudi Arabian** refinery turnarounds in May were potentially offset by marginally higher export liftings, leaving supply unchanged at 8.6 mb/d.

Nigeria: Getting Worse Before it Gets Any Better

Suggestions in April that significant volumes of Nigerian Forcados production were about to restart proved premature. Latest estimates suggest that May Nigerian crude production fell to its lowest levels since early-2003. Month-on-month production fell by 245 kb/d versus April, with production shut-ins reaching a high of nearly 1.0 mb/d. For May as a whole we estimate average idled capacity was over 800 kb/d, a level that still pertained in the first week of June.





Longer-term shut-ins from 2006 and earlier, comprising Forcados, Escravos, EA and Bonny volumes, continued to average over 550 kb/d. However, a spate of attacks on offshore vessels, onshore pipelines and pumping stations throughout May shuttered incremental volumes at the following fields:

- Abiteye (Escravos) 55 kb/d now restored;
- Bomu manifold (Bonny) attacked twice in May, 170 kb/d now restored;
- Funiwa (Pennington), 15 kb/d now restored;
- Akri and Oshi (Brass River) 80 kb/d now being restored;
- Nembe pipeline leak (Bonny) 77 kb/d still offline;
- Okono (offshore) 65 kb/d still offline;
- Tebida (Brass River) 40 kb/d still offline;

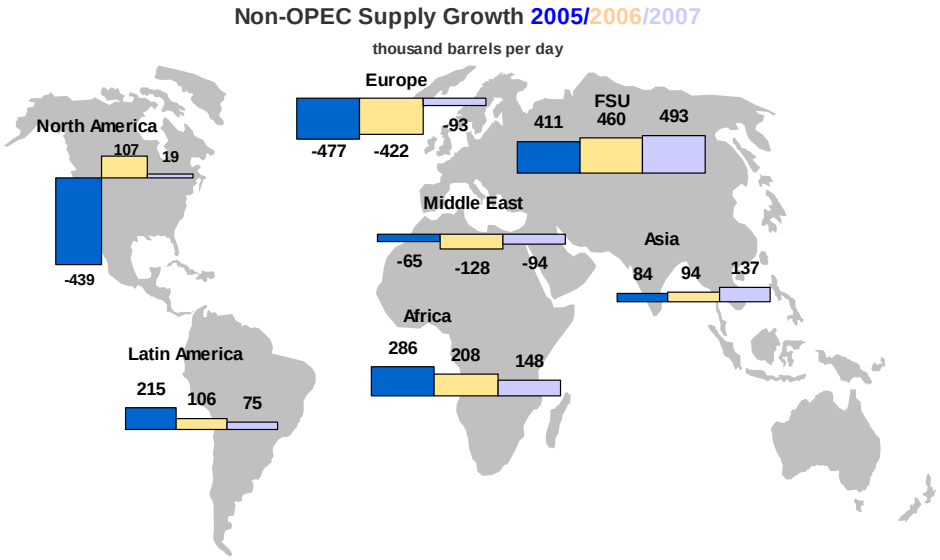
Aside from physical production stoppages, the issue of security for oil industry personnel remains precarious. A number of western service companies have withdrawn from the Niger Delta and on 11 May Chevron announced it would remove non-essential offshore workers due to the worsening security situation for one month to concentrate on sustaining production elsewhere. The announcement by major rebel group MEND (the Movement for the Emancipation of the Niger Delta) that it would cease hostilities for a month to allow incoming President Umaru Yar'Adua to formulate a plan for peace and development in the Delta was initially seen as a positive sign. However, suggestions that the President might be about to sanction the release of an ethnic Ijaw leader jailed under previous President Obasanjo appear to have been premature. Nigeria's Supreme Court on 8 June refused bail and the UK promptly advised its nationals to leave Bayelsa, Delta and Rivers states, for security reasons.

Compounding the threat to oil supplies from Nigeria, workers' unions are mulling a strike later in June to protest against domestic oil products price rises and the sale of government stakes in the Port Harcourt and Kaduna refineries. Only the Port Harcourt refinery is currently operating, with overall crude runs representing less than 25% of the country's 450 kb/d capacity.

Non-OPEC Overview

Non-OPEC supply for 2007 is trimmed by 110 kb/d to 50.2 mb/d, with growth of 0.9 mb/d this year after 0.4 mb/d in 2006. Steady 1.0 mb/d growth seen in each of the last three quarters now eases into a 0.7-0.9 mb/d range for the rest of 2007 under the impact of maintenance, seasonal shut-ins, project slippage and mature field decline. This is nonetheless an improvement on the scant growth evident from

late 2004 through mid-2006. Notably, North Sea maintenance could remove some 0.5 mb/d of light/sweet crude from the market over the summer, adding to current outages of 700 kb/d-plus of similar Nigerian crude. However, the expected rise in 4Q non-OPEC supplies is now some 0.8 mb/d compared with mid-year lows.



Non-OPEC projections are made on an assumption of 'business as usual' operating conditions, with no downward allowance made for unexpected events, such as prolonged project delays or unscheduled field stoppages. We prefer to take account of a propensity for 'things to go wrong' (amounting historically to some 300-400 kb/d) in the Table 1 balance when assessing the adjusted call on OPEC.

The narrowing base for 2007's growth from non-OPEC is worth noting. The FSU, global biofuels and non-OPEC Africa generate nearly 95% of a now-expected 0.9 mb/d increment in 2007, helping offset continued decline from the North Sea and non-OPEC Middle East. Moreover, despite recent strength from the three 'growth regions', none is immune from political, technical and economic risks. Australasia, Latin America and China generate more limited growth, although the former two regions could see resurgent growth in the medium term. Meanwhile, aggressive hurricane outage assumptions and ongoing decline from Mexico's Cantarell field counteract strong Canadian growth (which by itself accounts for 20% of the net non-OPEC total), leaving North American supplies largely unchanged in 2007 at 14.3 mb/d.

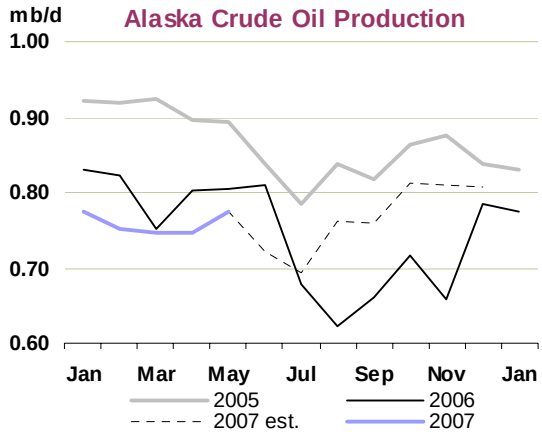
OECD

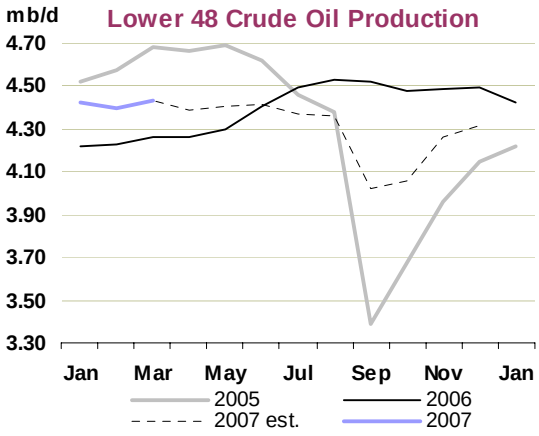
North America

US – May Alaska actual, others estimated: Total US supply in 2007 is now seen flat at 2006's level of 7.4 mb/d, including 5.1 mb/d of crude, 1.7 mb/d of NGL and 0.6 mb/d of other liquid fuel supplies, including ethanol. Ethanol growth and an assumed supply recovery from Alaska offset crude supply reductions elsewhere. As previously noted, we are including in these projections an aggressive GOM hurricane outage assumption for 2007, at 160 kb/d for 3Q and 215 kb/d for 4Q based on the five-year average. As was the case in the minimally disrupted 2006, early-year meteorological forecasts for 2007 envisage strong hurricane activity for the season that commenced 1 June. However, operators and regulators suggest that the industry is better placed than in 2005 to maintain power supplies, re-route crude and product supplies and have better reporting systems in place.

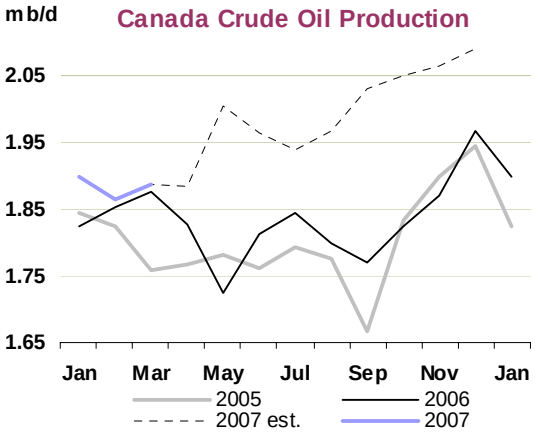
Alaskan May production came in below expectation due to an outage at the problem-plagued Prudhoe Bay field. Production was cut by 100 kb/d between 21-25 May at Gathering Centre 2 due to a water pipeline leak. Meanwhile, BP and Pioneer Natural Resources announced progress during May on the new offshore Liberty and Oooguruk developments, which could produce 20 kb/d each by the end of the

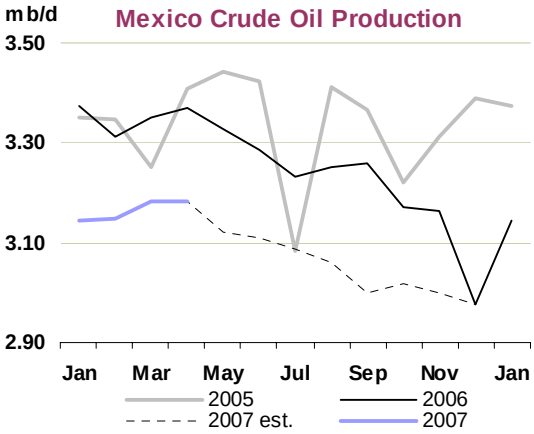
decade. US plans to augment declining longer-term production were signalled in late April when authorities announced the 2007-2012 outer continental shelf (OCS) drilling plan. There is speculation that long-standing moratoria on drilling in areas offshore Alaska, GOM and the East Coast could be relaxed.





Canada – Newfoundland April actual, others March actual: Scheduled outages affecting synthetic crude units in Alberta and the offshore Terra Nova and White Rose fields are likely to result in a lull in Canadian supply growth. Total oil supply is unlikely to regain March's 3.4 mb/d until August. Thereafter however, supply could reach close to 3.6 mb/d by December, with growth this year focussed on the Terra Nova and White Rose fields, plus Albertan oil sands mining and in-situ projects. Total Canadian supply is seen rising by 170 kb/d in 2007, similar to 2006 growth. A slowdown in expansion is then possible until late decade, given delays at several new oilsands projects, and in the absence of significant new offshore developments.

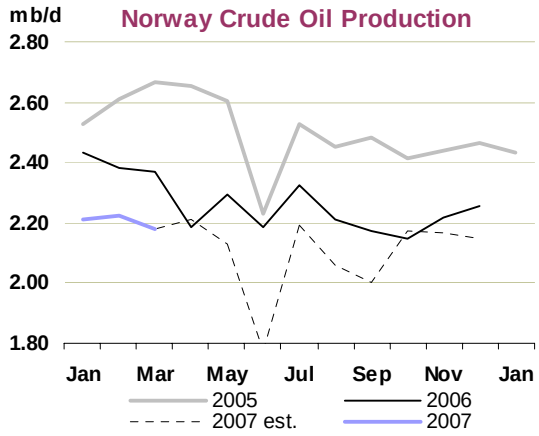


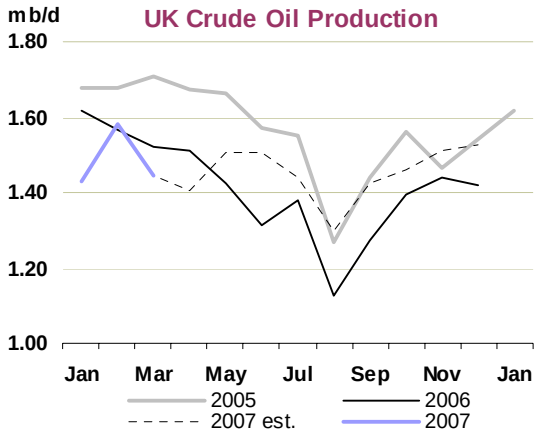


Mexico – April actual: A second successive monthly upward revision to Mexican 2007 supply does little to change the expected profile for the year. Total oil supply is expected to decline by 175 kb/d to 3.5 mb/d. Pemex announced in May that it plans to sustain crude supply close to 3.1 mb/d by 2012 (versus 3.25 mb/d in 2006) with $33 billion investment per year. However, the company is lobbying to reduce the 54% share of revenue paid to the government in taxes in 2006 in order to meet its targets. Reflecting financial uncertainty and apparently accelerating decline at the Cantarell field, forthcoming projections in the *MTOMR* take a more pessimistic view.

North Sea

UK & Norway – March actual: Production from the UK's Buzzard field hit 175 kb/d during May, close to this report's earlier expectations. Buzzard is responsible for a temporary levelling off in UK oil supply in 2007, at 1.72 mb/d. Declines of around 200 kb/d each year were evident during 2003-2006. Norwegian

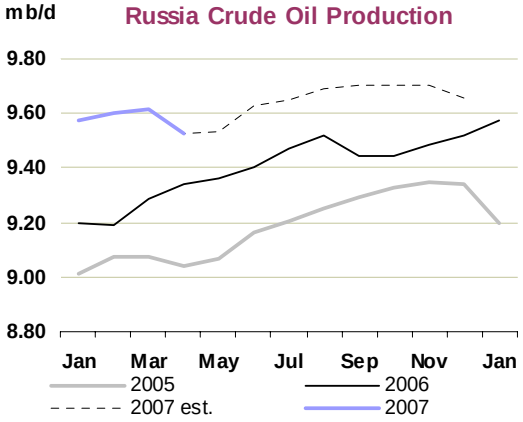


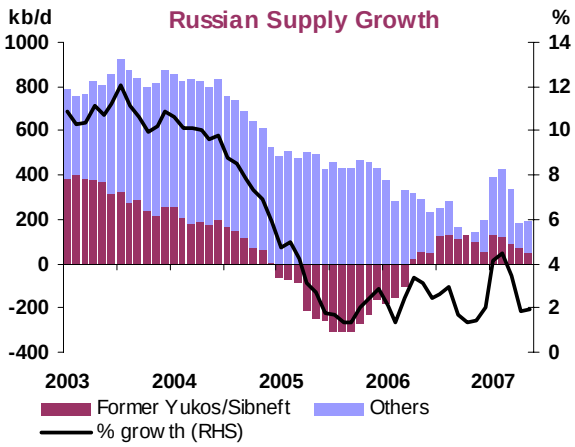


supply falls by 145 kb/d in 2007 to 2.6 mb/d, with loading schedules for June reinforcing earlier estimates of heavy seasonal maintenance, notably for the Ekofisk system. Total OECD Europe oil supply (primarily from the North Sea) is seen falling back from prevailing levels close to 5.2 mb/d to 4.8 mb/d in June, rebounding in July, but receding again to 4.9 mb/d in August and September. Production is expected to average 5.2 mb/d again in the fourth quarter. However, incomplete advance maintenance data, notably for the UK sector, renders the summer forecast prone to subsequent revision as the actual path of scheduled and unscheduled stoppages becomes clearer.

Former Soviet Union (FSU)

Russia – April actual, May provisional: Annual growth in Russian oil output slowed below 2% in April and May, while total output dipped to 9.85 mb/d from around 9.93 mb/d in March. Notably, output from the erstwhile fast-growing Sakhalin 1 project dipped to 225 kb/d, but should still attain capacity levels close to 250 kb/d by mid-year. Despite the most recent easing in growth, Russian production should average 9.95 mb/d (including gas condensate) in 2007, growing by 2.6% for the year. Despite major ongoing barriers to foreign company upstream investment in Russia, we nonetheless see the potential for supply growth to continue in a 2-2.5% per annum range through to the end of the decade based on firmly committed field development, broader company growth targets and evolving pipeline capacity.

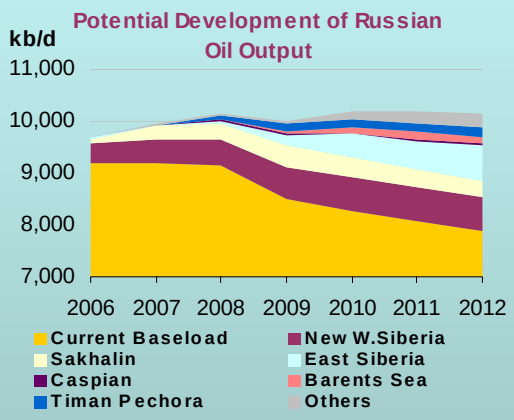


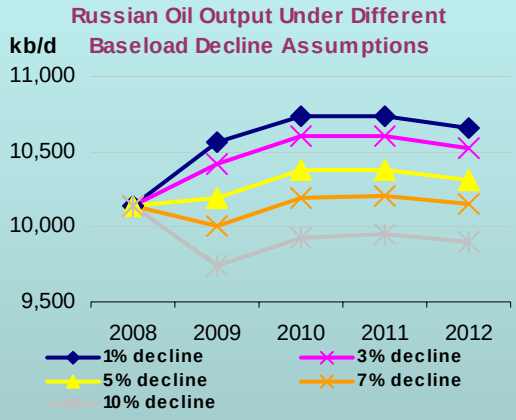


Russian Supply Growth and Export Pipeline Developments

Russian oil production could level off during 2010-2012, potentally stalling growth until mid-decade. Taking the top 20 main development projects scheduled for production through 2012, along with assumed 3% pa net decline for baseload production (in reality, some baseload assets are increasing output, some are at plateau, the remainder in varying degrees of decline), production reaches around 10.6 mb/d by 2010, from an actual 9.9 mb/d in 1Q 2007. Overall, output then dips to 10.5 mb/d by 2012. Assumed decline is a key variable in a forecast such as this, although the relatively low net level of 3% is balanced by a highly selective list of new field developments. But an uncertain Russian investment climate and tight drilling/service capacity justify caution on new project start-up.

Significant increments in 2007/2008 come from Sakhalin 1 (now building towards peak 250 kb/d), year-round production from late-2008 from Sakhalin 2, Rosneft's Vankor project, plus initial volumes from Lukoil in Timan Pechora and the North Caspian. During 2009-2011, more significant volumes begin to emerge from Rosneft, Surgutneftegaz, TNK-BP and Russneft in East Siberia. In all, we assume that East Siberian supply is capped at 600 kb/d through 2012, enough to fill phase 1 of the East Siberia-Pacific Ocean (ESPO) pipeline. Growing volumes also become available towards the end of the forecast period from TNK-BP's Uvat field in West Siberia, and from Gasprom/Rosneft's Priramloznoye in the Barents Sea.





Without publicly available field-specific data, it is not possible to perform an in-depth, field by field analysis for Russia. Our approach therefore combines a simplified key field overview such as the above, with an examination of company growth plans, government and industry forecasts and an assessment of likely pipeline capacity availability. The range of industry forecasts shows 2010 production lying in a 10.0-11.1 mb/d range, with traditionally conservative government forecasts showing a 2010 level of 10.2 mb/d. Although higher than this, our forecast is well below levels implied by the published growth targets for producers like Rosneft, Lukoil and TNK-BP.

Drawing longer-term conclusions from a five-year forecast is hazardous. Operators of multi-phase projects (such as Sakhalin) envisage modest decline from early production phases by 2010-2012, but a sharp build in supply again by the middle of the next decade. Extrapolating a decline in Russian production longer term would therefore be premature before examining post-2012 prospects in detail.

Longer-term crude and condensate supply growth will need new export routes, not least given pipeline monopoly Transneft's moves to diversify export markets while reducing reliance on transit states. The following major projects (including the non-Transneft operated CPC and BTC pipelines) incorporate a high level of uncertainty in terms of economics, timing, dedicated crude supply and geopolitical factors. However they illustrate the progress being made to avoid future transport bottlenecks:

- **East Siberia Pacific Ocean (ESPO)**

  Under construction. Phase 1 (600 kb/d) completion scheduled late 2008, with apparently committed crude supply. China to take initial 300 kb/d, leaving balance to be railed to Pacific. Phase 2 expansion to 1.6 mb/d depends on highly uncertain levels of East Siberian reserves.

Russian Supply Growth and Export Pipeline Developments (continued)

- **Baltic Pipeline System (BPS)-2**

  Transneft now planning the 1 mb/d, $2.5 billion line. On approval, estimated 15 month construction time. Could limit future Druzhba transit shipments to C.Europe via Belarus. Questions over crude supply, Russian willingness to effectively cede C.European markets to Caspian oil and whether real rationale is to obtain increased European prices.

- **Turkish Straits By-Pass**

  Seen essential to clear Black Sea/Turkish Straits bottlenecks and pre-requisite for CPC expansion. 1.5 mb/d Samsun-Ceyhan link now moving ahead. Russian-sponsored 1.0 mb/d Bourgas to Alexandroupolis line has clearer crude supply commitments. Unlikely that all four projects scheduled for 2011/2012 will proceed.

- **Baku-Tbilisi-Ceyhan (BTC)**

  Principal exit route for Azeri crude to Mediterranean. April confirmation that capacity now raised from 750 kb/d to 1 mb/d. Currently running 600 kb/d of crude. Slow progress on CPC expansion could attract Kazakh Tengiz (early-08) and Kashagan oil (post-2010) to BTC. But slow progress to date on necessary Trans-Caspian shipment facilities.

- **Caspian Pipeline Consortium (CPC)**

  Key exit route for Kazakh crude via Novorossiysk on Russian Black Sea. Proposed doubling of capacity to 1.4 mb/d is stalled. Transneft now controls Russia's 24% stake, seeking accelerated loan repayment and 40% tariff increase. Speculation that eventual Russian go-ahead for expansion may be used to lure Kazakh oil back from using BTC.

Sakhalin Energy announced recently that year-round production from the Sakhalin 2 project will be deferred until 2008 because of technical issues. This report was already assuming a slower time horizon after the marked delays forced on the project before Gazprom's takeover of a major equity stake. Hence our outlook for next year is likely to remain unchanged. Rosneft has also indicated a degree of optimism about medium-term supply growth prospects, now that it has taken control of some 1.6 mb/d of former Yukos assets. It now sees previous supply targets of 2 mb/d by 2010 and 3 mb/d by 2015 as attainable earlier and is expected to reveal new production targets imminently. Meanwhile, with doubts over TNK-BP's continued stake in the Kovytka gas field growing, the company appears to be focussing on progressively expanding the Uvat oilfield in West Siberia by a potential 200 kb/d during the next decade.

FSU Net Exports of Crude & Petroleum Products
(million barrels per day)

	2005	2006	2Q2006	3Q2006	4Q2006	1Q2007	Feb 07	Mar 07	Apr 07	Latest month vs. Mar 07	Latest month vs. Apr 06
Crude											
Black Sea	2.27	2.22	2.26	2.27	2.08	2.30	2.39	2.32	2.31	-0.01	0.16
Baltic	1.59	1.55	1.73	1.49	1.43	1.58	1.59	1.52	1.70	0.18	0.05
Arctic/FarEast	0.19	0.15	0.11	0.20	0.19	0.29	0.31	0.30	0.34	0.04	0.25
BTC	0.00	0.00	0.01	0.22	0.38	0.43	0.48	0.50	0.45	-0.06	0.45
Crude Seaborne	4.05	4.07	4.11	4.18	4.08	4.60	4.77	4.65	4.79	0.15	0.91
Druzhba Pipeline	1.15	1.20	1.16	1.23	1.19	1.17	1.25	1.16	1.18	0.03	0.06
Other Routes	0.25	0.38	0.38	0.38	0.45	0.47	0.44	0.41	0.42	0.01	0.02
Total Crude Exports	5.45	5.64	5.65	5.80	5.71	6.23	6.46	6.22	6.40	0.18	1.00
Of Which: Transneft	4.12	4.22	4.32	4.30	4.06	4.33	4.43	4.25	4.50	0.26	0.40
Products											
Fuel oil	0.93	0.95	1.05	0.94	0.95	1.04	1.05	1.16	1.13	-0.03	0.00
Gasoil	0.87	0.95	0.95	0.94	0.91	0.94	0.99	0.97	0.82	-0.14	-0.16
Other Products	0.58	0.61	0.70	0.63	0.54	0.59	0.61	0.58	0.66	0.09	-0.02
Total Product	2.38	2.51	2.69	2.50	2.40	2.57	2.65	2.70	2.62	-0.08	-0.18
Total Exports	7.83	8.16	8.34	8.30	8.11	8.80	9.12	8.92	9.02	0.10	0.81
Imports	0.02	0.04	0.03	0.05	0.04	0.02	0.02	0.03	0.02	-0.01	-0.01
Net Exports	7.81	8.12	8.31	8.25	8.07	8.78	9.10	8.89	9.00	0.11	0.82

Sources: Petro-Logistics, IEA estimates
Note: Transneft data has been revised to exclude Russian CPC volumes.

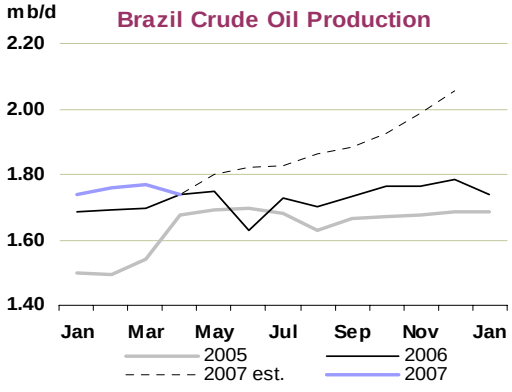
Preliminary trade data show FSU monthly crude exports rising by 180 kb/d in April, while product exports fell by 80 kb/d. Total April net export volumes of 9.0 mb/d were close to record highs and 110 kb/d above March totals, which had been revised down by 40 kb/d. Increases were clearly linked to lower Russian export duties which came into effect on 1 April.

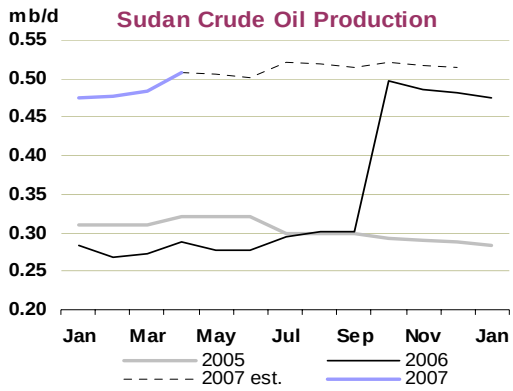
April crude exports were boosted by a 250 kb/d monthly increase in volumes transiting the Transneft pipeline network. Exports leaving Baltic ports were 180 kb/d higher month-on-month as pipeline maintenance finished and, as a result, Primorsk loadings hit an all-time peak of around 1.5 mb/d. More modest rises were seen in exports through Druzhba and via Arctic ports. FSU refinery maintenance led product exports down by 80 kb/d in April. Gasoil exports decreased most notably, falling 140 kb/d, alongside smaller drops for fuel oil but an increase in exports of other products. Lower exports suggested by May loading schedules could be offset by higher BTC volumes leaving a flat export profile in May. However, a rise in Russian duties could dent exports by up to 200 kb/d in June.

Other Non-OPEC

Brazil – April actual: Crude production slipped by 30 kb/d in April to 1.74 mb/d, on a combination of scheduled maintenance work and an unplanned stoppage at the Golfinho facility. The latter field has struggled since start-up to get beyond 20-30 kb/d due to reservoir pressure problems. Original plans to attain 200 kb/d by the end of 2007 may therefore slip. Notwithstanding, a series of new facility start-ups and rising supply from fields entering service in the past year should see Brazil add some 125 kb/d to production in 2007, with crude output averaging 1.85 mb/d. Ethanol supply is also seen rising by 20 kb/d to reach 310 kb/d. Growth in 2008 from both crude and ethanol could be stronger still.

Sudan – February actual: Current production stands close to 480 kb/d from seven blocks in the south and centre of the country operated largely by Chinese, Malaysian, Indian and Sudanese interests. Rising volumes of acidic Dar Blend crude from Blocks 3 and 7, and from the Thar Jath field in Block 5A stand to push production to 520 kb/d by end-2007 and 580 kb/d for the second half of 2008. Crude is exported north to the Gulf of Aden and from two 500 kb/d terminals at Bashayer on the Red Sea coast. However, ongoing conflict in the Darfur region is retarding development, which otherwise could allow Sudan to reach 1.0 mb/d between 2010 and 2012. There have been calls for the UN to take charge of Sudan's oil revenue in an escrow account until the government in Khartoum ceases hostilities.





Revisions to Non-OPEC Estimates

Non-OPEC supply for 2007 is adjusted down by 110 kb/d to 50.2 mb/d. Estimates for 2005 and 2006 are also trimmed, by 20 kb/d and 10 kb/d respectively. For 2007, the OECD and non-OPEC Africa account for most of the downward revision, outstripping upward adjustments from Mexico, Sudan, Thailand and biofuels. Downside adjustments focus on 2Q and 3Q07, partly due to heavier maintenance outages.

The largest revision accrues to **Equatorial Guinea**, where production from ExxonMobil's Zafiro field is now running lower than previously forecast. This cuts the 2007 forecast by nearly 50 kb/d. Other non-OECD adjustments for 2007, each of which lies in a 15-25 kb/d range, come from:

- Brazil (negative, field outages);
- Brunei (negative, weaker 1Q performance);
- Qatar GTL (negative, technical problems);
- Oman (negative, weaker than expected 2006 and 1Q07 output)
- Congo (negative, N'kossa field fire);
- Thailand (positive, stronger than expected February/March production)
- Sudan (positive on adoption of field-specific central bank data).

Biofuels projections are also revisited ahead of the forthcoming *Medium-Term Oil Market Report (MTOMR). S*upply outside of US and Brazilian ethanol is revised up 30 kb/d for 2006 (to 208 kb/d) and 15 kb/d for 2007 (to 360 kb/d).

Aggregate **US** monthly supply for March came in 65 kb/d above expectation, driven by NGL and ethanol supply. The ethanol adjustment is carried through 2007. But preliminary April/May indications suggest lower GOM and other lower-48 states' crude supply, leading to a 20 kb/d downward revision for 2007. **Mexican** 2007 supply is revised up by 25 kb/d to 3.51 mb/d after 55 kb/d upside for April. Lower Alberta conventional crude output in 1Q underpins a 10 kb/d downward revision to 2007 **Canadian** supply.

Revisions to Non-OPEC Oil Supply
(million barrels per day)

	Last Month's OMR				This Month's OMR				This Month vs. Last Month			
	2006	2007	06 v 05	07 v 06	2006	2007	06 v 05	07 v 06	2006	2007	06 v 05	07 v 06
North America	14.24	14.27	0.10	0.03	14.25	14.27	0.11	0.02	0.01	-0.01	0.01	-0.01
Europe	5.20	5.16	-0.41	-0.04	5.20	5.12	-0.41	-0.08	0.00	-0.04	0.00	-0.04
Pacific	0.58	0.66	-0.01	0.08	0.58	0.65	-0.01	0.07	0.00	-0.01	0.00	-0.02
Total OECD	**20.02**	**20.09**	**-0.32**	**0.07**	**20.03**	**20.03**	**-0.32**	**0.01**	**0.01**	**-0.06**	**0.01**	**-0.07**
Former USSR	12.10	12.58	0.46	0.48	12.10	12.59	0.46	0.49	0.00	0.01	0.00	0.01
Europe	0.15	0.13	-0.01	-0.01	0.15	0.13	-0.01	-0.01	0.00	0.00	0.00	0.00
China	3.67	3.75	0.06	0.07	3.67	3.74	0.06	0.07	0.00	-0.01	0.00	-0.01
Other Asia	2.71	2.72	0.05	0.00	2.71	2.72	0.05	0.00	0.00	0.00	0.00	0.00
Latin America	4.40	4.48	0.11	0.09	4.40	4.47	0.11	0.08	0.00	-0.01	0.00	-0.01
Middle East	1.73	1.65	-0.13	-0.08	1.73	1.64	-0.13	-0.09	0.00	-0.01	0.00	-0.01
Africa*	2.54	2.68	0.07	0.14	2.50	2.64	0.04	0.15	-0.05	-0.04	-0.03	0.01
Total Non-OECD*	**27.30**	**28.00**	**0.60**	**0.70**	**27.26**	**27.94**	**0.58**	**0.68**	**-0.05**	**-0.06**	**-0.03**	**-0.02**
Processing Gains	1.90	1.92	0.04	0.02	1.90	1.92	0.04	0.02	0.00	0.00	0.00	0.00
Other Biofuels	0.18	0.34	0.06	0.17	0.21	0.36	0.09	0.15	0.03	0.02	0.03	-0.01
Total Non-OPEC*	**49.40**	**50.35**	**0.38**	**0.95**	**49.39**	**50.25**	**0.39**	**0.86**	**-0.01**	**-0.11**	**0.01**	**-0.10**

OMR = Oil Market Report
* adjusted to exclude Angola

The 2007 production forecast for the **UK** and **Norway** is revised down by 15-20 kb/d each. This follows weaker-than-expected North Sea supply in March, and indications now of a sharper dip in loading schedules for June from Norway. March data for **Australia** also point to a more pronounced impact of cyclones on production. Although the effect is short-lived, overall 2007 supply is revised down 15 kb/d.

OECD STOCKS

Summary

- **Total OECD industry inventories rose by 9.9 mb in April**, with a crude build of 10.9 mb offsetting a -3.6 mb dip in product stocks. Regional trends diverged, as crude increases in Europe and North America were offset in the Pacific, and an increase in European product stocks was only partly balanced by drawdowns in North America and the Pacific. Total OECD gasoline inventories have now fallen well below their five-year average range, reflecting the globally tight market.

- **End-March data were revised down by 3.8 mb**, with a 22.6 mb upward revision to North America more-than-offset by revisions in Europe and the Pacific. Across the OECD, large downward revisions in crude (-3.2 mb) and products (-3.3 mb) were only partly offset by an upward change in 'other oils' (+2.7 mb). Again, regional differences were pronounced. North America saw crude revised up by 9.4 mb, which was balanced by a downward revision in the Pacific of 14.8 mb, mostly in Japan. On the other hand, an upward revision of 11.5 mb of products in North America was outweighed by a sharp downward revision of 16.0 mb in Europe.

Preliminary Industry Stock Change in April 2007 and First Quarter 2007

	April (preliminary) *(million barrels)*				April (preliminary) *(million barrels per day)*				First Quarter 2007 *(million barrels per day)*			
	N. Am	Europe	Pacific	Total	N. Am	Europe	Pacific	Total	N. Am	Europe	Pacific	Total
Crude Oil	**9.3**	**13.9**	**-12.3**	**10.9**	**0.31**	**0.46**	**-0.41**	**0.36**	**0.23**	**-0.16**	**-0.01**	**0.07**
Gasoline	-10.1	-4.2	-0.9	-15.2	-0.34	-0.14	-0.03	-0.51	-0.13	-0.05	0.03	-0.15
Distillates	-0.4	10.0	-1.4	8.1	-0.01	0.33	-0.05	0.27	-0.29	-0.10	-0.14	-0.53
Fuel Oil	1.1	-0.1	0.1	1.0	0.04	0.00	0.00	0.03	-0.03	-0.03	-0.01	-0.07
Other Products	5.3	0.0	-2.8	2.4	0.18	0.00	-0.09	0.08	-0.25	-0.02	-0.02	-0.29
Total Products	**-4.2**	**5.6**	**-5.0**	**-3.6**	**-0.14**	**0.19**	**-0.17**	**-0.12**	**-0.71**	**-0.19**	**-0.14**	**-1.04**
Other Oils[1]	2.9	-0.9	0.6	2.7	0.10	-0.03	0.02	0.09	-0.06	0.04	0.02	0.00
Total Oil	**7.9**	**18.6**	**-16.7**	**9.9**	**0.26**	**0.62**	**-0.56**	**0.33**	**-0.53**	**-0.31**	**-0.13**	**-0.97**

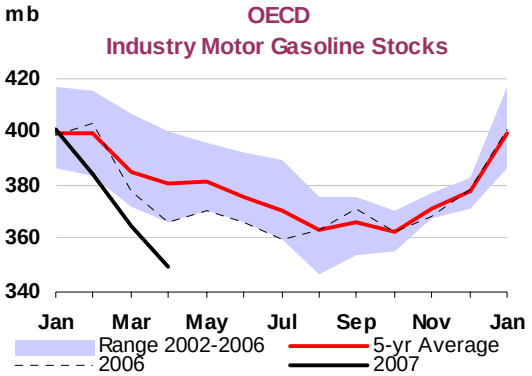
1 Other oils includes NGLs, feedstocks, and other hydrocarbons.

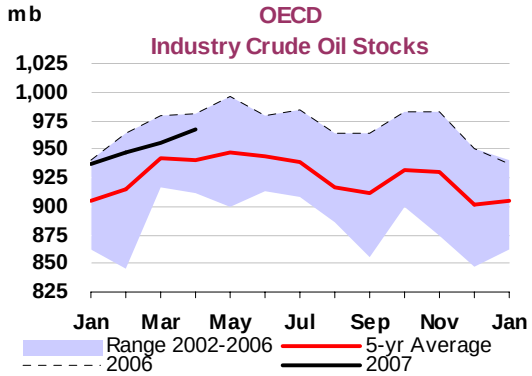
- **OECD forward cover from total oil stocks remained flat at 54 days** at the end of April, unchanged from both March and a year ago, despite the gasoline tightness. Preliminary May data for the US, Japan and Europe indicate an increase in OECD stocks (although European gasoline fell) but this may be balanced by growing consumption at the start of summer.

OECD Industry Stock Changes in April 2007

OECD North America

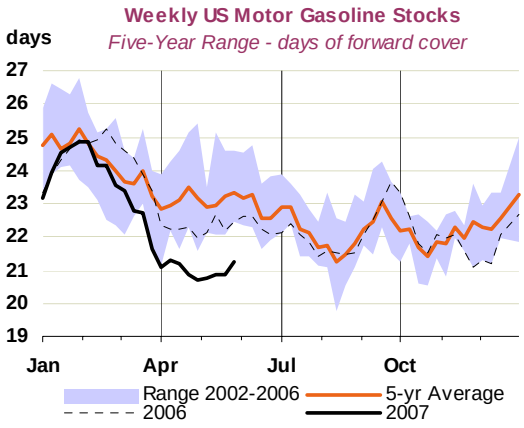
Total industry inventories in North America rose by 7.9 mb in April, as increases in crude (+9.3 mb), 'other oils' (+2.9 mb) and 'other' products (+5.3 mb) offset a 10.1 mb fall in gasoline stocks. Higher-than average crude imports and continued refinery outages contributed to a 5.9 mb April crude stock build in the US, although this still left levels 9.9 mb lower year-on-year. Mexico added a further 3.4 mb to the North America crude total.

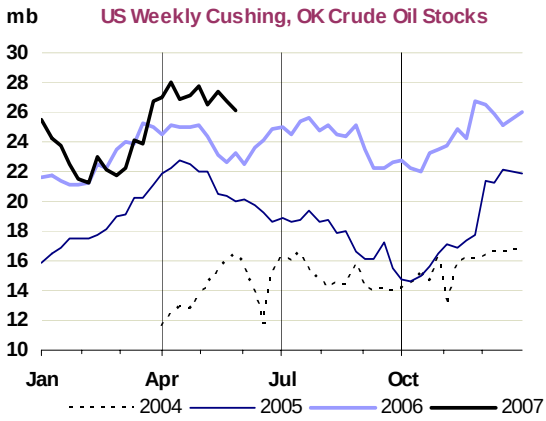




Preliminary US inventory data for May show a further industry crude build of 4.3 mb, as more problems dogged refineries and kept throughputs lower-than-average. Crude stocks at Cushing, Oklahoma, meanwhile fell by 1.1 mb, but remained high at 26.2 mb at the end of May, continuing to depress the price of NYMEX WTI relative to other crudes.

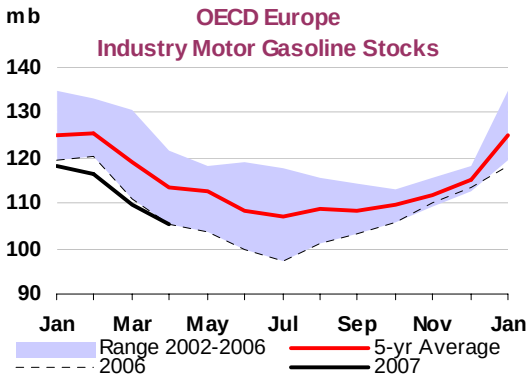
In other news, the US Department of Energy has now awarded contracts to exchange 9.2 mb of royalty-in-kind crude for 8.7 mb of higher-quality crude. This will be injected into the Strategic Petroleum Reserve at a rate of 50 kb/d from August.

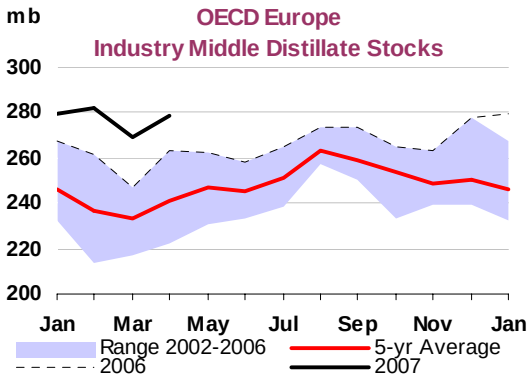




North American product stocks fell in April, as a 10.1 mb drop in gasoline stocks was only partially offset by gains in 'other' products and residual fuel oil. The gasoline stock draw was wholly due to a draw in the US, where refinery utilisation has underperformed previous years', and imports have only partially been able to compensate. Indeed, a steady and unusually steep decline in US gasoline inventories since January, coupled with similar trends in the Pacific (and to a lesser extent Europe), has now pulled total OECD gasoline stocks 30 mb below their five-year seasonal average.

The gasoline situation improved slightly in May, as refiners gradually returned from maintenance, but the market remains tight overall. The most recent weekly data showed US refinery utilisation still around 5% below the five-year average, but even so, the weak spring demand period enabled total US product stocks to increase by 17.5 mb. Of this total, gasoline inventories increased by 7.8 mb on the month, but with the forward demand cover calculation now encompassing the driving season cover remains in line with the April average at 21 days.





In contrast, US distillate stocks are in the higher half of their five-year range, but within this grouping, a change in diesel specifications has altered the composition of the stocks. There is considerable overlap between high-sulphur (usually off-road) diesel and heating oil in many countries, leading to statistical difficulties in separating the two categories. However, the phase-out of off-road diesel in the US since early June has seen an accounting switch, with a boost to diesel and a corresponding decline in heating oil stocks.

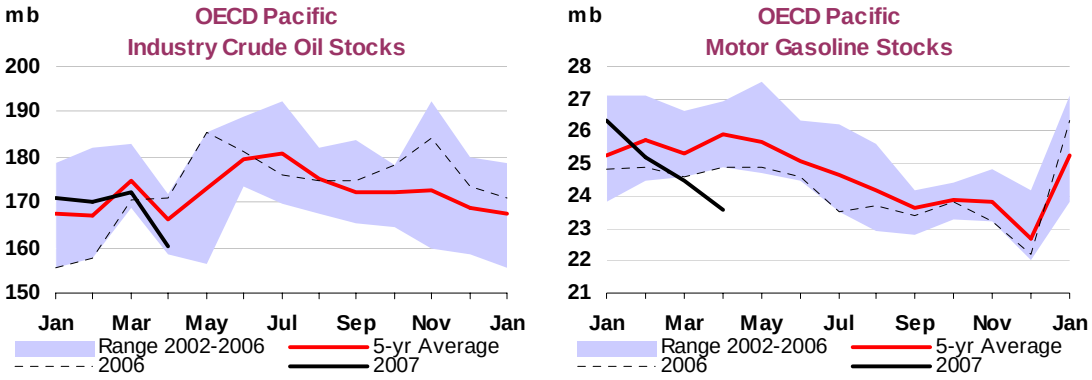
OECD Europe

Total inventories in Europe rose by 18.6 mb in April, on increases in crude (+13.9 mb) and total products (+5.6 mb). Crude stocks are above average, as refiners only gradually returned from maintenance. European product stocks are 15.5 mb higher than one year ago and remain the highest relative to their five-year average of all three regions. However, this masks the fact that in April, gasoline stocks fell by 4.2 mb, contributing to globally low inventories, as shippers looked to export barrels to the structurally short US. The decline in gasoline stocks stemmed mainly from France and Germany, where levels each fell by 1.7 mb. However, in Europe it must be recognised that the structural decline in gasoline demand means that stock cover should decline every year. Offsetting the gasoline draw, middle distillate stocks increased by 10.0 mb.

Preliminary Euroilstock data for May show a total industry stock build of 4.4 mb in the EU-16 as a rise in products of 5.3 mb offset a slight downturn in crude inventories of -0.9 mb. Notably, gasoline stocks fell by a further 2.3 mb, as did naphtha (-0.9 mb), but were outweighed by increases in middle distillate (+5.3 mb) and fuel oil (+3.3 mb).

OECD Pacific

In the Pacific region, total industry stocks for April fell by 16.7 mb, as crude and total products drew by 12.3 mb and 5.0 mb respectively. The lower crude levels reflect lower imports from OPEC countries, due to output cuts and seasonal throughput considerations. As such total OECD Pacific crude stocks have now fallen to the bottom of their five-year average range – in sharp contrast to the situation in North America. There were only modest shifts in product stocks, with 'other' products falling by 2.8 mb, middle distillates by 1.4 mb and gasoline by 0.9 mb in April. But while the gasoline stock fall was small, it took total Pacific gasoline stocks below the lower-end of their five-year average range, accentuating a globally tight picture.



Preliminary weekly data for May from the Petroleum Association of Japan (PAJ) showed a slight uptick in total industry inventories (+2.2 mb), driven by a crude build of 2.9 mb. Total (unfinished and finished) products fell slightly, with naphtha and gasoline shedding 1.5 mb and 0.5 mb respectively. Jet fuel stayed flat, but increases were seen in kerosene (+2.0 mb), gasoil/diesel (+0.9 mb) and residual fuel oil (+0.5 mb). Latest weekly data showed an uptick in refinery runs, perhaps indicating the end of maintenance and a gradual increase in product stocks ahead of the summer.

Year-on-Year OECD Industry Stock Comparisons for April 2007

	(million barrels)					*(Days of Forward Demand)*			
	North America	Europe	Pacific	Total		North America	Europe	Pacific	Total
Crude Oil	**-8.1**	**5.2**	**-11.0**	**-13.9**	**Total Oil**	**-1.2**	**1.2**	**-1.7**	**-0.5**
Total Products	-6.3	15.5	-4.5	4.7	*Versus 2005*	-0.1	0.4	1.6	0.4
Other Oils[1]	-0.6	-5.5	2.3	-3.7	*Versus 2004*	2.5	2.5	-0.5	2.0
Total Oil	**-15.0**	**15.2**	**-13.2**	**-12.9**	**Total Products**	**-0.5**	**1.1**	**-0.6**	**0.0**
Versus 2005	-2.8	15.4	8.0	20.6	*Versus 2005*	-0.6	1.0	0.5	0.1
Versus 2004	78.8	53.8	-5.6	127.0	*Versus 2004*	0.9	3.1	0.3	1.5

1 Other oils includes NGLs, feedstocks, and other hydrocarbons.

OECD Inventory Position at End-April and Revisions to Preliminary Data

Total OECD industry stocks were at 2,606 mb at the end of April, 9.9 mb higher than in March, but down 12.9 mb year-on-year. Crude inventories totalled 967 mb, a rise of 10.9 mb on the month, but 13.9 mb lower than end-April 2006. Total products stood at 1,354 mb, down slightly by 3.6 mb from last month, and 4.7 mb higher year-on-year. 'Other oils' meanwhile rose by 2.7 mb since March. Forward demand cover fell slightly, but due to rounding stayed at 54 days, unchanged from end-March and end-April last year. Taking a total downward revision of 3.8 mb into account, the first-quarter draw came in at a slightly higher 970 kb/d, compared with the 930 kb/d calculated in last month's report.

Revisions versus 11 May 2007 Oil Market Report

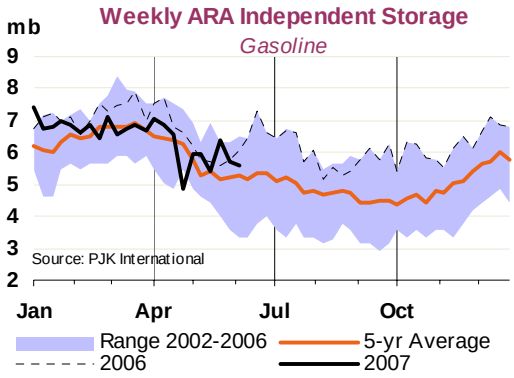
(million barrels)

	North America		*Europe*		*Pacific*		*OECD*	
	Feb 07	Mar 07	Feb 07	Mar 07	Feb 07	Mar 07	Feb 07	Mar 07
Crude Oil	**4.5**	**9.4**	**-0.4**	**2.2**	**0.0**	**-14.8**	**4.2**	**-3.2**
Gasoline	0.0	1.1	-2.2	-9.1	0.0	-0.6	-2.2	-8.5
Distillates	0.0	4.2	0.8	-3.9	0.0	-0.8	0.8	-0.5
Residual Fuel Oil	0.0	0.0	0.5	-1.4	0.0	0.1	0.5	-1.2
Other Products	0.0	6.1	-0.8	-1.6	0.0	2.4	-0.8	6.9
Total Products	**0.0**	**11.5**	**-1.7**	**-16.0**	**0.0**	**1.2**	**-1.7**	**-3.3**
Other Oils[1]	0.2	1.7	1.2	0.6	0.0	0.4	1.5	2.7
Total Oil	**4.8**	**22.6**	**-0.9**	**-13.2**	**0.0**	**-13.2**	**3.9**	**-3.8**

1 Other oils includes NGLs, feedstocks, and other hydrocarbons.

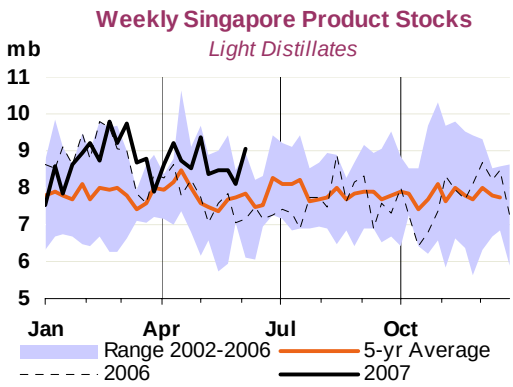
Recent Developments in ARA Independent Storage

Total product stocks held in independent storage in the Amsterdam-Rotterdam-Antwerp (ARA) area fell by 1.4 mb in May, but remain at the top of their five-year average range. Gasoil stocks drew by 1.3 mb, making up most of the drop, but fuel oil and naphtha also fell by 0.2 mb and 0.1 mb respectively. The draw downs were partially offset by a small increase of 0.2 mb in gasoline stocks. For the next few months the level of US gasoline imports from Europe will be important in determining the path of gasoline prices. In this regard it is worth noting that ARA gasoline stocks, while lower than the peak seen earlier this year, are around 2.2 mb above historic lows for this time of year. This would suggest that there is the potential for European exports to be maintained in the coming months.



Recent Developments in Singapore Stocks

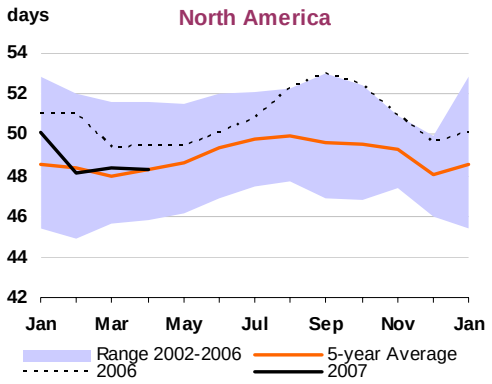
Total product stocks held in Singapore rose by 0.5 mb in May, according to International Enterprise, and also remain above their five-year average range. Middle distillates fell by 0.9 mb to their lowest level since early January, on regional refinery turnarounds. Light distillate inventories also fell by the same amount, but were at the top of their five-year average range, as naphtha buyers reportedly held back temporarily. Fuel oil stocks meanwhile rose by 2.3 mb in May, though they dipped again in the latter half of the month after a steep rise previously.

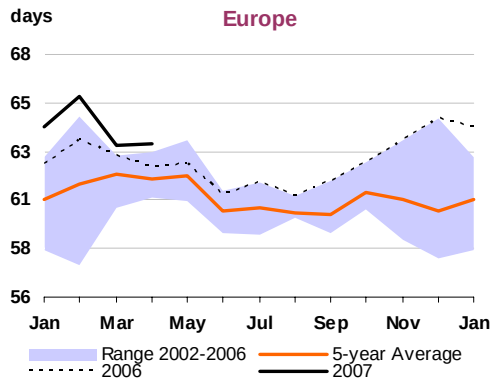


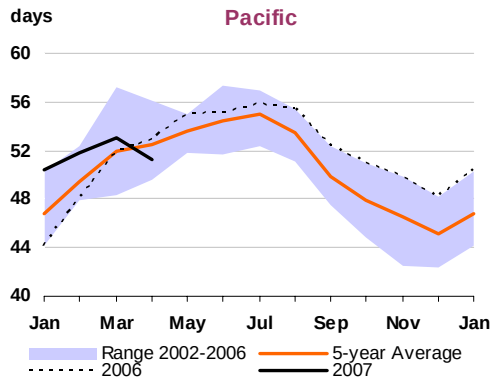
Regional OECD End-of-Month Industry Stocks

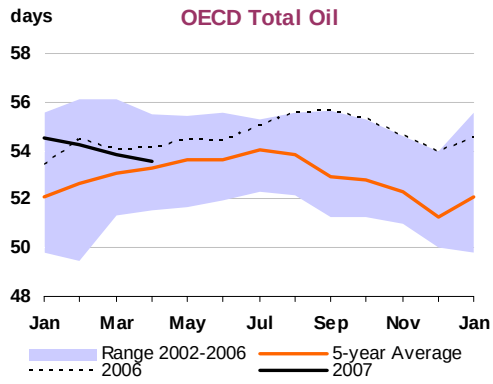
(in days of forward demand and millions barrels of total oil)

Days[1]

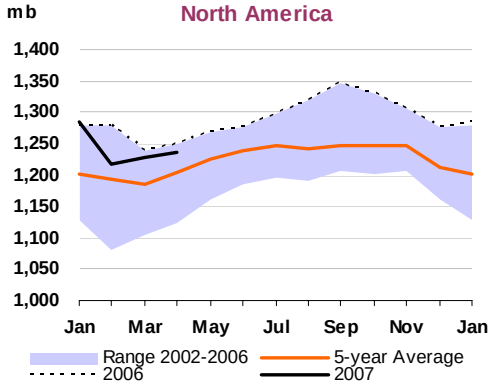


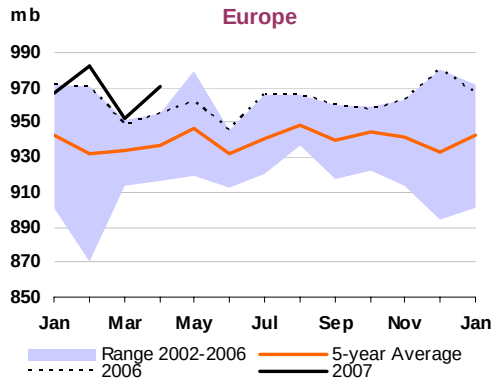


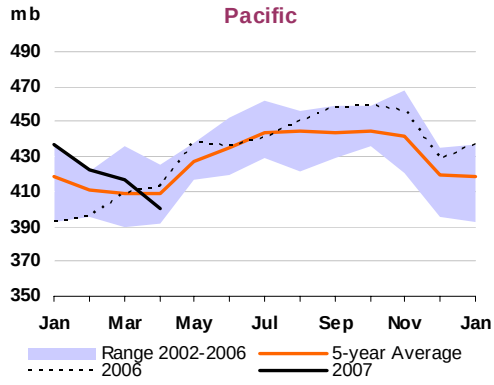


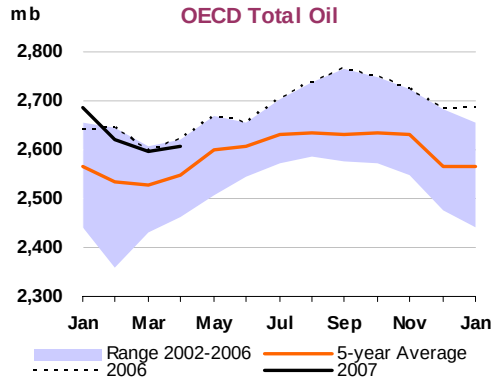


Million Barrels







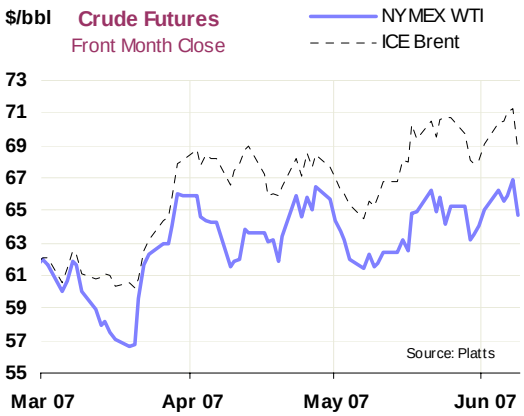


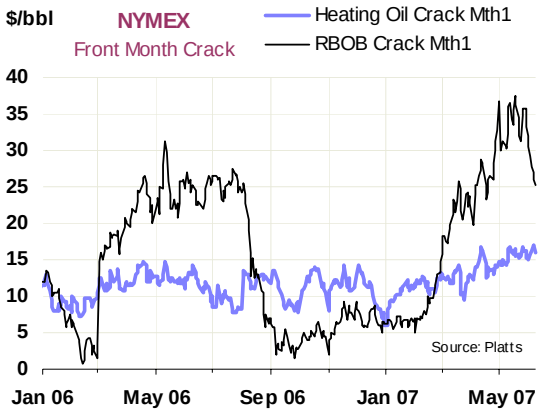
1 Days of forward demand are based on average demand over the next three months

PRICES

Summary

- **Dated Brent rose above $70/bbl in late May as markets tightened further** on stronger demand, lower supply, continued downstream tightness and early summer storms. While refining worries prevail, there are signs the market's focus is shifting, with rising interest rates, higher US gasoline stocks and the passing of Cyclone Gonu leading to a dip in crude prices as this report went to press. The fall in oil prices mirrored similar declines in other commodities, reflecting broader economic concerns.
- **Crude oil may be taking over as the market driver from gasoline in early June**, as refineries increase purchases and throughputs ahead of the summer. Brent and WTI prices and forward spreads continue to diverge, reflecting both regional supply and demand differences and the structural imbalances at the WTI delivery point of Cushing, Oklahoma.
- **Refining margins rose in May**, when gasoline's strength still outpaced gains in crude prices. Cracking margins broadly remain strong worldwide, but our calculations show European hydroskimming margins turning negative in late May.
- **Refined product markets were driven by gasoline**, though crack spreads have retreated since mid-May. Naphtha has mostly weakened versus crude, although it remains strong in Asia on healthy petrochemical demand. Low-sulphur fuel oil has picked up in areas with strong summer cooling demand.
- **Crude freight rates gradually eased from near the top of five-year ranges** in early May to finish the month below seasonal averages. Floating storage in the US Gulf and increased long-haul trading prevented a dramatic slide in dirty rates, despite Nigerian outages and muted OPEC exports. Asian refinery maintenance and US gasoline tightness maintained upward pressure on clean tanker rates.



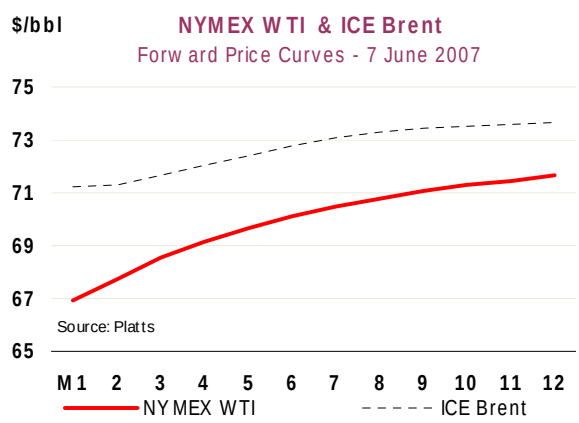


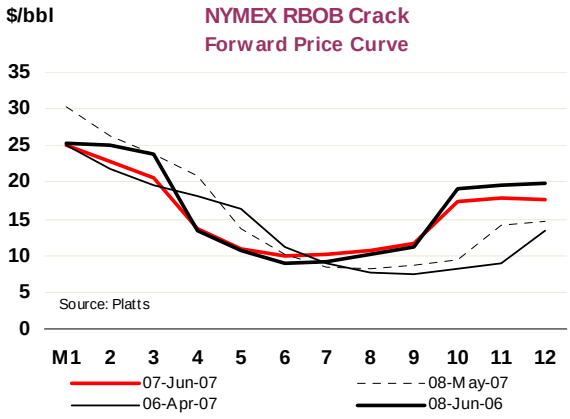
Overview

Tighter markets pushed prices above $70/bbl in May and early June, with crude benchmarks rising to their highest levels since last summer on stronger demand, lower supply, continued downstream tightness and the first summer storms. If geopolitical worries over Iran, Lebanon and elsewhere have perhaps receded, real outages briefly closed as much as 1 mb/d of high-quality Nigerian crude, adding to what is still the most acute problem – gasoline tightness. However, as this report went to press, benchmark crude prices had dipped again on worries about interest rates, the passing of Cyclone Gonu and a general decline in commodities.

Refinery issues in the US continue to keep utilisation low now the driving season has officially started – the latest weekly data indicated as much as five percentage points below the five-year average for this time of year. As a result, despite a 7.8 mb increase in stocks in May and relatively high imports, gasoline forward cover remains at an unusually low 21 days and US retail prices have in real terms been as high as in the 1979/80 crisis.

While it may still be possible for US refineries to substantially increase gasoline output, high fuel imports will be needed, as well as enough (of the right kind of) crude. Ongoing kidnappings and attacks in Nigeria reduced output by up to 1 mb/d in mid-May, and currently some 800 kb/d are shut-in. Further, the US crude stock position is not reflective of the global picture. While US crude stocks are at the top end of their five-year range, crude stocks in the OECD Pacific fell by 12.3 mb in April, to the bottom of their five-year average range. And markets reacted sharply to Cyclone Gonu which, unusually, threatened to significantly affect oil operations in the Middle East Gulf, and heralded the start to summer storm season. These developments – coming as they did at the same time as a rise in US gasoline stocks – appear to indicate a shift towards a crude-driven market.





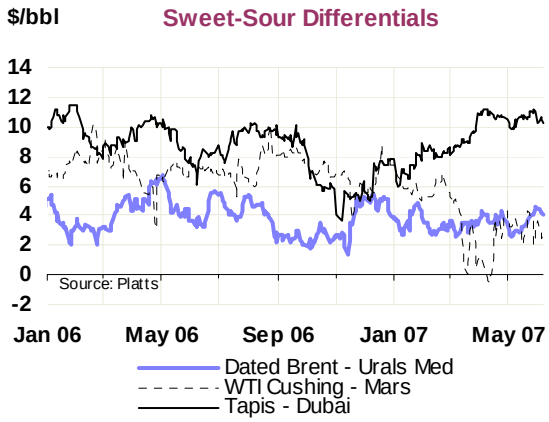
Looking ahead, this report's data show that the need for more OPEC crude is likely to be even greater over the third quarter as the market tightens and prices remain high. While weekly data from Japan and the US remain in line with our projections for a modest surplus in April and May, we continue to foresee a tightening in the summer. Moreover, geopolitical issues remain, including the Iranian nuclear issue, fighting in Lebanon and Gaza and disrupted oil supplies in Nigeria. Rumours (unsubstantiated) that Turkish troops had staged a limited incursion into northern Iraq provided further temporary support to oil prices in early June.

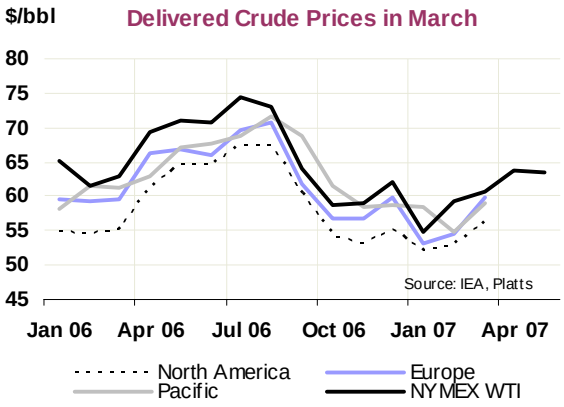
The decline in prices as this report went to press represents a response to a perceived easing of some of these geopolitical and weather issues and broader economic concerns. However, we note that the tightness in the refining sector has played a large role in supporting prices over the past weeks, and an easing of gasoline tightness could help to depress prices in the short term. The extent to which this price impact will be offset by a tightening of crude oil supplies is, however, difficult to quantify.

Spot Crude Oil Prices

With refinery maintenance in the Atlantic Basin nearing its seasonal end, the market's focus may switch to crude. Nigerian outages have again pinpointed the potential tightness of light sweet crude ahead of a summer when the global refining system already looks strained. Relative gross product worth comparisons show that refiners will strive to run high-gasoline-yield crudes where they can. Besides the Nigerian shut-ins, which currently amount to 800 kb/d, June will see strong North Sea maintenance taking approximately a further 400 kb/d off the market.

Physical Brent remains at a premium to most other similar grades such as Azeri Light, Saharan Blend and many West African crudes, due to better refining economics and lower June availability because of field maintenance. In the US, LLS's pronounced premium to WTI once again highlights the specific regional reasons for WTI's weakness, namely high local stocks at Cushing, Oklahoma, due to lower refinery throughputs and growing Canadian imports. In general, high crude stocks as well as a wide contango in near-month WTI futures have encouraged the booking of floating tanker storage off the US Gulf Coast, though this may also be connected to pricing issues.





WTI's discount to Dubai in parts of May once again led to shipments of Western Hemisphere crude to Asia. In addition to the more common flows of crude from Ecuador, Brazil and Argentina, China reportedly bought Canadian heavy sour Cold Lake, which, among other Canadian crudes, sometimes struggles to find an outlet to the US – at least until new pipelines are built. A wide Brent/Dubai spread is also encouraging Asian buyers to buy more Middle Eastern crudes over West African ones. In contrast, US buyers, after buying record-high volumes of Nigerian crude in March, have more recently drawn in far more Algerian crude, doubling their 2007 purchases so far compared with the same period last year.

Spot Crude Oil Prices and Differentials

(monthly and weekly averages, $/bbl)

	Mar	Apr	May	May-Apr Avg Change	%	Week Commencing: 07 May	14 May	21 May	28 May	04 Jun
Crudes										
Dated Brent	62.15	67.51	67.23	-0.28	-0.4	63.93	67.78	70.80	68.51	71.74
Brent (Asia) Mth1 adjusted	62.20	67.76	68.10	0.34	0.5	65.59	68.15	70.35	69.25	70.26
WTI (Cushing) Mth1 adjusted	60.62	63.84	63.40	-0.44	-0.7	61.85	63.52	64.86	63.95	66.12
Urals (Mediterranean)	58.80	63.92	64.15	0.23	0.4	61.27	65.21	67.47	64.56	67.99
Dubai Mth1 adjusted	58.80	63.97	64.61	0.64	1.0	62.90	64.85	66.27	64.72	65.28
Tapis (Dated)	67.87	74.74	75.13	0.39	0.5	73.03	75.50	77.08	75.54	75.72
Differential to Dated Brent										
WTI (Cushing) Mth1 adjusted	-1.53	-3.66	-3.82	-0.16		-2.08	-4.26	-5.93	-4.55	-5.62
Urals (Mediterranean)	-3.35	-3.59	-3.08	0.51		-2.66	-2.57	-3.33	-3.95	-3.75
Dubai Mth1 adjusted - Dated Brent	-3.35	-3.54	-2.62	0.92		-1.04	-2.93	-4.53	-3.78	-6.46
Tapis (Dated)	5.72	7.23	7.90	0.67		9.10	7.72	6.29	7.03	3.98
Prompt Month Differential										
Forward Cash Brent Mth1-Mth2 adj.	-0.25	-0.11	-0.28	-0.17		-0.52	-0.26	-0.04	-0.04	-0.04
Forward WTI Cushing Mth1-Mth2 adj	-1.67	-1.68	-1.27	0.42		-1.72	-1.22	-0.57	-1.10	-1.01

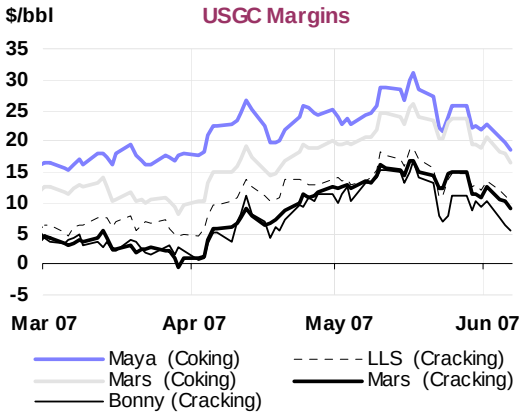
Source: Platts

Refining Margins

Refining margins rose across-the-board on average in May (month-on-month), as gasoline price gains led the market and outpaced crude. The greatest gains were on the US Gulf Coast, where gasoline saw the strongest increases, but also strength in fuel oil and diesel. Compared with the West Coast, where

refinery throughputs have increased sharply from their previous malaise, Gulf Coast runs are still below average as a result of planned and unplanned refinery outages. West Coast margins however remain by far the highest in our survey, despite an easing of regional tightness.

A clear indication of refinery tightness in May was the fact that European hydroskimming margins turned positive for the first sustained period since the post-hurricane late summer of 2005. However, by late May/early June this trend had reversed as gasoline cracks weakened from around mid-May. Briefly, even Dubai and Tapis hydroskimming margins turned positive in early May, as the peak in Asian refinery maintenance coincided with the globally tight gasoline market.



Spot Product Prices

Gasoline led product prices higher in the first half of May, gaining sharply in all regions on sustained demand and tight supply. However, its influence on the market may be waning, as cracks tailed off from mid-May and into early June. This was partly due to strengthening crude, which gained on the return of refineries from maintenance in the US and Europe and geopolitical worries, but is also a reflection of a

Selected Refining Margins in Major Refining Centres

($/bbl)

		Monthly Average			Change	Average for week ending:				
		Mar 07	Apr 07	May 07	May 07-Apr 07	09 May	16 May	23 May	30 May	06 Jun
NW Europe	Brent (Cracking)	4.99	6.78	10.11	3.33	12.25	10.91	8.79	7.97	7.04
	Urals (Cracking)	6.56	8.68	11.19	2.51	13.06	11.82	9.83	9.38	8.83
	Brent (Hydroskimming)	-1.98	-1.22	1.58	2.80	3.81	2.17	0.06	-0.15	-0.90
	Urals (Hydroskimming)	-1.99	-0.87	0.78	1.65	3.12	1.33	-1.09	-0.92	-1.15
Mediterranean	Es Sider (Cracking)	4.73	6.69	9.68	2.99	11.31	9.04	8.53	8.84	8.05
	Urals (Cracking)	6.35	7.98	10.85	2.87	13.04	11.14	9.47	9.14	8.33
	Es Sider (Hydroskimming)	-2.60	-1.52	0.86	2.38	2.71	0.01	-0.51	0.20	-0.28
	Urals (Hydroskimming)	-1.96	-1.35	0.43	1.78	3.15	0.50	-1.36	-1.27	-1.73
US Gulf Coast	Bonny (Cracking)	3.93	7.57	10.90	3.33	10.75	13.08	10.90	9.65	8.71
	Brent (Cracking)	3.08	6.94	11.99	5.05	12.66	14.80	11.78	9.75	7.80
	LLS (Cracking)	6.25	11.13	14.74	3.61	13.96	17.52	14.67	13.78	11.73
	Mars (Cracking)	2.89	7.55	13.87	6.31	13.25	15.64	14.16	13.55	10.66
	Mars (Coking)	11.25	16.16	21.94	5.78	20.46	24.24	22.80	21.83	18.45
	Maya (Coking)	17.00	22.76	25.34	2.58	24.21	28.46	26.12	24.01	20.71
US West Coast	ANS (Cracking)	16.93	16.53	16.63	0.11	18.85	17.29	15.60	14.76	10.96
	Kern (Cracking)	16.00	15.22	17.49	2.27	19.40	19.30	17.09	15.40	12.94
	Oman (Cracking)	12.82	12.24	12.69	0.45	14.95	12.97	12.18	10.17	9.35
	Kern (Coking)	36.32	37.10	36.55	-0.54	38.88	36.61	35.95	33.77	29.28
Singapore	Dubai (Hydroskimming)	-1.22	-0.51	-0.26	0.26	0.63	0.18	-0.83	-1.08	-0.86
	Tapis (Hydroskimming)	-4.29	-5.67	-3.46	2.22	-3.33	-2.96	-3.20	-3.91	-4.05
	Dubai (Hydrocracking)	3.52	4.38	5.43	1.05	5.83	5.99	5.25	4.82	4.54
	Tapis (Hydrocracking)	-0.44	-1.76	0.55	2.31	0.99	1.30	0.66	-0.30	-0.72
China	Cabinda (Hydroskimming)	-6.05	-5.38	-3.02	2.36	-2.47	-3.16	-3.41	-2.83	-3.84
	Daqing (Hydroskimming)	-8.52	-9.19	-5.87	3.32	-7.66	-6.12	-4.39	-4.44	-3.51
	Dubai (Hydroskimming)	-1.96	-0.98	-0.88	0.09	-0.02	-0.46	-1.48	-1.69	-1.40
	Daqing (Hydrocracking)	-1.70	-2.29	1.42	3.71	0.18	1.61	2.77	2.04	2.52
	Dubai (Hydrocracking)	2.79	3.93	4.78	0.85	5.17	5.32	4.58	4.15	3.92

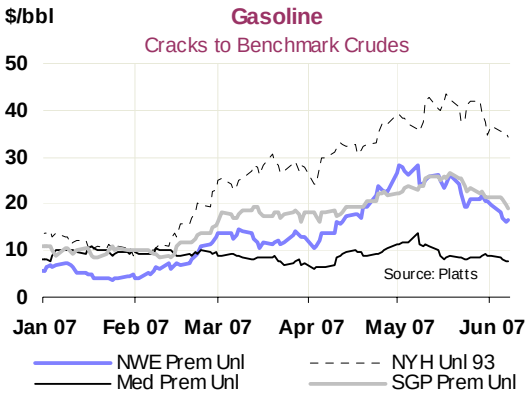
For the purposes of this report, refining margins are calculated for various complexity configurations, each optimized for processing the specific crude in a specific refining centre on a 'full-cost' basis. Consequently, reported margins should be taken as an indication, or proxy, of changes in profitability 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.

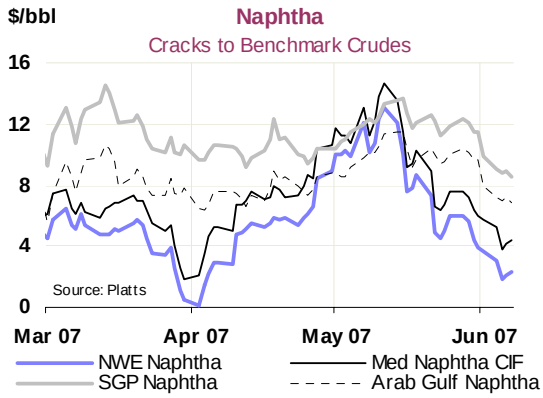
*The China refinery margin calculation represents a model based on spot product import/export parity, and does not reflect internal pricing regulations.

Sources: IEA, Purvin & Gertz Inc.

slightly less-tight gasoline market and a small increase in stocks (in May). Northwest Europe gasoline cracks in particular have narrowed quite considerably from early May highs, as in addition to refineries returning, lower volumes have reportedly been sent across the Atlantic.

In the light distillate segment, naphtha crack spreads have also seen strong declines since mid-May peaks. This is less true for Asia, where petrochemical demand remains strong as new crackers start up, and lead exporter India is reportedly set to provide a lower 600,000 tonnes to the market in May (compared with April's 790,000 tonnes). But in Europe, naphtha cracks have narrowed quite dramatically, as stocks increase again (in ARA) and opportunities to export to both east and west appear to have declined.





Middle distillates were more or less unchanged in May and early June, both in terms of crack spreads and absolute prices. Compared with gasoline, there is less tightness evident in the market; indeed in the ARA region, gasoil stocks have risen slightly above their five-year average range. Several new hydrocracking units have come online in Europe, somewhat reducing import needs for the region as a whole. In the US, total diesel stocks are high and rising, though in part, this simply reflects the switch of off-road (high-sulphur) diesel out of the 'heating oil' and into the 'diesel' pool (for more on this, see the Stocks and Refining sections). Jet cracks remain higher than diesel, and particularly strong in New York Harbor, due to refiners squeezing yields in favour of elements of the gasoline pool.

Fuel oil developments were divergent, with low-sulphur residue cracks improving. Low-sulphur waxy residue (LSWR) in Singapore gained from restocking ahead of the summer cooling season in Asia. High-sulphur fuel oil was flat *vis-à-vis* crude, while stocks in Singapore remained high. Slightly lower arbitrage volumes from Europe for June and July could yet change this. In the US, interest in low-sulphur fuel oil (LSFO) was reportedly also strong, again for utility use, given strong natural gas prices.

End-User Product Prices in May

OECD end-user product prices continued to increase in May. The ex-tax price of gasoline in US dollars rose by 9% on average in the countries reviewed, with US prices up 11.4%. In terms of full retail prices (with tax included), this means a 39% increase for drivers in the US since February. The ex-tax retail price of diesel in US dollars increased by 2.6% on average for all countries except the US, where it fell by 1.8%. Heating oil prices in US dollars on average rose by 1.8%, while LSFO ex-tax prices increased by 6.5% in OECD Europe and Japan.

Spot Product Prices

(monthly and weekly averages, $/bbl)

	Mar	Apr	May	May-Apr		Week Commencing:					Mar	Apr	May
				Change	%	07 May	14 May	21 May	28 May	04 Jun			
Rotterdam, Barges FOB											**Differential to Brent**		
Premium Unleaded	74.89	85.57	91.35	5.78	6.8	89.04	92.76	92.04	89.15	88.63	12.74	18.07	24.13
Naphtha	66.66	72.53	75.76	3.23	4.4	75.85	77.04	76.33	72.90	74.06	4.51	5.02	8.53
Jet/Kerosene	77.03	82.93	84.02	1.08	1.3	82.42	84.00	85.31	83.84	86.88	14.88	15.42	16.79
ULSD	76.23	81.65	81.72	0.06	0.1	79.84	81.36	83.75	82.16	85.26	14.08	14.15	14.49
Gasoil .2%	72.62	78.37	79.11	0.74	0.9	77.36	79.28	80.90	78.76	81.83	10.47	10.86	11.88
LSFO 1%	40.80	44.61	47.48	2.86	6.4	47.93	46.66	47.53	47.84	48.15	-21.35	-22.89	-19.75
HSFO 3.5%	42.07	48.44	49.35	0.90	1.9	49.49	48.57	49.41	47.71	49.65	-20.08	-19.07	-17.88
Mediterranean, FOB Cargoes											**Differential to Urals**		
Premium 50 ppm	73.46	83.69	90.23	6.55	7.8	88.35	92.01	90.74	88.38	87.38	14.66	19.77	26.08
Naphtha	64.85	70.70	73.91	3.21	4.5	74.36	75.46	74.22	70.46	71.89	6.04	6.78	9.76
Jet Aviation fuel	75.03	79.75	81.38	1.63	2.0	80.03	81.47	82.58	81.04	84.08	16.23	15.83	17.23
Gasoil .2%	73.06	79.56	79.87	0.31	0.4	79.09	80.34	80.52	78.17	81.66	14.25	15.64	15.72
LSFO 1%	43.10	48.88	51.95	3.08	6.3	50.70	51.29	53.10	51.90	53.09	-15.70	-15.05	-12.20
HSFO 3.5%	42.67	48.51	48.47	-0.04	-0.1	48.31	47.81	49.03	47.44	49.76	-16.13	-15.41	-15.68
New York Harbour, Barges											**Differential to WTI**		
Super Unleaded	87.49	96.10	102.74	6.64	6.9	100.53	105.16	104.69	101.10	101.17	26.86	32.26	39.33
Unleaded	81.16	87.73	93.89	6.16	7.0	93.07	96.96	95.09	91.72	91.51	20.54	23.88	30.49
Jet/Kerosene	78.80	85.85	87.34	1.49	1.7	85.71	87.88	89.37	87.66	88.94	18.18	22.00	23.94
No. 2 (Heating Oil)	73.09	78.19	79.10	0.91	1.2	77.41	79.69	81.15	79.49	82.82	12.47	14.34	15.69
LSFO 1%	42.70	47.18	52.45	5.27	11.2	52.10	52.74	52.74	52.19	53.25	-17.92	-16.67	-10.96
No. 6 3%	42.35	46.95	52.08	5.14	10.9	51.82	52.44	52.50	50.91	50.03	-18.27	-16.90	-11.32
Singapore, Cargoes											**Differential to Dubai**		
Premium Unleaded	76.62	83.49	88.77	5.28	6.3	87.24	90.53	90.45	86.67	85.60	17.81	19.52	24.16
Naphtha	70.56	74.22	76.73	2.51	3.4	75.31	77.60	78.15	76.18	74.11	11.76	10.25	12.12
Jet/Kerosene	75.02	80.91	82.14	1.23	1.5	80.71	82.06	83.21	82.18	83.06	16.21	16.94	17.53
Gasoil .5%	73.46	80.24	81.73	1.49	1.9	80.39	82.31	83.13	81.28	81.21	14.66	16.27	17.12
LSWR Cracked	46.20	51.91	54.94	3.03	5.8	51.00	55.78	58.30	57.15	58.93	-12.60	-12.06	-9.67
HSFO 180 CST	47.63	53.24	53.34	0.11	0.2	53.26	53.31	53.52	52.25	54.23	-11.17	-10.73	-11.27
HSFO 380 CST 4%	47.67	53.32	53.27	-0.06	-0.1	53.01	53.13	53.55	52.17	53.87	-11.13	-10.65	-11.34

Source: Platts

Freight

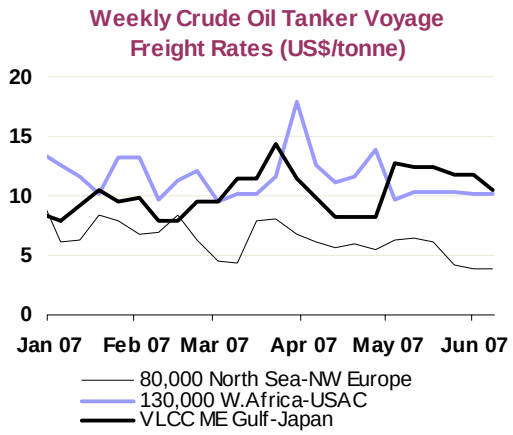
Crude freight rates gradually eased from near the top of five-year ranges in early May to finish the month below seasonal averages. Floating storage charters in the US Gulf and some increased long-haul trading restrained crude tanker supply. This prevented a dramatic slide in dirty rates, despite Nigerian outages and muted OPEC exports continuing to undermine vessel demand. Refinery maintenance in Asia supported product trade and demand for clean tankers. Low stocks and refinery outages maintained the need for gasoline imports into the US in May.

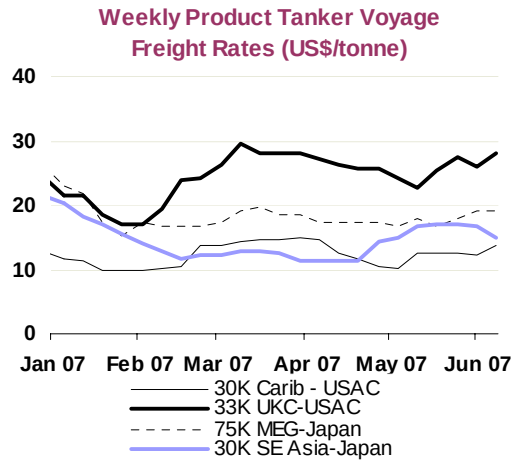
Trade data reveal that Nigeria was the third-largest provider of crude to the US in March, above Saudi Arabia for the first time. However, extensive outages have now reduced Nigerian export cargoes. OPEC cuts remain in place and Vela spot charters for June are reportedly near three-year lows. Furthermore, refinery maintenance, now focussed on Asia, usually undermines vessel demand in May. Despite these factors, VLCC freight rates had fallen only slightly below five-year averages by the end of May. Middle East Gulf rates to Japan and the US Gulf in early May were well above average, reaching around $13/tonne and $22/tonne respectively. One month later, rates for both routes had only dropped by around $2/tonne. They remain higher, on a $/tonne basis, than almost all rates seen between mid-October and February.

One factor supporting rates has been the reductions to vessel supply caused by the increased use of VLCCs as floating storage in the US Gulf. The prevailing wide contango in WTI has made it economic to charter VLCCs specifically for floating storage. Some VLCCs arriving in the US Gulf with valuable African crude have also invoked a clause to store offshore before discharging.

Vessel supply has been further reduced by incremental long-haul chartering. Asian purchases of West African crude reportedly hit 14-month highs for June on increased buying from China and evidence of the first cargoes for Indonesia in more than a year. Clearly Nigerian exports may be disrupted, but Angolan loading schedules suggest exports there will increase. Furthermore, Indian refiners have been increasingly looking to Mediterranean crude markets and there has even been a recent Chinese purchase of Canadian crude.

Elsewhere in the dirty sector, Nigerian outages caused westbound Atlantic Suezmax rates to weaken by $2-3/tonne in May. Cross-Mediterranean Aframax rates showed their volatility again by falling from six-month highs of $21/tonne in early May to 18-month lows of $7/tonne in early June. Aframax demand in June has been dented by a rise in Russian export duties and North Sea maintenance.





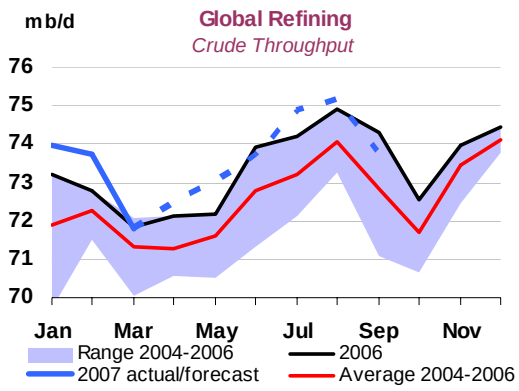
Clean product tanker rates rose in May. Asian clean rates were supported by increased trade of products during refinery maintenance. Rising Asian petrochemical capacity continues to boost demand for naphtha imports from Saudi Arabia and India. In the Atlantic basin, discharging delays caused an unusually large vessel backlog at Lagos port in late May, temporarily reducing vessel supply. Transatlantic clean rates were further boosted by the continued need for gasoline imports in the US, where stocks remain historically low. UK continent to US Atlantic Coast rates for 33,000-tonne clean cargoes rose by $4/tonne from the start of May to reach $28/tonne in early June.

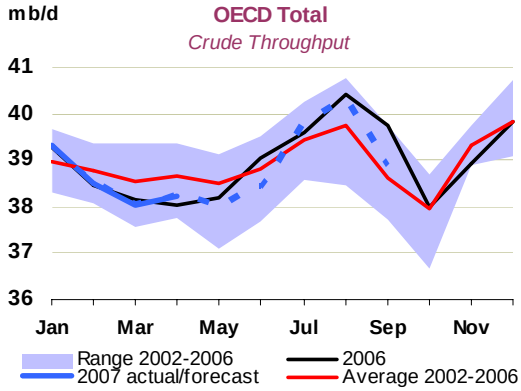
REFINING

Summary

- **Global refinery crude throughput is estimated to have averaged 72.4 mb/d in April,** with higher OECD crude runs offset by lower throughput in the FSU. Global crude runs are expected to increase to 75.2 mb/d in August, driven by higher crude throughput in the OECD, Russia and India.

- **OECD refinery crude throughput increased in April to 38.2 mb/d** as higher European and North American runs offset the maintenance–related decline in the Pacific. OECD crude throughput in May is estimated to have averaged 38.0 mb/d as Pacific maintenance reaches a peak and European crude runs remain subdued.





- **OECD fuel oil production remained under pressure** according to refinery yield data for March. This was most pronounced in the Pacific, with production some 2% lower. March naphtha yields were weaker in all regions, but remain at the top of the five-year range in the Pacific.

- **US gasoline inventories should increase in coming weeks,** but may remain tight over the summer months. Higher refinery throughputs, increased throughputs of catalytic cracking units and strong imports will all be needed to reduce the recent gasoline market tightness.

Global Refinery Throughput

Global crude runs were an estimated 72.4 mb/d in April, rising to 73.0 mb/d in May. Second-quarter crude runs are forecast to average 73.1 mb/d and should increase in July, reaching a peak in August at 75.2 mb/d. Upward revisions to Chinese and Asian forecasts underpin the higher forecast. Chinese crude runs are expected to remain strong over the balance of the second quarter and July. During this period they are likely to set new record throughput levels, following the completion of late-spring maintenance, the start-up of additional capacity at Sinopec's Yanshan refinery near Beijing, and in response to continued strong demand growth.

March crude throughput is revised down to 71.8 mb/d, on lower OECD Europe and Asian estimates. Upward revisions to planned maintenance activity partly account for this downward revision in crude throughput, as it does for the lower April and May estimates. However, some of the lower-than-expected crude throughput remains unexplained by reported maintenance activity and unplanned outages. The commercially sensitive nature of maintenance work implies that there will always be a portion that is unreported and we are unlikely to capture all the work taking place. Crude runs in Asia were weaker than forecast as lower throughputs in Taiwan and Indonesia more than offset the strength in Indian crude runs. Indian runs are forecast to increase by a further 50-70 kb/d in August when Essar completes the start-up of the remaining upgrading units at its recently commissioned Vadinar refinery.

Global Refinery Crude Throughput[1]

million barrels per day

	Jan 07	Feb 07	Mar 07	*Apr 07*	*May 07*	*Jun 07*	*Jul 07*	*Aug 07*	*Sep 07*
OECD Crude Runs									
North America	18.0	17.5	17.8	18.2	*18.5*	*18.3*	*18.7*	*19.0*	*18.6*
Europe	13.9	13.7	13.0	13.2	*13.1*	*13.6*	*13.9*	*14.0*	*13.5*
Pacific	7.4	7.3	7.3	6.8	*6.4*	*6.5*	*7.2*	*7.3*	*6.8*
Total OECD	39.3	38.5	38.0	38.2	*38.0*	*38.4*	*39.8*	*40.3*	*38.9*
NON-OECD Crude Runs									
FSU	5.7	5.9	*5.8*	*5.6*	*5.8*	*5.8*	*5.9*	*5.9*	*5.7*
Europe	1.0	1.0	*1.0*	*0.9*	*0.9*	*1.0*	*1.0*	*1.0*	*1.0*
China	6.2	6.5	*6.4*	*6.5*	*6.7*	*6.8*	*6.7*	*6.5*	*6.4*
Other Asia	8.1	8.2	*7.4*	*7.7*	*8.0*	*7.9*	*7.5*	*7.6*	*8.0*
Latin America	5.2	5.2	*5.3*	*5.6*	*5.4*	*5.5*	*5.5*	*5.5*	*5.5*
Middle East	6.0	5.8	*5.7*	*5.7*	*5.8*	*6.0*	*6.2*	*6.0*	*6.1*
Africa	2.4	2.6	*2.2*	*2.2*	*2.4*	*2.3*	*2.3*	*2.3*	*2.3*
Total Non-OECD	34.6	35.3	*33.8*	*34.2*	*35.0*	*35.3*	*35.1*	*34.8*	*34.9*
Total Crude Runs	73.9	73.8	*71.8*	*72.4*	*73.0*	*73.7*	*74.9*	*75.2*	*73.8*

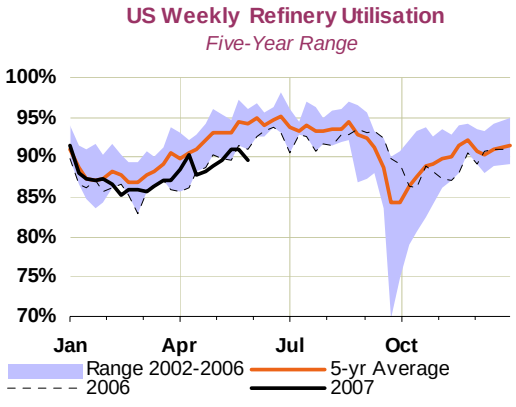
1 Crude runs in Italics are estimates

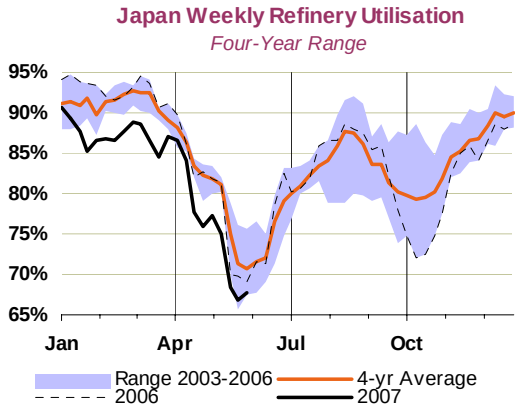
Russian April crude throughput declined to 4.4 mb/d, down 0.1 mb/d on the month and some 0.3 mb/d below the record level of February, following maintenance work at several refineries, according to preliminary data. Consequently, Russian crude throughput recorded the first year-on-year decline in three years. The lull in throughputs contributed to lower FSU product exports.

OECD Refinery Throughput

OECD Second- and Third-Quarter Forecast

OECD crude runs are forecast to average 38.2 mb/d over the second quarter. Lower forecast European crude runs are partly offset by upward revisions to estimates for North America. Weekly data for May point to higher utilisation in the US, as refiners on the East and West Coasts increased throughputs outpacing lower throughputs in Midwest, which remaining subdued due to continued operational difficulties at BP's Whiting refinery and reports of planned work at Flint hill Resources' Pine Bend refinery. Problems late in the month at several Gulf Coast refineries lowered utilisation rates in the region.

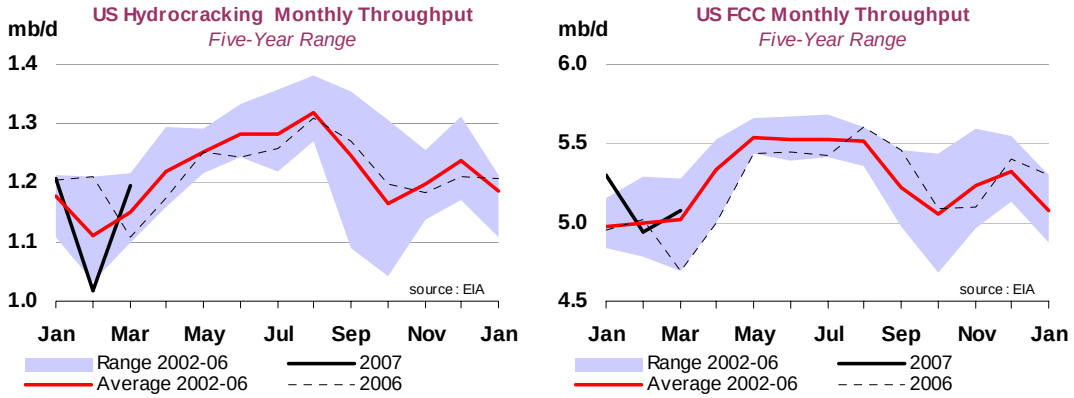




Higher quarter-on-quarter crude throughput in the third quarter is forecast to reach a seasonal peak of 40.3 mb/d in August. Gains in all three regions drive the higher throughputs. Pacific crude runs will recover by some 0.7 mb/d in July, following the completion of maintenance work at Korean refineries. Atlantic Basin runs are forecast to increase by a similar amount in July as refineries in North America and Europe seek to supply peak driving season demand. September crude runs are forecast to fall by 1.4 mb/d as autumn maintenance starts in all three regions.

Despite reports of operational problems with catalytic cracking units from several US refineries, US crude runs reached their highest level in mid-May since September last year. However, the respite was short-lived, as renewed problems emerged at the end of the month and the start of planned work on a 200 kb/d crude unit at Chevron's El Segundo refinery in California in early June.

Consequently, we continue to forecast lower North American throughput in June compared with May. However, July and August are still expected to see crude runs average 18.8 mb/d, roughly 0.5 mb/d above June levels and the highest level since last August. Monthly data on upgrading unit throughputs from the US EIA point to a rebound in March from the low levels seen in February.



Pacific region crude runs should increase over the balance of the second quarter, from their May low point, as Japan exits its maintenance season. Weekly data from Japan suggest that refineries have passed the low point of crude throughput in late May. However, planned work is expected to increase in Korea which typically starts its turnaround season later than Japan. Korean refinery maintenance will be somewhat constrained by the strong demand for gasoil/diesel ahead of a 1 July tax increase, which also raises distillate yields during the second quarter. Overall the region is forecast to achieve significantly higher runs in the third quarter, around 0.5 mb/d above the second quarter, as maintenance work is completed and driving season demand reaches a peak.

Refinery Crude Throughput and Utilisation in OECD Countries

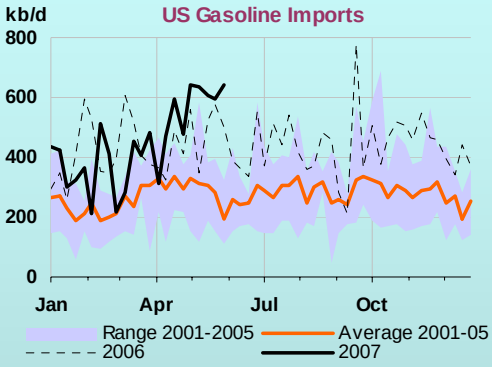
	million barrels per day						*Change from*		Utilisation rate[2]	
	Nov 06	Dec 06	Jan 07	Feb 07	Mar 07	Apr 07	*Mar 07*	*Apr 06*	Apr 07	Apr 06
OECD North America										
US[3]	15.01	15.37	14.96	14.43	14.84	15.21	0.36	0.27	87.45	86.16
Canada	1.81	1.80	1.80	1.80	1.70	1.76	0.05	0.24	87.14	75.11
Mexico	1.24	1.31	1.27	1.26	1.24	1.24	0.00	-0.02	80.44	71.96
Total	18.06	18.47	18.04	17.49	17.78	18.20	0.42	0.50	86.90	84.18
OECD Europe										
France	1.81	1.80	1.79	1.71	1.50	1.59	0.08	0.09	81.08	75.47
Germany	2.41	2.32	2.26	2.31	2.21	2.18	-0.02	-0.12	90.23	94.82
Italy	1.98	1.95	1.91	1.93	1.91	1.86	-0.04	0.05	79.78	78.06
Netherlands	1.04	1.03	1.01	0.97	0.88	1.01	0.13	0.13	83.66	72.06
Spain	1.11	1.15	1.19	1.14	1.17	1.22	0.04	0.02	95.52	94.07
UK	1.50	1.63	1.59	1.42	1.49	1.60	0.10	0.09	84.63	80.22
Other OECD Europe	3.91	4.02	4.14	4.20	3.81	3.76	-0.05	-0.38	78.59	85.86
Total	13.76	13.93	13.89	13.67	12.98	13.22	0.24	-0.11	83.31	83.73
OECD Pacific										
Japan	3.87	4.18	4.13	4.11	4.04	3.74	-0.30	-0.22	79.97	84.70
Korea	2.51	2.47	2.49	2.51	2.48	2.37	-0.11	0.04	91.88	90.37
Other OECD Pacific	0.72	0.78	0.76	0.70	0.75	0.69	-0.05	0.00	85.98	85.96
Total	7.10	7.43	7.38	7.32	7.27	6.80	-0.47	-0.18	84.38	86.64
OECD Total	38.92	39.83	39.32	38.49	38.03	38.23	0.19	0.21	85.18	84.46

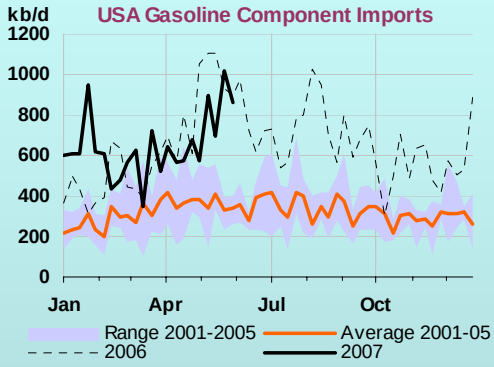
1 Estimate
2 Based on crude throughput and current operable refining capacity
3 US50

US Gasoline Stocks – Tightness to Persist?

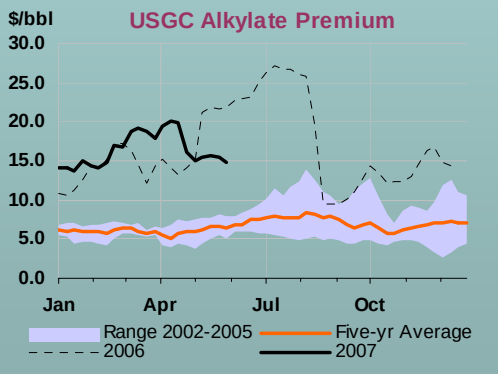
Tightness in the US gasoline market has been a major contributor to recent oil price strength. Robust demand growth, rapidly falling stock levels and reports of refinery problems have focused attention on the prospects for gasoline stocks during the US summer driving season.

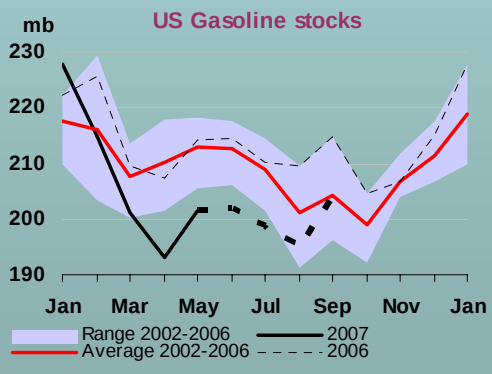
Recent gasoline production levels have been constrained by the erratic level of crude intake and the reported problems with upgrading units, particularly fluid catalytic cracking units (FCCs). The delay in reporting FCC utilisation rates (it is reported monthly and not weekly) suggests that one must consider other aspects of the gasoline market to determine its tightness. Gasoline imports have reached record levels for the time of year, while gasoline component imports have matched the ethanol induced peaks of the second quarter of 2006 and are well above the previous five-year range.





Higher imports depend upon the availability of surplus gasoline elsewhere. European gasoline demand is expected to be 1.8% lower than 2006 over the next three months, raising the prospect of higher exports. However, our forecast for European crude runs is also 1.3% below levels of a year ago. Consequently, only limited additional exports may be possible unless stock levels in Europe are drawn down further. Tightness in gasoline markets can be gauged by the strength in gasoline cracks and also by the premium that high octane, low volatility blending components, such as alkylate, command over gasoline. The volatility constraint imposed by ethanol blending can boost this premium during the summer months and make analysis difficult. However, alkylate production can be affected by FCC problems, as alkylation units typically derive their feedstock from FCCs and hence the premium can provide a good indication of FCC utilisation rates. The premium's decline, from the recent high levels, despite the introduction of less volatile summer specification gasoline, suggests that FCCs may have increased throughputs.



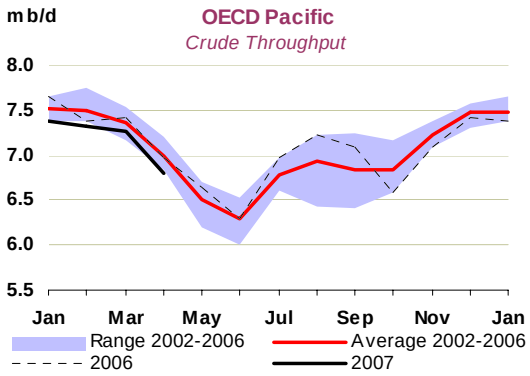


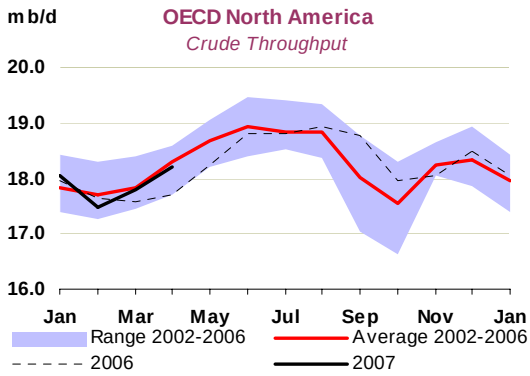
Gasoline market tightness is forecast (based on our outlook for US crude throughput) to ease in the coming weeks, barring a further deterioration in refinery reliability. However, subsequently gasoline supplies look set to remain tight by historical standards, assuming that US imports of gasoline and gasoline blending components are in line with last year's average levels. Consequently gasoline inventories are likely to remain at best flat from end-May levels and may well dip through to July, given our cautious forecast for US crude runs. Higher gasoline (and gasoline component) imports could improve the outlook, but a question mark remains as to where these would be sourced from.

Second-quarter European crude runs are forecast to average 13.3 mb/d, down 0.3 mb/d from last month's forecast and some 0.2 mb/d below last year's level. Higher estimates of offline capacity and a lower March baseline contribute to the reduced forecast. However, June crude runs could exceed our estimate of 13.6 mb/d given the relatively sparse nature of reported maintenance work during the month. July and August are expected to see crude runs average almost 14.0 mb/d before a heavy September maintenance programme reduces crude throughput.

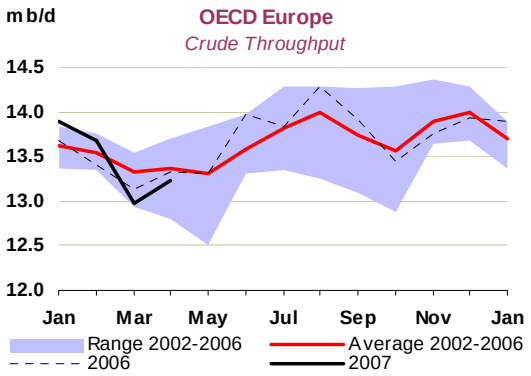
April Data

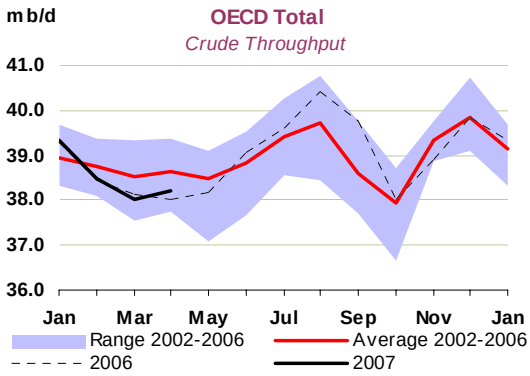
OECD refinery runs averaged 38.2 mb/d in April, an increase of 0.2 mb/d from March's downwardly revised (-0.3 mb/d) level. Gains in Europe and North America outweighed the 0.5 mb/d decline in the Pacific where maintenance reduced crude throughput. US crude runs recorded the largest increase, up 0.4 mb/d, while Japanese runs showed the biggest decline of 0.3 mb/d.





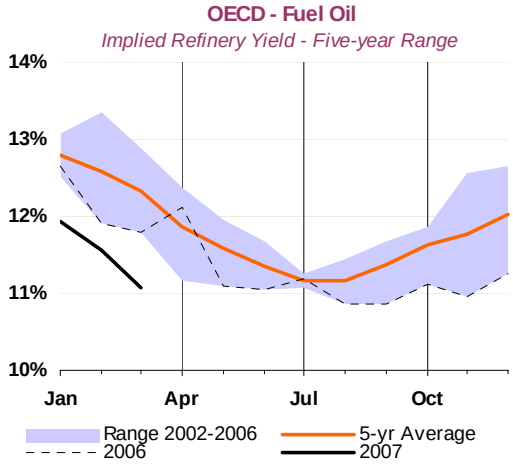
OECD Europe crude runs were 0.6 mb/d weaker than expected, a combination of the lower March baseline, with downward revisions of 0.3 mb/d, centred on the Netherlands, Turkey and Belgium. Lower than expected throughputs in France, possibly a result of more prolonged impact from the strike at Fos in late March, as well as Turkey, Belgium and Sweden where planned maintenance may have been underreported.

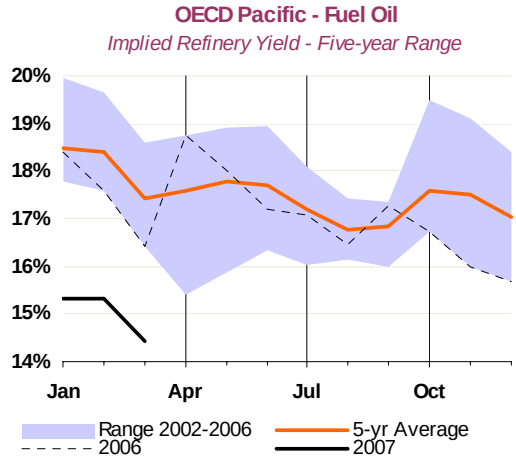




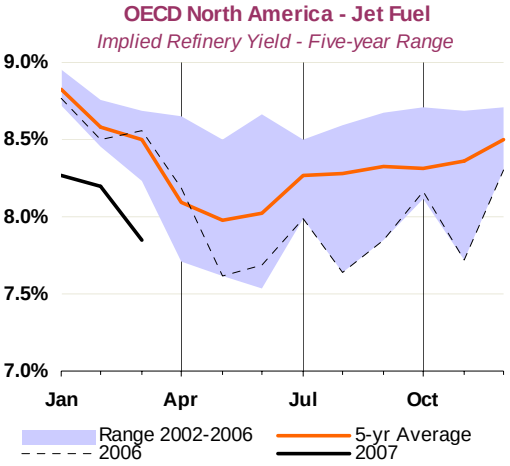
OECD Refinery Yields

OECD fuel oil production remained weak in March according to the most recent refinery yield data. Fuel oil accounted for 11.1% of output, 1.2 percentage points below the five-year average. The Pacific continued to lead other regions, in cutting fuel oil yields with production some 2 percentage points lower than last year, to the lowest level since 1995. In March, naphtha yields eased back in the Pacific and in Europe, with a corresponding increase in gasoline in both regions. Naphtha yields remain at the top of the five-year range in the Pacific and could rise further in next month's data, based on the strengthening naphtha crack in Asian markets during April and early May, underpinned by rising demand from petrochemical plants for feedstock.





North American jet fuel/kerosene yields remain weak compared with 2006 and to five-year averages, as refiners struggle to cope with strong demand growth for diesel and robust gasoline demand. The impact of the tighter off-road gasoil sulphur limit of 500 ppm, which became effective on 1 June in the US, remains to be seen. It could add further pressure to jet yields as refiners seek to maximise production of gasoil, and seek to minimise jet fuel, with marginal demand met by increasing imports of the more fungible product. However this outcome is by no means certain.



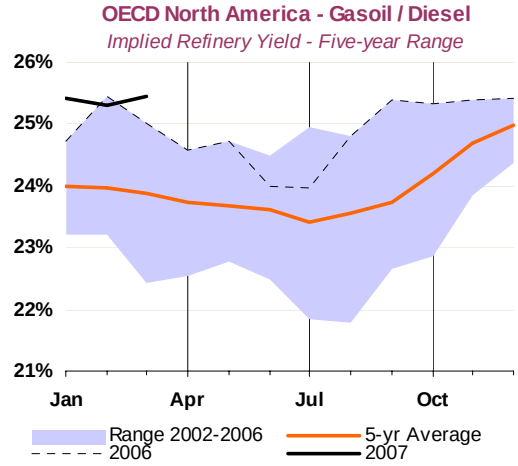


Table 1
WORLD OIL SUPPLY AND DEMAND
(million barrels per day)

	2003	2004	1Q05	2Q05	3Q05	4Q05	2005	1Q06	2Q06	3Q06	4Q06	2006	1Q07	2Q07	3Q07	4Q07	2007
OECD DEMAND																	
North America	24.5	25.4	25.6	25.3	25.6	25.6	25.5	25.2	25.1	25.5	25.4	25.3	25.7	25.4	25.9	26.0	25.8
Europe	15.4	15.5	15.6	15.2	15.6	15.7	15.5	15.8	15.1	15.5	15.6	15.5	15.1	15.0	15.6	15.8	15.4
Pacific	8.6	8.5	9.4	8.1	8.1	8.8	8.6	9.3	7.9	7.9	8.8	8.5	8.9	7.9	8.0	8.9	8.4
Total OECD	48.6	49.3	50.7	48.6	49.3	50.1	49.6	50.3	48.0	48.9	49.7	49.2	49.7	48.2	49.6	50.8	49.6
NON-OECD DEMAND																	
FSU	3.6	3.8	3.8	3.7	3.8	3.9	3.8	3.9	3.7	4.0	4.3	4.0	3.8	3.6	4.1	4.4	4.0
Europe	0.7	0.7	0.8	0.7	0.7	0.7	0.7	0.8	0.8	0.7	0.8	0.8	0.8	0.8	0.7	0.8	0.8
China	5.5	6.4	6.7	6.5	6.7	6.9	6.7	7.0	7.3	7.2	7.2	7.2	7.3	7.7	7.6	7.7	7.6
Other Asia	8.1	8.6	8.9	9.0	8.5	8.6	8.8	8.9	8.9	8.6	8.8	8.8	9.1	9.2	9.0	9.2	9.1
Latin America	4.7	5.0	5.0	5.1	5.3	5.2	5.1	5.1	5.3	5.4	5.4	5.3	5.3	5.5	5.6	5.5	5.5
Middle East	5.4	5.7	5.9	6.0	6.2	6.0	6.0	6.2	6.2	6.5	6.3	6.3	6.4	6.5	6.8	6.5	6.6
Africa	2.7	2.8	3.0	3.0	2.9	2.9	3.0	3.0	3.0	2.9	2.9	2.9	3.1	3.1	3.0	3.1	3.1
Total Non-OECD	30.7	33.0	34.1	34.0	34.0	34.1	34.0	34.9	35.2	35.2	35.7	35.2	35.8	36.3	36.7	37.3	36.6
Total Demand[1]	79.2	82.3	84.8	82.6	83.2	84.2	83.7	85.1	83.2	84.1	85.4	84.5	85.6	84.6	86.3	88.0	86.1
OECD SUPPLY																	
North America	14.6	14.6	14.5	14.7	13.7	13.8	14.1	14.2	14.2	14.3	14.3	14.2	14.4	14.2	14.2	14.3	14.3
Europe	6.3	6.1	5.9	5.7	5.4	5.5	5.6	5.5	5.1	4.9	5.2	5.2	5.2	5.0	5.0	5.2	5.1
Pacific	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.7	0.6	0.6	0.6	0.6	0.7	0.7	0.6
Total OECD	21.6	21.2	20.9	21.0	19.7	19.8	20.3	20.2	19.8	19.9	20.1	20.0	20.2	19.9	19.8	20.2	20.0
NON-OECD SUPPLY																	
FSU	10.3	11.2	11.5	11.5	11.7	11.9	11.6	11.8	12.0	12.2	12.4	12.1	12.5	12.5	12.5	12.7	12.6
Europe	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
China	3.4	3.5	3.6	3.6	3.6	3.6	3.6	3.7	3.7	3.7	3.6	3.7	3.7	3.7	3.7	3.8	3.7
Other Asia	2.6	2.7	2.7	2.6	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
Latin America	4.0	4.1	4.2	4.4	4.3	4.3	4.3	4.3	4.4	4.4	4.4	4.4	4.4	4.4	4.5	4.6	4.5
Middle East	2.0	1.9	1.9	1.9	1.9	1.8	1.9	1.8	1.7	1.7	1.7	1.7	1.7	1.6	1.6	1.6	1.6
Africa[2]	3.0	3.4	3.5	3.6	3.8	3.9	3.7	3.9	3.8	3.9	4.1	3.9	2.6	2.6	2.7	2.7	2.6
Total Non-OECD	25.6	27.0	27.5	27.7	28.1	28.4	27.9	28.3	28.5	28.7	29.0	28.7	27.8	27.8	27.9	28.2	27.9
Processing Gains[3]	1.8	1.8	1.9	1.9	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
Other Biofuels[4]	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.4	0.4	0.4	0.4	0.4
Total Non-OPEC[5]	49.1	50.2	50.4	50.6	49.7	50.2	50.2	50.7	50.5	50.7	51.3	50.8	50.3	50.0	50.0	50.7	50.2
Non-OPEC excl. Angola[2]	48.2	49.2	49.3	49.5	48.4	48.8	49.0	49.3	49.1	49.3	49.9	49.4	50.3	50.0	50.0	50.7	50.2
OPEC																	
Crude[6]	27.1	28.9	29.3	29.7	30.0	29.9	29.7	29.9	29.7	30.0	29.2	29.7	30.2				
NGLs	3.7	4.2	4.4	4.5	4.6	4.5	4.5	4.6	4.6	4.6	4.7	4.6	4.8	4.8	4.8	5.0	4.9
Total OPEC	30.8	33.1	33.7	34.2	34.6	34.5	34.2	34.5	34.3	34.7	33.9	34.3	35.0				
OPEC incl. Angola[2]	31.7	34.1	34.8	35.4	35.9	35.9	35.5	35.9	35.6	36.1	35.3	35.7	35.0				
Total Supply[7]	79.9	83.2	84.1	84.8	84.3	84.7	84.5	85.1	84.8	85.4	85.2	85.1	85.3				
STOCK CHANGES AND MISCELLANEOUS																	
Reported OECD																	
Industry	0.1	0.1	0.0	0.9	0.2	-0.4	0.1	0.0	0.7	1.2	-0.9	0.2	-1.0				
Government	0.2	0.1	0.1	0.3	0.0	-0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0				
Total	0.3	0.2	0.1	1.2	0.2	-0.5	0.2	0.0	0.7	1.2	-0.8	0.3	-0.9				
Floating Storage/Oil in Transit	0.2	0.0	-0.4	0.1	0.0	0.1	-0.1	0.1	-0.1	0.3	-0.6	-0.1	0.2				
Miscellaneous to balance[8]	0.2	0.7	-0.3	1.0	1.0	0.9	0.6	-0.1	0.9	-0.2	1.2	0.4	0.5				
Total Stock Ch. & Misc	0.6	0.9	-0.6	2.3	1.1	0.4	0.8	0.0	1.5	1.3	-0.3	0.7	-0.3				
Memo items:																	
Call on OPEC crude + Stock ch.[9]	26.5	28.0	29.9	27.5	28.9	29.5	28.9	29.9	28.1	28.7	29.5	29.0	30.5	29.8	31.5	32.3	31.0
Adjusted Call on OPEC + Stock ch.[10]	26.7	28.7	29.6	28.4	29.9	30.4	29.6	29.7	29.0	28.5	30.7	29.5	31.0	30.8	32.4	33.2	32.0
"Call" incl. Angola[2]	27.4	29.0	31.0	28.6	30.2	30.9	30.2	31.3	29.5	30.1	30.9	30.5	30.5	29.8	31.5	32.3	31.0
"Adjusted Call" incl. Angola[2]	27.5	29.7	30.7	29.6	31.2	31.7	30.8	31.1	30.4	30.0	32.1	30.9	31.0	30.8	32.4	33.2	32.0

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 With effect from OMR of 13 February 2007, Angolan production will be reclassified within OPEC and excluded from the Non-OPEC and Africa totals, for the period January 2007 onwards. Secondary aggregates allow comparison with previous year totals by including Angola within OPEC retroactively.

3 Net volumetric gains and losses in the refining process (excludes net gain/loss in former USSR, China and non-OECD Europe) and marine transportation losses

4 Biofuels from sources outside Brazil and US.

5 Non-OPEC supplies include crude oil, condensates, NGL and non-conventional sources of supply such as synthetic crude, ethanol and MTBE. No allowance is made in the non-OPEC forecast for exceptional events which have, at certain times historically, reduced non-OPEC supply by 300-400 kbd on an annual basis

6 As of the March 2006 OMR, Venezuelan Orinoco heavy crude production is included within Venezuelan crude estimates. Orimulsion fuel remains within the OPEC NGL & non-conventional category, but Orimulsion production will reportedly cease from January 2007.

7 Comprises crude oil, condensates, NGLs, oil from non-conventional sources and other sources of supply

8 Includes changes in non-reported stocks in OECD and non-OECD areas

9 Equals the arithmetic difference between total demand minus total non-OPEC supply minus OPEC NGLs

10 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 plus an extra 350 kb/d allowance for average understatement of non-OPEC supply added for forecast periods.

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

(million barrels per day)

	2003	2004	1Q05	2Q05	3Q05	4Q05	2005	1Q06	2Q06	3Q06	4Q06	2006	1Q07	2Q07	3Q07	4Q07	2007
OECD DEMAND																	
North America	-	-	-	-	-	-	-	-	-	-	-	-	-0.1	-	-	-	-
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-0.1	0.1	0.1	-
Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-	0.1	-	-	-
Total OECD	-	-	-	-	-	-	-	-	-	-	-	-	-0.1	-	0.1	0.1	-
NON-OECD DEMAND																	
FSU	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Europe	-	-	-	-	-	-	-	-	-	-	-	-	0.1	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-	-	-	-0.1	-	-	-	-
Other Asia	-	-	0.1	0.2	-0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2
Latin America	-	-	-	-	-	-	-	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Middle East	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Africa	-	-	0.1	0.1	0.1	0.1	0.1	0.1	-	-	-	-	0.1	0.1	0.1	0.1	0.1
Total Non-OECD	-	-	0.2	0.2	-	0.2	0.2	0.3	0.2	0.2	0.3	0.3	0.4	0.4	0.4	0.4	0.4
Total Demand	-	-	0.2	0.2	-	0.2	0.2	0.3	0.2	0.2	0.3	0.2	0.2	0.3	0.5	0.5	0.4
OECD SUPPLY																	
North America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-0.1	-	-	-
Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total OECD	-	-	-	-	-	-	-	-	-	-	-	-	-0.1	-	-0.1	-0.1	-0.1
NON-OECD SUPPLY																	
FSU	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.1	-
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Asia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Latin America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Middle East	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Africa	-	-	-	-	-	-	-	-0.1	-0.1	-0.1	0.1	-	-	-	-0.1	-0.1	-
Total Non-OECD	-	-	-	-	-	-	-	-0.1	-0.1	-0.1	0.1	-	-	-0.1	-0.1	-	-0.1
Processing Gains	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Biofuels	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Non-OPEC	-	-	-	-	-	-	-	-	-	-0.1	0.1	-	-	-0.2	-0.1	-0.1	-0.1
Non-OPEC excl. Angola	-	-	-	-	-	-	-	-	-	-0.1	0.1	-	-	-0.2	-0.1	-0.1	-0.1
OPEC																	
Crude	-	-	-	-	-	-	-	-	-	-	-	-	-				
NGLs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total OPEC	-	-	-	-	-	-	-	-	-	-	-	-	-				
OPEC incl. Angola	-	-	-	-	-	-	-	-	-	-	-	-	-				
Total Supply	-	-	-	-	-	-	-	-	-	-0.1	0.1	-	-				
STOCK CHANGES AND MISCELLANEOUS REPORTED OECD																	
Industry	-	-	-	-	-	-	-	-	-	-	-	-	-				
Government	-	-	-	-	-	-	-	-	-	-	-	-	-				
Total	-	-	-	-	-	-	-	-	-	-	-	-	-				
Floating Storage/Oil in Transit	-	-	-	-	-	-	-	-	-	-	-	-	-				
Miscellaneous to balance	-	-	-0.2	-0.2	-	-0.2	-0.2	-0.3	-0.3	-0.3	-0.2	-0.3	-0.3				
Total Stock Ch. & Misc	-	-	-0.2	-0.2	-	-0.2	-0.2	-0.3	-0.3	-0.3	-0.2	-0.3	-0.3				
Memo items:																	
Call on OPEC crude + Stock ch.	-	-	0.2	0.2	-	0.2	0.2	0.3	0.3	0.3	0.2	0.3	0.3	0.5	0.7	0.7	0.5
Adjusted Call on OPEC + Stock ch.	-	-	-	-	-	-	-	-	-	-	-	-	-	0.3	0.5	0.4	0.3
"Call" incl. Angola[2]	-	-	0.2	0.2	-	0.2	0.2	0.3	0.3	0.3	0.2	0.3	0.3	0.5	0.7	0.7	0.5
"Adjusted Call" incl. Angola	-	-	-	-	-	-	-	-	-	-	-	-	-	0.3	0.5	0.4	0.3

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

	2004	1Q05	2Q05	3Q05	4Q05	2005	1Q06	2Q06	3Q06	4Q06	2006	1Q07	2Q07	3Q07	4Q07	2007
Demand (mb/d)																
North America	25.37	25.61	25.33	25.61	25.58	25.53	25.15	25.09	25.47	25.39	25.28	25.71	25.38	25.95	26.04	25.77
Europe	15.47	15.62	15.17	15.57	15.70	15.52	15.81	15.08	15.49	15.57	15.49	15.15	15.02	15.60	15.81	15.40
Pacific	8.49	9.45	8.06	8.07	8.79	8.59	9.30	7.87	7.90	8.76	8.46	8.88	7.85	8.01	8.91	8.41
Total OECD	49.33	50.68	48.56	49.25	50.07	49.64	50.26	48.04	48.87	49.72	49.22	49.73	48.25	49.56	50.76	49.58
FSU	3.76	3.82	3.71	3.79	3.89	3.80	3.91	3.73	3.97	4.30	3.98	3.77	3.61	4.08	4.44	3.97
Europe	0.70	0.78	0.73	0.68	0.73	0.73	0.82	0.76	0.71	0.77	0.76	0.84	0.78	0.73	0.78	0.78
China	6.42	6.68	6.50	6.70	6.89	6.69	6.96	7.29	7.17	7.20	7.16	7.27	7.72	7.63	7.74	7.59
Other Asia	8.58	8.93	8.98	8.49	8.61	8.75	8.90	8.91	8.61	8.85	8.82	9.14	9.19	8.95	9.18	9.11
Latin America	4.98	4.96	5.13	5.25	5.15	5.12	5.15	5.29	5.40	5.38	5.31	5.32	5.46	5.60	5.54	5.48
Middle East	5.73	5.87	5.96	6.18	5.96	5.99	6.16	6.21	6.47	6.27	6.28	6.41	6.53	6.77	6.51	6.56
Africa	2.78	3.02	3.00	2.88	2.91	2.95	2.98	2.98	2.87	2.95	2.94	3.09	3.05	2.98	3.09	3.05
Total Non-OECD	32.95	34.07	34.01	33.96	34.15	34.05	34.88	35.18	35.21	35.71	35.25	35.85	36.35	36.74	37.28	36.56
World	82.28	84.75	82.57	83.21	84.22	83.69	85.14	83.22	84.08	85.43	84.47	85.58	84.60	86.29	88.04	86.13
of which:																
US50	*20.73*	*20.84*	*20.65*	*20.92*	*20.79*	*20.80*	*20.49*	*20.60*	*20.86*	*20.73*	*20.67*	*20.88*	*20.79*	*21.26*	*21.22*	*21.04*
Euro4	*8.25*	*8.25*	*7.95*	*8.26*	*8.21*	*8.17*	*8.45*	*7.90*	*8.11*	*8.15*	*8.15*	*7.84*	*7.75*	*8.14*	*8.24*	*7.99*
Japan	*5.29*	*6.00*	*4.94*	*5.03*	*5.46*	*5.35*	*5.96*	*4.78*	*4.81*	*5.35*	*5.22*	*5.45*	*4.65*	*4.84*	*5.42*	*5.09*
Korea	*2.16*	*2.40*	*2.07*	*2.01*	*2.23*	*2.18*	*2.28*	*2.03*	*2.02*	*2.30*	*2.16*	*2.34*	*2.12*	*2.07*	*2.35*	*2.22*
Mexico	*2.00*	*2.04*	*2.11*	*2.06*	*2.10*	*2.08*	*2.08*	*2.02*	*1.99*	*2.03*	*2.03*	*2.08*	*2.05*	*2.06*	*2.11*	*2.08*
Canada	*2.30*	*2.36*	*2.24*	*2.28*	*2.33*	*2.30*	*2.21*	*2.14*	*2.27*	*2.26*	*2.22*	*2.36*	*2.19*	*2.28*	*2.33*	*2.29*
Brazil	*2.15*	*2.12*	*2.18*	*2.25*	*2.21*	*2.19*	*2.18*	*2.21*	*2.28*	*2.30*	*2.24*	*2.25*	*2.27*	*2.36*	*2.35*	*2.31*
India	*2.57*	*2.71*	*2.58*	*2.46*	*2.55*	*2.57*	*2.71*	*2.67*	*2.48*	*2.70*	*2.64*	*2.88*	*2.79*	*2.54*	*2.79*	*2.75*
Annual Change (% per annum)																
North America	3.5	1.4	1.0	0.7	-0.5	0.6	-1.8	-0.9	-0.6	-0.7	-1.0	2.2	1.1	1.9	2.6	1.9
Europe	0.3	0.8	0.9	0.7	-1.1	0.3	1.2	-0.6	-0.5	-0.9	-0.2	-4.2	-0.4	0.7	1.6	-0.6
Pacific	-1.6	2.3	2.3	-0.5	0.7	1.2	-1.6	-2.4	-2.1	-0.3	-1.6	-4.5	-0.2	1.4	1.6	-0.5
Total OECD	1.5	1.4	1.2	0.5	-0.5	0.6	-0.8	-1.1	-0.8	-0.7	-0.8	-1.1	0.4	1.4	2.1	0.7
FSU	4.7	8.6	-0.3	-0.1	-2.7	1.2	2.4	0.6	4.8	10.5	4.6	-3.7	-3.3	2.7	3.3	-0.1
Europe	1.2	5.1	5.1	5.1	5.1	5.1	4.3	4.3	4.3	4.3	4.3	3.1	3.0	2.8	2.4	2.8
China	15.8	6.4	-0.4	6.4	4.5	4.2	4.2	12.1	7.1	4.6	6.9	4.5	5.9	6.4	7.5	6.1
Other Asia	6.1	4.6	3.5	1.1	-1.4	1.9	-0.2	-0.7	1.5	2.7	0.8	2.7	3.1	3.9	3.7	3.4
Latin America	6.2	3.0	2.9	3.1	2.6	2.9	3.7	3.2	2.9	4.4	3.6	3.3	3.3	3.6	3.0	3.3
Middle East	6.6	4.2	4.6	4.6	4.8	4.6	4.8	4.2	4.7	5.3	4.8	4.1	5.2	4.5	3.8	4.4
Africa	3.9	9.1	7.6	5.3	3.4	6.3	-1.3	-0.8	-0.1	1.1	-0.3	3.6	2.4	3.9	4.8	3.7
Total Non-OECD	7.5	5.5	2.8	3.4	1.8	3.3	2.4	3.4	3.7	4.6	3.5	2.8	3.3	4.3	4.4	3.7
World	3.8	3.0	1.8	1.6	0.4	1.7	0.5	0.8	1.0	1.4	0.9	0.5	1.7	2.6	3.0	2.0
Annual Change (mb/d)																
North America	0.85	0.35	0.26	0.17	-0.13	0.16	-0.46	-0.23	-0.14	-0.19	-0.26	0.55	0.28	0.48	0.65	0.49
Europe	0.04	0.13	0.14	0.12	-0.18	0.05	0.19	-0.10	-0.07	-0.13	-0.03	-0.66	-0.06	0.10	0.25	-0.09
Pacific	-0.14	0.21	0.18	-0.04	0.06	0.10	-0.15	-0.19	-0.17	-0.03	-0.13	-0.42	-0.02	0.11	0.14	-0.04
Total OECD	0.75	0.69	0.58	0.24	-0.25	0.31	-0.42	-0.52	-0.39	-0.35	-0.42	-0.53	0.21	0.69	1.04	0.36
FSU	0.17	0.30	-0.01	0.00	-0.11	0.05	0.09	0.02	0.18	0.41	0.18	-0.15	-0.12	0.11	0.14	0.00
Europe	0.01	0.04	0.04	0.03	0.04	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02
China	0.88	0.40	-0.03	0.40	0.30	0.27	0.28	0.79	0.47	0.32	0.46	0.31	0.43	0.46	0.54	0.44
Other Asia	0.49	0.39	0.30	0.10	-0.12	0.17	-0.02	-0.06	0.13	0.24	0.07	0.24	0.27	0.34	0.33	0.30
Latin America	0.29	0.14	0.14	0.16	0.13	0.14	0.19	0.16	0.15	0.23	0.18	0.17	0.17	0.19	0.16	0.18
Middle East	0.35	0.24	0.26	0.27	0.27	0.26	0.28	0.25	0.29	0.31	0.29	0.26	0.32	0.29	0.24	0.28
Africa	0.10	0.25	0.21	0.14	0.10	0.18	-0.04	-0.03	0.00	0.03	-0.01	0.11	0.07	0.11	0.14	0.11
Total Non-OECD	2.30	1.77	0.92	1.10	0.60	1.10	0.81	1.17	1.25	1.56	1.20	0.96	1.17	1.53	1.57	1.31
World	3.05	2.46	1.49	1.34	0.35	1.41	0.39	0.65	0.86	1.21	0.78	0.43	1.38	2.22	2.60	1.67
Revisions to Oil Demand from Last Month's Report (mb/d)																
North America	-	-	-	-	-	-	-	-	-	-	-	-0.15	-0.02	0.03	0.03	-0.03
Europe	-	-	-	-	-	-	-0.01	-0.00	-0.01	-0.00	-0.00	0.01	-0.08	0.06	0.06	0.01
Pacific	-	-	-	-	-	-	-	0.00	0.00	0.00	0.00	0.02	0.06	0.03	0.02	0.03
Total OECD	-	-	-	-	-	-	-0.01	-0.00	-0.01	0.00	-0.00	-0.12	-0.04	0.11	0.11	0.02
FSU	-	-	-	-	-	-	-	-	-	-	-	0.02	-0.02	0.01	0.01	0.00
Europe	0.00	0.02	0.02	0.02	0.03	0.02	0.04	0.04	0.04	0.05	0.04	0.05	0.05	0.05	0.05	0.05
China	-	-	-	-	-	-	-	-	-	-	-	-0.09	-0.02	0.01	0.02	-0.02
Other Asia	-0.00	0.13	0.15	-0.09	0.07	0.06	0.08	0.06	0.07	0.15	0.09	0.15	0.19	0.17	0.16	0.17
Latin America	0.01	0.01	0.01	0.03	0.03	0.02	0.07	0.07	0.08	0.08	0.07	0.13	0.12	0.12	0.12	0.12
Middle East	-0.02	-0.02	-0.02	-0.00	0.01	-0.01	0.01	0.02	0.01	0.01	0.01	0.02	0.01	0.01	0.02	0.02
Africa	-0.02	0.05	0.06	0.06	0.06	0.06	0.07	0.04	0.03	-0.00	0.04	0.08	0.06	0.05	0.06	0.06
Total Non-OECD	-0.03	0.20	0.22	0.01	0.19	0.16	0.27	0.22	0.24	0.29	0.25	0.36	0.39	0.42	0.43	0.40
World	-0.03	0.20	0.22	0.01	0.19	0.16	0.27	0.22	0.23	0.29	0.25	0.24	0.34	0.54	0.54	0.42
Revisions to Oil Demand Growth from Last Month's Report (mb/d)																
World	-0.02	0.24	0.24	0.03	0.21	0.18	0.07	-0.01	0.22	0.10	0.10	-0.02	0.13	0.31	0.25	0.17

Table 3
WORLD OIL PRODUCTION
(million barrels per day)

	2005	2006	2007	4Q06	1Q07	2Q07	3Q07	4Q07	Mar 07	Apr 07	May 07
OPEC											
Crude Oil											
Saudi Arabia	9.06	8.93		8.60	8.34				8.27	8.33	8.33
Iran	3.88	3.89		3.88	3.88				4.03	3.97	3.90
Iraq	1.81	1.90		1.85	1.89				2.00	2.10	2.00
UAE	2.46	2.62		2.60	2.57				2.56	2.56	2.59
Kuwait	2.13	2.21		2.20	2.16				2.15	2.12	2.07
Neutral Zone	0.58	0.58		0.57	0.55				0.55	0.55	0.55
Qatar	0.77	0.82		0.81	0.80				0.78	0.80	0.80
Angola[b]					1.53				1.56	1.59	1.56
Nigeria	2.40	2.24		2.26	2.22				2.15	2.25	2.01
Libya	1.64	1.71		1.74	1.69				1.69	1.69	1.71
Algeria	1.34	1.35		1.34	1.33				1.33	1.34	1.36
Venezuela	2.71	2.56		2.50	2.44				2.39	2.37	2.37
Indonesia	0.94	0.89		0.86	0.85				0.85	0.84	0.85
Total Crude Oil	29.74	29.69		29.22	30.24				30.30	30.49	30.07
Total NGLs[1]	4.50	4.63	4.86	4.66	4.76	4.80	4.83	5.03	4.76	4.80	4.80
Total OPEC	34.24	34.32		33.87	35.01				35.06	35.29	34.86
OPEC incl. Angola[6]	35.48	35.73		35.31	35.01				35.06	35.29	34.86
NON-OPEC[2]											
OECD											
North America	14.14	14.25	14.27	14.30	14.36	14.20	14.18	14.32	14.51	14.40	14.18
United States	7.32	7.37	7.40	7.47	7.44	7.47	7.33	7.36	7.52	7.45	7.49
Mexico	3.76	3.68	3.51	3.50	3.57	3.56	3.48	3.43	3.60	3.60	3.55
Canada	3.06	3.19	3.36	3.32	3.35	3.17	3.38	3.53	3.39	3.35	3.14
Europe	5.61	5.20	5.12	5.20	5.24	5.04	4.98	5.21	5.15	5.18	5.15
UK	1.84	1.66	1.72	1.66	1.76	1.73	1.63	1.77	1.73	1.66	1.76
Norway	2.97	2.78	2.64	2.76	2.72	2.55	2.58	2.68	2.67	2.75	2.63
Others	0.80	0.76	0.76	0.77	0.76	0.76	0.77	0.76	0.76	0.76	0.76
Pacific	0.59	0.58	0.65	0.63	0.59	0.63	0.67	0.70	0.53	0.60	0.64
Australia	0.54	0.53	0.58	0.58	0.53	0.57	0.60	0.60	0.47	0.54	0.59
Others	0.05	0.05	0.07	0.05	0.06	0.06	0.08	0.09	0.06	0.06	0.06
Total OECD	20.34	20.03	20.03	20.12	20.19	19.87	19.84	20.23	20.19	20.17	19.98
NON-OECD											
Former USSR	11.64	12.10	12.59	12.37	12.55	12.54	12.52	12.75	12.59	12.47	12.55
Russia	9.48	9.69	9.95	9.80	9.91	9.88	9.99	10.00	9.93	9.84	9.85
Others	2.16	2.40	2.64	2.57	2.63	2.67	2.53	2.75	2.66	2.63	2.70
Asia	6.28	6.39	6.46	6.38	6.46	6.44	6.45	6.48	6.40	6.46	6.44
China	3.62	3.67	3.74	3.64	3.75	3.73	3.73	3.75	3.69	3.74	3.72
Malaysia	0.74	0.75	0.73	0.78	0.74	0.72	0.73	0.75	0.74	0.72	0.73
India	0.78	0.79	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Others	1.14	1.17	1.16	1.15	1.15	1.17	1.16	1.16	1.16	1.18	1.17
Europe	0.16	0.15	0.13	0.14	0.14	0.14	0.13	0.13	0.14	0.14	0.14
Latin America	4.29	4.40	4.47	4.42	4.39	4.42	4.48	4.59	4.38	4.38	4.43
Brazil	1.99	2.10	2.24	2.15	2.15	2.18	2.26	2.39	2.16	2.13	2.20
Argentina	0.78	0.77	0.76	0.77	0.77	0.77	0.76	0.76	0.77	0.77	0.77
Colombia	0.53	0.53	0.52	0.53	0.52	0.52	0.52	0.52	0.52	0.52	0.52
Ecuador	0.53	0.54	0.50	0.53	0.50	0.51	0.50	0.48	0.48	0.51	0.51
Others	0.46	0.46	0.45	0.45	0.45	0.44	0.45	0.44	0.44	0.45	0.44
Middle East[3]	1.86	1.73	1.64	1.69	1.66	1.64	1.64	1.61	1.65	1.65	1.64
Oman	0.79	0.74	0.70	0.73	0.72	0.71	0.70	0.69	0.72	0.71	0.71
Syria	0.46	0.42	0.38	0.40	0.39	0.38	0.38	0.37	0.39	0.39	0.38
Yemen	0.42	0.38	0.37	0.36	0.36	0.36	0.38	0.37	0.36	0.36	0.36
Africa	3.70	3.91	2.64	4.06	2.62	2.63	2.66	2.67	2.63	2.66	2.62
Egypt	0.70	0.67	0.66	0.66	0.66	0.66	0.66	0.65	0.66	0.66	0.66
Angola[b]	1.23	1.37		1.38							
Gabon	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23
Others	1.54	1.63	1.75	1.78	1.73	1.74	1.77	1.78	1.73	1.77	1.73
Total Non-OECD	27.92	28.67	27.94	29.05	27.82	27.81	27.88	28.23	27.79	27.76	27.81
Processing Gains[4]	1.86	1.90	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92
Other Biofuels[5]	0.12	0.21	0.36	0.21	0.36	0.36	0.36	0.36	0.36	0.36	0.36
TOTAL NON-OPEC	50.25	50.80	50.25	51.30	50.29	49.96	50.00	50.74	50.26	50.21	50.07
Non-OPEC excl. Angola[6]	49.00	49.39	50.25	49.87	50.29	49.96	50.00	50.74	50.26	50.21	50.07
TOTAL SUPPLY	84.48	85.12		85.18	85.30				85.32	85.50	84.94

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 will reportedly cease from January 2007.
2 Comprises crude oil, condensates, NGLs and oil from non-conventional sources. No allowance is made in the non-OPEC forecast for exceptional events, which have, at certain times historically, reduced non-OPEC supply by 300-400 kbd on an annual basis.
3 Includes small amounts of production from Israel, Jordan and Bahrain.
4 Net volumetric gains and losses in refining (excludes net gain/loss in FSU, China and non-OECD Europe) and marine transportation losses.
5 Comprises Fuel Ethanol and Biodiesel supply from outside Brazil and US.
6 With effect from OMR of 13 February 2007, Angolan production will be reclassified within OPEC and excluded from the Non-OPEC total, for the period January 2007 onwards. Secondary aggregates allow comparison with previous year totals by including Angola within OPEC retroactively

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			
	Dec2006	Jan2007	Feb2007	Mar2007	Apr2007*	Apr2004	Apr2005	Apr2006	2Q2006	3Q2006	4Q2006	1Q2007
North America												
Crude	437.3	455.8	446.7	458.2	467.5	425.0	455.9	475.5	-0.05	0.02	-0.25	0.23
Motor Gasoline	242.6	256.5	242.7	230.6	220.4	233.4	246.8	236.3	-0.01	0.03	-0.02	-0.13
Middle Distillate	217.3	210.5	191.7	190.8	190.4	167.5	176.7	190.1	0.06	0.26	-0.08	-0.29
Residual Fuel Oil	50.3	50.9	44.7	47.7	48.7	45.8	45.7	49.2	0.02	0.01	-0.03	-0.03
Total Products[3]	694.5	688.1	636.6	630.8	626.6	596.1	643.3	632.9	0.38	0.60	-0.33	-0.71
Total[4]	1275.8	1283.3	1216.8	1228.1	1236.0	1157.3	1238.9	1251.0	0.40	0.77	-0.77	-0.53
Europe												
Crude	339.8	309.8	330.6	325.7	339.6	336.4	340.8	334.5	-0.06	-0.10	0.11	-0.16
Motor Gasoline	113.7	118.2	116.4	109.6	105.4	111.5	115.5	105.3	-0.12	0.04	0.11	-0.05
Middle Distillate	277.7	279.5	282.4	268.9	278.9	223.9	250.4	263.4	0.12	0.17	0.05	-0.10
Residual Fuel Oil	76.7	83.3	75.4	73.9	73.8	72.1	70.8	76.0	0.06	-0.03	0.04	-0.03
Total Products[3]	573.0	586.4	579.3	555.8	561.4	506.3	540.5	545.9	0.06	0.25	0.16	-0.19
Total[4]	980.2	967.2	982.0	952.1	970.8	916.9	955.4	955.6	-0.04	0.16	0.21	-0.31
Pacific												
Crude	173.3	171.0	169.9	172.4	160.1	171.9	158.5	171.1	0.11	-0.07	-0.02	-0.01
Motor Gasoline	22.2	26.3	25.2	24.5	23.6	26.9	25.3	24.9	0.00	-0.01	-0.01	0.03
Middle Distillate	73.4	81.3	71.3	60.9	59.5	56.6	55.1	57.9	0.10	0.18	-0.14	-0.14
Residual Fuel Oil	22.6	21.7	22.3	22.1	22.2	22.7	21.5	22.4	0.04	0.01	-0.01	-0.01
Total Products[3]	183.4	191.5	179.4	171.1	166.1	164.5	164.1	170.6	0.16	0.30	-0.30	-0.14
Total[4]	428.2	436.7	422.7	416.5	399.8	405.4	391.8	413.0	0.30	0.25	-0.33	-0.13
Total OECD												
Crude	950.3	936.6	947.3	956.3	967.2	933.2	955.2	981.1	0.00	-0.15	-0.16	0.07
Motor Gasoline	378.4	401.0	384.3	364.6	349.4	371.8	387.7	366.6	-0.13	0.06	0.08	-0.15
Middle Distillate	568.4	571.2	545.3	520.7	528.8	447.9	482.1	511.4	0.28	0.61	-0.16	-0.53
Residual Fuel Oil	149.6	155.9	142.4	143.7	144.7	140.5	138.1	147.6	0.13	-0.01	0.00	-0.07
Total Products[3]	1450.9	1466.0	1395.2	1357.7	1354.1	1267.0	1347.9	1349.4	0.60	1.15	-0.46	-1.04
Total[4]	2684.2	2687.2	2621.5	2596.7	2606.6	2479.6	2586.1	2619.5	0.66	1.19	-0.89	-0.97

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			
	Dec2006	Jan2007	Feb2007	Mar2007	Apr2007*	Apr2004	Apr2005	Apr2006	2Q2006	3Q2006	4Q2006	1Q2007
North America												
Crude	688.6	688.6	688.6	688.6	689.4	658.2	691.9	687.9	0.02	0.00	0.01	0.00
Products	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	0.00	0.00	0.00	0.00
Europe												
Crude	175.0	174.4	173.7	174.3	174.3	157.4	164.4	171.0	0.04	0.02	-0.01	-0.01
Products	235.6	235.9	237.7	239.9	239.9	208.6	208.4	233.4	0.00	-0.01	0.00	0.05
Pacific												
Crude	384.5	384.6	385.8	385.1	385.1	386.8	384.5	380.5	0.00	0.01	0.03	0.01
Products	11.8	11.8	11.8	11.8	11.8	11.0	11.0	11.4	0.00	0.00	0.00	0.00
Total OECD												
Crude	1248.1	1247.6	1248.1	1248.0	1248.8	1202.3	1240.8	1239.4	0.06	0.03	0.04	0.00
Products	249.4	249.8	251.6	253.7	253.7	221.6	221.4	246.8	0.01	-0.01	0.00	0.05
Total[4]	1498.5	1498.3	1500.7	1502.7	1503.5	1424.9	1463.2	1487.2	0.07	0.02	0.04	0.05

* 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 2006		End June 2006		End September 2006		End December 2006		End March 2007 [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	169.7	79	169.7	75	179.2	79	179.2	76	177.3	-
Mexico	41.7	21	42.1	21	47.0	23	42.3	20	40.5	-
United States[4]	1693.7	83	1731.6	83	1788.3	87	1722.9	83	1678.8	-
Total[4]	1927.2	77	1965.5	77	2036.5	80	1966.4	77	1918.7	76
Pacific										
Australia	35.5	39	38.9	42	35.3	37	34.8	37	34.2	-
Japan	620.1	130	627.2	130	649.1	121	630.8	116	615.3	-
Korea	137.4	68	155.4	77	160.5	70	151.8	65	156.1	-
New Zealand	7.3	47	6.8	46	7.0	44	7.1	44	7.7	-
Total	800.3	102	828.3	105	851.9	97	824.6	93	813.3	104
Europe[5]										
Austria	19.0	63	19.7	62	19.0	64	21.9	76	22.8	-
Belgium	27.3	52	30.4	57	30.5	56	30.2	52	28.4	-
Czech Republic	19.6	90	19.5	88	19.3	94	19.7	101	20.2	-
Denmark	19.1	99	20.4	110	21.2	113	18.5	97	18.3	-
Finland	26.7	120	30.5	136	26.8	116	26.6	112	29.5	-
France	196.2	104	188.7	97	187.5	96	192.4	97	178.5	-
Germany	280.3	109	283.1	103	281.9	105	282.8	117	290.5	-
Greece	35.4	92	34.9	86	38.2	80	39.2	86	35.6	-
Hungary	20.8	127	17.6	110	17.4	100	16.5	111	18.0	-
Ireland	13.1	72	12.6	71	13.9	70	12.5	62	13.1	-
Italy	131.5	81	126.0	76	134.1	79	133.1	80	133.9	-
Luxembourg	0.9	15	1.0	17	0.9	15	1.0	16	0.9	-
Netherlands	120.5	121	123.1	119	121.1	119	118.7	121	117.1	-
Norway	21.9	91	21.8	90	29.4	123	35.1	152	20.2	-
Poland	35.5	74	35.7	67	37.3	71	41.5	91	43.9	-
Portugal	24.7	83	24.7	81	23.8	83	24.0	77	23.7	-
Slovak Republic	8.3	102	7.7	89	7.4	94	7.5	100	7.0	-
Spain	130.2	84	129.2	82	133.9	85	134.8	83	129.3	-
Sweden	38.4	109	39.6	113	38.6	102	33.8	92	35.5	-
Switzerland	37.7	144	39.3	141	38.9	133	38.1	148	38.7	-
Turkey	51.6	79	51.6	78	53.7	83	55.5	88	56.5	-
United Kingdom	97.4	54	99.0	56	97.4	54	108.5	61	105.8	-
Total	1356.1	90	1356.0	88	1372.1	88	1391.7	92	1367.3	91
Total OECD	4083.6	85	4149.9	85	4260.6	86	4182.7	84	4099.4	85
DAYS OF IEA Net Imports[6]	-	114	-	116	-	118	-	122	-	120

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 2007 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. 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]*		
1Q2004	3888	1423	2465	81	30	51
2Q2004	3974	1429	2545	81	29	52
3Q2004	4016	1435	2581	80	29	51
4Q2004	3997	1450	2547	79	29	50
1Q2005	4005	1462	2543	82	30	52
2Q2005	4116	1494	2623	84	30	53
3Q2005	4132	1494	2638	83	30	53
4Q2005	4083	1487	2597	81	30	52
1Q2006	4084	1487	2597	85	31	54
2Q2006	4150	1493	2657	85	31	54
3Q2006	4261	1495	2766	86	30	56
4Q2006	4183	1499	2684	84	30	54
1Q2007	4099	1503	2597	85	31	54

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 1Q2007 (when latest forecasts are used).

Table 6

IEA Member Country Destinations of Selected Crude Streams[1]

(million barrels per day)

	2004	2005	2006	2Q06	3Q06	4Q06	1Q07	Jan 07	Feb 07	Mar 07	Year Earlier Mar 06	Year Earlier change
Saudi Light & Extra Light												
North America	0.55	0.46	0.60	0.68	0.62	0.60	0.68	0.71	0.69	0.65	0.55	0.11
Europe	1.03	0.90	0.78	0.80	0.72	0.78	0.72	0.77	0.60	0.78	0.81	-0.03
Pacific	1.24	1.31	1.32	1.33	1.29	1.28	1.17	1.07	1.21	1.22	1.47	-0.25
Saudi Medium												
North America	0.80	0.81	0.64	0.61	0.68	0.61	0.47	0.65	0.47	0.30	0.66	-0.35
Europe	0.11	0.16	0.14	0.14	0.14	0.10	0.05	0.08	0.03	0.04	0.16	-0.12
Pacific	0.23	0.26	0.35	0.35	0.35	0.32	0.34	0.28	0.38	0.37	0.37	0.00
Saudi Heavy												
North America	0.22	0.17	0.21	0.21	0.21	0.19	0.15	0.20	0.21	0.04	0.20	-0.17
Europe	0.23	0.23	0.18	0.22	0.21	0.14	0.09	0.12	0.09	0.07	0.16	-0.09
Pacific	0.15	0.25	0.23	0.20	0.22	0.23	0.20	0.20	0.22	0.18	0.22	-0.04
Iraqi Basrah Light[2]												
North America	0.71	0.60	0.52	0.60	0.60	0.46	0.53	0.59	0.41	0.59	0.48	0.10
Europe	0.21	0.23	0.32	0.29	0.40	0.36	0.29	0.29	0.39	0.21	0.23	-0.02
Pacific	0.12	0.06	0.08	0.09	0.10	0.07	0.11	0.06	0.15	0.13	0.12	0.01
Iraqi Kirkuk												
North America	0.02	-	0.00	-	0.01	-	-	-	-	-	-	-
Europe	0.08	0.05	0.01	-	0.04	0.01	0.04	0.03	0.11	-	-	-
Pacific	-	-	-	-	-	-	-	-	-	-	-	-
Iranian Light												
North America	-	-	-	-	-	-	-	-	-	-	-	-
Europe	0.24	0.20	0.26	0.27	0.31	0.27	0.31	0.34	0.39	0.20	0.26	-0.06
Pacific	0.16	0.15	0.13	0.12	0.10	0.11	0.12	0.11	0.09	0.17	0.20	-0.03
Iranian Heavy[3]												
North America	-	-	-	-	-	-	-	-	-	-	-	-
Europe	0.57	0.63	0.58	0.57	0.67	0.60	0.55	0.58	0.58	0.51	0.39	0.11
Pacific	0.65	0.62	0.56	0.48	0.51	0.61	0.66	0.59	0.60	0.78	0.69	0.08
Venezuelan Light & Medium												
North America	0.67	0.82	0.66	0.68	0.62	0.57	0.64	0.69	0.62	0.60	0.78	-0.17
Europe	0.01	0.04	0.11	0.15	0.08	0.11	0.09	0.08	0.14	0.07	0.17	-0.10
Pacific	-	-	-	-	-	-	-	-	-	-	-	-
Venezuelan 22 API and heavier												
North America	0.88	0.72	0.72	0.72	0.74	0.72	0.54	0.48	0.71	0.44	0.68	-0.24
Europe	0.05	0.06	0.06	0.05	0.06	0.05	0.06	0.07	0.06	0.06	0.08	-0.02
Pacific	-	-	-	-	-	-	-	-	-	-	-	-
Mexican Maya												
North America	1.36	1.27	1.24	1.24	1.30	1.15	1.19	1.19	1.15	1.22	1.32	-0.10
Europe	0.16	0.17	0.16	0.20	0.16	0.15	0.14	0.14	0.14	0.14	0.13	0.01
Pacific	0.00	-	-	-	-	-	-	-	-	-	-	-
Mexican Isthmus												
North America	-	0.03	0.04	0.03	0.01	0.02	0.02	0.03	0.03	-	0.10	-
Europe	0.01	0.03	0.01	0.00	0.00	0.01	0.01	-	-	0.02	0.00	0.01
Pacific	0.00	-	-	-	-	-	-	-	-	-	-	-
Russian Urals												
North America	0.12	0.13	0.09	0.16	0.16	0.05	0.11	0.08	0.08	0.18	-	-
Europe	1.86	1.77	1.68	1.83	1.66	1.54	1.85	1.75	2.10	1.72	1.85	-0.14
Pacific	0.01	0.00	0.00	-	0.01	-	0.00	-	0.01	-	-	-
Nigerian Light[4]												
North America	0.80	0.90	0.79	0.79	0.78	0.72	0.97	1.04	1.01	0.86	0.77	0.08
Europe	0.28	0.35	0.33	0.27	0.39	0.37	0.23	0.27	0.26	0.18	0.26	-0.08
Pacific	0.11	0.05	0.04	0.03	0.02	0.03	0.02	0.03	0.03	-	0.03	-
Nigerian Medium												
North America	0.23	0.17	0.17	0.17	0.16	0.17	0.24	0.16	0.22	0.35	0.16	0.18
Europe	0.04	0.07	0.10	0.08	0.08	0.14	0.06	0.02	0.11	0.06	0.07	-0.01
Pacific	0.01	0.01	0.00	-	0.01	-	0.02	-	0.03	0.03	-	-

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, Poland and the Slovak Republic.
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)

	2004	2005	2006	2Q2006	3Q2006	4Q2006	1Q2007	Jan-07	Feb-07	Mar-07	Year Earlier Mar-06	Year Earlier % change
Crude Oil												
North America	8431	8457	8159	8265	8686	7937	8006	8252	7194	8494	7207	18%
Europe	9478	9792	9771	9747	10158	9770	9449	9505	10100	8803	9099	-3%
Pacific	6659	6801	6813	6508	6680	6674	6953	6968	6955	6936	7614	-9%
Total OECD	24569	25050	24743	24520	25524	24381	24408	24726	24249	24233	24496	-1%
LPG												
North America	24	18	14	8	12	28	16	17	10	19	7	183%
Europe	225	248	249	243	210	263	275	260	309	260	297	-13%
Pacific	541	527	579	576	595	497	565	606	448	630	642	-2%
Total OECD	790	793	842	826	818	788	856	883	767	909	946	-4%
Naphtha												
North America	99	115	62	49	64	96	33	44	40	14	32	-57%
Europe	282	273	312	277	304	314	321	307	349	309	321	-4%
Pacific	769	746	754	731	810	783	838	794	909	817	634	29%
Total OECD	1150	1133	1128	1057	1178	1193	1191	1145	1298	1140	987	15%
Gasoline[3]												
North America	794	1034	1147	1365	1166	944	918	919	841	986	1138	-13%
Europe	137	165	154	143	122	157	246	213	236	287	127	126%
Pacific	105	102	97	135	74	96	87	73	88	102	102	0%
Total OECD	1035	1301	1398	1643	1363	1197	1251	1205	1165	1375	1367	1%
Jet & Kerosene												
North America	101	173	152	191	203	130	176	132	187	209	96	118%
Europe	293	375	375	382	398	407	333	277	371	355	305	16%
Pacific	77	66	71	39	43	76	55	86	39	37	80	-53%
Total OECD	471	614	598	612	644	612	563	495	597	601	481	25%
Gasoil/Diesel												
North America	123	143	170	173	181	116	130	126	101	161	110	46%
Europe	751	845	960	926	901	937	899	926	963	814	1047	-22%
Pacific	74	79	81	100	65	81	75	76	80	69	64	7%
Total OECD	947	1067	1211	1199	1147	1134	1104	1128	1145	1043	1222	-15%
Heavy Fuel Oil												
North America	453	527	340	320	309	254	362	353	275	449	340	32%
Europe	397	491	478	474	419	502	501	412	566	532	503	6%
Pacific	76	85	92	105	76	65	91	83	108	84	118	-29%
Total OECD	926	1102	910	899	804	821	954	848	949	1065	961	11%
Other Products												
North America	872	1024	1106	1162	1298	991	1035	1074	911	1107	751	47%
Europe	676	781	897	855	922	915	865	1069	774	742	947	-22%
Pacific	256	248	243	209	224	267	258	247	205	316	273	16%
Total OECD	1805	2052	2246	2225	2444	2173	2157	2390	1889	2166	1970	10%
Total Products												
North America	2466	3034	2991	3268	3233	2559	2668	2664	2366	2946	2474	19%
Europe	2759	3177	3425	3299	3277	3495	3440	3466	3567	3299	3548	-7%
Pacific	1898	1852	1918	1894	1888	1865	1968	1965	1877	2054	1913	7%
Total OECD	7123	8063	8334	8461	8398	7919	8077	8095	7810	8299	7934	5%
Total Oil												
North America	10897	11490	11150	11533	11919	10496	10674	10916	9560	11439	10258	12%
Europe	12237	12969	13196	13046	13435	13265	12889	12971	13668	12103	12647	-4%
Pacific	8558	8654	8731	8402	8568	8539	8921	8934	8831	8990	9526	-6%
Total OECD	31692	33113	33077	32981	33922	32300	32484	32820	32059	32532	32431	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

OIL MARKET REPORT CONTACTS

Editorial Enquiries

Editor — Lawrence Eagles
Head, Oil Industry & Markets Division
(+33) 0*1 40 57 65 90
e-mail: lawrence.eagles@iea.org

Demand — Eduardo Lopez
(+33) 0*1 40 57 65 93
e-mail: eduardo.lopez@iea.org

Supply — David Fyfe
(+33) 0*1 40 57 65 94
e-mail: david.fyfe@iea.org

Prices/OECD Stocks — Julius Walker
(+33) 0*1 40 57 65 22
e-mail: julius.walker@iea.org

Refinery Activity — David Martin
(+33) 0*1 40 57 65 95
e-mail: david.martin@iea.org

OECD Stocks/Trade — Toril Ekeland Bosoni
(+33) 0*1 40 57 66 36
e-mail: toril.bosoni@iea.org

Statistics/Freight/Trade — James Ryder
(+33) 0*1 40 57 66 18
e-mail: james.ryder@iea.org

End-User Prices/Statistical Support — Miklos Bankuti
(+33) 0*1 40 57 67 76
e-mail: miklos.bankuti @iea.org

Editorial Assistant — Anne Mayne
(+33) 0*1 40 57 65 96
e-mail: anne.mayne@iea.org

Fax: *(+33) 0*1 40 57 65 99/40 57 65 09*

* 0 only within France

Media Enquiries

Press Office — Gwyn Darling
(+33) 0*1 40 57 65 54
e-mail: ieapressoffice@iea.org

Subscription and Delivery Enquiries

Oil Market Report Subscriptions (Attn: Ms. Sandra Coleman)
International Energy Agency
BP 586-75726 PARIS Cedex 15, France

Tel. +33 (0) 1 40 57 65 57
Fax. +33 (0) 1 40 57 65 59
e-mail: sandra.coleman@iea.org

Users' Guide to the IEA Oil Market Report

Readers are referred to the *Users' Guide*, published in conjunction with the *Annual Statistical Supplement* (current issue dated 11 August 2006), for information on the data sources, definitions, technical terms and general approach used in preparing the Report. 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 (© 2007 Platts - a division of McGraw-Hill Inc.).

INTERNATIONAL ENERGY AGENCY/AGENCE INTERNATIONALE DE L'ENERGIE

OIL MARKET REPORT

A MONTHLY OIL MARKET AND STOCKS ASSESSMENT

www.oilmarketreport.org

INTERNATIONAL ENERGY AGENCY

AGENCE INTERNATIONALE DE L'ENERGIE

13 July 2007

HIGHLIGHTS

- **Brent futures surged over $77/bbl by mid-July** on tight fundamentals, increased geopolitical tension and indications of strong fund buying. Falling refining margins suggest that market tightness is shifting from product to crude markets.

- **Global oil product demand** is expected to rise by a robust 2.5% to 88.2 mb/d in 2008, largely due to a weather-related rebound in the OECD and strong demand in non-OECD countries. This represents an increase of 2.2 mb/d, from the slightly revised (-0.1 mb/d) 2007 level of 86.0 mb/d.

- **Non-OPEC supply in 2008** is forecast to reach 51.0 mb/d (+1.0 mb/d), plus 5.5 mb/d of OPEC gas liquids (+0.7 mb/d). Key growth drivers include the FSU, Latin America and global biofuels. OECD Europe and North America continue to see production decline, despite strong growth from the US Gulf of Mexico and Canadian oil sands.

- **OPEC capacity rises by 1 mb/d in 2008 to average 35.4 mb/d**, with the implication that spare capacity will post a modest rise. In reality, the spare capacity comparison will depend to a large extent on OPEC production levels both in the second half of 2007 and next year.

- **Global refinery crude throughput increased by 0.2 mb/d in May** to 72.7 mb/d and is 0.4 mb/d higher year-on-year**.** Crude throughput is forecast to increase rapidly to an August peak of 75.2 mb/d, on the back of higher runs in the OECD and the Middle East.

- **Preliminary end-June OECD stock data show an increase of 7.8 mb,** as increases in the US and Japan offset a sharp downturn in Europe. Together with an average 21.2 mb rise in stocks in April and May, this implies a second-quarter stock build around 550 kb/d and forward demand cover at end-June unchanged at 53.6 days.

Next Issue: 10 August 2007

CONTENTS

2008: STARTING TO IMPROVE FLEXIBILITY

The *Medium-Term Oil Market Report (MTOMR)*, released earlier this week, looked at the evolving pressures on the oil market for the next five years. Understandably, the focus was on the tail end of the forecast, but it is easy to forget that the market will not evolve in a uniform way. This month's *Oil Market Report (OMR)*, with the roll over of our short-term forecasts to 2008 provides an opportunity to examine some of the possible near-term shifts in fundamentals and what implications they may have for the market.

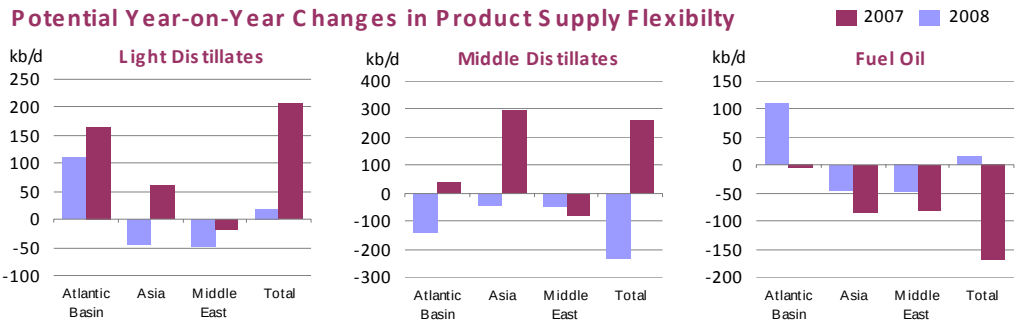
Projected world demand continues the 2007 rebound, rising 2.2 mb/d in 2008, but it will likely be outpaced by rising supplies of biofuels (+350 kb/d), other non-OPEC (650 kb/d), OPEC NGL (0.7 mb/d) and rising OPEC capacity (1 mb/d). Demand growth of 2.5% is driven by non-OECD countries, but OECD growth of 1.6% is inflated by the assumption of a return to normal weather conditions. The net result is that the '*call on OPEC crude and stock change*' rises to a range of 31.7-32.3 mb/d.

There are, as always, uncertainties in terms of weather, project slippage and GDP growth – in particular, it is difficult to estimate the projected rise in OPEC spare capacity in 2008. This report does not forecast OPEC production and the estimate is therefore based on the assumption that OPEC will follow the growth in the *call* in the second half of 2007 and beyond. A greater issue is the assumption that the 550 kb/d of Nigerian capacity shut in over the past 18 months remains offline. At present, this seems a reasonable assumption, but security issues in the Niger Delta could shift effective capacities in either direction. Similarly, there is the question of the impact of the recent nationalisation of ConocoPhillips and Exxon Mobil's operating shares by Venezuela, but here it would seem that the risk to capacity is more on the downside.

As we stressed in the *MTOMR*, OPEC spare capacity is only one factor among many in determining the oil price. In 2004, OPEC spare capacity was more than 2 mb/d below current levels, but oil prices were $30/barrel lower. A large part of that $30, we have argued, has been caused by product supply tightness. Over the next five years, investment in upgrading capacity should increase the flexibility of the refining industry to meet demand-side and crude-quality challenges - and may therefore reduce some of these upside price pressures. This increased flexibility starts to kick in from 2008, with modest improvements in global light/middle distillate supply capabilities and the greater potential to upgrade more fuel oil.

In 2008, improved Atlantic Basin light distillate supply potential is more due to the structural decline in European gasoline demand than refinery-level changes, but the introduction of additional hydrocrackers in Asia should improve middle distillate supply potential and in turn could tighten local fuel oil balances. For fuel oil, strong demand from bunkering and industrial/power generation needs in the Middle East, removes almost the entire traditional regional surplus in 2008. However, it will not be until 2009 and beyond that installed Middle East upgrading capacity rises to the point where local refiners will have to choose between producing more gasoline or meeting rapidly growing regional demand for fuel oil.

Overall, both in terms of spare upstream capacity and refinery flexibility, 2008 looks at this stage to be slightly more comfortable than 2006 and 2007. While product specification differences will continue to restrict product trade, there is the potential for light and middle distillate supply tightness to ease slightly and for the fuel oil market to partially rebalance. However, these are just two components of the myriad influences (including weather, OPEC policy, geopolitics and GDP growth) that will determine the direction of oil prices in the coming months.



DEMAND

Summary

- **Global oil product demand** has been slightly revised downwards to 86.0 mb/d in 2007 (+1.8% over 2006), given minor baseline revisions to OECD figures. In 2008, world demand is expected to rise by a robust 2.5% to 88.2 mb/d, in part due to a weather-related rebound in OECD demand. In absolute terms, this is equivalent to an increase of 2.2 mb/d.

Global Oil Demand (2006-2008)

(million barrels per day)

	1Q06	2Q06	3Q06	4Q06	2006	1Q07	2Q07	3Q07	4Q07	2007	1Q08	2Q08	3Q08	4Q08	2008
Africa	3.0	3.0	2.9	2.9	2.9	3.1	3.1	3.0	3.1	3.1	3.2	3.2	3.1	3.2	3.2
Americas	30.3	30.3	30.8	30.7	30.6	31.0	30.8	31.5	31.5	31.2	31.6	31.4	31.9	31.9	31.7
Asia/Pacific	25.2	24.1	23.7	24.8	24.4	25.3	24.7	24.6	25.8	25.1	26.4	25.5	25.3	26.6	26.0
Europe	16.7	15.9	16.3	16.4	16.3	16.0	15.7	16.4	16.6	16.2	16.6	16.1	16.5	16.8	16.5
FSU	3.9	3.7	4.0	4.3	4.0	3.8	3.6	4.0	4.5	4.0	3.9	3.7	4.1	4.5	4.1
Middle East	6.2	6.2	6.5	6.3	6.3	6.4	6.5	6.8	6.5	6.5	6.7	6.8	7.1	6.8	6.8
World	**85.2**	**83.2**	**84.1**	**85.5**	**84.5**	**85.5**	**84.4**	**86.2**	**88.0**	**86.0**	**88.5**	**86.6**	**87.9**	**89.8**	**88.2**
Annual Chg (%)	0.4	0.7	1.0	1.4	0.9	0.4	1.4	2.5	3.0	1.8	3.4	2.6	2.1	2.1	2.5
Annual Chg (mb/d)	0.3	0.6	0.9	1.2	0.8	0.3	1.1	2.1	2.5	1.5	2.9	2.2	1.8	1.8	2.2
Changes from last month's report (mb/d)	0.06	0.02	0.03	0.03	0.03	-0.03	-0.22	-0.12	-0.03	-0.10					

- **OECD oil product demand** has been marginally adjusted downwards, following the review of historical North American and European figures (2005 and 2006) and the reappraisal of 2007 data for several countries. Regional demand is now seen increasing by 0.5% in 2007, to 49.5 mb/d. In 2008, growth is expected to jump to +1.6%, on the premise of normal winter conditions during the first quarter and the continued strength in North American demand, which is poised to rise by 1.4%. Overall, with 50.3 mb/d, the OECD should contribute to roughly a third (0.8 mb/d) of global demand growth in 2008.

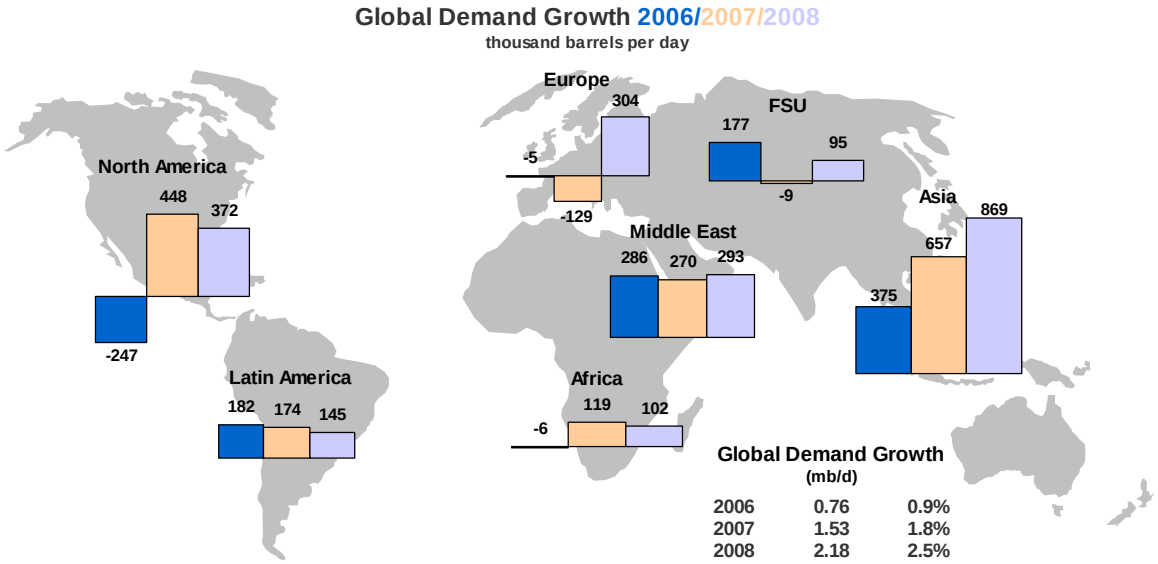
- **The risks to the 2008 OECD demand forecast lie predominantly on the downside.** These include: 1) economic uncertainties (particularly in the US); 2) weather vagaries (another mild winter); 3) interfuel substitution (in favour of natural gas); and 4) price risks (if the recent spike persists).

- **Non-OECD oil product demand** has remained largely unchanged at 36.6 mb/d for 2007 (+3.6% over 2006). Buoyant growth is forecast to persist in 2008, bringing non-OECD demand to 37.9 mb/d (+3.8% over the previous year). Growth is expected to be driven by robust demand in China (+6.1% year-on-year) and the Middle East (+4.5%). As such, the growth in non-OECD consumption will account for almost two-thirds of global incremental demand.

- **The 2008 non-OECD prognosis faces mainly upside risks.** A key uncertainty is whether Chinese and Middle-Eastern economic growth will actually be stronger than expected. Given that China and the Middle East together currently account for about 45% of worldwide incremental demand, this could have significant implications. Another – offsetting – risk is whether current prices subsidies (most notably in the Middle East) will remain in place.

OECD

According to preliminary data, total OECD inland deliveries decreased by 0.9% in May, compared with the same month in 2006. This fall was related to European weakness (-3.7% year-on-year), which exceeded the modest gains observed in both North America and the Pacific (+0.3% each).



Europe's subdued demand was partly seasonal – May traditionally signals the transition between winter heating and summer driving – but also very much weather-related. Indeed, the warm temperatures that prevailed in May across much of Europe reduced OECD heating oil demand, with deliveries falling by 16.8% on an annual basis. Similarly, OECD fuel oil demand contracted by 5.3% as a result of weak electricity demand and some degree of interfuel substitution (natural gas). Only demand for motor fuels (gasoline and diesel) registered increases in the OECD as a whole. Gasoline demand rose by 0.4% year-on-year in May, supported by North America and the Pacific, while diesel deliveries gained 3.3%, sustained essentially by North America.

OECD Demand based on Adjusted Preliminary Submissions - May 2007

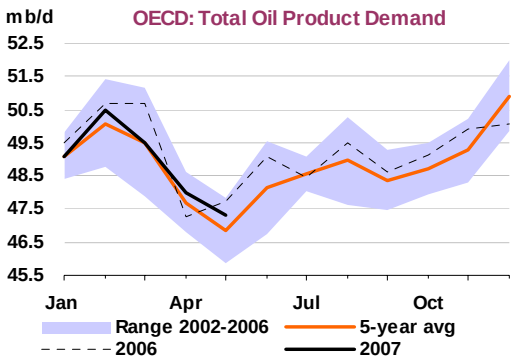
(million barrels per day)

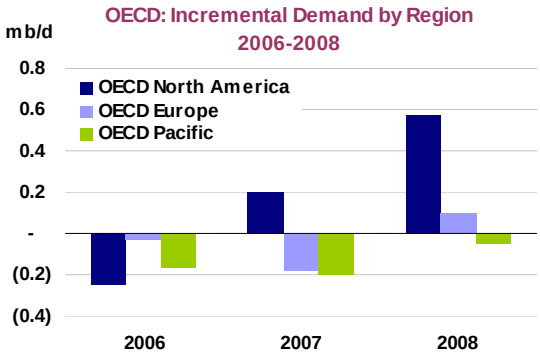
	Gasoline		Jet/Kerosene		Diesel		Other Gasoil		RFO		Other		Total Products	
	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa
OECD North America*	**10.92**	**1.0**	**1.92**	**-0.7**	**3.79**	**6.8**	**1.23**	**-19.2**	**1.14**	**3.3**	**6.16**	**0.12**	**25.15**	**0.3**
US50	9.39	0.7	1.68	-1.5	3.25	7.6	0.74	-29.2	0.61	1.1	4.81	-1.3	20.48	-0.4
Canada	0.70	-0.4	0.13	1.8	0.20	3.4	0.34	2.9	0.11	-2.9	0.73	10.2	2.20	3.7
Mexico	0.75	6.0	0.07	13.0	0.28	1.7	0.12	1.7	0.32	10.9	0.55	0.6	2.09	4.6
OECD Europe	**2.55**	**-2.2**	**1.28**	**-0.2**	**4.18**	**0.7**	**1.44**	**-16.5**	**1.60**	**-9.3**	**3.58**	**-2.1**	**14.62**	**-3.7**
Germany	0.52	-3.8	0.20	3.7	0.60	-4.6	0.28	-44.4	0.15	-18.2	0.55	-11.9	2.29	-14.0
United Kingdom	0.43	1.2	0.35	-9.3	0.44	3.4	0.13	27.8	0.09	0.0	0.40	-7.2	1.84	-1.0
France	0.23	-7.2	0.15	-0.1	0.64	-1.4	0.18	-20.5	0.07	-22.1	0.45	-1.5	1.71	-5.5
Italy	0.29	-6.6	0.08	-3.1	0.57	1.7	0.07	-8.6	0.20	-25.3	0.38	0.9	1.59	-5.0
Spain	0.16	-4.5	0.12	5.3	0.54	3.7	0.18	2.2	0.21	-2.5	0.34	-1.6	1.54	0.7
OECD Pacific	**1.52**	**0.9**	**0.67**	**1.8**	**1.22**	**2.0**	**0.44**	**-10.4**	**0.85**	**-7.7**	**2.83**	**3.6**	**7.52**	**0.3**
Japan	0.98	-0.2	0.42	1.0	0.56	3.6	0.33	-13.5	0.44	-17.7	1.66	7.3	4.38	-0.2
Korea	0.17	7.1	0.12	2.8	0.31	0.6	0.11	1.5	0.39	6.5	0.96	-2.0	2.07	1.1
Australia	0.32	0.9	0.10	4.0	0.30	2.6	0.00	8.7	0.02	-6.5	0.19	3.0	0.92	2.0
OECD Total	**14.98**	**0.4**	**3.86**	**-0.1**	**9.19**	**3.3**	**3.11**	**-16.8**	**3.59**	**-5.3**	**12.56**	**0.2**	**47.30**	**-0.9**

* Including US territories

Overall, we expect OECD demand to reach 49.5 mb/d in 2007 (+0.5%) and 50.3 mb/d in 2008 (+1.6%). The relatively strong 2008 growth forecast is based on the premise that the 2007-08 winter will be normal. Under this assumption, all OECD areas should post strong year-on-year gains (+1.4% in North America, +1.8% in Europe and +1.7% in the Pacific). It is worth noting, though, that North America, which accounts for over half of OECD demand, will remain the primary engine of growth in the OECD.

Finally, it must be emphasised that this forecast could err on the downside, for several reasons: 1) economic uncertainties (should activity in the US be less robust than is currently expected given housing woes, coupled with other worldwide financial imbalances); 2) weather vagaries (if the





forthcoming winter proves as mild as the previous one, demand for heating and fuel oil could plummet); 3) interfuel substitution in favour of natural gas if it stays competitive compared with fuel oil (notably in North America and Europe); and 4) price risks (we assume a nominal oil price equating to around $68.6/bbl basis Brent in 2008, based on a futures curve of late May 2007, but we may reassess this assumption if the current price shifts are sustained).

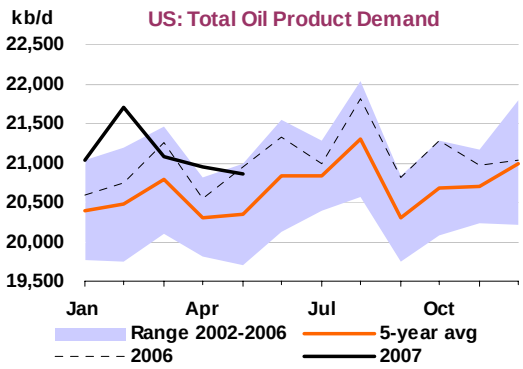
Total OECD Demand by Product
(million barrels per day)

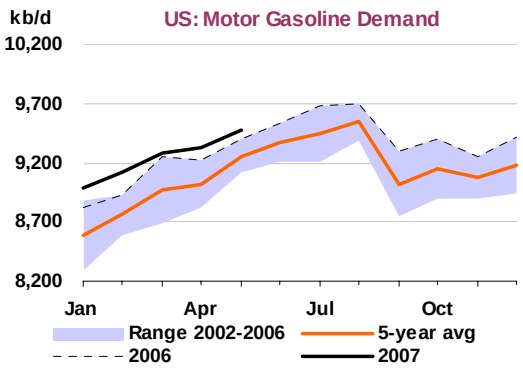
	2006	2007	3Q06	4Q06	1Q07	2Q07	Feb 07	Mar 07	Apr 07*	Latest month vs. Mar 07	Latest month vs. Apr 06
LPG & Ethane	4.70	4.75	4.41	4.76	5.21	4.55	5.44	4.89	4.77	-0.12	0.31
Naphtha	3.15	3.26	3.13	3.35	3.39	3.08	3.42	3.28	3.13	-0.15	0.24
Motor Gasoline	14.86	14.97	15.26	14.92	14.46	15.00	14.52	14.82	14.85	0.02	0.13
Jet & Kerosene	4.17	4.19	3.98	4.27	4.35	3.94	4.46	4.20	4.01	-0.20	-0.08
Gas/Diesel Oil	13.24	13.33	12.91	13.59	13.56	12.61	13.93	13.65	12.63	-1.02	0.17
Residual Fuel Oil	4.03	3.94	3.82	3.84	4.20	3.73	4.37	4.06	3.83	-0.23	-0.01
Other Products	5.04	5.04	5.34	4.98	4.50	5.16	4.34	4.60	4.79	0.19	-0.01
Total Products	**49.21**	**49.48**	**48.85**	**49.71**	**49.66**	**48.07**	**50.48**	**49.50**	**48.00**	**-1.50**	**0.76**

* Latest official OECD submissions (MOS)

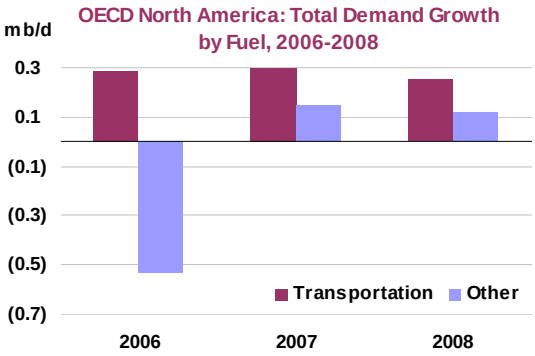
North America

According to adjusted preliminary data for May, inland deliveries in the continental **United States** – a proxy of demand – shrank by 0.4% versus the same month in the previous year. The main factor of weakness was heating oil; deliveries plummeted by 29.2% year-on-year. This is partly related to seasonal factors (more benign temperatures) but also to reclassification issues (low-sulphur distillates are now classified as 'diesel'). As such, diesel reported a year-on-year gain of 7.6%. Nonetheless, this category relates mostly to on-road diesel (including ULSD), which suggests that economic conditions are still resilient. Gasoline demand, meanwhile, rose by only 0.7%, very much in line with seasonal patterns – and despite high retail prices.





Looking ahead, US50 demand is poised to increase by 1.5% to 21.3 mb/d in 2008. This outlook is based on expectations of relatively strong economic growth (+2.8%, according to the IMF) and on the assumption that temperatures will be normal over the next winter, as opposed to the previous one. The first factor should support buoyant demand for transportation fuels, with gasoline rising by 1.0% (in line with previous years) and diesel by 2.8%. The second factor should sustain a rebound of heating oil (+7.2%). But, as noted before, there are several downside risks to this prognosis.



Coupled with strong **Mexican** demand, overall consumption in OECD North America is seen growing by 1.4% to 26.1 mb/d in 2008. Mexico's consumption is forecast to expand by 2.5% to 2.1 mb/d, mostly boosted by strong demand for transportation fuels (+4.8% for gasoline and +3.7% for diesel). **Canadian** demand, meanwhile, is expected to remain essentially unchanged at 2.3 mb/d

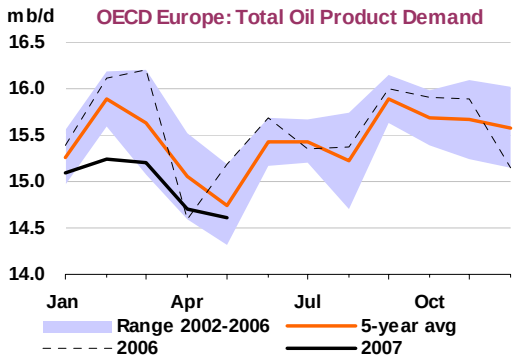
OECD North America Demand by Product
(million barrels per day)

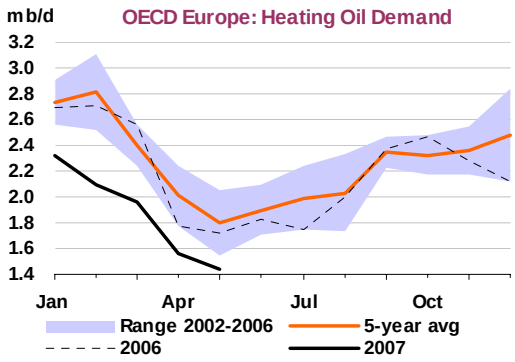
	2006	2007	3Q06	4Q06	1Q07	2Q07	Feb 07	Mar 07	Apr 07*	Latest month vs. Mar 07	Latest month vs. Apr 06
LPG & Ethane	2.82	2.90	2.67	2.90	3.25	2.71	3.47	2.95	2.85	-0.11	0.13
Naphtha	0.44	0.46	0.46	0.49	0.42	0.46	0.41	0.39	0.42	0.03	0.04
Motor Gasoline	10.72	10.87	10.99	10.77	10.53	10.88	10.52	10.71	10.69	-0.01	0.11
Jet & Kerosene	1.91	1.92	1.94	1.89	1.88	1.92	1.91	1.84	1.90	0.06	-0.04
Gas/Diesel Oil	5.18	5.31	5.07	5.28	5.49	5.03	5.72	5.45	5.13	-0.32	0.17
Residual Fuel Oil	1.20	1.22	1.16	1.09	1.38	1.15	1.46	1.36	1.21	-0.16	0.04
Other Products	2.97	3.02	3.14	2.92	2.73	3.14	2.66	2.82	2.93	0.11	0.12
Total Products	**25.25**	**25.70**	**25.43**	**25.35**	**25.66**	**25.29**	**26.15**	**25.53**	**25.13**	**-0.40**	**0.58**

* Latest official OECD submissions (MOS)

Europe

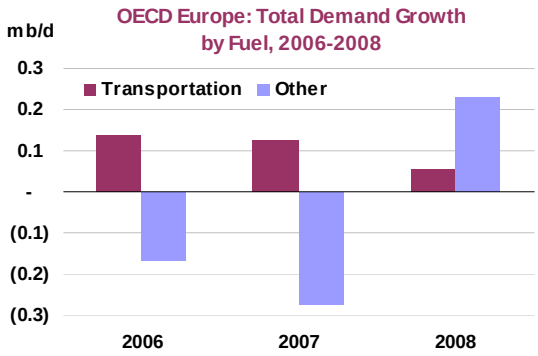
Preliminary figures show that total oil product demand in Europe plummeted by 3.7% in May on a yearly basis. As noted earlier, demand usually falls in April-May as the winter ends and then rebounds with the summer. However, the warm temperatures that prevailed in May amplified the seasonal fall (heating-degree days or HDDs were some 9% lower than the 10-year average). As a result, heating oil deliveries contracted by 16.5% on an annual basis, while fuel oil demand shrank by 9.3% since electricity consumption remained subdued.





Turning to the main markets, oil product demand shrank by 14.0% year-on-year in **Germany**, where heating oil deliveries plummeted by 44.4%, according to preliminary delivery data. In fact, German household stocks remained filled at 53% of capacity in May – unchanged versus April, when stocks usually fall to their lowest level before starting to build up again. Similarly, **French** demand was dragged

down (–5.5%) by weak heating oil deliveries (-20.5%). In **Italy**, meanwhile, total demand fell by 5.0%, given weak fuel oil deliveries (-25.3%) – although, as we have hitherto noted, fuel oil demand could rebound if the summer drought is more severe than expected.



With regards to 2008, demand in OECD Europe is poised to surge by 1.8% to 15.7 mb/d. As with North America, this forecast assumes relatively strong economic growth, notably in the main countries (France, Germany, Italy, Spain and the UK, which together account for almost two-thirds of European consumption) and normal winter weather. More interestingly, growth in 2008 will be mostly driven by heating fuels, as opposed to transportation fuels. Nevertheless, this prediction faces similar downside risks as in North America.

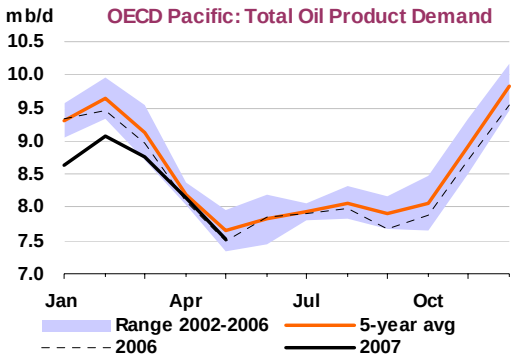
OECD Europe Demand by Product
(million barrels per day)

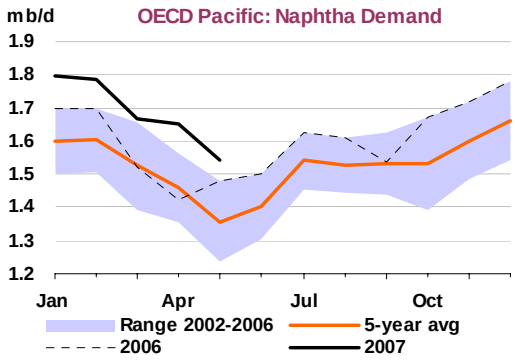
	2006	2007	3Q06	4Q06	1Q07	2Q07	Feb 07	Mar 07	Apr 07*	Latest month vs. Mar 07	Latest month vs. Apr 06
LPG & Ethane	0.96	0.93	0.84	0.91	0.99	0.91	0.97	0.99	0.93	-0.05	0.04
Naphtha	1.11	1.12	1.07	1.14	1.22	1.06	1.22	1.22	1.06	-0.16	-0.02
Motor Gasoline	2.57	2.52	2.66	2.55	2.40	2.59	2.41	2.53	2.60	0.07	0.01
Jet & Kerosene	1.28	1.31	1.37	1.28	1.23	1.29	1.25	1.20	1.24	0.04	0.05
Gas/Diesel Oil	6.24	6.21	6.15	6.43	6.23	5.80	6.26	6.27	5.70	-0.57	0.05
Residual Fuel Oil	1.85	1.77	1.77	1.78	1.83	1.69	1.93	1.72	1.73	0.00	0.02
Other Products	1.55	1.54	1.71	1.56	1.28	1.60	1.20	1.27	1.45	0.18	-0.03
Total Products	**15.56**	**15.41**	**15.57**	**15.64**	**15.18**	**14.94**	**15.25**	**15.20**	**14.71**	**-0.49**	**0.12**

* Latest official OECD submissions (MOS)

Pacific

According to preliminary data, oil product demand in the Pacific rose by a modest 0.3% in May, compared with the same month in the previous year. Demand growth was essentially supported by LPG (+9.2%), naphtha (+4.4%), and jet/kerosene (+1.8%). In terms of individual countries, **Japanese** oil product demand contracted by 0.2% on an annual basis, for the seventh month in a row. This was due to relatively mild temperatures and to structural weakness in transportation fuels, notably gasoline (diesel deliveries rose by 3.6%).

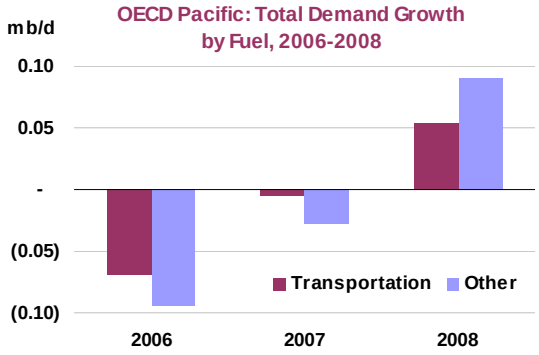




In **Korea**, meanwhile, total oil product deliveries rose by 1.1% year-on-year, boosted by strong naphtha (+8.0%) and gasoline deliveries (+7.1%). Moreover, the country implemented a long-awaited move to raise its domestic diesel fuel tax by 7.5% starting 1 July, in order to bring diesel prices in line with gasoline prices (the fuel tax accounts for about 60% of the end-user price). The diesel fuel tax rose to about 57 cents per litre (from a previous level of 53 cents); the gasoline fuel tax, by contrast, remains unchanged at 80 cents per litre. As such, retail prices in Korea currently stand at approximately $1.83 per litre of

gasoline and some $1.39 per litre of diesel. Nevertheless, there may be a modest price impact on domestic diesel demand.

Turning to 2008, demand in OECD Pacific is poised to race ahead by 1.7% to 8.5 mb/d. As with the rest of the OECD, this prognosis assumes sustained economic growth (particularly in China, the recipient of most of the region's exports) and normal winter temperatures. The former should support transportation fuel and naphtha growth, notably in Australia and Korea, where economic activity remains solid, while the latter should boost heating fuels (notably kerosene in Japan).



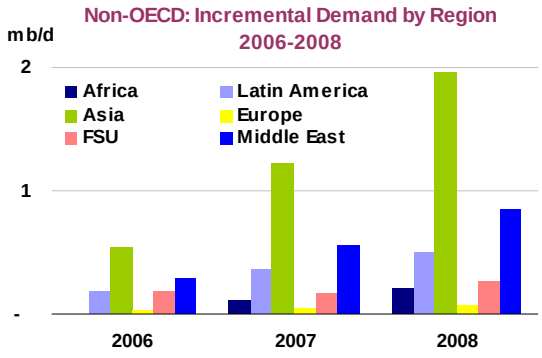
OECD Pacific Demand by Product
(million barrels per day)

	2006	2007	3Q06	4Q06	1Q07	2Q07	Feb 07	Mar 07	Apr 07*	Latest month vs. Mar 07	Latest month vs. Apr 06
LPG & Ethane	0.92	0.92	0.91	0.94	0.97	0.93	1.00	0.95	0.99	0.04	0.14
Naphtha	1.60	1.68	1.59	1.72	1.75	1.56	1.78	1.67	1.65	-0.02	0.23
Motor Gasoline	1.57	1.58	1.61	1.60	1.53	1.53	1.59	1.58	1.55	-0.03	0.00
Jet & Kerosene	0.98	0.96	0.67	1.10	1.25	0.74	1.30	1.16	0.87	-0.29	-0.08
Gas/Diesel Oil	1.83	1.81	1.69	1.88	1.85	1.77	1.95	1.93	1.79	-0.14	-0.06
Residual Fuel Oil	0.98	0.94	0.89	0.97	0.99	0.89	0.98	0.98	0.90	-0.07	-0.08
Other Products	0.52	0.48	0.49	0.50	0.49	0.42	0.48	0.51	0.40	-0.11	-0.10
Total Products	**8.40**	**8.37**	**7.85**	**8.71**	**8.83**	**7.85**	**9.08**	**8.77**	**8.15**	**-0.62**	**0.05**

* Latest official OECD submissions (MOS)

Non-OECD

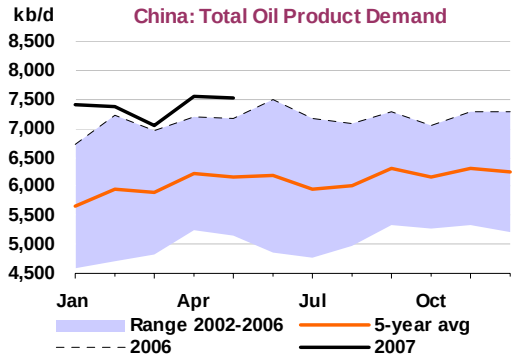
Our forecast of non-OECD oil product demand has remained largely unchanged at 36.6 mb/d in 2007 (+3.6% over 2006). Moreover, we expect that growth will remain buoyant in 2008, bringing non-OECD demand to 37.9 mb/d (+3.8% over 2007). As now, non-OECD consumption growth – almost two-thirds of global incremental demand – will continue to be driven by buoyant demand in China (+6.1% year-on-year) and the Middle East (+4.5%).

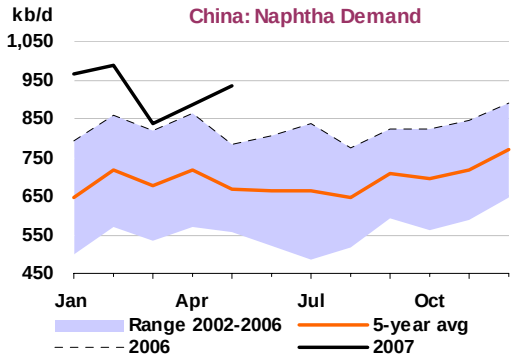


By contrast to the OECD, this forecast could err on the upside. Indeed, given data uncertainties, a big question is whether Chinese and Middle-Eastern economic growth will actually be much stronger than expected. Since China and the Middle East account together for about 39% of non-OECD demand and for 16% of global demand (and for about 45% of worldwide incremental demand), this could have significant implications for the outlook. A counterbalancing risk, though, is whether current price subsidies (most notably in the Middle East) will remain in place – if not, demand growth could be curtailed.

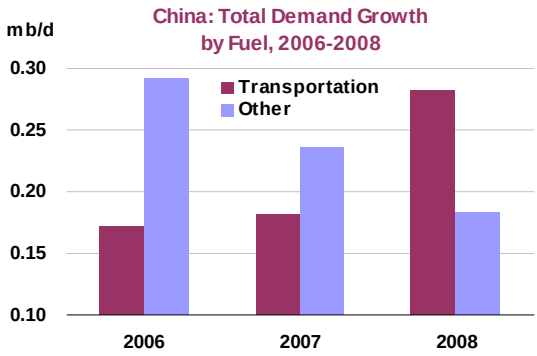
China

Apparent demand in China (defined as refinery output plus net oil product imports, adjusted for fuel oil and direct crude burning, smuggling and stock changes) increased by approximately 4.9% year-on-year in May. Demand growth for naphtha, gasoil and residual fuel oil was particularly strong (+19.3%, +5.3% and 5.2%, respectively), supported by continued petrochemical demand, farming activities and construction. In addition, gasoline and jet/kerosene demand rose by 1.9% and 9.5%, respectively, following the seven-day '1 May' holiday. Coupled with minor revisions to 1Q07 and April estimates, we have adjusted fractionally downwards our short-term growth forecast. Total Chinese oil product demand is expected to increase by 5.8% in 2007, to roughly 7.6 mb/d.





Looking to 2008, Chinese demand is seen rising by 6.1% year-on-year to 8.0 mb/d. This outlook assumes very strong economic growth (+9.5%, according to the IMF), which should foster significant demand growth across virtually all product categories, particularly naphtha (+7.0%), gasoline (+6.8%) and gasoil (+5.7%). However, as noted earlier, there is a significant upside risk to this prognosis, notably much stronger-than expected economic growth – the government has just revised up its GDP growth estimate for 2006 (+11.1% instead of +10.7%); as such, the 2007 and 2008 forecasts may in the end prove too modest. Although trade – the main engine of growth, accounting for almost 40% of GDP – could face protectionist restrictions in several key markets – chiefly the US – there are no indications to date that this may happen in the short term. As such, economic growth could well exceed current forecasts and thus push up oil demand.



China Demand by Product
(thousand barrels per day)

	Demand			Annual Chg (kb/d)		Annual Chg (%)	
	2005	2006	2007	2006	2007	2006	2007
LPG & Ethane	650	633	634	-17	1	-2.6	0.1
Naphtha	707	826	921	119	95	16.8	11.5
Motor Gasoline	1131	1170	1202	39	32	3.4	2.7
Jet & Kerosene	246	280	298	34	19	13.8	6.7
Gas/Diesel Oil	2239	2338	2469	99	131	4.4	5.6
Residual Fuel Oil	778	776	804	-2	28	-0.2	3.6
Other Products	943	1135	1247	192	112	20.3	9.8
Total Products	**6693**	**7157**	**7575**	**464**	**418**	**6.9**	**5.8**

There could be, nonetheless, a dampening factor: retail prices. Indeed, the periodic rumours regarding the liberalisation of gasoline and diesel prices and the implementation of a national fuel tax have resurfaced – allegedly, both could happen next October. Although it is premature to speculate on the effects of such hypothetical moves – which would entail social and political costs – such a significant increase in retail prices of transportation fuels would probably dampen demand.

Has Anything Changed in China's Wholesale Market?

On 1 January 2007 the government formally implemented the so-called 'rules of crude market management' that would, in principle, open China's crude and oil product wholesale market. The move was prompted by the country's obligations upon its ascension to full WTO membership (December 2006). Six months on, however, it remains unclear whether the market has experienced the structural changes that the new measures were supposed to bring about.

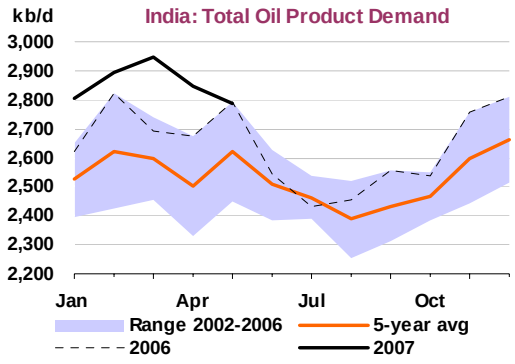
Indeed, although 11 companies have been issued with wholesale licences since January, seven are subsidiaries of three state-owned companies (CNOOC, Sinochem and China National Aviation Fuel), two are joint ventures with another state-owned company (Sinopec) and only two are private companies (one Chinese independent, Rong Li Oil Storage, and one international oil major, ExxonMobil). Moreover, given that 99% of the already existing distribution companies (of which there are 2,514) belong to state-owned entities, it becomes implausible to argue that the wholesale market has undergone a significant transformation towards true competition and away from state control.

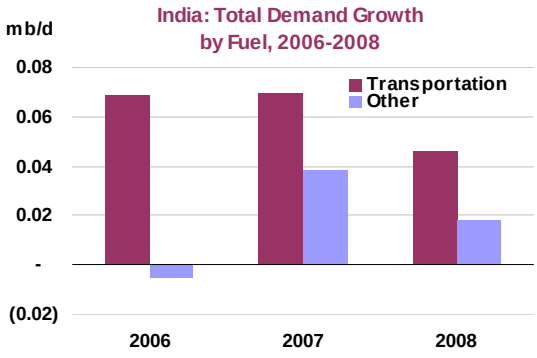
This lack of competition can be traced back to Sinopec and CNPC's wholesale monopoly, which was mandated in 1999. As such, both companies became the only qualified wholesalers, which would in turn supply all other wholesalers and retailers. In theory, a new entrant – assuming it fulfils the high barriers to entry (a minimum amount of registered capital and storage capacity) – could overcome this obstacle by importing oil products by itself. However, all imported products would have to be sold at government-capped prices.

As such, the vast Chinese domestic market remains arguably unprofitable for most actors, with the exception of the largest firms. In fact, there have been reports that some 80 companies are looking for foreign buyers in an attempt to exit the market (some are apparently bundling their assets in order to become more attractive). In the end, the current framework could be seen as a first step towards greater liberalisation, but it may also have the effect of reducing the refining and product supply markets to a few players with strong operational and financial capabilities. That could provide better competition than the current duopoly; however, the real issue for the future is whether retail prices will be freed to fully reflect changes in the world market.

Other Non-OECD

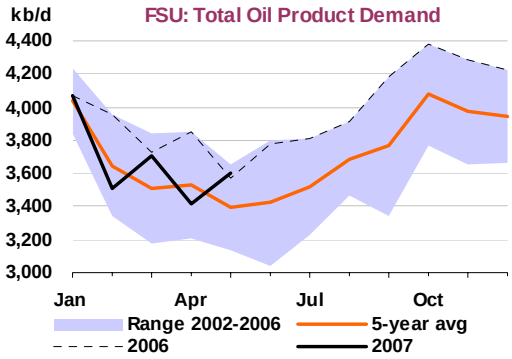
In May, for the first time in nine months, oil product sales in **India** – a proxy of demand – fell by 0.2% year-on-year, dragged down by naphtha and 'other products'. Although transportation fuels posted gains, according to preliminary data, these were limited compared with recent months. Gasoline deliveries rose by 'only' 2.2% (compared with about 10% on average since the beginning of the year), while gasoil/diesel sales increased by 3.6% (compared with the previous four-month average of roughly 7%). Meanwhile, 'other products' (which include bitumen, lubricants, etc.) fell by 13.8% – possibly reflecting strong stock-building in the previous year – in sharp contrast to average monthly growth of roughly 10% since January. More interestingly, naphtha demand fell for the second consecutive month (-5.8%), possibly confirming the greater availability of natural gas and heralding a resumption of naphtha's gradual decline.



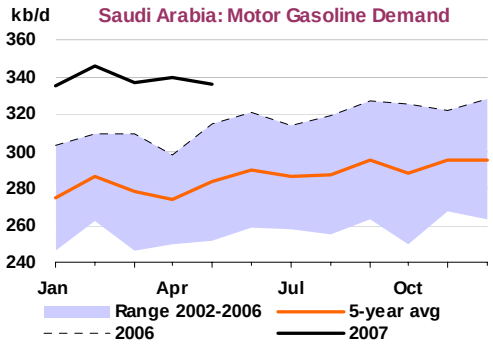


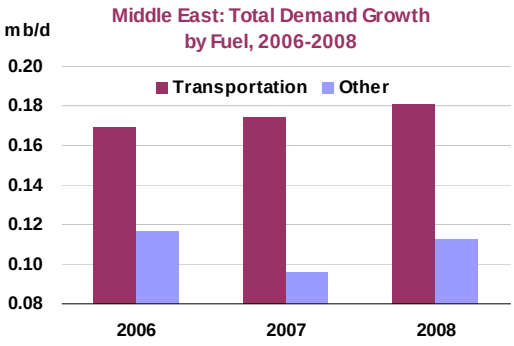
As a consequence of naphtha's structural decline, we expect that India's oil product demand growth will return to its underlying trend in 2008, rising by 2.3% year-on-year to 2.8 mb/d (compared with +4.1% in 2007). Nevertheless, if natural gas shortages were to occur again, naphtha demand could sporadically increase, thus lifting next year's overall demand level.

FSU apparent demand – defined as domestic crude production minus net exports of crude and oil products – remains virtually unchanged from last month's report, since the revisions to supply and trade figures tended to offset each other. In May, the region's net exports continued to peak at close to 9.0 mb/d. Nonetheless, net exports are expected to decline in 3Q07 due to increased duties from 1 June. Overall, FSU demand is expected to average 4.0 mb/d in 2007 (0.2% lower than in 2006) and about 4.1 mb/d in 2008 (+2.4%). This forecast, however, is hampered by the great uncertainty surrounding regional trade data.



Demand in the **Middle East** continues to race ahead, driven by low retail prices, an ongoing economic boom in most countries in the region, and young and growing populations. A vivid illustration is provided by **Saudi Arabia**, where year-on-year oil product demand growth averaged almost 5% in the first four months of this year, largely as a result of buoyant gasoline and gasoil sales (approximately 42% of total demand). Total consumption in the Kingdom is thus expected to reach 2.2 mb/d in 2007 (+4.5% year-on-year) and 2.3 mb/d in 2008 (+5.1%).





A similar pattern is expected to prevail in the region as a whole. In 2008, total Middle-Eastern demand is forecast to rise by 4.5% to 6.8 mb/d, slightly faster than this year (+4.3%). However, along similar lines as in China, this forecast is contingent on several factors that present a varying degree of risk – much stronger than expected economic growth and the potential reduction of retail subsidies. This latter issue is perhaps the most important one in the Middle East, as attested by recent riots in Iran as a result of the implementation of a rationing scheme for gasoline in June (which followed May's 25% price hike).

SUPPLY

Summary

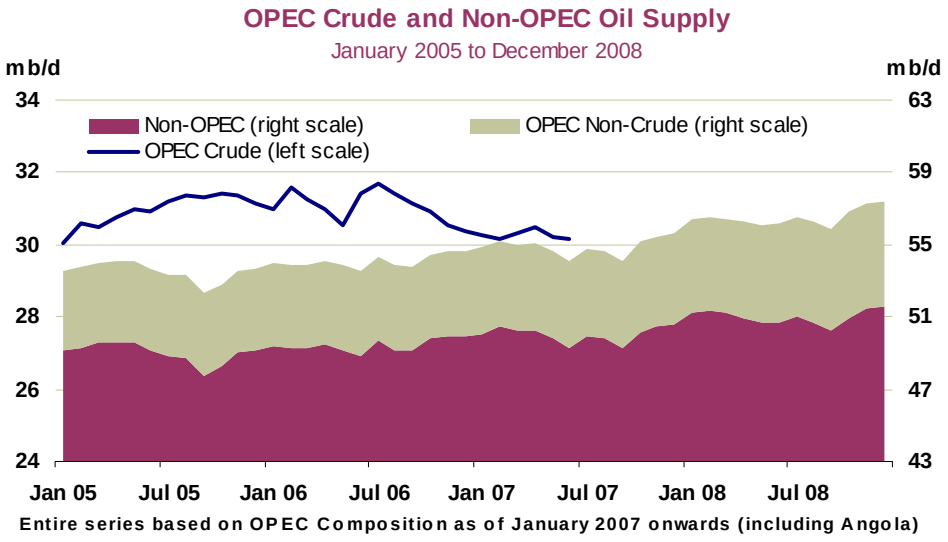
- **World oil supply** in June fell by 550 kb/d to 84.3 mb/d, as maintenance curbed North Sea production and seasonal factors limited North American output. OPEC also saw crude supply down by 45 kb/d on the month. Non-OPEC supply should rebound in July before maintenance again dents August output.

- **Non-OPEC production estimates for 2007** are cut by 220 kb/d versus last month's report, with revisions focused on OECD Europe and North America. The adjustments result entirely from a methodology change. This removes a non-OPEC contingency factor of -0.4 mb/d from the 'adjusted call on OPEC crude and stock change', incorporating it instead in the baseline non-OPEC forecast. Excluding the methodology change, non-OPEC estimates are actually revised up by some 50 kb/d.

- **The non-OPEC forecast roll-out for 2008** shows supply reaching 51.0 mb/d, plus 5.5 mb/d of OPEC gas liquids. Annual growth for both components thus accelerates to +1.0 mb/d and +0.66 mb/d respectively. Saudi Arabia, Qatar and Iran account for the sizeable rise in OPEC NGLs. Key drivers of 2008 non-OPEC growth are the FSU (+430 kb/d), Latin America (+290 kb/d), non-US/Brazilian biofuels (+250 kb/d), Africa (+130 kb/d) and OECD Pacific (+110 kb/d). OECD Europe and North America continue to see production decline, despite strong growth from the US GOM and Canadian oil sands.

- **June OPEC crude supply** fell by 45 kb/d to 30.17 mb/d, as lower Saudi and Iraqi supply countered modest recovery from Nigeria. Nigerian production shut-ins eased to 600 kb/d in early July but sizeable risks remain that may cap Nigerian capacity close to 2.4 mb/d through 2008. Venezuela too faces growing political and regulatory challenges that could undermine capacity. But total OPEC production capacity could rise by 0.6 mb/d to 34.7 mb/d at end-2007, and further to 35.9 mb/d by end-2008. Saudi Arabia's late-2007 Khursaniyah project drives the anticipated capacity expansion.

- **The 'call on OPEC crude and stock change'** for 2007 shows a similar profile to last month, rising by 2.8 mb/d between 2Q07 and 4Q07 and implying a diminishing margin of OPEC spare capacity. The call also rises by some 0.6 mb/d on average in 2008, to a midpoint of 32.0 mb/d, although rising OPEC capacity levels could prevent further tightening in spare capacity.

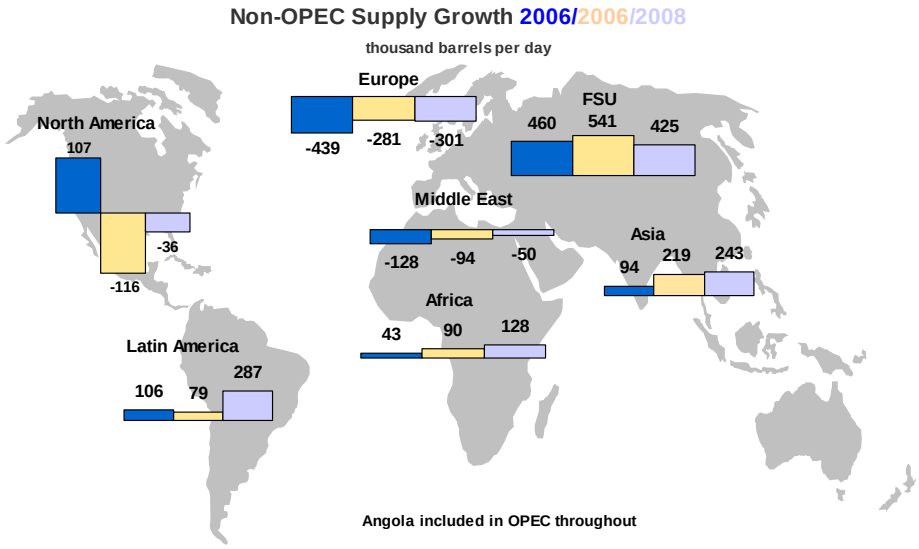


All world oil supply figures for June discussed in this report are IEA estimates. Estimates for OPEC countries, Alaska and Russia are supported by preliminary June supply data.

An abbreviated non-OPEC supply overview this month focuses on the roll out of our forecast to 2008, with discussion of key areas of expansion and decline. However, to avoid duplication, several of the themes underpinning this analysis are elaborated upon in the* MTOMR*, released on 9 July. Readers are advised to consult* MTOMR *for a more detailed discussion of factors affecting supply in 2008 and beyond.

The 2008 Outlook for Non-OPEC Supply

Non-OPEC supply is expected to continue to recover after the levelling off around 49-49.4 mb/d evident in 2005/2006. It reaches 50.0 mb/d in 2007 and 51.0 mb/d in 2008. Total non-OPEC growth is expected to average 600 kb/d this year and 980 kb/d next year. An additional 190 kb/d of growth this year comes from OPEC gas liquids, with an even stronger 660 kb/d increase from that source of supply expected for 2008. Non-OPEC projections have been adjusted downwards to account for a proliferation of unscheduled field outages and new field start-up delays. Nonetheless, as outlined in the recently released edition of the IEA *MTOMR*, the backdrop to the forecast is an impressive list of new field start-ups for the 2007-2009 period which offsets prevailing net decline from baseload non-OPEC production calculated at 4.6% annually.



Total Non-OPEC Supply Growth (kb/d)	
2006	422
2007	603
2008	977

OPEC NGLs (kb/d)	
2006	149
2007	190
2008	657

Growth in non-OPEC supply continues to migrate away from the **mature OECD producing regions.** However, the next few years should see a temporary respite from the sharp declines in OECD production seen during the mid-2004 to mid-2006 period. OECD total production declined on average by 5% year-on-year from mid-2004 to mid-2006, exacerbated by extreme weather, unscheduled pipeline and production facility outages and a lengthening list of new project delays. With cost inflation and shortages of labour, raw materials and equipment likely to persist, so too will delays and disruptions.

The forecast methodology has been adjusted accordingly, notably to incorporate a field 'reliability' factor (see below). Nonetheless, a slowing in total OECD decline has been evident since the middle of last year. Although unlikely to be reversed entirely, we do see more modest rates of total annual OECD production decline closer to 1.5% annually as representative of the likely trend for 2007/2008. And while certain governments in OECD areas have tightened access and fiscal terms in light of higher prices, major development projects are proceeding. Significant new supplies are expected in the next 18 months from the Canadian oil sands, offshore areas like the US Gulf of Mexico, New Zealand and Australia and, to a lesser extent, the North Sea (including the recent 200 kb/d Buzzard start-up in the UK). This is not enough to offset prevailing 4-5% net decline from the mature segment of production, but is a moderating influence nonetheless.

World Oil Supply 2005-2008
(million barrels per day)

	2005	2006	2007	2008	05 vs 04	06 vs 05	07 vs 06	08 vs 07
North America	14.14	14.25	14.13	14.09	-0.44	0.11	-0.12	-0.04
Europe	5.61	5.18	4.92	4.63	-0.47	-0.43	-0.27	-0.29
Pacific	0.59	0.58	0.67	0.78	0.00	-0.01	0.09	0.11
Total OECD	**20.34**	**20.01**	**19.71**	**19.50**	**-0.90**	**-0.33**	**-0.30**	**-0.21**
Former USSR	11.64	12.10	12.64	13.06	0.41	0.46	0.54	0.43
East Europe	0.16	0.15	0.13	0.12	-0.01	-0.01	-0.01	-0.01
China	3.62	3.67	3.82	3.88	0.13	0.06	0.15	0.05
Other Asia	2.66	2.71	2.69	2.77	-0.05	0.05	-0.02	0.07
Latin America	4.29	4.40	4.48	4.76	0.22	0.11	0.08	0.29
Middle East	1.86	1.73	1.64	1.59	-0.07	-0.13	-0.09	-0.05
Africa[1]	2.45	2.50	2.59	2.71	0.03	0.04	0.09	0.13
Total Non-OECD[1]	**26.68**	**27.26**	**27.99**	**28.90**	**0.66**	**0.58**	**0.73**	**0.91**
Processing Gains	1.86	1.90	1.92	1.95	0.03	0.04	0.02	0.03
Other Biofuels[3]	0.12	0.26	0.40	0.66	0.04	0.14	0.15	0.25
Total Non-OPEC[1]	**49.00**	**49.42**	**50.03**	**51.00**	**-0.17**	**0.42**	**0.60**	**0.98**
OPEC Crude	30.97	31.06			1.07	0.10		
OPEC NGL & Non-Conv.	4.52	4.67	4.86	5.51	0.36	0.15	0.19	0.66
Total OPEC[2]	35.48	35.73			1.43	0.25		
Total Supply	**84.49**	**85.15**			**1.26**	**0.67**		

1 Excluding Angola
2 Including Angola
3 Biofuels from Sources outside Brazil and US

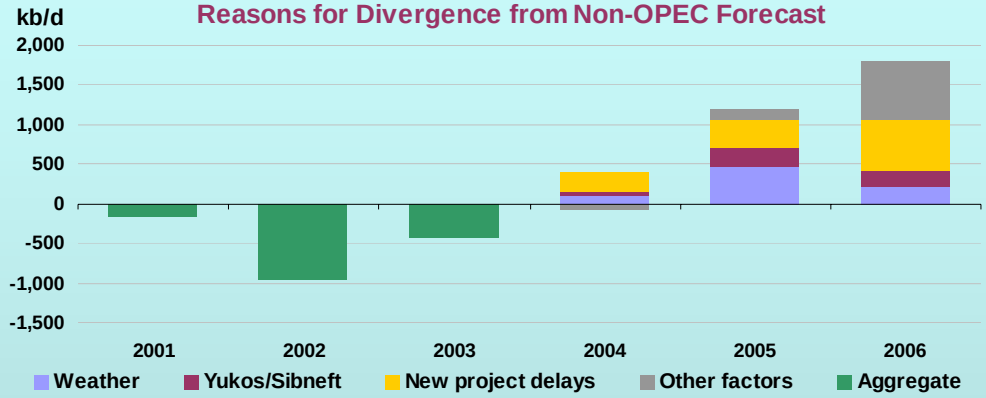
Output from **Mexico** remains on a downward trend. Although fiscal reform is being discussed that might eventually boost Pemex's ability to raise upstream investment, little respite from short-term production decline is expected, with total crude production slipping by 5-6% in both 2007 and 2008, reaching 2.9 mb/d next year. The maturing Cantarell field sees output slide by some 15% annually, with offsets in 2008 largely restricted to the Ku-Maloob-Zaap complex, where output is expected to reach 515 kb/d from less than 250 kb/d in 2002.

However, just as OECD decline has moderated, so too has the stellar growth in **FSU supply** seen in the first half of the current decade. Double-digit growth fuelled by Russia, and to a lesser degree by expanded supply from new fields in the Caspian republics of Azerbaijan and Kazakhstan, has given way to more modest growth as access and fiscal terms have tightened. The role of centrally controlled state/quasi-state companies has increased and delays in expanding export capacity infrastructure have also taken effect. Nor has the FSU been immune from the general tightness in upstream construction, drilling and service capacity evident elsewhere. That said, continued modest growth from the FSU in 2007/2008 seems to us the most likely prognosis, with the region collectively expanding output by 500 kb/d on average (3.9% pa) both this year and next. Our medium-term projections through to 2012 see Azerbaijan and Kazakhstan increasingly taking the growth baton from Russia, where supply growth potentially slows until the middle of the next decade.

Latin American supply growth, having slipped back in 2006 and 2007 (partly on new field delays) is seen regaining levels around 290 kb/d in 2008. Regional supply reaches 4.8 mb/d next year from 4.5 mb/d in 2007. Growth is concentrated in **Brazil**, with crude output reaching 2.15 mb/d compared with 1.9 mb/d in 2007. Deepwater developments at the Roncador, Polvo, Golfinho, Piranema and Marlim Leste fields underpin potentially the strongest year yet for Brazilian supply growth. Brazilian biofuels output, largely ethanol from sugar cane, adds a further 50 kb/d next year to reach 360 kb/d. As noted in the *MTOMR*, Brazilian ethanol enjoys competitive advantages regarding production costs, agricultural land use and infrastructure compared with biofuels in other countries, which sustains its medium-term growth.

Methodology Change Accounts for Bulk of Non-OPEC Forecast Adjustment This Month

Extreme weather, Russian geopolitical developments and new project delays have all retarded non-OPEC supply, notable in 2005/2006. While the *OMR* in 2001-2003 tended to understate non-OPEC supply, 2004-2006 has seen the opposite trend. Original non-OPEC forecasts for 2005 and 2006 proved over-optimistic to the tune of 1.0 mb/d-plus, or around 2%. Moreover, OECD supply has consistently come in below initial forecasts for the past ten years. In part, this derives from a prevailing 'business as usual' methodology, with normal operating conditions and on-schedule project completions assumed until contrary evidence arises. And while the past twelve months have seen non-OPEC annual growth recover again to around +1.0 mb/d, large risks remain for the 2007-2012 outlook.



To reflect this, a 'reliability' adjustment is henceforward applied to the non-OPEC forecast on a country-specific basis. The *OMR* and the *MTOMR* previously presented a headline non-OPEC forecast unadjusted for supply contingencies, but appended with cautionary notes on a tendency for supply to 'under-shoot' initial projections by 300-400 kb/d. Then, from the *OMR* dated 13 March 2007, an 'adjusted call on OPEC crude and stock change' was introduced, in parallel with the base 'call', containing adjustments for non-OPEC supply risk (350 kb/d). Now, in an effort to be more explicit about the adjustment, a historically-derived factor is instead included in the headline non-OPEC supply forecast, with the adjustment to the 'call on OPEC crude and stock change' correspondingly reduced.

In the past three years, OECD supply has slipped 1.0 mb/d below initial forecasts, although heavier than usual storm losses and project slippage account for an estimated 35% of this shortfall in 2004 and 65% in 2005 and 2006. *The reliability adjustment factor which we now include in the non-OPEC forecast represents the residual difference between initial forecast and outcome, after netting off slippage and extreme weather.* The forecast already attempts to capture these latter two influences within the normal methodology. The extra adjustment for field reliability explicitly acknowledges that, given tight drilling and service markets and ageing infrastructure, unscheduled outages are now part of the industrial landscape. Conversely, more modest upward adjustments are applied for those countries which have tended to be 'under-forecast' in the past, providing upstream conditions in those countries going forward warrant this.

Henceforward an allowance of -410 kb/d for non-OPEC supply is included, allocated by main country and region (but not by field). The new adjustment is calculated from an observed five-year average divergence from initial forecast. The adjustments show up as aggregated miscellaneous-to-balance line items by country in the field-by-field database. Adjustments have been calculated as follows:

USA	-125 kb/d	Azerbaijan	+26 kb/d
Canada	-97 kb/d	Kazakhstan	+25 kb/d
Mexico	+27 kb/d	Brazil	-34 kb/d
UK	-125 kb/d	Colombia	+20 kb/d
Norway	-162 kb/d	Egypt	-24 kb/d
Other OECD Europe	-24 kb/d	China	+97 kb/d
Australia	+22 kb/d	Malaysia	-34 kb/d

Total Net Non-OPEC Adjustment = - 410 kb/d (applied 2Q07 onwards)

Methodology Change Accounts for Bulk of Non-OPEC Forecast Adjustment This Month
(continued)

The reliability adjustments will evolve over time in both scale and location as forecasts are replaced by actual production data. There may be an inbuilt conservatism for the new forecast by use of a constant factor rather than a fixed proportion of the changing production base. But, as noted above, a degree of conservatism is probably warranted given the currently prevailing operating environment.

Revisions to Non-OPEC Oil Supply
(million barrels per day)

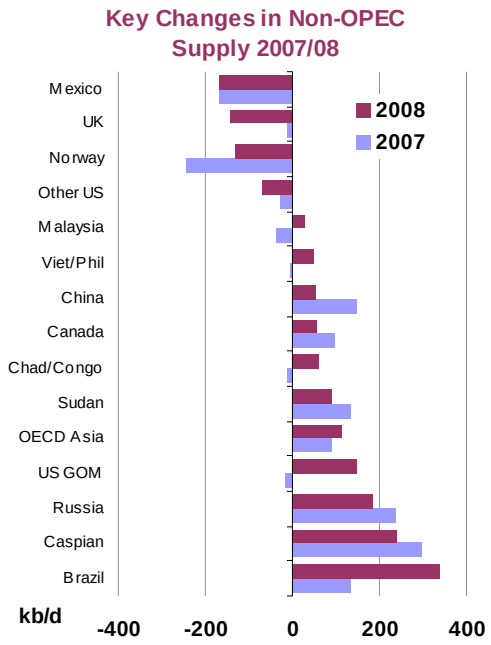
	Last Month's OMR				This Month's OMR				This Month vs. Last Month			
	2006	2007	06 v 05	07 v 06	2006	2007	06 v 05	07 v 06	2006	2007	06 v 05	07 v 06
North America	14.25	14.27	0.11	0.02	14.25	14.13	0.11	-0.12	0.00	-0.13	0.00	-0.13
Europe	5.20	5.12	-0.41	-0.08	5.18	4.92	-0.43	-0.27	-0.02	-0.20	-0.02	-0.19
Pacific	0.58	0.65	-0.01	0.07	0.58	0.67	-0.01	0.09	0.00	0.02	0.00	0.02
Total OECD	**20.03**	**20.03**	**-0.32**	**0.01**	**20.01**	**19.71**	**-0.33**	**-0.30**	**-0.02**	**-0.32**	**-0.02**	**-0.30**
Former USSR	12.10	12.59	0.46	0.49	12.10	12.64	0.46	0.54	0.00	0.05	0.00	0.05
Europe	0.15	0.13	-0.01	-0.01	0.15	0.13	-0.01	-0.01	0.00	0.00	0.00	0.00
China	3.67	3.74	0.06	0.07	3.67	3.82	0.06	0.15	0.00	0.08	0.00	0.08
Other Asia	2.71	2.72	0.05	0.00	2.71	2.69	0.05	-0.02	0.00	-0.02	0.00	-0.02
Latin America	4.40	4.47	0.11	0.08	4.40	4.48	0.11	0.08	0.00	0.00	0.00	0.00
Middle East	1.73	1.64	-0.13	-0.09	1.73	1.64	-0.13	-0.09	0.00	0.00	0.00	0.00
Africa*	2.50	2.64	0.04	0.15	2.50	2.59	0.04	0.09	0.00	-0.06	0.00	-0.06
Total Non-OECD*	**27.26**	**27.94**	**0.58**	**0.68**	**27.26**	**27.99**	**0.58**	**0.73**	**0.00**	**0.05**	**0.00**	**0.05**
Processing Gains	1.90	1.92	0.04	0.02	1.90	1.92	0.04	0.02	0.00	0.00	0.00	0.00
Other Biofuels	0.21	0.36	0.09	0.15	0.26	0.40	0.14	0.15	0.05	0.04	0.05	-0.01
Total Non-OPEC*	**49.39**	**50.25**	**0.39**	**0.86**	**49.42**	**50.03**	**0.42**	**0.60**	**0.03**	**-0.22**	**0.03**	**-0.25**

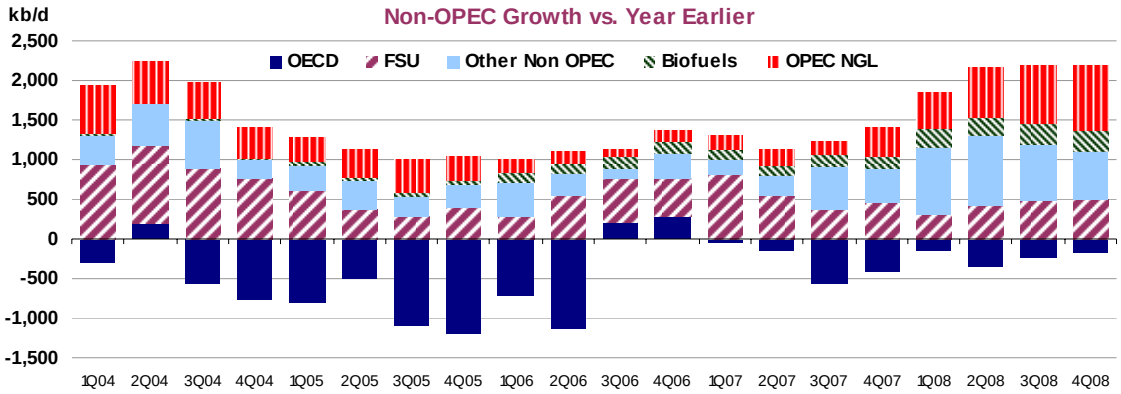
OMR = *Oil Market Report*
* adjusted to exclude Angola

With the reliability adjustment of -410 kb/d applying from the middle of the second quarter of 2007 onwards, *ceteris paribus*, this month's non-OPEC estimate for 2007 should be some 275 kb/d below last month's. Ironically, total non-OPEC adjustments this month total only -220 kb/d, as net upward adjustments accruing from recent field data provide a partial upside offset of +55 kb/d. Overall, downward adjustments accrue this month to North America, Europe, non-OECD Asia and Africa. Upward adjustments come from the OECD Pacific, the FSU and China. Azerbaijan and China in particular see stronger expectations now after incorporating May production data.

Otherwise, Latin American supply looks sluggish for 2008, amid a general worsening of the investment climate for international operating companies. **Ecuador** is expected to see continued decline, with production slipping to 470 kb/d in 2008 from 500 kb/d in 2007. The potential reintegration of Ecuador within OPEC follows calls by President Correa to boost Ecuador's equity stake in existing fields at the expense of private companies. A recent loosening of upstream terms in **Colombia** has yet to bear fruit, albeit production does seem to have stabilised closed to 530 kb/d after aggressive decline earlier in the decade.

Other non-OPEC producing regions face a contrasting supply outlook for 2007/2008. **Chinese** supply growth averages 150 kb/d in 2007, but this slows to 50 kb/d in 2008, taking total production to 3.88 mb/d next year. A twin-pronged increase from offshore and onshore north-western production this year helps offset decline at more mature easterly onshore production from fields such as Daqing and Shengli. While further upside may be possible for 2008 from north-western supply, we have restricted growth next year to offshore fields which have been clearly identified as new production prospects. Elsewhere in Asia, growth accelerates to 70 kb/d after stagnating in 2007, with **Malaysia, the Philippines** and **Vietnam** expected to see strong growth, partly based on higher gas condensate supplies.





The other key source of expected non-OPEC growth in 2008 is **Africa**. Despite Angola moving into the OPEC fold in January 2007, regional supply increases by 130 kb/d to 2.71 mb/d next year. Longer-term expansion from new producers such as **Equatorial Guinea** and **Mauritania** now looks to be further off, after the impact of tightening upstream operating regime and reservoir problems respectively. **Sudan,** and **Congo** however help to push regional supply higher, as output from other key producers levels off or enters decline. Questions continue to surround the political backdrop in **Sudan**. There have been calls for sanctions against the government for activities in the Darfur region, but the opening of a new export terminal on the Red Sea has led to a rise in Dar Blend crude output to some 150 kb/d and total national production to around 450 kb/d. Production is expected to increase to 560 kb/d in 2008, as Dar Blend output rises further to 275 kb/d, and increased Nile Blend supply is forthcoming from the recently started Thar Jath project. **Congolese** production adds a more modest 30 kb/d in 2008 to reach 250 kb/d on higher supplies from the offshore Moho Bilondo field.

Other Sources of Supply Growth - Biofuels

Global biofuel production – largely ethanol and biodiesel – is forecast to increase by an impressive 32% in 2008 (+350 kb/d) to reach 1.45 mb/d. This follows similar growth in 2007, albeit from a low absolute base. Widespread biodiesel growth in OECD Europe accounts for 38% (135 kb/d) of next year's increase, while the US, Brazil and non-OECD Asia each adds at least 50 kb/d to prevailing supply (predominantly ethanol for the US and Brazil, which is included in those countries' total oil supply data). Nonetheless, despite sharp increases in percentage terms, this outlook mirrors a generally cautious forecast for biofuels in 2006-2012 as contained in the *MTOMR*. Although installed capacity (based on firm projects) potentially reaches nearly 3.0 mb/d in 2012 from 1.0 mb/d in 2006, either substantial amounts of capacity could remain underutilised, or some projects may slip. Questions continue to surround biofuels' economic viability (given rising feedstock costs), competing claims on land use between energy and food supply and an apparent lack of specific policy mandates for biofuels uptake within the vehicle fuel pool.

Other Sources of Supply Growth – OPEC Gas Liquids (NGL and condensates)

OPEC NGL and condensate supply growth of 660 kb/d in 2008 outstrips any other single component of the 'non-OPEC' projection for next year. Total supply reaches 5.5 mb/d, after having consistently grown by some 8% annually for 2001-2006. Gas liquids (ethane, propane, butane and pentanes from gas processing plants, plus field gas condensates) produced outside of OPEC's quota system for crude oil see their strongest year since an estimated increase of 0.5 mb/d in 2004. In 2008, as in 2004, growth centres on new projects being developed in Saudi Arabia (domestic utilisation), Qatar and Iran (both export-driven, but also increasingly targeting domestic use).

Saudi Arabia could see growth of 345 kb/d with inauguration of the associated gas processing facilities at the Khursaniyah project. Non-associated gas liquids from the Hawiyah processing facilities also contribute. Increases from both Qatar and Iran of some 150 kb/d are orientated towards gas condensate. The Dolphin and Ras Gas 3, 4 and 5 projects account for **Qatar's** increment, while in **Iran**, the increase will depend on successful completion of phases 6, 7 and 8 at South Pars. Moreover, rising output of light/sweet OPEC condensate in 2008 will likely affect the quality of the marginal barrel of global supply.

Our forecast for 2008 and beyond, while implying an ambitious pace of new project start-ups, nonetheless implies a fairly static liquids–to-gas ratio for the main gas producing regions. While in theory one might envisage liquids recovery to rise over time, caution over future NGL availability is in order, given that new gas processing capacity faces the same construction and labour bottlenecks as confront the oil sector. Moreover, an increasing number of major oil producers face increased gas reinjection requirements, which could limit gas liquids extraction. But, on balance, we believe a number of key factors we have itemised previously will encourage continued strong growth in NGL supply:

- OPEC gas development is increasingly targeting local, as opposed to export, markets, to free up oil for export. This diminishes the potential NGL supply impact of weaker international gas demand;
- The impetus to minimise gas flaring is growing;
- Much Middle Eastern gas is stranded, with a clear incentive to strip out liquids to maximise early revenue flows. Wet gas streams are preferentially developed ahead of dry gas for this reason;
- Qatar and Iran are tending towards modular gas supply and export infrastructure, less prone to time and cost overruns than new, stand-alone projects (albeit Iran faces other impediments in terms of investment terms and local demand growth);
- A significant and growing amount of NGL supply will derive from non-associated gas, less prone to delays if crude capacity plans are deferred.

OPEC Crude Oil Supply in June

Total OPEC crude supply was 45 kb/d lower in June than upwardly revised May levels of 30.2 mb/d. Revised data for Saudi Arabia and Angola underpinned the higher May estimate. In June, Saudi Arabia, Iraq, Indonesia and Libya are estimated to have seen production decline by a collective 205 kb/d, while

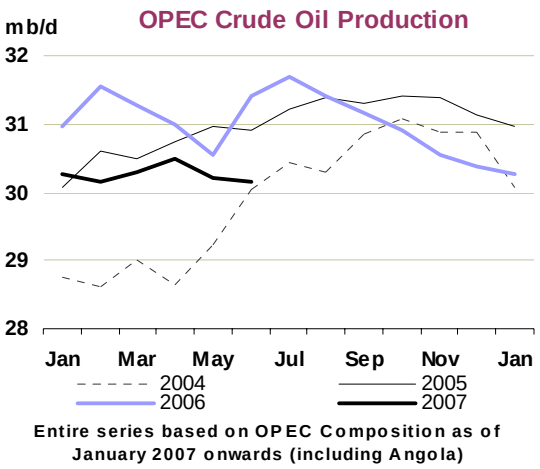
OPEC Crude Production[1]
(million barrels per day)

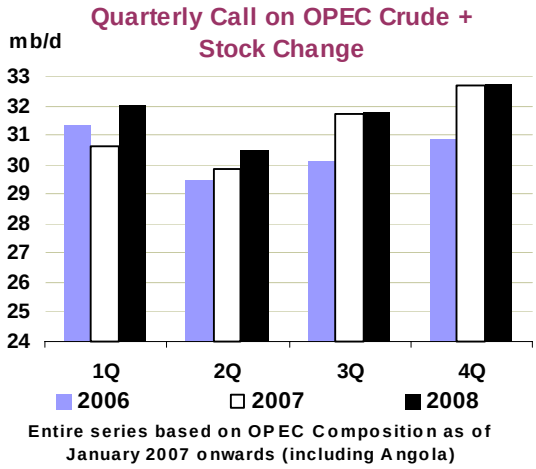
	May 2007 Production	June 2007 Production	Sustainable Production Capacity[2]	Spare Capacity vs June 2007 Production	Capacity end-2007	Capacity end-2008
Algeria	1.36	1.37	1.38	0.00	1.38	1.47
Indonesia	0.85	0.83	0.87	0.04	0.88	0.88
Iran	3.90	3.95	3.95	0.00	3.90	3.97
Kuwait[3]	2.34	2.34	2.64	0.30	2.68	2.83
Libya	1.71	1.70	1.73	0.03	1.78	1.84
Nigeria[4]	2.01	2.08	2.49	0.41	2.45	2.39
Qatar	0.80	0.81	0.90	0.09	1.01	1.09
Saudi Arabia[3]	8.70	8.58	10.80	2.22	10.91	11.35
UAE	2.59	2.61	2.75	0.15	2.90	2.89
Venezuela[5]	2.37	2.37	2.60	0.24	2.62	2.60
Subtotal	**26.61**	**26.63**	**30.10**	**3.47**	**30.50**	**31.31**
Angola[1]	1.60	1.60	1.60	0.00	1.79	2.15
Iraq	2.00	1.94	2.40	0.46	2.40	2.40
Total	**30.21**	**30.17**	**34.10**	**3.93**	**34.69**	**35.86**
(excluding Indonesia, Iraq, Nigeria, Venezuela				*2.79)*		

1 Angola joins OPEC effective 1 January 2007.
2 Capacity levels can be reached within 30 days and sustained for 90 days.
3 Includes half of Neutral Zone Production.
4 Nigerian capacity excludes some 545 kb/d of long-term shut-in capacity.
5 Includes Orinoco extra-heavy oil assumed at 475 kb/d in June

Nigeria, Iran, the UAE, Qatar and Algeria added a combined 160 kb/d. OPEC-10 production (excluding Angola and Iraq) in June averaged 26.6 mb/d, some 1.5 mb/d below corresponding output one year ago, and 1.9 mb/d below the September benchmark against which last autumn's managed cuts in production were measured. This has allowed notional OPEC spare capacity to reach 3.9 mb/d, although effective spare capacity excluding Indonesia, Iraq, Nigeria and Venezuela stands closer to 2.8 mb/d.

This report's analysis suggests a sharp rise in the requirement for OPEC crude between a second quarter low point of some 30 mb/d and nearer 33 mb/d by the fourth quarter. Moreover, as our OPEC capacity expectations (table above) illustrate, late 2007 installed capacity of 34.7 mb/d implies that spare capacity could tighten from current levels. The market in the second half of 2007 could oscillate uncomfortably between sharply lower inventories if OPEC continues to curb output, or tightening spare capacity if it follows the 'call'. Nor does the situation become materially more comfortable in 2008, despite stronger growth in both non-OPEC supply and OPEC capacity. OPEC could add over 1.0 mb/d of net new capacity in the course of 2008, reaching 35.9 mb/d. However, nominal spare capacity by 4Q08 seems unlikely to exceed 3 mb/d, despite net capacity gains from Saudi Arabia, Kuwait, Qatar, Iran, Libya and Algeria.



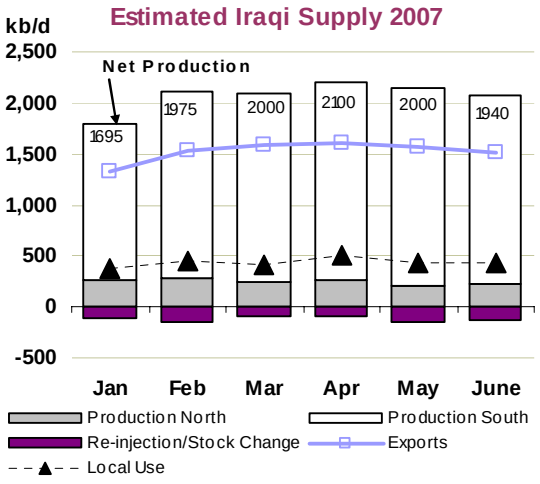


OPEC Ministers meet next on 11 September in Vienna, and seem to be distancing themselves from the likelihood of boosting production officially before then. OPEC representatives in recent weeks have stressed speculation, refining bottlenecks and geopolitical tensions as underpinning high and volatile prices. Two issues which may arise at the Vienna meeting are calls for the setting of a ceiling for Angolan production and the possibility of Ecuador being readmitted as a full member. Ecuador, which now produces just over 500 kb/d, had its membership frozen in late 1992, in part after non-payment of membership dues.

Saudi Arabian crude supply is revised up to 8.7 mb/d for May, with a modest cut to below 8.6 mb/d estimated for June. Latest available *JODI (Joint Oil Data Initiative)* data are backed up by upwardly revised tanker sailing data for May. Weaker earlier May estimates had been based on lower domestic refinery runs due to refinery maintenance. While higher June refinery runs are implied by lower anticipated refinery maintenance, early indications are of an offsetting cut in crude exports. June estimates, as for all the OPEC countries, remain subject to verification as more complete tanker sailing data become available. However, comments from Saudi Oil Minister Naimi in early July tended to reinforce perceptions of production around 8.6 mb/d. Nor has there been any sign of significant change in Saudi production policy for July and August, with term liftings reportedly remaining broadly stable at June levels.

Crude capacity for Saudi Arabia is seen by this report rising to 10.9 mb/d by end-2007 and 11.4 mb/d at end-2008. The Khursaniyah project is likely to start up in December 2007, reaching 500 kb/d of Arab Light capacity by 2H08, alongside some 300 kb/d of gas liquids. Initial volumes of new extra light crude are also expected from the Shaybah field expansion and the Nuayyim project by the end of 2008. The two fields combined will eventually add a gross 300 kb/d to Saudi crude capacity. Capacity additions in Saudi Arabia for now are focussed on lighter/sweeter crude grades, before the next major heavy/sour increment expected from the Manifa project from 2011.

Iraq's crude supply for June (net of reinjection and storage) is estimated at 1.94 mb/d, comprising 1.52 mb/d of exports and 0.42 mb/d of local consumption. Crude exports were down by some 60 kb/d from an upwardly revised May level of 1.58 mb/d. Exports remained limited to those from the southern terminals of Basrah and Khor al-Amaya, plus 10 kb/d of cross-border pipeline sales to Syria. However, with Iraqi Kirkuk crude in storage at Ceyhan, Turkey reportedly increasing to nearly four million barrels in June, state marketer SOMO announced a tender for sales of three one million barrel cargoes to be lifted by 23 July. Refiners OMV, Tupras and Saras subsequently were awarded 1 mb each, implying a potential extra 0.1 mb/d for July Iraqi exports.



Uncertainty continues to surround Iraq's fledgling hydrocarbon law, currently before the national assembly. Having agreed to a 17% share of oil-related revenues, the Kurdistan Regional Government (KRG) is pursuing its own upstream licensing round, and is still questioning, among other factors, the relative roles of a future Iraq National Oil Company (INOC) and the regional authorities. The KRG is also reportedly opposed to Baghdad's removal for later consideration of annexes covering field and acreage allocations. The KRG's own draft oil law, which it insists will comply with the national version, is believed to facilitate production sharing contracts with foreign operators.

Nigerian crude supply in June is estimated at 2.08 mb/d, a rise of 70 kb/d from May levels. On average, June saw 765 kb/d of crude production shut-in due to rebel attacks and pipeline outages, compared with 815 kb/d in May. By 11 July, total shut-ins had fallen back to 600 kb/d after Shell completed repairs on the Nembe pipeline, where leaks, unrelated to rebel attacks, had caused the shut-in of 77 kb/d of Bonny Light. Agip also reinstated 65 kb/d of offshore Okono production, and there were unconfirmed reports that 13 kb/d of long-idled Forcados production had been reactivated. However, further attacks were sustained during June by facilities serving the Escravos and Brass River export streams. A four-day workers' strike which had threatened to further curb oil production and exports was ended on 25 June after the government partly rescinded fuel price rises put in place by outgoing President Obasanjo. The new government of President Umaru Yar'Adua also agreed to set up committees to examine the fuel price issue and proposed sales of oil refineries and power stations.

While the situation in Nigeria now appears marginally less grave than in May/June, rebel attacks and kidnappings of oil sector personnel continue in the Niger Delta. A ceasefire by main rebel group MEND also expired in early July. How successful the government will be with its target of six months in which to stabilise the Niger Delta security situation remains to be seen. Shell has announced that initial export liftings will begin again from the 380 kb/d Forcados terminal in July. However, initial volumes will comprise oil placed in storage before major production shut-ins occurred last year, with little sign yet that substantial Forcados production recovery is imminent. Reflecting continuing uncertainty over the prospects for some 545 kb/d of long-term shuttered Nigerian capacity in the Niger Delta, we have

removed this tranche from our Nigerian capacity estimates for 2007/2008 and beyond. This effectively anchors expected Nigerian capacity close to the current sustainable level of 2.4 mb/d for the rest of 2007 and 2008, albeit any significant turnaround in restarting output could cause us to revisit likely Nigerian capacity levels in months to come.

May **Angolan** crude supply came in nearly 50 kb/d higher than our preliminary estimate last month, at 1.6 mb/d (plus 90 kb/d of gas liquids not counted towards the crude total). Despite the start-up on 18 June of the deepwater Block 17 Rosa field (operator Total), June supply is estimated relatively flat at 1.6 mb/d due to maintenance work elsewhere. Nonetheless, steady Angolan production build-up is expected for 2007/2008 from Rosa, the Dalia field, BBLT, Greater Plutonio (now scheduled to start in 3Q07) and Kizomba C (starting 3Q08). Capacity could hit 1.8 mb/d by the end of 2007 and 2.15 mb/d by late 2008. For now, Angola, like Iraq, remains outside an idled OPEC quota system, although there have been calls from within the organisation for an Angolan quota to be decided later in 2007 or in 2008.

Venezuelan crude oil supply in June is estimated at 2.37 mb/d, unchanged from May. Heavy Orinoco crude output destined for the four major upgrading projects is assumed at 475 kb/d for last month, versus capacity of 630 kb/d. Government sources again stressed that production curbs were in support of OPEC production policy. However, industry sources have been expressing concern for some time as to the sustainability of Orinoco upgrader production if their effective renationalisation leads to the flight of existing operating companies from the country.

This came into sharper focus in late June as ExxonMobil and Conoco announced they would sever ties with the Cerro Negro and Hamaca/Petrozuata upgrader projects respectively, having failed to agree diminished equity participation and compensation terms with state PDVSA. In the process, PDVSA has increased its control over the Orinoco projects collectively from around 40% to nearly 80%. Oil Minister Rafael Ramirez recently reported that Orinoco production had fallen further to 418 kb/d. Additional potential problems for Venezuelan production are foreseen if recent strike action by sub-contracted drilling workers intensifies. PDVSA recently terminated operating contracts with private drilling companies covering drilling rigs which it owns, based in Lake Maracaibo. The displaced workers are demanding that PDVSA employ them directly. PDVSA says recent protests have not affected production.

OECD STOCKS

Summary

- **Total OECD industry stocks built by 20.9 mb in May**, as increased refinery throughputs and lower seasonal demand caused product inventories to rise. Despite this improvement, gasoline (and fuel oil) stocks remained below average and total OECD forward demand cover is only just in line with the five-year average, at 53.6 days.

- **End-April inventory data were revised up by 18.9 mb** as upward corrections in crude and 'other' oils of 11.2 mb and 9.4 mb respectively offset a minor downward revision of 1.6 mb in product stocks. The biggest single revision was an 8.3 mb upward correction of crude oil inventories in the Pacific.

- **Preliminary end-June stock data showed a further increase of 7.8 mb in the OECD,** as increases in the US and Japan offset a sharp downturn in Europe. This implies flat forward demand cover for end-June at 53.6 days, and a second-quarter stock build of 550 kb/d, in line with the seasonal average.

Preliminary Industry Stock Change in May 2007 and First Quarter 2007

	May (preliminary) *(million barrels)*				*(million barrels per day)*				First Quarter 2007 *(million barrels per day)*			
	N. Am	Europe	Pacific	Total	N. Am	Europe	Pacific	Total	N. Am	Europe	Pacific	Total
Crude Oil	**1.7**	**-7.3**	**6.6**	**1.0**	**0.05**	**-0.24**	**0.21**	**0.03**	**0.28**	**-0.15**	**-0.01**	**0.12**
Gasoline	8.5	-1.3	-0.2	7.0	0.27	-0.04	-0.01	0.22	-0.13	-0.04	0.03	-0.15
Distillates	4.9	-0.3	4.0	8.6	0.16	-0.01	0.13	0.28	-0.29	-0.09	-0.14	-0.52
Fuel Oil	-4.4	0.5	0.1	-3.8	-0.14	0.02	0.00	-0.12	-0.03	-0.04	-0.01	-0.07
Other Products	10.6	0.0	2.6	13.2	0.34	0.00	0.09	0.43	-0.25	-0.04	-0.02	-0.30
Total Products	**19.5**	**-1.2**	**6.6**	**24.9**	**0.63**	**-0.04**	**0.21**	**0.80**	**-0.71**	**-0.20**	**-0.14**	**-1.05**
Other Oils[1]	-2.8	-0.9	-1.3	-5.0	-0.09	-0.03	-0.04	-0.16	-0.06	0.08	0.02	0.03
Total Oil	**18.3**	**-9.3**	**11.9**	**20.9**	**0.59**	**-0.30**	**0.38**	**0.67**	**-0.49**	**-0.28**	**-0.13**	**-0.90**

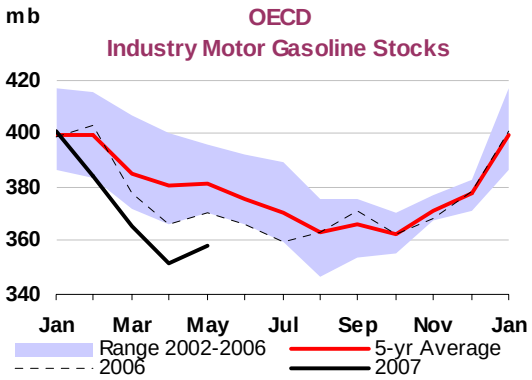
1 Other oils includes NGLs, feedstocks, and other hydrocarbons.

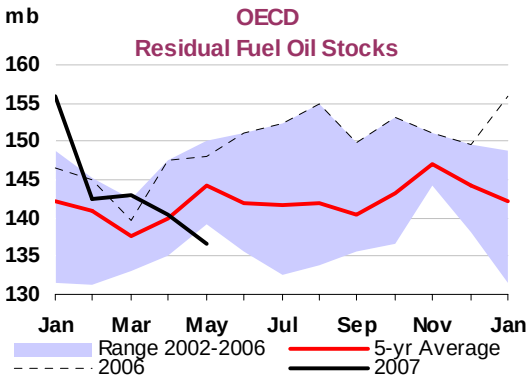
OECD Industry Stock Changes in May 2007

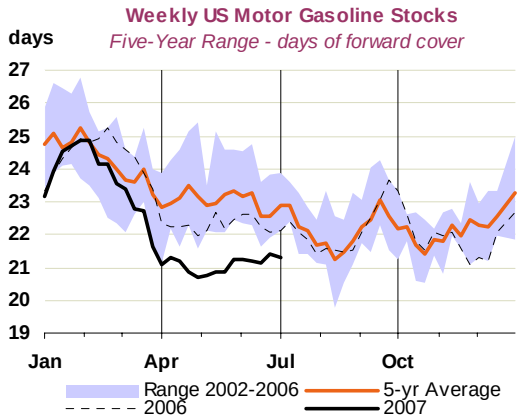
OECD North America

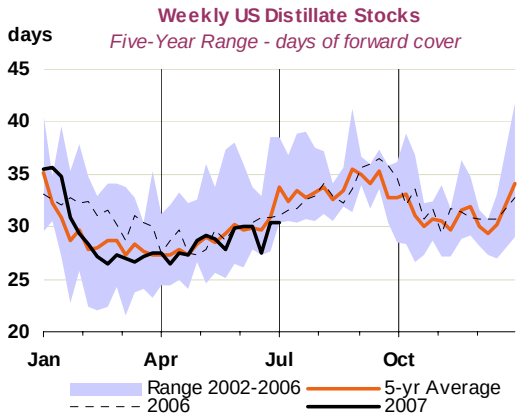
North American total industry inventories rose by 18.3 mb in May, largely on a 19.5 mb increase in products. This was driven by gasoline stocks in the US, which rose by 8.2 mb, as refineries returned from maintenance. Total distillate stocks in the US also increased by 5.5 mb, while crude was up by 3.5 mb.

Preliminary end-June data showed total US industry stocks rising by 20.2 mb on the month, of which 11.5 mb was crude and 8.7 mb products. Crude stocks at Cushing, Oklahoma, fell by 2.7 mb to 23.6 mb at the end of June as refineries in the area ramped up runs following planned and unplanned maintenance, lending WTI (and particularly WTI spreads) some support. In contrast, PADD 3 crude stocks increased by 11.5 mb as several VLCCs, that had previously been used as floating storage, were chartered elsewhere and unloaded. As noted in the Freight section, oil on water has fallen to unusually low levels for this time of year, reducing another part of the supply buffer ahead of the summer.









US gasoline stocks rose by 3.6 mb by the end of June, as refineries focused on producing the motor fuel for summer use. Nevertheless, this leaves end-month cover (reflecting cover for peak seasonal driving needs) unchanged at 21 days, two days below its five-year average. Refinery throughputs remained on average 0.5 mb/d lower than in June last year, but imports have more than compensated for the difference. Meanwhile, total distillate stocks fell by 300 kb as a 2.9 mb draw in heating oil was only partly offset by a 2.6 mb increase in diesel stocks. Total distillate stocks have now also fallen to the bottom of their five-year average range in terms of forward demand cover, at 30 days. A key issue for the market is now whether the seasonally low gasoline stocks will constrain the normal seasonal build in distillates.

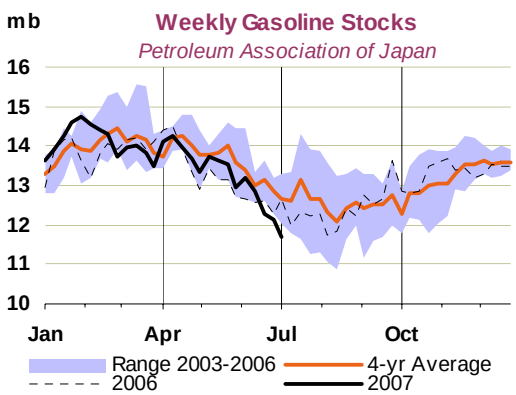
OECD Europe

European industry stocks fell by 9.3 mb in May. This was largely because of a downturn in crude inventories of 7.3 mb, partly related to oil field maintenance in the North Sea. Crude levels fell by 4-5 mb each in Germany, France and the UK, but rose by 4.1 mb in the Netherlands and by a further 5.1 mb in sum in other European countries surveyed. Product stocks also fell by 1.2 mb, holding below the five-year range following stock draws in Germany and Italy.

Preliminary Euroilstock data for end-June show a further stock draw of 16.3 mb, largely in products (-10.4 mb), though crude dipped too by 5.9 mb. The product fall was largely in middle distillates, which drew by 5.3 mb and gasoline, down by 2.7 mb, as a steady stream of exports continued to move to the US.

OECD Pacific

End-May Pacific industry inventories rose by 11.9 mb following increases in both crude and products of 6.6 mb each and an offsetting draw in natural gas liquids of 1.3 mb. Unusually, most of the change stemmed from Korea, where crude and products each rose by around 5 mb. The tendencies were clear, in that the product build was due to middle distillates increasing in both Korea and Japan, by 2.7 mb and 1.3 mb respectively. As in the other OECD regions, gasoline stocks fell in both countries, however only by a marginal 0.1 mb each.



End-June preliminary data from the Petroleum Association of Japan (PAJ) showed a further increase in total stocks of 3.9 mb. Interestingly, even as refineries ramped up throughputs after maintenance, the increase was wholly in crude. In products, a gasoline draw of 1.0 mb, and a dip in residue (-0.7 mb) were balanced by naphtha and middle distillates. As in the US and OECD Europe, Japanese gasoline inventories remain at or below their five-year average range.

Revisions versus 12 June 2007 Oil Market Report

(million barrels)

	North America		*Europe*		*Pacific*		*OECD*	
	Mar 07	Apr 07	Mar 07	Apr 07	Mar 07	Apr 07	Mar 07	Apr 07
Crude Oil	**4.4**	**3.9**	**0.3**	**-1.1**	**0.0**	**8.3**	**4.7**	**11.2**
Gasoline	0.0	3.1	0.5	-1.5	0.0	0.4	0.5	2.0
Distillates	0.0	2.0	0.7	0.0	0.0	-0.2	0.7	1.8
Residual Fuel Oil	0.0	-1.7	-0.7	-2.6	0.0	0.1	-0.7	-4.2
Other Products	0.0	0.2	-1.6	-2.2	0.0	0.7	-1.6	-1.2
Total Products	**0.0**	**3.6**	**-1.1**	**-6.3**	**0.0**	**1.1**	**-1.1**	**-1.6**
Other Oils[1]	0.1	1.5	3.7	7.7	0.0	0.1	3.8	9.4
Total Oil	**4.5**	**9.1**	**2.9**	**0.3**	**0.0**	**9.5**	**7.4**	**18.9**

1 Other oils includes NGLs, feedstocks, and other hydrocarbons.

OECD Inventory Position at End-May and Revisions to Preliminary Data

Total OECD industry stocks stood at 2,646 mb at the end of May, 20.9 mb higher than end-April, but 23.0 mb down on the year. Crude inventories stood at 979 mb, only 1.0 mb higher from April and 17.0 mb lower than end-May 2006. Total products totalled 1,377 mb, 24.9 mb higher month-on-month, but 3.4 mb lower year-on-year. 'Other oils' rose by 13.2 mb in May. Forward demand cover again slipped slightly, but in round numbers remains at 54 days, again unchanged from end-April and from end-May 2006. Forward cover is now in line with its five-year average, having declined steadily from the beginning of the year.

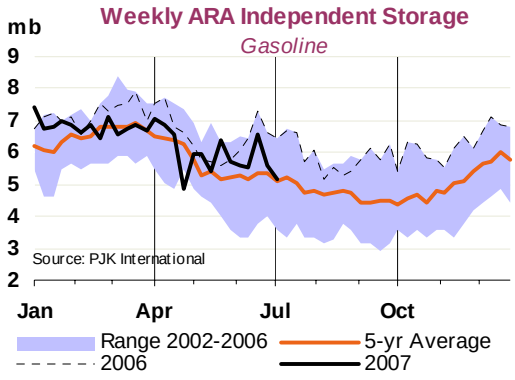
Year-on-Year OECD Industry Stock Comparisons for May 2007

	(million barrels)					*(Days of Forward Demand)*			
	North America	Europe	Pacific	Total		North America	Europe	Pacific	Total
Crude Oil	**9.9**	**-16.5**	**-10.4**	**-17.0**	**Total Oil**	**-0.9**	**0.0**	**-2.1**	**-0.8**
Total Products	-8.8	12.1	-6.7	-3.4	*Versus 2005*	-0.1	-1.1	0.6	-0.3
Other Oils[1]	-6.7	3.8	0.3	-2.6	*Versus 2004*	2.6	1.3	1.5	2.0
Total Oil	**-5.5**	**-0.6**	**-16.9**	**-23.0**	**Total Products**	**-0.7**	**0.8**	**-0.9**	**-0.3**
Versus 2005	-2.8	-17.4	-1.7	-21.8	*Versus 2005*	-0.7	0.3	-0.2	-0.3
Versus 2004	86.3	33.0	4.5	123.8	*Versus 2004*	0.9	1.6	1.3	1.2

1 Other oils includes NGLs, feedstocks, and other hydrocarbons.

Recent Developments in ARA Independent Storage

Total product stocks held in independent storage in the Amsterdam-Rotterdam-Antwerp (ARA) area rose by 1.6 mb in June and remain at the top of their five-year average. Over the month, the greatest change was in gasoil, which rose by 1.3 mb, which would fit with reports of surplus German and other heating oil being sent *down* the Rhine to NWE storage. Fuel oil and naphtha rose by 0.6 mb and 0.4 mb respectively, while jet/kerosene and gasoline fell by 0.4 mb and 0.2 mb. All products except gasoline are towards the top of their respective five-year average ranges. The lower gasoline levels are likely due to transatlantic exports to fill the structural US supply deficit and offset unplanned outages.



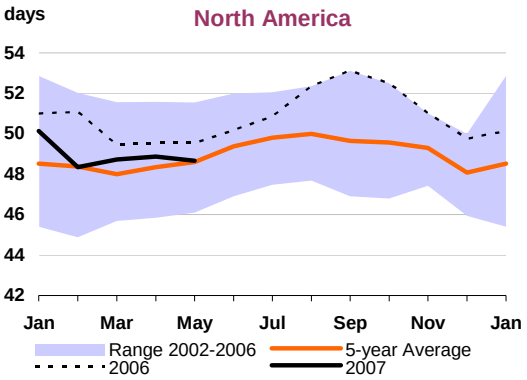
Recent Developments in Singapore Stocks

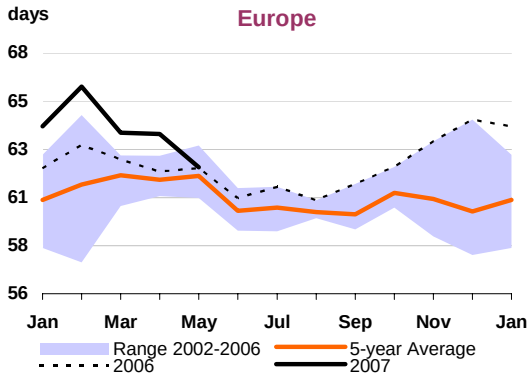
Total product stocks held in Singapore rose by 0.5 mb. Increases in light and middle distillates of 1.7 mb and 0.1 mb respectively offset a downturn in fuel oil stocks of 1.3 mb. Light distillates have now swung well above their five-year average range, while in contrast middle distillates are only in line with their five-year average on strong demand in the region.

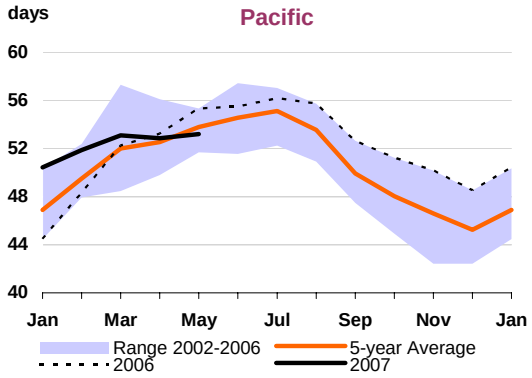
Regional OECD End-of-Month Industry Stocks

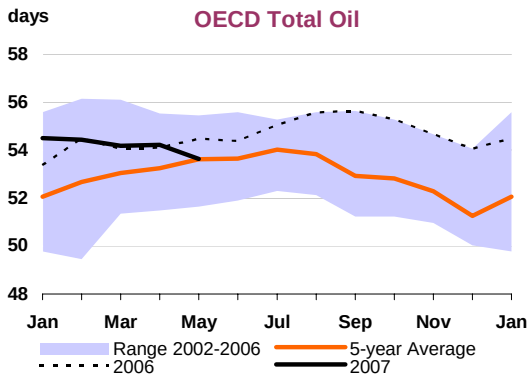
(in days of forward demand and millions barrels of total oil)

Days[1]

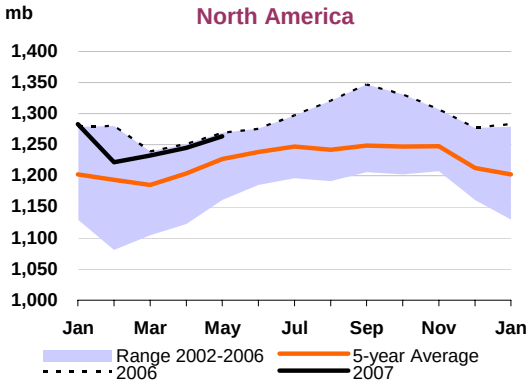


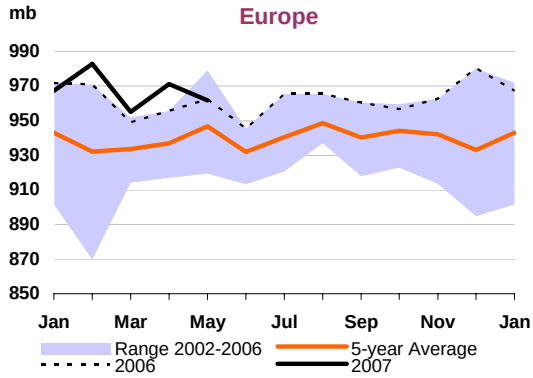


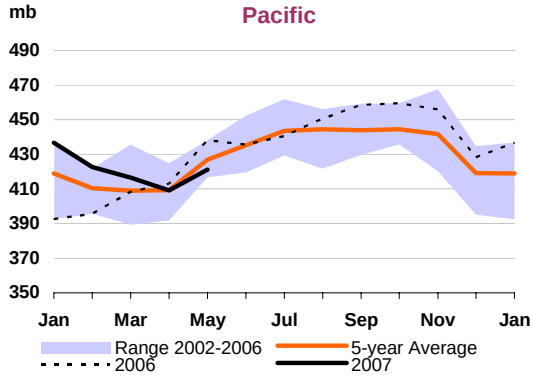


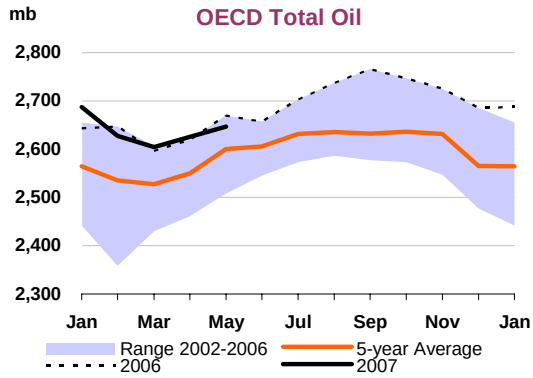


Million Barrels









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

PRICES

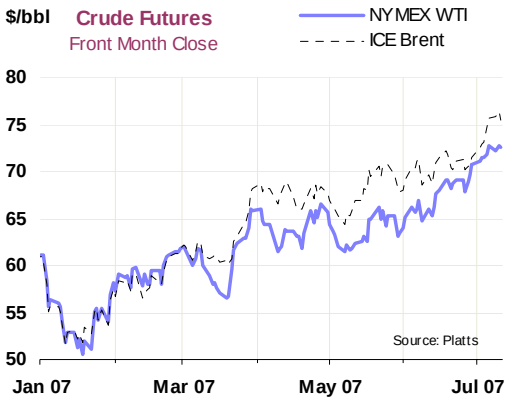
Summary

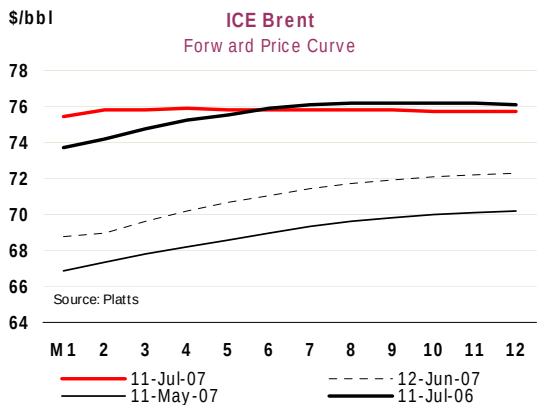
- **Brent futures surged over $77/bbl by mid-July** on a tighter market, increased geopolitical tension and indications of strong fund buying. Near-term tightness on lower North Sea crude supplies due to field maintenance and still-curbed OPEC output coincided with strong summer refiner demand, and was reflected in Brent's move into backwardation.

- **Markets appear crude-driven**, as gains in benchmarks outpaced those in key products despite ongoing US refinery issues. Crude's dominance was reflected by refining margins falling in all regions, but on the whole, product cracks and refining margins remain at historically high levels.

- **Product markets were relatively weak** in comparison to crude as refineries increased throughputs, albeit slowly. Although US, European and Japanese gasoline stocks remain tight, gasoil differentials to crude were broadly stronger as distillate stocks fell in the US and Europe. Fuel oil prices rose to record highs in some regions on strong utility buying and approaching bunker specification changes in NWE Europe, but remain heavily discounted to crude.

- **VLCC rates from the Middle East Gulf drifted below seasonal averages** in June, falling most notably on westbound trades. Global volumes of oil at sea are now unseasonably low. Ample tonnage eroded clean tanker rates in the Atlantic Basin in June, despite high US gasoline imports.



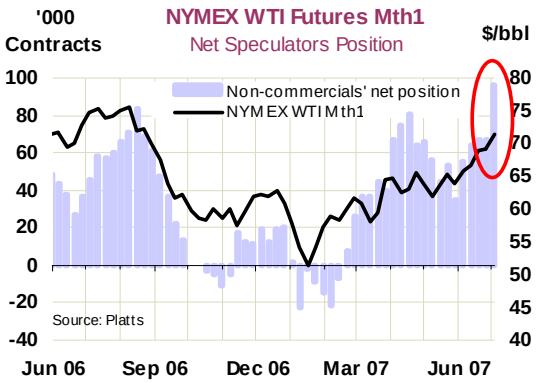


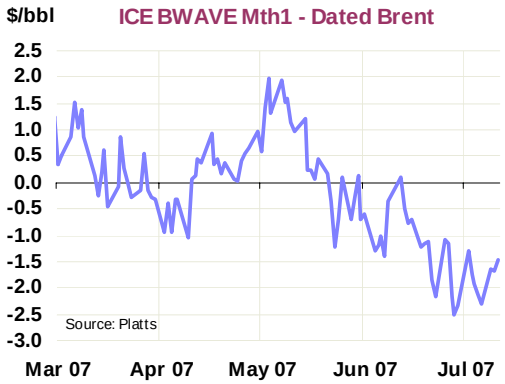
Overview

A further tightening of the market pushed Brent futures above $77/bbl, not far off their record $78.30 seen last August. While downstream problems have not yet abated, supply was further constrained and demand remained strong even in the face of high prices. While weekly and monthly data show refinery throughputs remain below average in the US, crude strength appears to reflect demand for July and August delivery. In addition, further support was derived from geopolitical worries.

A rise in commodity prices in general is potentially indicative of strong underlying economic growth, while the weaker dollar often adds short-term support to dollar-denominated commodity prices. More importantly, ICE Brent's return to backwardation portends near-term tightness in crude markets. Although OECD refiners are still ramping up from maintenance and unplanned problems persist, the strong rise in crude prices would appear to indicate competition from downstream buyers, even though crude stocks remain high in the US.

The end of Nigerian rebel group MEND's ceasefire, and a subsequent wave of new kidnappings was widely reported as supporting prices, even though actual production levels have not been further curtailed. A strike by Nigerian unions in mid-June had no effect on crude output, but subsequent threats of strikes by Brazilian and Venezuelan oil workers keep the potential threat to oil production to the forefront. OPEC has however indicated it will act if it sees any sign of a crude shortage. However, it will take time for data to be available to back up the current price signals and with Saudi Arabia reportedly keeping August term volumes unchanged, a shift in output targets ahead of the September meeting seems unlikely. Other geopolitical tremors, such as the terrorist bombings in the UK, Hamas taking control of the Gaza strip or ongoing tension over Iran did not affect oil flows *per se*, but added to the heated temperature of the markets.





On the demand side, Chinese crude imports in June rose by 20% year-on-year to 3.44 mb/d on strong summer demand for travel and electricity. A lack of hydroelectric and nuclear power is leading Japan to burn more fuel oil and crude for summer cooling. And in the US, even recent record-high gasoline pump prices appear not to have caused a significant change in consumers' behaviour so far, with increased driving reported over the Independence Day holiday.

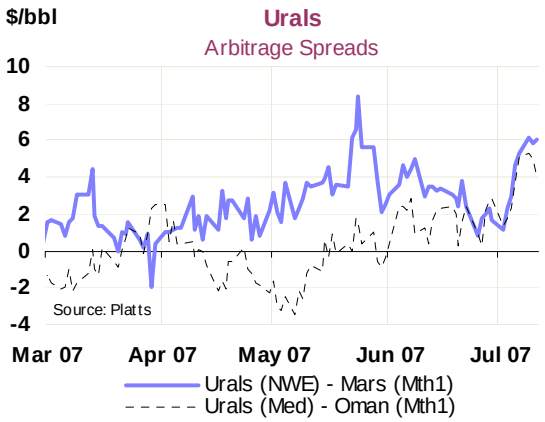
Funds activity has also increased in the crude markets. Latest weekly CFTC data showed a surge to record highs of both open interest and non-commercials' net long position in WTI, hinting at a belief in sustained higher oil prices. Some have noted that the steady rise in futures coincides with both the period in which commodity indexes roll over their positions, but also the beginning of the third quarter, in which funds typically make new investment decisions. However, it also coincided with a marked tightening of forward crude spreads with both WTI and Brent futures toying with backwardation.

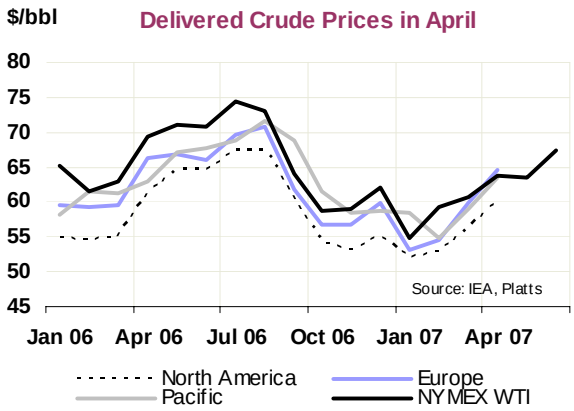
Spot Crude Oil Prices

The dynamics of the US crude market changed, as WTI prices regained strength and improved vis-à-vis Brent. This was largely due to a fall in crude stocks at Cushing, Oklahoma, which have now returned to 22.8 mb in early July, compared with their early April high of 28.0 mb. To some extent however, the crude overhang seen at Cushing, that has distorted US crude markets, has simply switched to the US Gulf. Refineries returned in the Midwest, and a number of VLCCs, temporarily storing crude offshore, were reported to be unloading on the USGC, boosting crude stocks in PADD III. However, the flooding and shutdown of the Coffeyville, Kansas, refinery may yet change this again, as it is expected to boost Cushing stocks.

Physical Brent took strength from North Sea maintenance, with supply there cut by around 465 kb/d month-on-month in June, contributing to a draw in European crude stocks. The impression that Atlantic Basin refiners are competing for tightened North Sea crudes is heightened by Brent's relative strength versus not only sour crudes such as Dubai and Oman, but also eastern light sweet benchmark Tapis. A

change in Dated Brent pricing methodology, whereby the major price assessors apply a price de-escalator to Forties crude as its sulphur content increases, has also contributed to the Brent price shift.





European sour crude Urals also strengthened versus similar Mars and Oman, though the announcement of a 3 mb Kirkuk tender from Ceyhan sharply reduced NWE Urals's premium versus its Mediterranean counterpart. A strong Dated Brent premium over ICE BWAVE should further reduce the Russian crude's attractiveness versus Middle Eastern sour grades, which are priced off the latter, though hikes in Saudi and Iranian official selling prices (OSPs) in early July somewhat made up for this.

Spot Crude Oil Prices and Differentials

(monthly and weekly averages, $/bbl)

	Apr	May	Jun	Jun-May Avg Change	%	Week Commencing: 11 Jun	18 Jun	25 Jun	02 Jul	09 Jul
Crudes										
Dated Brent	67.51	67.23	71.54	4.31	6.4	70.16	72.63	72.51	75.12	77.48
Brent (Asia) Mth1 adjusted	67.76	68.10	70.42	2.33	3.4	69.70	71.23	70.89	72.90	76.08
WTI (Cushing) Mth1 adjusted	63.84	63.40	67.44	4.03	6.4	66.55	68.74	69.12	71.76	72.36
Urals (Mediterranean)	63.92	64.15	67.82	3.68	5.7	67.18	68.68	68.26	71.31	74.68
Dubai Mth1 adjusted	63.97	64.61	65.79	1.18	1.8	65.23	66.70	66.21	68.07	69.73
Tapis (Dated)	74.74	75.13	75.18	0.05	0.1	74.32	75.80	75.15	76.69	79.95
Differential to Dated Brent										
WTI (Cushing) Mth1 adjusted	-3.66	-3.82	-4.11	-0.28		-3.60	-3.89	-3.39	-3.37	-5.12
Urals (Mediterranean)	-3.59	-3.08	-3.72	-0.64		-2.98	-3.95	-4.25	-3.82	-2.81
Dubai Mth1 adjusted - Dated Brent	-3.54	-2.62	-5.75	-3.13		-4.93	-5.93	-6.30	-7.06	-7.75
Tapis (Dated)	7.23	7.90	3.64	-4.26		4.16	3.17	2.64	1.57	2.47
Prompt Month Differential										
Forward Cash Brent Mth1-Mth2 adj.	-0.11	-0.28	0.10	0.37		0.10	0.08	0.25	-0.42	0.10
Forward WTI Cushing Mth1-Mth2 adj	-1.68	-1.27	-0.58	0.69		-0.62	-0.34	-0.32	-0.39	-0.34

Source: Platts

Refining Margins

Refining margins fell across the board in June, as crude prices increased strongly, outpacing product gains. US margins tumbled most on sharp downturns in gasoline after a series of moderate stock builds. On the US Gulf Coast, margins have now approximately halved since early-May highs, again underpinning our argument that crude has taken over as the market driver. US West Coast losses were also marked, despite distillate crack spreads increasing. In Europe, hydroskimming margins turned negative again after a spell in positive territory in May. Singapore margins generally moved least, though Tapis hydroskimming improved slightly after Tapis remained essentially flat.

Selected Refining Margins in Major Refining Centres

($/bbl)

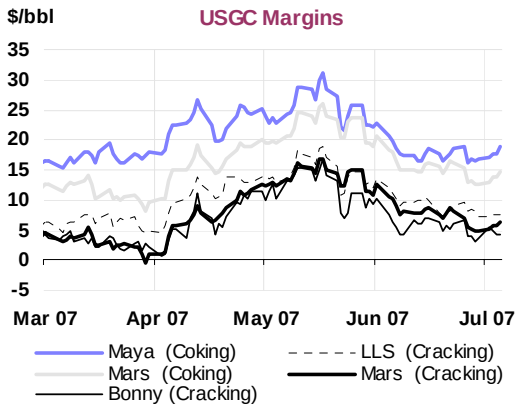
		Monthly Average			Change	Average for week ending:				
		Apr 07	May 07	Jun 07	Jun 07-May 07	06 Jun	13 Jun	20 Jun	27 Jun	04 Jul
NW Europe	Brent (Cracking)	6.78	10.11	6.82	-3.29	7.04	7.18	6.87	6.84	5.62
	Urals (Cracking)	8.68	11.19	8.47	-2.72	8.83	8.13	8.24	9.16	7.27
	Brent (Hydroskimming)	-1.22	1.58	-0.90	-2.48	-0.90	-0.46	-1.07	-0.74	-1.45
	Urals (Hydroskimming)	-0.87	0.78	-1.24	-2.02	-1.15	-1.32	-1.61	-0.54	-2.09
Mediterranean	Es Sider (Cracking)	6.69	9.68	7.17	-2.52	8.05	6.50	6.85	7.82	6.54
	Urals (Cracking)	7.98	10.85	7.65	-3.20	8.33	7.46	7.35	8.04	6.82
	Es Sider (Hydroskimming)	-1.52	0.86	-0.64	-1.50	-0.28	-1.22	-1.13	0.30	-0.47
	Urals (Hydroskimming)	-1.35	0.43	-1.85	-2.28	-1.73	-1.74	-2.35	-1.35	-2.10
US Gulf Coast	Bonny (Cracking)	7.57	10.90	7.79	-3.10	8.71	6.82	8.47	8.15	6.78
	Brent (Cracking)	6.94	11.99	5.71	-6.28	7.80	5.38	6.21	5.11	4.26
	LLS (Cracking)	11.13	14.74	9.38	-5.36	11.73	9.61	8.73	8.66	7.57
	Mars (Cracking)	7.55	13.87	7.90	-5.97	10.66	7.84	7.94	6.96	5.30
	Mars (Coking)	16.16	21.95	15.45	-6.49	18.45	14.87	15.52	14.77	13.20
	Maya (Coking)	22.76	25.35	17.91	-7.44	20.72	17.07	17.55	17.63	17.14
US West Coast	ANS (Cracking)	16.53	16.63	8.90	-7.73	10.96	8.91	8.50	8.73	6.25
	Kern (Cracking)	15.22	17.49	10.82	-6.67	12.94	11.27	10.05	10.10	9.53
	Oman (Cracking)	12.24	12.69	8.56	-4.13	9.35	7.32	8.21	9.23	8.55
	Kern (Coking)	37.10	36.58	27.24	-9.34	29.32	26.35	27.40	27.34	24.27
Singapore	Dubai (Hydroskimming)	-0.51	-0.26	-0.60	-0.34	-0.86	-0.72	-0.76	-0.50	-0.35
	Tapis (Hydroskimming)	-5.67	-3.46	-3.33	0.12	-4.05	-3.44	-3.43	-2.92	-2.61
	Dubai (Hydrocracking)	4.38	5.43	4.17	-1.26	4.54	4.06	3.83	4.11	4.37
	Tapis (Hydrocracking)	-1.76	0.55	-0.55	-1.10	-0.72	-0.62	-0.86	-0.29	0.20
China	Cabinda (Hydroskimming)	-5.38	-3.02	-3.11	-0.09	-3.84	-2.78	-2.56	-2.95	-3.84
	Daqing (Hydroskimming)	-9.19	-5.87	-2.31	3.56	-3.51	-2.64	-1.92	-1.65	-3.49
	Dubai (Hydroskimming)	-0.98	-0.88	-1.07	-0.19	-1.40	-1.18	-1.24	-0.94	-0.80
	Daqing (Hydrocracking)	-2.29	1.42	2.87	1.45	2.52	2.55	2.75	3.35	1.96
	Dubai (Hydrocracking)	3.93	4.78	3.67	-1.11	3.92	3.58	3.33	3.66	3.86

For the purposes of this report, refining margins are calculated for various complexity configurations, each optimized 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.

Spot Product Prices

Refined product markets were marked by gasoline's weak performance relative to distillates. Despite all the focus on tight gasoline supplies – end-June stocks in the US, Europe and Japan remain well below average levels – this was not reflected in differentials, which fell, notably in the US. In terms of crack spreads, these have deteriorated significantly, notably in Europe, where they had been unusually high on strong exports to the US, showing up in falling European gasoline stocks in June.



Distillate crack spreads were mixed, with diesel and heating oil flat on the whole and jet/kerosene falling quite sharply. Gasoil prices took some strength from falling stocks in the US and Europe, despite higher runs, and in Asia from Latin American buying, after the winter there turned unusually cold. Despite the onset of summer travel, jet spreads fell, in Asia possibly due to a hike in Korean exports of 25% in July.

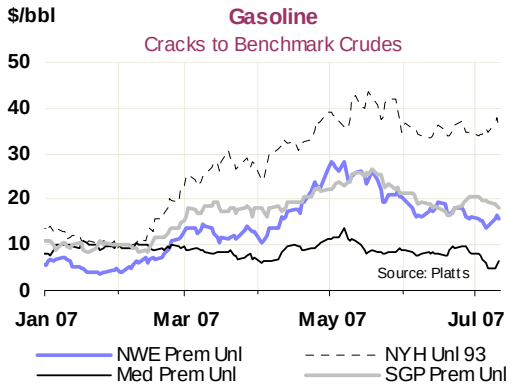
Spot Product Prices

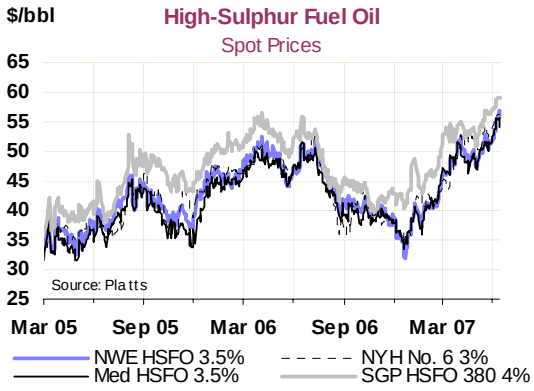
(monthly and weekly averages, $/bbl)

	Apr	May	Jun	Jun-May Change	Jun-May %	Week Commencing: 11 Jun	18 Jun	25 Jun	02 Jul	09 Jul	Apr	May	Jun
Rotterdam, Barges FOB											**Differential to Brent**		
Premium Unleaded	85.57	91.35	88.90	-2.45	-2.7	88.20	90.16	89.13	89.89	93.43	18.07	24.13	17.36
Naphtha	72.53	75.76	73.69	-2.06	-2.7	73.23	73.38	74.55	76.69	77.97	5.02	8.53	2.15
Jet/Kerosene	82.93	84.02	87.24	3.22	3.8	86.35	88.34	88.10	89.11	91.40	15.42	16.79	15.70
ULSD	81.65	81.72	85.50	3.78	4.6	84.54	86.59	86.38	87.51	89.81	14.15	14.49	13.96
Gasoil .2%	78.37	79.11	82.31	3.20	4.0	81.52	83.55	83.17	84.52	86.75	10.86	11.88	10.76
LSFO 1%	44.61	47.48	48.58	1.10	2.3	47.96	48.74	49.72	52.34	54.60	-22.89	-19.75	-22.96
HSFO 3.5%	48.44	49.35	50.91	1.56	3.2	51.32	51.57	51.65	53.74	55.97	-19.07	-17.88	-20.64
Mediterranean, FOB Cargoes											**Differential to Urals**		
Premium 50 ppm	83.69	90.23	87.23	-3.01	-3.3	86.41	88.36	87.19	88.13	91.40	19.77	26.08	19.40
Naphtha	70.70	73.91	72.19	-1.72	-2.3	71.64	72.15	73.66	76.10	77.48	6.78	9.76	4.36
Jet Aviation fuel	79.75	81.38	84.76	3.38	4.2	83.60	85.91	86.29	87.16	89.42	15.83	17.23	16.94
Gasoil .2%	79.56	79.87	82.45	2.58	3.2	82.10	83.49	83.53	85.29	87.47	15.64	15.72	14.62
LSFO 1%	48.88	51.95	54.68	2.73	5.2	54.04	55.48	56.71	59.85	61.11	-15.05	-12.20	-13.15
HSFO 3.5%	48.51	48.47	50.75	2.28	4.7	50.87	51.00	51.78	54.20	54.91	-15.41	-15.68	-17.07
New York Harbour, Barges											**Differential to WTI**		
Super Unleaded	96.10	102.74	102.39	-0.35	-0.3	100.96	103.66	104.46	106.33	109.03	32.26	39.33	34.95
Unleaded	87.73	93.89	91.52	-2.37	-2.5	90.14	92.79	92.15	94.36	96.99	23.88	30.49	24.09
Jet/Kerosene	85.85	87.34	88.82	1.48	1.7	86.47	90.93	89.89	91.64	91.80	22.00	23.94	21.38
No. 2 (Heating Oil)	78.19	79.10	83.64	4.54	5.7	82.56	85.30	85.00	87.08	88.20	14.34	15.69	16.20
LSFO 1%	47.18	52.45	54.03	1.59	3.0	54.96	54.20	54.26	55.95	57.00	-16.67	-10.96	-13.40
No. 6 3%	46.95	52.08	52.06	-0.02	0.0	53.22	52.87	52.36	55.38	56.23	-16.90	-11.32	-15.37
Singapore, Cargoes											**Differential to Dubai**		
Premium Unleaded	83.49	88.77	84.79	-3.98	-4.5	83.82	83.78	85.95	88.03	88.24	19.52	24.16	19.00
Naphtha	74.22	76.73	73.12	-3.61	-4.7	72.40	72.58	73.39	76.14	76.60	10.25	12.12	7.33
Jet/Kerosene	80.91	82.14	83.75	1.61	2.0	82.60	84.96	84.89	85.42	86.84	16.94	17.53	17.96
Gasoil .5%	80.24	81.73	81.80	0.07	0.1	81.50	83.12	81.78	83.46	86.34	16.27	17.12	16.01
LSWR Cracked	51.91	54.94	60.70	5.77	10.5	60.44	62.45	61.75	62.08	62.90	-12.06	-9.67	-5.09
HSFO 180 CST	53.24	53.34	55.45	2.11	4.0	55.55	56.00	56.43	57.74	58.85	-10.73	-11.27	-10.34
HSFO 380 CST 4%	53.32	53.27	55.58	2.32	4.3	55.62	56.46	56.81	57.81	59.04	-10.65	-11.34	-10.21

Source: Platts

Fuel oil prices made strong gains, mostly on strong demand for power generation. In Asia, low-sulphur waxy residue (LSWR) saw its discount to Dubai narrow on strong buying (normally prompted by Japanese demand or Indonesian refinery problems), while high-sulphur fuel oil (HSFO) was supported by lower South Korean exports and lower arbitrage volumes from Europe. In Europe, support for fuel oil will also come from new, lower sulphur requirements for bunker fuel to come into place in the English Channel and North Sea from 11 August. This new Sulphur Emissions Control Area (SECA) will require a maximum of 1.5% in marine bunker fuel, as is already the case in the Baltic Sea.





End-User Product Prices in June

Most end-user prices rose in June, except gasoline prices in Canada and the US, which declined by 2.1% in US dollars, ex-tax. In comparison, gasoline prices in other OECD countries rose by 3.0% on average, with

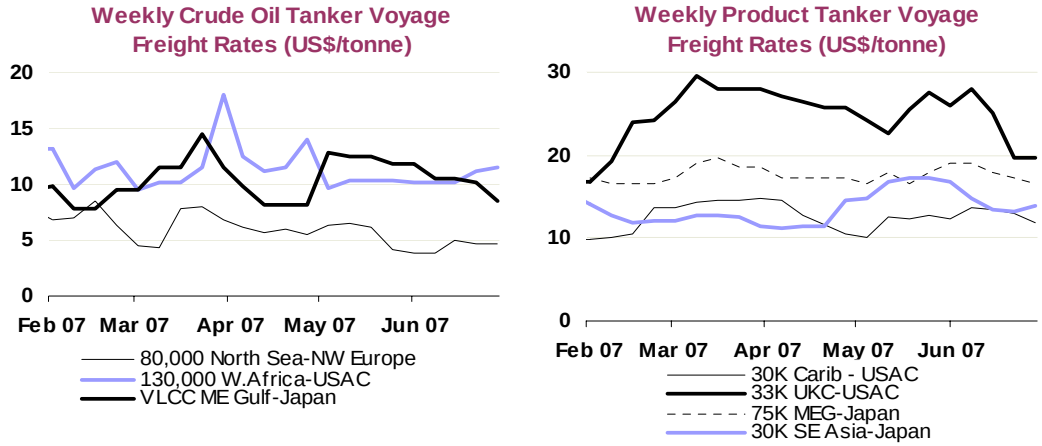
increases of 5.0% and 5.5% in the UK and Italy respectively. Other OECD ex-tax product prices in US dollars all gained on average, with 1.8% growth for diesel, 1.8% for heating oil and 2.7% for fuel oil.

Freight

VLCC rates from the Middle East Gulf drifted below seasonal averages in June, falling most notably on westbound trades. Global volumes of oil at sea are now unseasonably low. The upside potential for rates in the summer, prompted by a decline in Asian refinery maintenance, is diluted by ongoing limits on OPEC exports. Interest in crudes from the Atlantic Basin and Mediterranean pushed rates from these regions slightly higher in June. Ample tonnage eroded clean tanker rates in the Atlantic Basin in June, despite high US gasoline imports.

Tanker trackers report that volumes of oil in transit remain well below seasonal norms, apparently confirming low vessel employment for this time of year. Growing VLCC availability was boosted further in the second half of June by the discharge from several of these two-million barrel vessels which had been storing crude temporarily in the US Gulf. VLCC rates from the Middle East Gulf to US Gulf fell from $20/tonne at the start of June to around $15/tonne in early July.

OPEC cargo reductions continue to undermine any potential for a seasonal rebound in vessel demand as Asian refineries return from maintenance. In line with recent months, Saudi Arabia announced that it will supply 9-10% less crude to refineries in the Far East than contracted volumes in August. VLCC rates from the Middle East Gulf to Japan, now booking for loading in August, are currently around $9/tonne, down by over $3/tonne from early June. However, eastbound rates have shown signs of rebounding in early July.



Suezmax rates from West Africa to the US Atlantic rose by over $1/tonne, to reach $11.50/tonne in the second half of June. Corresponding VLCC rates rose by a similar amount in early July. While these increases coincided with a temporary halt in hostilities from a major rebel group in Nigeria and delays at Nigerian ports, higher Mediterranean chartering was probably more supportive. Black Sea to Med million-barrel rates jumped by $4/tonne in the middle week of June, peaking at almost $12/tonne. There were also reports of improved economics for spot exports of African or FSU grades to the US. Increased interest in Aframax vessels in the Caribbean lent support to late-June rates for the sector and reduced broader vessel availability. Brisk chartering elsewhere contributed to firmness in Aframax rates in the North Sea in June, despite maintenance at production facilities.

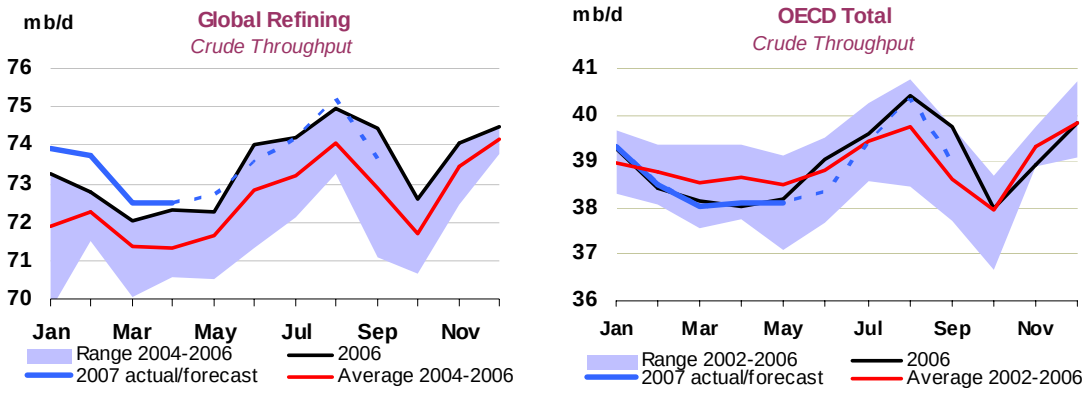
Clean product tanker rates fell in June, especially in Western markets. Clean rates for 30,000-tonne trades from Northern Europe to the US Atlantic Coast dropped below $20/tonne at the end of June having started the month near $26/tonne. US gasoline imports remain but increased supply of product tankers in the Atlantic and Mediterranean have had an offsetting effect on spot charter rates. By contrast, limited tanker availability may have bolstered Singapore to Japan clean rates in late June following a quiet month of chartering activity, when refineries increasingly returned to operations.

REFINING

Summary

- **Global refinery crude throughput is estimated at 72.7 mb/d in May, 0.4 mb/d higher year-on-year** and 0.2 mb/d above April**.** Higher crude runs in the non-OECD regions and OECD North America offset the decline in the OECD Pacific. Crude throughput is forecast to reach 75.2 mb/d in August, as refiners seek to meet strong demand in the Atlantic Basin before maintenance work in the autumn.

- **OECD refinery crude throughput was 38.1 mb/d in May**, largely unchanged from April and last May's level. Higher crude runs in North America and Europe offset the maintenance–related decline in the Pacific. OECD crude throughput in June is estimated to be 0.3 mb/d higher at 38.4 mb/d. The return of refineries from maintenance in the Pacific, North America and Europe are expected to push OECD crude throughput to 39.4 mb/d in July and 40.3 mb/d in August.



- **Naphtha yields in the Pacific bounced back in April to fresh ten-year highs, driven by gains in Korea and Japan.** European naphtha yields declined as refiners preferred to switch production into gasoline and jet/kerosene, which rose to the top of the five-year range. North American refiners continued to focus on gasoil/diesel production, at the expense of the jet/kerosene yields. Gasoline yields were also weak, linked to below-average FCC utilisation in the US.

- **In 2008, an easing of the current gasoline market tightness should be seen.** To a lesser extent gasoil and diesel markets should also ease, but jet markets could remain relatively tight. Fuel oil markets are expected to enter a rebalancing phase as increased demand and new upgrading capacity reduce the need for the product to be discounted against crude prices.

Global Refinery Throughput

Global crude runs were an estimated 72.7 mb/d in May, up 0.2 mb/d from April's 72.5 mb/d and 0.4 mb/d higher year on year. Crude runs are expected to increase, to a summer peak of 75.2 mb/d in August, before dropping 1.6 mb/d in September as autumn maintenance kicks in. The peak summer crude throughput assumes that the refinery-reliability problems currently affecting the US ease, although we retain a 0.5 mb/d assumption of offline capacity in August for North America. Chinese crude runs in July will be boosted by the start-up of Sinopec's 160 kb/d crude unit at its Yanshan refinery, but offset partly by lower runs at Petro China's Dalian refinery. Ultimately, Sinopec will mothball two older 60 kb/d crude units at Yanshan, which will reduce runs further, although a definitive schedule for this was not available at the time of writing.

North American crude throughput remains constrained by the large number of refineries running at less than full capacity due to operational problems. In addition to the high-profile incidents in the US Midwest at Coffeyville's Kansas and BP's Whiting refineries, we have noted a further 25 plants which are subject to disruptions, in addition to planned maintenance at a number of refineries.

Global Refinery Crude Throughput[1]

million barrels per day

	Jan 07	Feb 07	Mar 07	*Apr 07*	*May 07*	*Jun 07*	*Jul 07*	*Aug 07*	*Sep 07*
OECD Crude Runs									
North America	18.0	17.5	17.8	17.9	18.3	*18.3*	*18.6*	*19.1*	*18.7*
Europe	13.9	13.7	13.0	13.3	13.4	*13.7*	*13.7*	*14.0*	*13.5*
Pacific	7.4	7.3	7.3	6.9	6.4	*6.4*	*7.0*	*7.3*	*6.8*
Total OECD	39.3	38.5	38.0	38.1	38.1	*38.4*	*39.4*	*40.3*	*39.0*
NON-OECD Crude Runs									
FSU	5.7	5.9	*5.8*	*5.6*	*5.6*	*5.8*	*5.9*	*5.9*	*5.6*
Europe	1.0	1.0	*1.0*	*0.9*	*0.9*	*1.0*	*1.0*	*1.0*	*1.0*
China	6.2	6.5	*6.4*	*6.5*	*6.6*	*6.7*	*6.6*	*6.5*	*6.2*
Other Asia	8.1	8.2	*7.9*	*7.9*	*8.0*	*7.9*	*7.3*	*7.6*	*7.9*
Latin America	5.2	5.3	*5.2*	*5.5*	*5.3*	*5.5*	*5.4*	*5.5*	*5.5*
Middle East	6.0	5.8	*6.0*	*6.0*	*5.8*	*6.0*	*6.2*	*6.1*	*6.0*
Africa	2.4	2.4	*2.3*	*2.2*	*2.3*	*2.3*	*2.3*	*2.3*	*2.3*
Total Non-OECD	34.6	35.2	*34.5*	*34.4*	*34.6*	*35.2*	*34.8*	*34.9*	*34.6*
Total Crude Runs	73.9	73.7	*72.5*	*72.5*	*72.7*	*73.5*	*74.2*	*75.2*	*73.6*

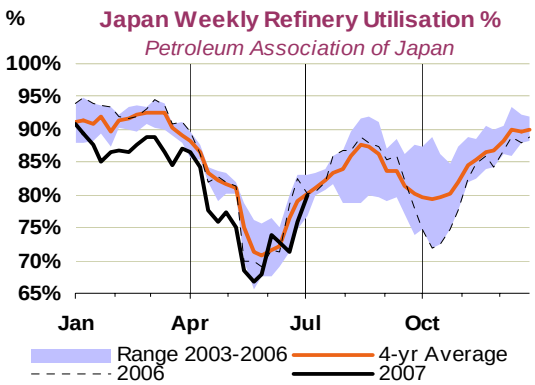
1 Crude runs in Italics are estimates

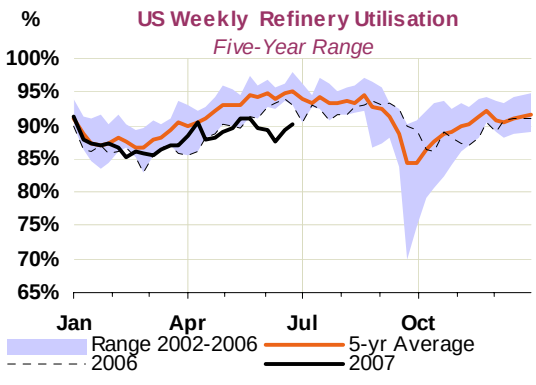
April data have been received for some non-OECD countries, leading us to revise up our estimates for crude throughput to 34.4 mb/d for the non-OECD. This offsets slightly lower OECD estimates for the month. Conversely, preliminary data for May have led to number of revisions in the FSU, China and Latin America and lowers total non-OECD runs to 34.6 mb/d from last month's 35.0 mb/d estimate.

OECD Refinery Throughput

OECD Third-Quarter Forecast

Third-quarter crude throughput is expected to hit a seasonal peak in August of 40.3 mb/d, an increase of 2.2 mb/d from May's 38.1 mb/d. Gains are forecast to be evenly distributed between the regions, averaging 0.7 mb/d. In the Pacific, completion of Japanese (and latterly Korean) maintenance should see runs reach 7.3 mb/d. Korean runs should receive a boost from the imminent restart of SK Incheon's mothballed 75 kb/d crude tower, which is currently scheduled for the middle of July. North American and European runs should both increase by 0.7 mb/d, although this assumes a cessation of current US reliability problems.

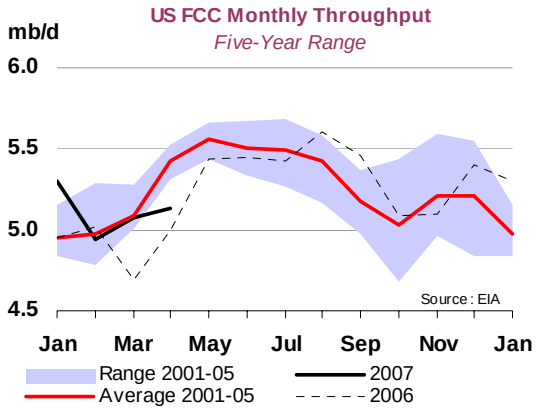


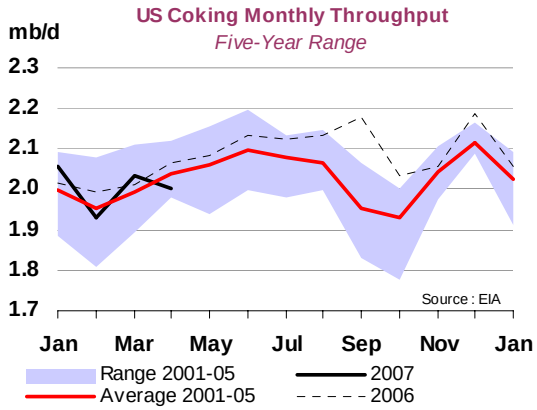


Weekly data for June point to a sharp recovery in runs in Japan, following the conclusion of most maintenance work. Work appears to have been heavier over the first half of the month, but runs recovered

strongly by the end of the month. Early July saw a number of refiners reporting operating problems, including Shell's Yokkaichi plant, where a residue cracking unit was taken offline. At the time of writing the unit was expected to restart in mid-July, affecting gasoline production, just ahead of the peak demand season.

US weekly data indicate that June crude runs were 15.4 mb/d, in line with our conservative expectations for the month and 0.5 mb/d below both June 2006 levels and the five-year average. Crude runs were lower than average on the Gulf and West Coasts, largely due to planned maintenance, and in the Midwest and East Coast due to unplanned outages. Gulf and West Coast crude runs should increase with the return to service of a 240 kb/d crude unit at ExxonMobil's Beaumont refinery and a 200 kb/d crude unit at Chevron's El Segundo refinery, both scheduled for late July. Further increases will occur when BP's Whiting facility, which at the time of writing has shut down its remaining crude processing for inspection, resumes full operations, although the timing of this remains uncertain.

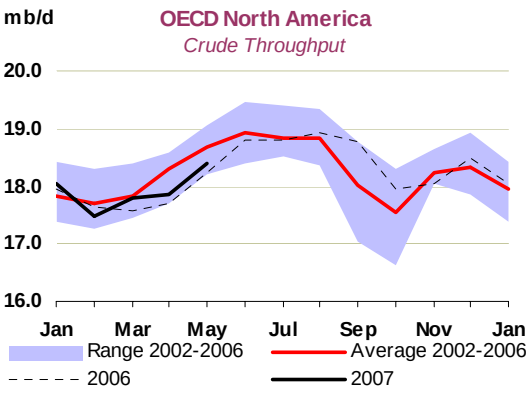


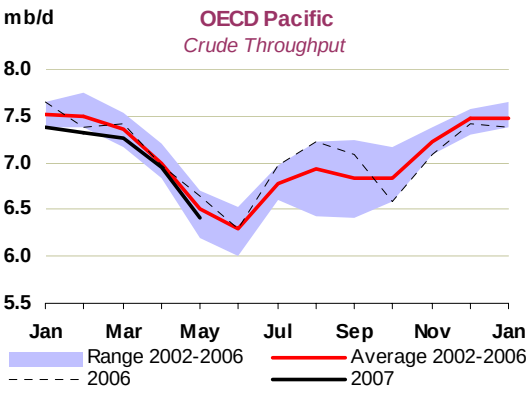


Monthly US data for April indicate that refineries continued to struggle with upgrading unit reliability issues, leading to lower-than-average capacity utilisation for the month. As noted in last month's report the strong level of gasoline and gasoline blending component imports during the month, and strong alkylate premiums indicated that FCC utilisation rates were likely to have been constrained, although we expect to see some improvement in subsequent months' data.

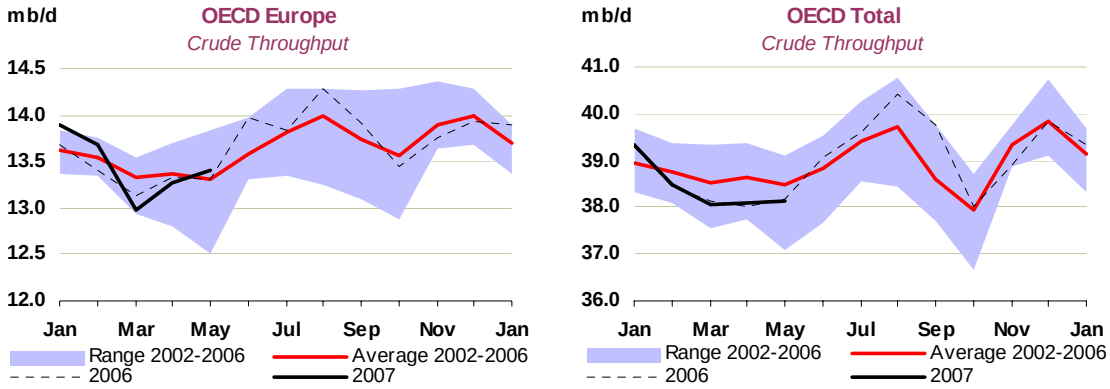
May OECD Data

OECD crude throughput in May averaged 38.1 mb/d, 0.1 mb/d ahead of our forecast, driven by higher-than-forecast runs in Europe. Crude throughput was flat compared with April's downwardly revised (-0.1 mb/d) level, as increased throughput in North America and Europe was offset by the heavy decline in Japanese runs, reducing Pacific throughput.





North American crude runs were 0.4 mb/d higher than in April, largely driven by the continued recovery in US West Coast runs from March's historically low levels. Canadian crude runs remained depressed, following the disruption to Imperial's Nanticoke and Sarnia refineries and the planned turnaround at its Dartmouth refinery. Pacific crude throughput fell as expected by 0.5 mb/d, as Japanese refineries reached the annual peak in maintenance activity, while refiners in Korea and Australia increased runs slightly, ahead of the start of seasonal maintenance.



Gains in Europe were largely in France, where throughputs rose by 0.3 mb/d as refineries recovered from the disruption of the Fos port strike and completion of maintenance in April at Total's Donges and Shell's Berre l'Etang refineries. Elsewhere runs were broadly lower, although little planned work was reported with the exception of a partial shutdown at PCK's Schwedt refinery. Crude throughput was 0.1 mb/d higher year-on-year, as gains in France, Italy and the Netherlands were largely offset by declines in Germany, Belgium and Sweden.

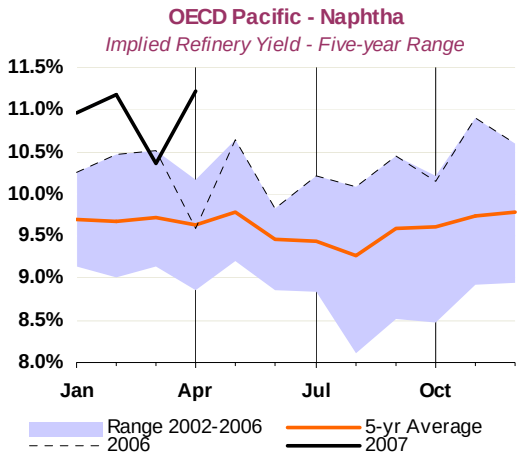
Refinery Crude Throughput and Utilisation in OECD Countries

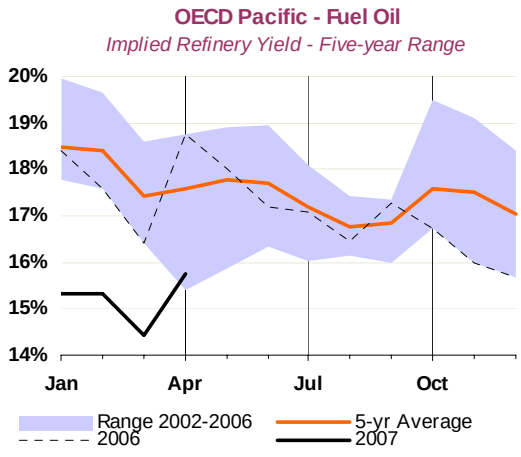
	million barrels per day						*Change from*		Utilisation rate[2]	
	Dec 06	Jan 07	Feb 07	Mar 07	Apr 07	May 07	*Apr 07*	*May 06*	May 07	May 06
OECD North America										
US[3]	15.37	14.96	14.43	14.84	15.04	15.49	0.45	-0.03	89.06	89.54
Canada	1.80	1.80	1.80	1.72	1.59	1.58	-0.01	0.09	78.10	73.86
Mexico	1.31	1.27	1.26	1.24	1.24	1.23	-0.01	0.01	79.73	71.96
Total	18.47	18.04	17.49	17.80	17.87	18.29	0.42	0.07	87.32	86.64
OECD Europe										
France	1.80	1.79	1.71	1.50	1.59	1.88	0.29	0.39	95.90	75.40
Germany	2.32	2.26	2.31	2.21	2.19	2.14	-0.05	-0.23	88.69	97.62
Italy	1.95	1.91	1.93	1.91	1.83	1.78	-0.05	0.28	76.19	64.74
Netherlands	1.03	1.01	0.97	0.88	1.01	1.03	0.02	0.11	84.98	75.00
Spain	1.15	1.19	1.14	1.17	1.22	1.19	-0.03	-0.03	93.79	96.26
UK	1.63	1.59	1.42	1.49	1.60	1.63	0.03	0.04	86.12	84.59
Other OECD Europe	4.02	4.14	4.20	3.81	3.84	3.75	-0.09	-0.46	78.37	87.33
Total	13.93	13.89	13.67	12.98	13.28	13.40	0.13	0.09	84.45	83.56
OECD Pacific										
Japan	4.18	4.13	4.11	4.04	3.88	3.29	-0.60	-0.21	70.28	74.93
Korea	2.47	2.49	2.51	2.48	2.37	2.43	0.06	-0.09	94.28	97.76
Other OECD Pacific	0.78	0.76	0.70	0.75	0.70	0.70	0.01	0.08	87.43	77.43
Total	7.43	7.38	7.32	7.27	6.95	6.42	-0.53	-0.22	79.67	82.48
OECD Total	39.83	39.32	38.49	38.05	38.09	38.11	0.02	-0.06	84.93	84.81

1 Estimate
2 Based on crude throughput and current operable refining capacity
3 US50

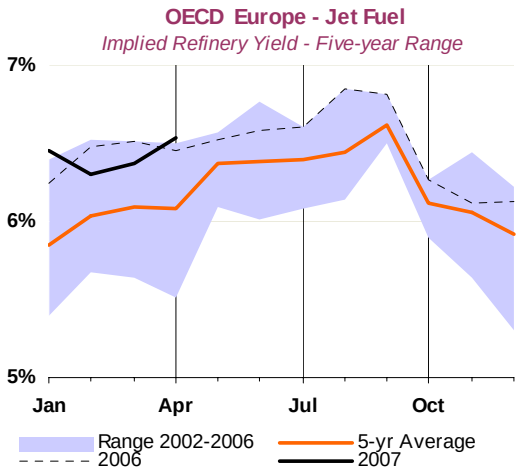
OECD Refinery Yields

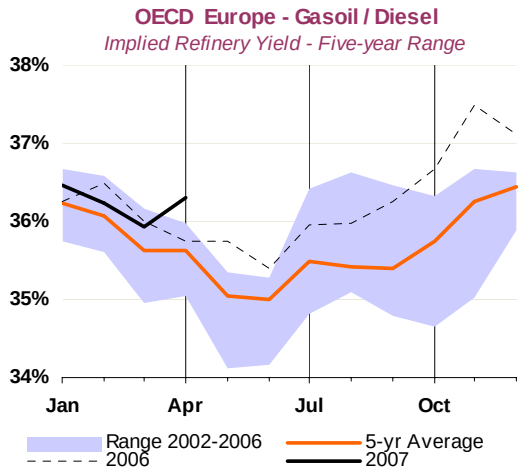
Naphtha yields in the Pacific bounced back in April to fresh 10-year highs, driven by gains in Korea and Japan. Naphtha yields were 11.2%, 1.6 percentage points (17%) above the five-year average and April 2006 levels. Continued strong demand from petrochemical producers and refiners looking to capture strong gasoline prices underpinned the naphtha crack, encouraging higher yields. Fuel oil yields also increased during April from the 10-year low reached in March, but remain below average levels. This increase, which is centred on Japan, is likely to have been the result of refiners increasing the use of marginal hydroskimming capacity to boost overall production levels to offset the impact of the start of seasonal maintenance.





European naphtha yields declined in April as refiners appeared to switch marginal light distillate production into gasoline, given the stronger crack spreads as a result of problems with US refineries. Lower naphtha yields would also appear to have boosted jet/kerosene production, although to a lesser extent. Nevertheless, the jet/kerosene yield was at the top of its five year range and gasoil/diesel was similarly strong. These latter two products may see continued strength in subsequent months' data as hydrocrackers at Total's Gonfreville and Neste's Porvoo refineries reach full production.





Outlook for 2008

Next year should see the start-up of 1.5 mb/d of new crude distillation capacity, almost half of which will be in China. The balance of the growth is well-dispersed, with most regions contributing to the growth (notable exceptions are Europe and the Pacific). North American crude capacity is expected to increase by 116 kb/d, driven by a number of small-scale expansions at refineries operated by Valero, Holly, Frontier and others. Latin America should see the beginning of Brazilian expansion coming onstream plus the restart of the Cienfuegos refinery in Cuba.

The Middle East's 250 kb/d growth in crude distillation capacity relies on the start of Qatar's 146 kb/d condensate splitter and the expansion of Saudi Aramco's Rabigh and Iran's Bandar Abbas refineries. Growth in Other Asia is largely due to the 150 kb/d of Indian crude capacity expansions. These include the second phase of Essar's Vadinar refinery and the expansion of IOC's Koyali refinery in Gujarat, both tied into new upgrading units and desulphurisation. Reports of the phased start-up of Reliance's 580 kb/d Jamnagar refinery over the course of 2008 suggest that its inclusion in our product supply model only for 1Q09 might be overly cautious. However, without confirmation of exactly which units will start and when, we retain the assumption that refinery throughput will only reach full capacity at the beginning of 2009.

Upgrading additions are expected to further add to the supply of light products in 2008 and start to tighten the fuel oil pool, as discussed in our recently published *MTOMR*. Coking capacity additions of over 400 kb/d are expected to occur largely in China, North and Latin America. An equally large tranche of hydrocracking capacity is expected to commence operations during 2008, adding to the supply of low-sulphur middle distillates. Furthermore, we expect 1.5 mb/d of hydrotreating capacity additions next year, 60% of which are aimed at the diesel desulphurisation. Only 25 kb/d is targeted at hydrotreating residue, despite the tighter bunker fuel sulphur limits that will be introduced in Europe by the beginning of the year.

The net impact on our global product balance is mixed during 2008. Naphtha markets look to remain tight during the year, however gasoline supply potential looks set to outstrip demand by quite a wide margin. At the same time jet/kerosene markets are expected to remain tight. Similarly, only marginal easing of the gasoil/diesel market is expected next year. Fuel-oil cracks are expected to start to tighten as a result of the commissioning of the upgrading capacity noted above. Overall the key question is how the market will resolve these shifts in balance between demand and supply potential, particularly ahead of the even bigger changes we expect to occur in 2009.

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

	2004	2005	1Q06	2Q06	3Q06	4Q06	2006	1Q07	2Q07	3Q07	4Q07	2007	1Q08	2Q08	3Q08	4Q08	2008
OECD DEMAND																	
North America	25.4	25.5	25.1	25.1	25.4	25.4	25.2	25.7	25.3	25.9	26.0	25.7	26.1	25.7	26.2	26.2	26.1
Europe	15.5	15.6	15.9	15.2	15.6	15.6	15.6	15.2	14.9	15.7	15.9	15.4	15.8	15.3	15.8	16.0	15.7
Pacific	8.5	8.6	9.2	7.8	7.9	8.7	8.4	8.8	7.8	8.0	8.9	8.4	9.2	7.9	8.0	8.9	8.5
Total OECD	49.4	49.7	50.3	48.0	48.9	49.7	49.2	49.7	48.1	49.5	50.7	49.5	51.1	48.9	49.9	51.1	50.3
NON-OECD DEMAND																	
FSU	3.8	3.8	3.9	3.7	4.0	4.3	4.0	3.8	3.6	4.0	4.5	4.0	3.9	3.7	4.1	4.5	4.1
Europe	0.7	0.7	0.8	0.7	0.7	0.8	0.7	0.8	0.8	0.7	0.8	0.8	0.9	0.8	0.7	0.8	0.8
China	6.4	6.7	7.0	7.3	7.2	7.2	7.2	7.3	7.7	7.6	7.7	7.6	7.8	8.1	8.0	8.2	8.0
Other Asia	8.6	8.8	9.0	9.0	8.7	8.9	8.9	9.2	9.2	9.0	9.2	9.1	9.4	9.4	9.2	9.5	9.4
Latin America	5.0	5.1	5.2	5.3	5.4	5.4	5.3	5.3	5.5	5.6	5.5	5.5	5.5	5.6	5.7	5.7	5.6
Middle East	5.7	6.0	6.2	6.2	6.5	6.3	6.3	6.4	6.5	6.8	6.5	6.5	6.7	6.8	7.1	6.8	6.8
Africa	2.8	3.0	3.0	3.0	2.9	2.9	2.9	3.1	3.1	3.0	3.1	3.1	3.2	3.2	3.1	3.2	3.2
Total Non-OECD	33.0	34.1	34.9	35.2	35.2	35.8	35.3	35.9	36.3	36.7	37.3	36.6	37.3	37.7	38.0	38.7	37.9
Total Demand[1]	82.3	83.7	85.2	83.2	84.1	85.5	84.5	85.5	84.4	86.2	88.0	86.0	88.5	86.6	87.9	89.8	88.2
OECD SUPPLY																	
North America	14.6	14.1	14.2	14.2	14.3	14.3	14.2	14.4	14.1	14.0	14.1	14.1	14.4	14.0	13.9	14.1	14.1
Europe	6.1	5.6	5.5	5.1	4.9	5.2	5.2	5.2	4.9	4.6	4.9	4.9	4.9	4.6	4.4	4.6	4.6
Pacific	0.6	0.6	0.5	0.5	0.7	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8
Total OECD	21.2	20.3	20.2	19.8	19.9	20.1	20.0	20.2	19.7	19.3	19.7	19.7	20.0	19.4	19.1	19.5	19.5
NON-OECD SUPPLY																	
FSU	11.2	11.6	11.8	12.0	12.2	12.4	12.1	12.5	12.6	12.6	12.8	12.6	12.8	13.0	13.1	13.3	13.1
Europe	0.2	0.2	0.2	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	3.5	3.6	3.7	3.7	3.7	3.6	3.7	3.7	3.8	3.9	3.9	3.8	3.9	3.9	3.9	3.9	3.9
Other Asia	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.8	2.8	2.8
Latin America	4.1	4.3	4.3	4.4	4.4	4.4	4.4	4.4	4.4	4.5	4.6	4.5	4.8	4.8	4.8	4.7	4.8
Middle East	1.9	1.9	1.8	1.7	1.7	1.7	1.7	1.7	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
Africa[2]	3.4	3.7	3.9	3.8	3.9	4.1	3.9	2.6	2.6	2.6	2.6	2.6	2.7	2.7	2.7	2.7	2.7
Total Non-OECD	27.0	27.9	28.3	28.5	28.7	29.0	28.7	27.8	27.8	28.0	28.4	28.0	28.6	28.8	28.9	29.2	28.9
Processing Gains[3]	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0
Other Biofuels[4]	0.1	0.1	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.7	0.7	0.7	0.7	0.7
Total Non-OPEC[5]	50.2	50.2	50.7	50.5	50.8	51.3	50.8	50.2	49.8	49.7	50.4	50.0	51.3	50.8	50.6	51.3	51.0
Non-OPEC excl. Angola[2]	49.2	49.0	49.3	49.2	49.3	49.9	49.4	50.2	49.8	49.7	50.4	50.0	51.3	50.8	50.6	51.3	51.0
OPEC																	
Crude[6]	28.9	29.7	29.9	29.7	30.0	29.2	29.7	30.2	30.3								
NGLs	4.2	4.5	4.6	4.6	4.6	4.7	4.6	4.8	4.8	4.8	5.0	4.9	5.2	5.4	5.6	5.8	5.5
Total OPEC	33.1	34.2	34.5	34.3	34.7	33.9	34.3	35.0	35.1								
OPEC incl. Angola[2]	34.1	35.5	35.9	35.6	36.1	35.3	35.7	35.0	35.1								
Total Supply[7]	83.2	84.5	85.2	84.8	85.4	85.2	85.2	85.3	84.9								
STOCK CHANGES AND MISCELLANEOUS																	
Reported OECD																	
Industry	0.1	0.1	0.0	0.7	1.2	-0.9	0.2	-0.9									
Government	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0									
Total	0.2	0.2	0.0	0.7	1.2	-0.8	0.3	-0.9									
Floating Storage/Oil in Transit	0.0	-0.1	0.1	-0.1	0.3	-0.6	-0.1	0.2									
Miscellaneous to balance[8]	0.7	0.6	-0.2	0.9	-0.2	1.2	0.4	0.4									
Total Stock Ch. & Misc	0.9	0.7	0.0	1.5	1.3	-0.3	0.7	-0.3	0.5								
Memo items:																	
Call on OPEC crude + Stock ch.[9]	28.0	29.0	29.9	28.1	28.7	29.5	29.0	30.5	29.8	31.7	32.6	31.1	32.0	30.4	31.7	32.7	31.7
Adjusted Call on OPEC + Stock ch.[10]	28.7	29.6	29.7	29.0	28.5	30.7	29.5	30.9	30.4	32.3	33.2	31.7	32.6	31.0	32.3	33.3	32.3
"Call" incl. Angola[2]	29.0	30.2	31.3	29.5	30.1	30.9	30.5	30.5	29.8	31.7	32.6	31.1	32.0	30.4	31.7	32.7	31.7
"Adjusted Call" incl. Angola[2]	29.7	30.8	31.1	30.4	30.0	32.1	30.9	30.9	30.4	32.3	33.2	31.7	32.6	31.0	32.3	33.3	32.3

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 With effect from OMR of 13 February 2007, Angolan production will be reclassified within OPEC and excluded from the Non-OPEC and Africa totals, for the period January 2007 onwards. Secondary aggregates allow comparison with previous year totals by including Angola within OPEC retroactively.
3 Net volumetric gains and losses in the refining process (excludes net gain/loss in former USSR, China and non-OECD Europe) and marine transportation losses
4 Biofuels from sources outside Brazil and US.
5 Non-OPEC supplies include crude oil, condensates, NGL and non-conventional sources of supply such as synthetic crude, ethanol and MTBE.
6 As of the March 2006 OMR, Venezuelan Orinoco heavy crude production is included within Venezuelan crude estimates. Orimulsion fuel remains within the OPEC NGL & non-conventional category, but Orimulsion production will reportedly cease from January 2007.
7 Comprises crude oil, condensates, NGLs, oil from non-conventional sources and other sources of supply
8 Includes changes in non-reported stocks in OECD and non-OECD areas
9 Equals the arithmetic difference between total demand minus total non-OPEC supply minus OPEC NGLs
10 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)

	2004	2005	1Q06	2Q06	3Q06	4Q06	2006	1Q07	2Q07	3Q07	4Q07	2007	1Q08	2Q08	3Q08	4Q08	2008
OECD DEMAND																	
North America	-	-	-	-	-	-	-	-	-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	-					
Pacific	-	-	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-	-0.1	-	-					
Total OECD	-	-	-	-	-	-	-	-0.1	-0.2	-0.1	-0.1	-0.1					
NON-OECD DEMAND																	
FSU	-	-	-	-	-	-	-	-	-	-0.1	-	-					
Europe	-	-	-	-	-	-	-	-	-	-	-	-					
China	-	-	-	-	-	-	-	-	-	-	-	-					
Other Asia	-	-	-	-	-	-	-	-	-	-	-	-					
Latin America	-	-	-	-	-	-	-	-	-	-	-	-					
Middle East	-	-	-	-	-	-	-	-	-	-	-	-					
Africa	-	-	-	-	-	-	-	-	-	-	-	-					
Total Non-OECD	-	-	-	-	-	-	-	-	-	-	-	-					
Total Demand	0.1	0.1	0.1	-	-	-	-	-	-0.2	-0.1	-	-0.1					
OECD SUPPLY																	
North America	-	-	-	-	-	-	-	-	-0.1	-0.2	-0.3	-0.1					
Europe	-	-	-	-	-	-	-	-	-0.1	-0.3	-0.3	-0.2					
Pacific	-	-	-	-	-	-	-	-	-	-	-	-					
Total OECD	-	-	-	-	-	-	-	-	-0.2	-0.5	-0.5	-0.3					
NON-OECD SUPPLY																	
FSU	-	-	-	-	-	-	-	-	-	0.1	0.1	-					
Europe	-	-	-	-	-	-	-	-	-	-	-	-					
China	-	-	-	-	-	-	-	-	0.1	0.1	0.1	0.1					
Other Asia	-	-	-	-	-	-	-	-	-	-	-	-					
Latin America	-	-	-	-	-	-	-	-	-	-	-	-					
Middle East	-	-	-	-	-	-	-	-	-	-	-	-					
Africa	-	-	-	-	-	-	-	-0.1	-0.1	-0.1	-	-0.1					
Total Non-OECD	-	-	-	-	-	-	-	-0.1	-	0.1	0.1	0.1					
Processing Gains	-	-	-	-	-	-	-	-	-	-	-	-					
Other Biofuels	-	-	0.1	0.1	0.1	0.1	0.1	-	-	-	-	-					
Total Non-OPEC	-	-	-	-	-	-	-	-	-0.1	-0.3	-0.4	-0.2					
Non-OPEC excl. Angola	-	-	-	-	-	-	-	-	-0.1	-0.3	-0.4	-0.2					
OPEC																	
Crude	-	-	-	-	-	-	-	-									
NGLs	-	-	-	-	-	-	-	-	-	-	-	-					
Total OPEC	-	-	-	-	-	-	-	-									
OPEC incl. Angola	-	-	-	-	-	-	-	-									
Total Supply	-	-	-	-	-	-	-	-									
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	-	-	-	-	-	-									
Memo items:																	
Call on OPEC crude + Stock ch.	0.1	0.1	-	-	-	-	-	-	-0.1	0.2	0.3	0.1					
Adjusted Call on OPEC + Stock ch.	-	-	-	-	-	-	-	-0.1	-0.5	-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

	2005	1Q06	2Q06	3Q06	4Q06	2006	1Q07	2Q07	3Q07	4Q07	2007	1Q08	2Q08	3Q08	4Q08	2008
Demand (mb/d)																
North America	25.49	25.15	25.06	25.43	25.35	25.25	25.66	25.29	25.87	25.96	25.70	26.12	25.74	26.16	26.24	26.07
Europe	15.59	15.89	15.15	15.57	15.64	15.56	15.18	14.94	15.65	15.87	15.41	15.79	15.26	15.75	15.96	15.69
Pacific	8.57	9.24	7.82	7.85	8.71	8.40	8.83	7.85	7.96	8.86	8.37	9.22	7.91	8.02	8.91	8.51
Total OECD	49.65	50.28	48.03	48.85	49.71	49.21	49.66	48.07	49.48	50.68	49.48	51.14	48.92	49.94	51.11	50.28
FSU	3.80	3.91	3.73	3.97	4.30	3.98	3.77	3.63	4.02	4.46	3.97	3.88	3.74	4.10	4.53	4.07
Europe	0.72	0.80	0.75	0.70	0.75	0.75	0.83	0.77	0.72	0.77	0.77	0.85	0.79	0.74	0.79	0.79
China	6.69	6.96	7.29	7.17	7.20	7.16	7.27	7.68	7.62	7.73	7.57	7.81	8.14	8.03	8.19	8.04
Other Asia	8.79	8.95	8.96	8.66	8.90	8.87	9.17	9.19	8.98	9.22	9.14	9.42	9.44	9.24	9.50	9.40
Latin America	5.13	5.15	5.29	5.40	5.38	5.31	5.32	5.46	5.60	5.54	5.48	5.46	5.61	5.74	5.69	5.63
Middle East	5.99	6.16	6.21	6.47	6.27	6.28	6.41	6.51	6.77	6.51	6.55	6.70	6.79	7.06	6.81	6.84
Africa	2.95	2.99	2.98	2.87	2.95	2.95	3.10	3.06	3.00	3.10	3.07	3.21	3.16	3.09	3.20	3.17
Total Non-OECD	34.09	34.92	35.22	35.25	35.75	35.29	35.88	36.30	36.69	37.32	36.55	37.32	37.68	38.01	38.72	37.94
World	83.74	85.20	83.24	84.10	85.46	84.50	85.54	84.37	86.17	88.01	86.03	88.46	86.60	87.94	89.83	88.21
of which:																
US50	*20.80*	*20.49*	*20.60*	*20.86*	*20.73*	*20.67*	*20.88*	*20.69*	*21.20*	*21.15*	*20.98*	*21.29*	*21.09*	*21.43*	*21.36*	*21.29*
Euro4	*8.21*	*8.49*	*7.94*	*8.14*	*8.18*	*8.19*	*7.88*	*7.70*	*8.17*	*8.25*	*8.00*	*8.24*	*7.90*	*8.21*	*8.29*	*8.16*
Japan	*5.31*	*5.89*	*4.72*	*4.75*	*5.29*	*5.16*	*5.39*	*4.64*	*4.78*	*5.36*	*5.04*	*5.66*	*4.65*	*4.78*	*5.35*	*5.11*
Korea	*2.19*	*2.29*	*2.04*	*2.04*	*2.32*	*2.17*	*2.35*	*2.13*	*2.09*	*2.37*	*2.24*	*2.45*	*2.17*	*2.13*	*2.41*	*2.29*
Mexico	*2.05*	*2.05*	*1.98*	*1.96*	*2.00*	*2.00*	*2.05*	*2.04*	*2.03*	*2.09*	*2.05*	*2.10*	*2.09*	*2.08*	*2.14*	*2.10*
Canada	*2.30*	*2.24*	*2.14*	*2.26*	*2.26*	*2.22*	*2.35*	*2.22*	*2.29*	*2.35*	*2.30*	*2.35*	*2.22*	*2.30*	*2.36*	*2.31*
Brazil	*2.19*	*2.18*	*2.20*	*2.28*	*2.30*	*2.24*	*2.25*	*2.27*	*2.35*	*2.35*	*2.30*	*2.30*	*2.33*	*2.41*	*2.41*	*2.36*
India	*2.58*	*2.71*	*2.67*	*2.48*	*2.70*	*2.64*	*2.88*	*2.78*	*2.55*	*2.79*	*2.75*	*2.94*	*2.85*	*2.61*	*2.85*	*2.81*
Annual Change (% per annum)																
North America	0.5	-1.7	-0.9	-0.6	-0.7	-1.0	2.0	0.9	1.7	2.4	1.8	1.8	1.8	1.1	1.1	1.4
Europe	0.7	1.2	-0.6	-0.5	-0.9	-0.2	-4.5	-1.4	0.5	1.5	-1.0	4.1	2.2	0.6	0.6	1.8
Pacific	0.8	-2.5	-2.7	-2.1	-0.3	-1.9	-4.5	0.3	1.3	1.7	-0.4	4.5	0.9	0.8	0.6	1.7
Total OECD	0.6	-0.9	-1.1	-0.8	-0.7	-0.9	-1.2	0.1	1.3	2.0	0.5	3.0	1.8	0.9	0.8	1.6
FSU	1.2	2.4	0.6	4.8	10.5	4.6	-3.7	-2.8	1.3	3.7	-0.2	2.9	3.3	2.1	1.6	2.4
Europe	4.2	3.4	3.4	3.4	3.4	3.4	3.2	3.1	2.9	2.5	2.9	2.6	2.9	2.9	2.9	2.8
China	4.2	4.2	12.1	7.1	4.6	6.9	4.5	5.3	6.2	7.3	5.8	7.3	6.0	5.4	6.0	6.1
Other Asia	2.0	-0.2	-0.8	1.6	2.8	0.8	2.5	2.6	3.7	3.6	3.1	2.6	2.7	2.9	3.1	2.8
Latin America	2.9	3.7	3.2	2.9	4.4	3.6	3.3	3.2	3.6	3.0	3.3	2.7	2.6	2.6	2.7	2.7
Middle East	4.6	4.8	4.2	4.7	5.3	4.8	4.1	4.8	4.5	3.8	4.3	4.6	4.4	4.4	4.6	4.5
Africa	6.4	-1.2	-0.7	0.0	1.2	-0.2	3.9	2.8	4.3	5.2	4.0	3.4	3.3	3.3	3.4	3.3
Total Non-OECD	3.3	2.4	3.4	3.7	4.6	3.5	2.7	3.1	4.1	4.4	3.6	4.0	3.8	3.6	3.7	3.8
World	1.7	0.4	0.7	1.0	1.4	0.9	0.4	1.4	2.5	3.0	1.8	3.4	2.6	2.1	2.1	2.5
Annual Change (mb/d)																
North America	0.12	-0.43	-0.23	-0.14	-0.19	-0.25	0.51	0.24	0.44	0.61	0.45	0.46	0.45	0.29	0.28	0.37
Europe	0.11	0.19	-0.10	-0.07	-0.13	-0.03	-0.71	-0.22	0.08	0.23	-0.15	0.62	0.33	0.10	0.09	0.28
Pacific	0.07	-0.24	-0.22	-0.17	-0.03	-0.16	-0.42	0.03	0.11	0.14	-0.03	0.39	0.07	0.06	0.05	0.14
Total OECD	0.30	-0.48	-0.55	-0.39	-0.35	-0.44	-0.61	0.04	0.63	0.98	0.26	1.47	0.85	0.46	0.43	0.80
FSU	0.05	0.09	0.02	0.18	0.41	0.18	-0.14	-0.11	0.05	0.16	-0.01	0.11	0.12	0.08	0.07	0.10
Europe	0.03	0.03	0.02	0.02	0.02	0.02	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
China	0.27	0.28	0.79	0.47	0.32	0.46	0.31	0.38	0.45	0.52	0.42	0.53	0.46	0.41	0.46	0.47
Other Asia	0.17	-0.02	-0.07	0.13	0.25	0.07	0.22	0.23	0.32	0.32	0.27	0.24	0.25	0.26	0.28	0.26
Latin America	0.14	0.19	0.16	0.15	0.23	0.18	0.17	0.17	0.19	0.16	0.17	0.14	0.14	0.15	0.15	0.15
Middle East	0.26	0.28	0.25	0.29	0.31	0.29	0.25	0.30	0.29	0.24	0.27	0.29	0.29	0.30	0.30	0.29
Africa	0.18	-0.04	-0.02	0.00	0.03	-0.01	0.12	0.08	0.12	0.15	0.12	0.10	0.10	0.10	0.10	0.10
Total Non-OECD	1.10	0.81	1.16	1.26	1.57	1.20	0.96	1.09	1.44	1.57	1.27	1.45	1.38	1.31	1.40	1.38
World	1.39	0.34	0.61	0.87	1.22	0.76	0.34	1.13	2.07	2.55	1.53	2.92	2.23	1.77	1.82	2.18
Revisions to Oil Demand from Last Month's Report (mb/d)																
North America	-0.04	-0.01	-0.04	-0.04	-0.04	-0.03	-0.04	-0.08	-0.08	-0.08	-0.07	-	-	-	-	-
Europe	0.08	0.08	0.08	0.08	0.08	0.08	0.03	-0.08	0.06	0.06	0.02	-	-	-	-	-
Pacific	-0.02	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.01	-0.06	-0.05	-0.04	-	-	-	-	-
Total OECD	0.02	0.02	-0.01	-0.01	-0.01	-0.01	-0.06	-0.18	-0.08	-0.07	-0.10	-	-	-	-	-
FSU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	-0.06	0.02	0.00	-	-	-	-	-
Europe	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-	-	-	-	-
China	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.05	-0.01	-0.01	-0.02	-	-	-	-	-
Other Asia	0.04	0.05	0.05	0.05	0.05	0.05	0.03	0.01	0.03	0.04	0.02	-	-	-	-	-
Latin America	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	-	-	-	-
Middle East	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.02	0.00	0.00	-0.01	-	-	-	-	-
Africa	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	-	-	-	-	-
Total Non-OECD	0.04	0.04	0.04	0.04	0.04	0.04	0.03	-0.05	-0.04	0.04	0.00	-	-	-	-	-
World	0.05	0.06	0.02	0.03	0.03	0.03	-0.03	-0.22	-0.12	-0.03	-0.10	-	-	-	-	-
Revisions to Oil Demand Growth from Last Month's Report (mb/d)												-	-	-	-	-
World	-0.01	-0.05	-0.04	0.01	0.01	-0.02	-0.09	-0.25	-0.15	-0.06	-0.14	-	-	-	-	-

Table 3
WORLD OIL PRODUCTION
(million barrels per day)

	2006	2007	2008	1Q07	2Q07	3Q07	4Q07	1Q08	Apr 07	May 07	Jun 07
OPEC											
Crude Oil											
Saudi Arabia	8.93			8.34	8.35				8.33	8.43	8.31
Iran	3.89			3.88	3.94				3.97	3.90	3.95
Iraq	1.90			1.89	2.01				2.10	2.00	1.94
UAE	2.62			2.57	2.58				2.56	2.59	2.61
Kuwait	2.21			2.16	2.08				2.12	2.07	2.07
Neutral Zone	0.58			0.55	0.55				0.55	0.55	0.55
Qatar	0.82			0.80	0.80				0.80	0.80	0.81
Angola[b]				1.53	1.60				1.59	1.60	1.60
Nigeria	2.24			2.22	2.11				2.25	2.01	2.08
Libya	1.71			1.69	1.70				1.69	1.71	1.70
Algeria	1.35			1.33	1.36				1.34	1.36	1.37
Venezuela	2.56			2.44	2.37				2.37	2.37	2.37
Indonesia	0.89			0.85	0.84				0.84	0.85	0.83
Total Crude Oil	29.69			30.24	30.29				30.49	30.21	30.16
Total NGLs[1]	4.63	4.86	5.51	4.76	4.80	4.83	5.03	5.21	4.80	4.80	4.80
Total OPEC	34.32			35.01	35.09				35.29	35.01	34.96
OPEC incl. Angola[6]	35.73			35.01	35.09				35.29	35.01	34.96
NON-OPEC[2]											
OECD											
North America	14.25	14.13	14.09	14.35	14.13	13.98	14.07	14.38	14.41	14.06	13.91
United States	7.37	7.33	7.40	7.43	7.49	7.20	7.19	7.47	7.54	7.49	7.44
Mexico	3.68	3.52	3.35	3.57	3.56	3.50	3.44	3.40	3.60	3.53	3.56
Canada	3.19	3.29	3.34	3.35	3.07	3.28	3.44	3.52	3.27	3.04	2.91
Europe	5.18	4.92	4.63	5.22	4.90	4.65	4.89	4.91	5.24	4.97	4.50
UK	1.66	1.65	1.51	1.76	1.69	1.50	1.65	1.65	1.74	1.72	1.62
Norway	2.78	2.53	2.40	2.72	2.48	2.42	2.52	2.53	2.74	2.53	2.16
Others	0.74	0.73	0.72	0.74	0.73	0.73	0.73	0.73	0.75	0.72	0.73
Pacific	0.58	0.67	0.78	0.59	0.65	0.70	0.73	0.74	0.62	0.67	0.67
Australia	0.53	0.60	0.68	0.53	0.59	0.63	0.63	0.64	0.56	0.61	0.61
Others	0.05	0.07	0.10	0.06	0.06	0.08	0.10	0.10	0.06	0.06	0.06
Total OECD	20.01	19.71	19.50	20.16	19.69	19.33	19.69	20.03	20.28	19.70	19.08
NON-OECD											
Former USSR	12.10	12.64	13.06	12.55	12.58	12.59	12.82	12.84	12.47	12.63	12.65
Russia	9.69	9.93	10.11	9.91	9.87	9.96	9.97	9.94	9.84	9.86	9.90
Others	2.40	2.71	2.95	2.63	2.72	2.63	2.85	2.90	2.63	2.78	2.75
Asia	6.39	6.52	6.64	6.46	6.48	6.55	6.57	6.58	6.47	6.47	6.51
China	3.67	3.82	3.88	3.75	3.79	3.87	3.88	3.88	3.75	3.78	3.83
Malaysia	0.75	0.71	0.74	0.74	0.70	0.69	0.71	0.72	0.72	0.69	0.69
India	0.79	0.82	0.82	0.82	0.82	0.82	0.82	0.83	0.82	0.82	0.82
Others	1.17	1.16	1.21	1.15	1.17	1.16	1.16	1.16	1.18	1.17	1.17
Europe	0.15	0.13	0.12	0.14	0.14	0.13	0.13	0.13	0.14	0.14	0.13
Latin America	4.40	4.48	4.76	4.39	4.40	4.50	4.61	4.77	4.40	4.37	4.44
Brazil	2.10	2.23	2.57	2.15	2.15	2.25	2.38	2.56	2.13	2.11	2.19
Argentina	0.77	0.76	0.75	0.77	0.77	0.76	0.76	0.75	0.77	0.77	0.77
Colombia	0.53	0.54	0.54	0.52	0.54	0.54	0.54	0.54	0.54	0.54	0.54
Ecuador	0.54	0.50	0.47	0.50	0.51	0.50	0.48	0.48	0.51	0.51	0.50
Others	0.46	0.45	0.44	0.45	0.44	0.45	0.44	0.44	0.45	0.44	0.44
Middle East[3]	1.73	1.64	1.59	1.66	1.64	1.64	1.61	1.62	1.65	1.64	1.63
Oman	0.74	0.70	0.68	0.72	0.71	0.70	0.69	0.69	0.71	0.71	0.70
Syria	0.42	0.38	0.35	0.39	0.38	0.38	0.37	0.36	0.39	0.38	0.38
Yemen	0.38	0.37	0.37	0.36	0.36	0.38	0.37	0.39	0.36	0.36	0.36
Africa	3.91	2.59	2.71	2.56	2.56	2.60	2.62	2.68	2.57	2.55	2.55
Egypt	0.67	0.63	0.62	0.64	0.63	0.63	0.63	0.63	0.63	0.63	0.63
Angola[b]	1.37										
Gabon	0.23	0.23	0.24	0.23	0.23	0.23	0.23	0.24	0.23	0.23	0.23
Others	1.63	1.72	1.85	1.69	1.69	1.74	1.76	1.82	1.71	1.69	1.68
Total Non-OECD	28.67	27.99	28.90	27.76	27.80	28.02	28.36	28.63	27.70	27.80	27.91
Processing Gains[4]	1.90	1.92	1.95	1.92	1.92	1.92	1.92	1.95	1.92	1.92	1.92
Other Biofuels[5]	0.26	0.40	0.66	0.40	0.40	0.40	0.40	0.66	0.40	0.40	0.40
TOTAL NON-OPEC	50.83	50.03	51.00	50.25	49.81	49.67	50.38	51.26	50.30	49.82	49.32
Non-OPEC excl. Angola[6]	49.42	50.03	51.00	50.25	49.81	49.67	50.38	51.26	50.30	49.82	49.32
TOTAL SUPPLY	85.15			85.26	84.90				85.58	84.83	84.28

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 will reportedly cease 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 (excludes net gain/loss in FSU, China and non-OECD Europe) and marine transportation losses.
5 Comprises Fuel Ethanol and Biodiesel supply from outside Brazil and US.
6 With effect from OMR of 13 February 2007, Angolan production will be reclassified within OPEC and excluded from the Non-OPEC total, for the period January 2007 onwards. Secondary aggregates allow comparison with previous year totals by including Angola within OPEC retroactively

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			
	Jan2007	Feb2007	Mar2007	Apr2007	May2007*	May2004	May2005	May2006	2Q2006	3Q2006	4Q2006	1Q2007
North America												
Crude	455.8	450.9	462.6	471.4	473.1	424.0	452.9	463.2	-0.05	0.02	-0.25	0.28
Motor Gasoline	256.5	242.7	230.6	223.6	232.1	235.0	248.2	242.3	-0.01	0.03	-0.02	-0.13
Middle Distillate	210.5	191.7	190.8	192.4	197.2	174.6	182.8	196.0	0.06	0.26	-0.08	-0.29
Residual Fuel Oil	50.9	44.7	47.7	47.0	42.6	44.5	47.0	49.7	0.02	0.01	-0.03	-0.03
Total Products[3]	688.1	637.2	630.8	630.2	649.7	615.3	668.1	658.4	0.38	0.60	-0.33	-0.71
Total[4]	1283.3	1221.8	1232.6	1245.1	1263.5	1177.1	1266.3	1269.0	0.40	0.77	-0.76	-0.49
Europe												
Crude	309.8	330.6	326.0	338.5	331.2	335.9	356.4	347.7	-0.06	-0.10	0.11	-0.15
Motor Gasoline	118.2	116.4	110.1	103.8	102.5	114.5	112.3	103.6	-0.12	0.04	0.11	-0.04
Middle Distillate	279.5	282.4	269.6	278.9	278.6	232.3	256.6	262.3	0.12	0.17	0.05	-0.09
Residual Fuel Oil	83.3	75.4	73.3	71.2	71.7	74.9	78.5	73.9	0.06	-0.03	0.04	-0.04
Total Products[3]	586.4	577.6	554.7	555.1	553.9	521.8	549.9	541.8	0.06	0.25	0.16	-0.20
Total[4]	967.2	982.8	955.0	971.1	961.8	928.8	979.1	962.4	-0.04	0.16	0.21	-0.28
Pacific												
Crude	171.0	169.9	172.4	168.4	175.0	179.1	171.9	185.4	0.11	-0.07	-0.02	-0.01
Motor Gasoline	26.3	25.2	24.5	24.0	23.8	24.7	25.7	24.9	0.00	-0.01	-0.01	0.03
Middle Distillate	81.3	71.3	60.9	59.3	63.3	56.1	62.5	67.0	0.10	0.18	-0.14	-0.14
Residual Fuel Oil	21.7	22.3	22.1	22.3	22.4	24.1	24.7	24.4	0.04	0.01	-0.01	-0.01
Total Products[3]	191.5	179.4	171.1	167.2	173.8	166.8	178.1	180.5	0.16	0.30	-0.30	-0.14
Total[4]	436.7	422.7	416.5	409.3	421.2	416.7	422.8	438.1	0.30	0.25	-0.33	-0.13
Total OECD												
Crude	936.6	951.5	960.9	978.3	979.3	938.9	981.2	996.3	0.00	-0.15	-0.16	0.12
Motor Gasoline	401.0	384.3	365.1	351.4	358.4	374.1	386.2	370.8	-0.13	0.06	0.08	-0.15
Middle Distillate	571.2	545.3	521.3	530.5	539.1	463.0	501.9	525.3	0.28	0.61	-0.16	-0.52
Residual Fuel Oil	155.9	142.4	143.0	140.5	136.7	143.4	150.1	148.1	0.13	-0.01	0.00	-0.07
Total Products[3]	1466.0	1394.2	1356.6	1352.5	1377.4	1303.8	1396.2	1380.7	0.60	1.15	-0.46	-1.05
Total[4]	2687.2	2627.3	2604.1	2625.5	2646.4	2522.6	2668.2	2669.4	0.66	1.19	-0.88	-0.90

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			
	Jan2007	Feb2007	Mar2007	Apr2007	May2007*	May2004	May2005	May2006	2Q2006	3Q2006	4Q2006	1Q2007
North America												
Crude	688.6	688.6	688.6	689.4	690.3	661.3	693.9	688.6	0.02	0.00	0.01	0.00
Products	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	0.00	0.00	0.00	0.00
Europe												
Crude	174.4	173.7	174.3	174.7	174.7	157.6	164.4	172.0	0.04	0.02	-0.01	-0.01
Products	235.9	237.7	239.9	241.0	241.0	208.5	210.2	233.0	0.00	-0.01	0.00	0.05
Pacific												
Crude	384.6	385.8	385.1	385.1	385.1	386.9	384.5	380.5	0.00	0.01	0.03	0.01
Products	11.8	11.8	11.8	11.8	11.8	11.0	11.0	11.7	0.00	0.00	0.00	0.00
Total OECD												
Crude	1247.6	1248.1	1248.0	1249.1	1250.0	1205.8	1242.8	1241.1	0.06	0.03	0.04	0.00
Products	249.8	251.6	253.7	254.9	254.9	221.5	223.2	246.7	0.01	-0.01	0.00	0.05
Total[4]	1498.3	1500.7	1502.7	1504.9	1505.8	1428.3	1467.0	1488.7	0.07	0.02	0.04	0.05

* 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 2006		End June 2006		End September 2006		End December 2006		End March 2007 [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	169.7	79	169.7	75	179.2	79	180.1	77	181.8	-
Mexico	41.7	21	42.1	22	47.0	24	42.3	21	40.5	-
United States[4]	1693.7	83	1731.6	83	1788.3	87	1722.9	83	1678.8	-
Total[4]	1927.2	77	1965.5	78	2036.5	81	1967.4	77	1923.2	76
Pacific										
Australia	35.5	39	38.9	42	35.3	37	34.8	37	34.2	-
Japan	620.1	131	627.2	132	649.1	123	630.8	117	615.3	-
Korea	137.4	67	155.4	76	160.5	69	151.8	65	156.1	-
New Zealand	7.3	49	6.8	48	7.0	46	7.1	46	7.7	-
Total	800.3	102	828.3	105	851.9	98	824.6	93	813.3	104
Europe[5]										
Austria	19.0	63	19.7	62	19.0	64	21.9	76	24.0	-
Belgium	27.3	49	30.4	54	30.5	53	30.2	48	28.5	-
Czech Republic	19.6	91	19.5	88	19.3	94	19.7	101	20.2	-
Denmark	19.1	99	20.4	110	21.2	113	18.5	97	18.3	-
Finland	26.7	122	30.5	139	26.8	118	26.6	114	29.5	-
France	196.2	105	188.7	98	187.5	96	192.4	98	178.5	-
Germany	280.3	108	283.1	103	281.9	104	282.8	117	290.5	-
Greece	35.4	90	34.9	84	38.2	79	39.2	84	35.6	-
Hungary	20.8	123	17.6	107	17.4	97	16.5	107	18.0	-
Ireland	13.1	72	12.6	71	13.9	70	12.5	62	12.9	-
Italy	131.5	80	126.0	75	134.1	78	133.1	79	133.9	-
Luxembourg	0.9	15	1.0	17	0.9	15	1.0	16	0.9	-
Netherlands	120.5	122	123.1	119	121.1	119	118.7	130	118.5	-
Norway	21.9	93	21.8	93	29.4	127	35.1	156	20.2	-
Poland	35.5	73	35.7	66	37.3	70	41.5	89	43.9	-
Portugal	24.7	83	24.7	80	23.8	83	24.0	77	23.7	-
Slovak Republic	8.3	103	7.7	90	7.4	95	7.5	101	7.0	-
Spain	130.2	84	129.2	82	133.9	84	134.8	83	129.3	-
Sweden	38.4	111	39.6	116	38.6	104	33.8	94	35.5	-
Switzerland	37.7	146	39.3	143	38.9	135	38.1	150	38.7	-
Turkey	51.6	79	51.6	78	53.7	83	55.5	88	56.8	-
United Kingdom	97.4	53	99.0	56	97.4	54	108.5	60	105.8	-
Total	1356.1	89	1356.0	87	1372.1	88	1391.7	92	1370.2	92
Total OECD	4083.6	85	4149.9	85	4260.6	86	4183.7	84	4106.7	85
DAYS OF IEA Net Imports[6]	-	114	-	116	-	118	-	122	-	121

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 2007 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. 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]*		
1Q2004	3888	1423	2465	81	30	51
2Q2004	3974	1429	2545	81	29	52
3Q2004	4016	1435	2581	80	28	51
4Q2004	3997	1450	2547	79	29	50
1Q2005	4005	1462	2543	82	30	52
2Q2005	4116	1494	2623	84	30	53
3Q2005	4132	1494	2638	83	30	53
4Q2005	4083	1487	2597	81	30	52
1Q2006	4084	1487	2597	85	31	54
2Q2006	4150	1493	2657	85	31	54
3Q2006	4261	1495	2766	86	30	56
4Q2006	4184	1499	2685	84	30	54
1Q2007	4107	1503	2604	85	31	54

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 1Q2007 (when latest forecasts are used).

Table 6

IEA Member Country Destinations of Selected Crude Streams[1]

(million barrels per day)

	2004	2005	2006	2Q06	3Q06	4Q06	1Q07	Feb 07	Mar 07	Apr 07	Year Earlier Apr 06	Year Earlier change
Saudi Light & Extra Light												
North America	0.55	0.46	0.60	0.68	0.62	0.60	0.68	0.69	0.65	0.81	0.65	0.17
Europe	1.03	0.90	0.78	0.80	0.72	0.78	0.72	0.60	0.78	0.70	0.73	-0.03
Pacific	1.24	1.31	1.32	1.33	1.29	1.28	1.17	1.21	1.22	1.28	1.53	-0.25
Saudi Medium												
North America	0.80	0.81	0.64	0.61	0.68	0.61	0.47	0.47	0.30	0.61	0.74	-0.13
Europe	0.11	0.16	0.14	0.14	0.14	0.10	0.05	0.03	0.04	0.06	0.15	-0.10
Pacific	0.23	0.26	0.35	0.35	0.35	0.32	0.34	0.38	0.37	0.36	0.37	-0.01
Saudi Heavy												
North America	0.22	0.17	0.21	0.21	0.21	0.19	0.15	0.21	0.04	0.04	0.21	-0.18
Europe	0.23	0.23	0.18	0.22	0.21	0.14	0.09	0.09	0.07	0.21	0.24	-0.03
Pacific	0.15	0.25	0.23	0.20	0.22	0.23	0.20	0.22	0.18	0.21	0.21	0.00
Iraqi Basrah Light[2]												
North America	0.71	0.60	0.52	0.60	0.60	0.46	0.52	0.41	0.54	0.31	0.51	-0.21
Europe	0.21	0.23	0.32	0.29	0.40	0.36	0.29	0.39	0.21	0.29	0.31	-0.02
Pacific	0.12	0.06	0.08	0.09	0.10	0.07	0.11	0.15	0.13	0.15	0.12	0.02
Iraqi Kirkuk												
North America	0.02	-	0.00	-	0.01	-	-	-	-	-	-	-
Europe	0.08	0.05	0.01	-	0.04	0.01	0.04	0.11	-	-	-	-
Pacific	-	-	-	-	-	-	-	-	-	-	-	-
Iranian Light												
North America	-	-	-	-	-	-	-	-	-	-	-	-
Europe	0.24	0.20	0.26	0.27	0.31	0.27	0.31	0.39	0.20	0.32	0.26	0.06
Pacific	0.16	0.15	0.13	0.12	0.10	0.11	0.12	0.09	0.17	0.06	0.13	-0.08
Iranian Heavy[3]												
North America	-	-	-	-	-	-	-	-	-	-	-	-
Europe	0.57	0.63	0.58	0.57	0.67	0.60	0.55	0.58	0.51	0.65	0.38	0.27
Pacific	0.65	0.62	0.56	0.48	0.51	0.61	0.66	0.60	0.78	0.63	0.56	0.07
Venezuelan Light & Medium												
North America	0.67	0.82	0.66	0.68	0.62	0.57	0.65	0.62	0.64	0.62	0.73	-0.11
Europe	0.01	0.04	0.11	0.15	0.08	0.11	0.09	0.14	0.07	0.13	0.14	-0.01
Pacific	-	-	-	-	-	-	-	-	-	-	-	-
Venezuelan 22 API and heavier												
North America	0.88	0.72	0.72	0.72	0.74	0.72	0.55	0.69	0.50	0.67	0.71	-0.04
Europe	0.05	0.06	0.06	0.05	0.06	0.05	0.06	0.06	0.06	0.07	0.04	0.04
Pacific	-	-	-	-	-	-	-	-	-	-	-	-
Mexican Maya												
North America	1.36	1.27	1.24	1.24	1.30	1.15	1.19	1.15	1.22	1.15	1.24	-0.09
Europe	0.16	0.17	0.16	0.20	0.16	0.15	0.14	0.14	0.14	0.11	0.20	-0.09
Pacific	0.00	-	-	-	-	-	-	-	-	-	-	-
Mexican Isthmus												
North America	-	0.03	0.04	0.03	0.01	0.02	0.02	0.03	-	-	0.07	-
Europe	0.01	0.03	0.01	0.00	0.00	0.01	0.01	-	0.02	0.00	0.00	0.00
Pacific	0.00	-	-	-	-	-	-	-	-	-	-	-
Russian Urals												
North America	0.12	0.13	0.09	0.16	0.16	0.05	0.11	0.08	0.18	0.21	0.04	0.16
Europe	1.86	1.77	1.68	1.83	1.66	1.54	1.85	2.10	1.72	2.06	1.72	0.33
Pacific	0.01	0.00	0.00	-	0.01	-	0.00	0.01	-	-	-	-
Nigerian Light[4]												
North America	0.80	0.90	0.79	0.79	0.78	0.72	0.96	0.98	0.86	0.70	0.95	-0.24
Europe	0.28	0.35	0.33	0.27	0.39	0.37	0.23	0.26	0.18	0.22	0.29	-0.07
Pacific	0.11	0.05	0.04	0.03	0.02	0.03	0.02	0.03	-	0.01	0.02	-0.01
Nigerian Medium												
North America	0.23	0.17	0.17	0.17	0.16	0.17	0.24	0.22	0.35	0.17	0.12	0.05
Europe	0.04	0.07	0.10	0.08	0.08	0.14	0.06	0.11	0.06	0.03	0.05	-0.02
Pacific	0.01	0.01	0.00	-	0.01	-	0.02	0.03	0.03	-	-	-

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, Poland and the Slovak Republic.
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)

	2004	2005	2006	2Q2006	3Q2006	4Q2006	1Q2007	Feb-07	Mar-07	Apr-07	Year Earlier Apr-06	Year Earlier % change
Crude Oil												
North America	8431	8457	8156	8265	8686	7937	8006	7192	8494	8189	7310	12%
Europe	9478	9792	9771	9747	10158	9770	9435	10100	8765	10060	9228	9%
Pacific	6659	6801	6813	6508	6680	6674	6953	6955	6936	6473	6733	-4%
Total OECD	24569	25050	24740	24520	25524	24381	24394	24247	24195	24722	23943	3%
LPG												
North America	24	18	14	8	12	28	16	10	19	14	5	200%
Europe	225	248	249	243	210	263	264	309	226	257	213	21%
Pacific	541	527	579	576	595	497	565	448	630	581	597	-3%
Total OECD	790	793	842	826	818	788	844	767	875	852	815	5%
Naphtha												
North America	99	115	62	49	64	96	33	40	14	35	32	10%
Europe	282	273	312	277	304	314	293	349	229	234	151	55%
Pacific	769	746	754	731	810	783	838	909	817	710	736	-4%
Total OECD	1150	1133	1128	1057	1178	1193	1164	1298	1060	979	919	7%
Gasoline[3]												
North America	794	1034	1147	1365	1166	944	918	841	986	1248	1241	1%
Europe	137	165	154	143	122	157	268	289	303	232	26	786%
Pacific	105	102	97	135	74	96	76	88	70	36	111	-67%
Total OECD	1035	1301	1398	1643	1363	1197	1262	1218	1359	1517	1379	10%
Jet & Kerosene												
North America	101	173	152	191	203	130	176	187	210	221	206	7%
Europe	293	375	375	382	398	407	333	371	356	373	363	3%
Pacific	77	66	71	39	43	76	49	39	23	16	29	-44%
Total OECD	471	614	598	612	644	612	559	597	589	611	599	2%
Gasoil/Diesel												
North America	123	143	170	173	181	116	130	101	161	156	103	52%
Europe	751	845	960	926	901	937	897	963	806	736	1072	-31%
Pacific	74	79	81	100	65	81	83	80	94	59	72	-17%
Total OECD	947	1067	1211	1199	1147	1134	1110	1145	1060	952	1247	-24%
Heavy Fuel Oil												
North America	453	527	340	320	309	254	362	275	449	360	260	38%
Europe	397	491	478	474	419	502	467	566	432	385	474	-19%
Pacific	76	85	92	105	76	65	88	108	75	67	98	-32%
Total OECD	926	1102	910	899	804	821	916	949	956	811	832	-3%
Other Products												
North America	872	1024	1106	1162	1298	991	1035	911	1107	1154	1153	0%
Europe	676	781	897	855	922	915	876	774	776	862	914	-6%
Pacific	256	248	243	209	224	267	256	205	312	162	238	-32%
Total OECD	1805	2052	2246	2225	2444	2173	2167	1889	2195	2177	2306	-6%
Total Products												
North America	2466	3034	2991	3268	3233	2559	2669	2366	2947	3187	2999	6%
Europe	2759	3177	3425	3299	3277	3495	3398	3620	3128	3080	3215	-4%
Pacific	1898	1852	1918	1894	1888	1865	1956	1877	2020	1632	1882	-13%
Total OECD	7123	8063	8334	8461	8398	7919	8023	7863	8095	7900	8095	-2%
Total Oil												
North America	10897	11490	11147	11533	11919	10496	10674	9558	11441	11376	10980	4%
Europe	12237	12969	13196	13046	13435	13265	12833	13720	11894	13140	12443	6%
Pacific	8558	8654	8731	8402	8568	8539	8910	8831	8956	8105	8615	-6%
Total OECD	31692	33113	33074	32981	33922	32300	32417	32109	32291	32621	32039	2%

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

OIL MARKET REPORT CONTACTS

Editorial Enquiries

Editor — Lawrence Eagles
Head, Oil Industry & Markets Division
(+33) 0*1 40 57 65 90
e-mail: lawrence.eagles@iea.org

Demand — Eduardo Lopez
(+33) 0*1 40 57 65 93
e-mail: eduardo.lopez@iea.org

Supply — David Fyfe
(+33) 0*1 40 57 65 94
e-mail: david.fyfe@iea.org

Prices/OECD Stocks — Julius Walker
(+33) 0*1 40 57 65 22
e-mail: julius.walker@iea.org

Refining — David Martin
(+33) 0*1 40 57 65 95
e-mail: david.martin@iea.org

OECD Stocks/Trade — Toril Ekeland Bosoni
(+33) 0*1 40 57 66 36
e-mail: toril.bosoni@iea.org

Statistics/Freight/Trade — James Ryder
(+33) 0*1 40 57 66 18
e-mail: james.ryder@iea.org

End-User Prices/Statistical Support — Miklós Bánkuti
(+33) 0*1 40 57 67 76
e-mail: miklos.bankuti@iea.org

Editorial Assistant — Anne Mayne
(+33) 0*1 40 57 65 96
e-mail: anne.mayne@iea.org

Fax: *(+33) 0*1 40 57 65 99/40 57 65 09*

* 0 only within France

Media Enquiries

Press Office — Gwyn Darling
(+33) 0*1 40 57 65 54
e-mail: ieapressoffice@iea.org

Subscription and Delivery Enquiries

Oil Market Report Subscriptions (Attn: Ms. Sandra Coleman)
International Energy Agency
BP 586-75726 PARIS Cedex 15, France

Tel. +33 (0) 1 40 57 65 57
Fax. +33 (0) 1 40 57 65 59
e-mail: sandra.coleman@iea.org

Users' Guide to the IEA Oil Market Report

Readers are referred to the *Users' Guide*, published in conjunction with the *Annual Statistical Supplement* (current issue dated 11 August 2006), for information on the data sources, definitions, technical terms and general approach used in preparing the Report. 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 (© 2007 Platts - a division of McGraw-Hill Inc.).

INTERNATIONAL ENERGY AGENCY/AGENCE INTERNATIONALE DE L'ENERGIE

OIL MARKET REPORT

A MONTHLY OIL MARKET AND STOCKS ASSESSMENT

www.oilmarketreport.org

INTERNATIONAL ENERGY AGENCY

AGENCE INTERNATIONALE DE L'ENERGIE

10 August 2007

HIGHLIGHTS

- **Benchmark WTI reached a record high** of over $78/barrel and moved into backwardation in July before falling back sharply on a combination of concerns over growth, unwinding of speculative positions and poor refining margins. High crude prices and increased refinery throughput further pressured already negative returns from marginal refineries in July, but these have subsequently recovered somewhat.

- **World oil supply is seen lagging demand** in July, despite a 1.1 mb/d monthly increase to 85.3 mb/d. However, monthly gains from non-OPEC producers could prove short-lived as maintenance and seasonal factors will likely reverse the July increase in August and September. Non-OPEC production estimates for 2007 and 2008 remain largely unchanged from last month's, at 50.0 mb/d and 51.0 mb/d, respectively.

- **July OPEC crude supply increased by 385 kb/d to 30.5 mb/d** reflecting the restart of previously shuttered Iraqi and Nigerian supply rather than a policy shift to meet 3Q07and 4Q07 demand. OPEC has indicated that no change in production policy is likely ahead of the 11 September meeting, suggesting little change in delivered supply until 4Q07 at best. Effective spare capacity remains at just under 3.0 mb/d.

- **Forecast global oil product demand remains unchanged** at 86.0 mb/d in 2007 (+1.8% over 2006) and 88.2 mb/d in 2008 (+2.5%). A surge of demand for fuel oil, direct-burn crude and gasoil in Japan (linked to TEPCO's problems) and several Gulf countries has been largely offset by downward revisions in non-OECD Asia and the FSU.

- **A build of 13.3 mb in OECD industry stocks in June** lifted the 2Q07 increase to 67 mb or 0.73 mb/d - below the five-year average for this period. A counter-seasonal stock draw looks likely during 3Q07. Total OECD industry stock cover stood at 54.0 days at the end of June, 0.1 day lower than at end-May and 0.4 days below June 2006.

- **Global refinery crude throughput** is estimated at 73.3 mb/d in June, and is seen rising by 1.3 mb/d in July as scheduled and unscheduled maintenance comes to an end. August throughput has been revised lower to 75.1 mb/d, to reflect economic run cuts and higher non-OECD maintenance activity, primarily in China and the FSU.

Next Issue: 12 September 2007

INTERNATIONAL ENERGY AGENCY (IEA)

AGENCE INTERNATIONALE DE L'ENERGIE

The International Energy Agency is Seeking an Energy Emergency Analyst

A Three- to Five-Year, Fixed-Term Appointment

The Emergency Planning and Preparations Division of the IEA is looking for an Energy Emergency Analyst to work under the supervision of the Division head. The Division is responsible for developing strategies and policy and ultimately co-ordinating an emergency response among IEA Member countries in the event of a serious supply disruption, such as were experienced in September 2005 following the hurricanes Katrina and Rita in the Gulf of Mexico.

Major responsibilities include:

- Participation in the design and improvement of emergency response systems and strategies;
- Help to co-ordinate their implementation during actual oil supply disruptions;
- Analyse oil/energy and geopolitical situations affecting energy supply security;
- Develop and maintain contacts on emergency policies with government officials and oil companies in major consuming non-member countries, aiming to co-ordinate those policies with the IEA;
- Represent the IEA at international workshops, training sessions and conferences;
- Act as Desk Officer for several IEA Member countries, maintaining contacts with officials of those countries, undertaking reviews of their emergency response policies and programmes.

The ideal candidate should possess:

- Advanced university degree in economics, engineering or other relevant discipline;
- A minimum of five years' experience with aspects of oil supply;
- Sound administrative experience;
- The ability to work within a committed team, within a multicultural environment;
- The ability to work under pressure;
- An excellent knowledge of, and drafting ability in, English; a working knowledge of other languages would be an advantage
- Very good communication skills and ability to draft clearly and succinctly.

Applications are invited from nationals of OECD Member countries. For further details, please refer to the *Job Vacancies* section at **www.oecd.org.** The reference for this vacancy is **002345**. Please submit your application, in English or in French, before midnight Paris time on **7 September 2007**.

The OECD is an Equal Opportunity Employer

OECD OCDE

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

CONTENTS

THE PRICE OF POOR DATA

The financial market concerns that prompted the recent dip in oil prices has added to the big analytical divisions already apparent in the market. Prices remain high and crude futures markets have been toying with backwardation – both of which seems at odds to the high level of OECD crude stocks at the end of June. From a fundamental perspective, the rise in oil prices in June and July is explainable: refiners booked crude to meet peak throughputs in July and August, and concern that OPEC will undersupply the market increased the price at which refiners are willing to draw down their stocks, so inflating prices.

But, with the limited hard data to hand, there is still a wide margin for interpretation of current and future fundamentals. We have weekly data for the US and Japan, but to get a preliminary picture of the OECD takes six weeks. The *Joint Oil Data Initiative (JODI)* has made huge inroads into the collection of more timely and accurate data, but there is still very little information on stock levels outside the OECD.

Some countries are still struggling to set up data collection systems, but for most monitoring stock levels at ports, loading terminals and refineries is as easy as collating supply or product-by-product demand data. Many (if not most) companies probably have the ability to report these data on a real-time basis. So why the lack of data?

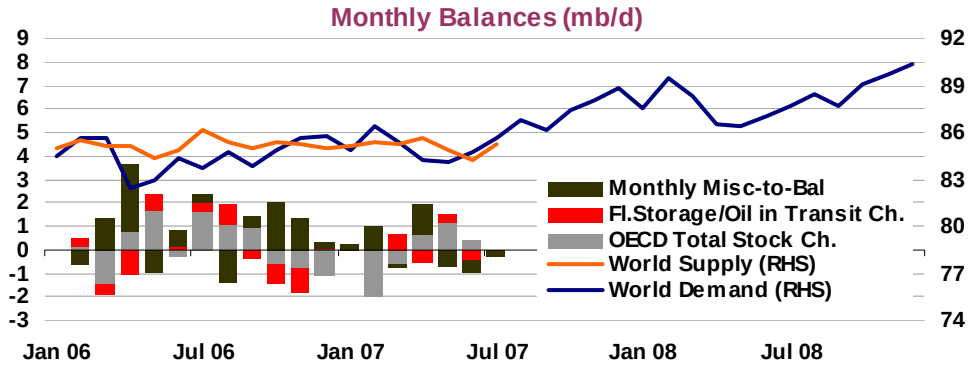
There are two common arguments. Firstly, some non-OECD officials have indicated that several years of high prices have led industry to run on minimal stocks and they worry that if they release this information, they might push oil prices higher than they already are. That is the easiest issue to address: do not worry – the market already implicitly assumes they are zero. Secondly, that stock data are commercially sensitive. That may be the case, but keeping it secret has scarcely led to consumers paying less and the US and Japan show it can be done. US regulations are generally very responsive to industry's needs, yet the comprehensive weekly data published by the EIA demonstrate that commercial sensitivities can be overcome.

This is not just about data coverage, it is also about the timeliness of data. In the OECD, weekly European data are conspicuous by their absence (even China and Russia industry publications provide some weekly data!). While there are some genuine concerns in Europe about cost and the quality of the trade data available, some of the often-heard arguments against the publication of more frequent data fail to see the bigger picture.

Statisticians argue that data quality becomes poorer if you produce them more frequently. This may be true, but every analyst understands there is a trade off between timeliness and accuracy. Weekly data are less accurate than monthly data; monthly data are less accurate than annual. But the JODI experience shows that data quality improves if it is collected regularly under a continual assessment process.

It is also wrong to interpret the focus on the US weekly data as a sign that more timely data increase market volatility. Experiences in other commodity markets show that it can have the opposite effect. Copper traders have long had the benefit of regular reports of stocks from the London Metal Exchange (LME). These exchange-deliverable stocks were originally held in warehouses in North West Europe and provided limited information to those outside of the trading fraternity. Yet, like the weekly US oil data, they provided a market focus: analysts would forecast changes and prices would swing around their release. But as the geographical coverage of the LME widened and the frequency of the stock data releases increased, the volatility surrounding the numbers dwindled.

To those involved in market analysis, it is clear that more comprehensive and more frequently released data improve market understanding. Moreover, if doing so knocks several hundredths of a cent off the average oil import bill it would be cost effective. In the current environment, the uncertainties associated with a lack of data could bear a much higher cost.



Focusing on the high level of US stocks as evidence that the market is well supplied ignores the low level of Japanese crude stocks and European inventories at average levels. In days of forward demand cover, these stocks are below normal and logic suggests they may be even lower from a global perspective. Our projections suggest stocks will be drawn down further in August and September, yet when OPEC members come to assess the market at their 11 September meeting, they will have to hand only OECD-wide data from June. If ever there was a compelling argument for the benefits of wider and more frequent stock data coverage, it is now.

While refinery tightness partly explained rising prices in the second quarter, that reasoning evaporated in July as global throughputs soared and refinery margins plunged. Historical data alone will not provide answers. Prices provide a strong signal too. With volatility in financial markets elevating concerns about future demand, the last thing the global economy needs is higher oil prices. Undersupplying the market in this context could bear considerable risks.

DEMAND

Summary

- **Global oil product demand** remains unchanged at 86.0 mb/d in 2007 (+1.8% over 2006) and 88.2 mb/d in 2008 (+2.5%). A surge of fuel oil and direct crude burning in Japan and of gasoil and fuel oil in several Gulf countries has been largely offset by downward revisions in non-OECD Asia and the FSU. Even though there are concerns regarding the spill-over effects of the US subprime market woes onto the world economy, the International Monetary Fund has recently strengthened its outlook for 2008.

Global Oil Demand (2006-2008)

(million barrels per day)

	1Q06	2Q06	3Q06	4Q06	2006	1Q07	2Q07	3Q07	4Q07	2007	1Q08	2Q08	3Q08	4Q08	2008
Africa	3.0	3.0	2.9	2.9	2.9	3.1	3.1	3.0	3.1	3.1	3.2	3.2	3.1	3.2	3.2
Americas	30.3	30.3	30.8	30.7	30.6	31.0	30.9	31.4	31.4	31.2	31.6	31.5	31.9	31.9	31.7
Asia/Pacific	25.2	24.1	23.7	24.8	24.4	25.3	24.7	24.7	25.9	25.1	26.5	25.6	25.4	26.6	26.0
Europe	16.7	15.9	16.3	16.4	16.3	16.0	15.6	16.4	16.6	16.1	16.6	16.0	16.5	16.7	16.5
FSU	3.9	3.7	4.0	4.3	4.0	3.8	3.5	3.9	4.5	3.9	3.9	3.6	4.0	4.5	4.0
Middle East	6.2	6.2	6.5	6.3	6.3	6.4	6.5	6.8	6.5	6.6	6.7	6.8	7.1	6.8	6.9
World	**85.2**	**83.2**	**84.1**	**85.5**	**84.5**	**85.5**	**84.3**	**86.1**	**88.1**	**86.0**	**88.4**	**86.6**	**87.9**	**89.7**	**88.2**
Annual Chg (%)	0.4	0.7	1.0	1.4	0.9	0.3	1.3	2.4	3.0	1.8	3.4	2.7	2.1	1.9	2.5
Annual Chg (mb/d)	0.4	0.6	0.9	1.2	0.8	0.3	1.1	2.0	2.6	1.5	2.9	2.3	1.8	1.7	2.2
Changes from last month's report (mb/d)	0.02	0.00	0.00	0.00	0.01	-0.03	-0.04	-0.05	0.05	-0.02	-0.04	0.03	-0.01	-0.11	-0.03

- **OECD oil product demand** has been revised upwards in both 2007 and 2008. This results from minor 2Q07 revisions to several countries and, more significantly, to the outage of Japan's largest nuclear plant after a major earthquake in July. Japan is now seen burning about 140 kb/d of additional low-sulphur fuel oil and crude for power generation at least for a year. OECD demand is thus expected to increase by 0.6% in 2007 to 49.5 mb/d, and by 1.7% in 2008 to 50.3 mb/d. This forecast also assumes normal winter conditions during 4Q07 and 1Q08 and the continued growth of North American demand (+1.4%).

- **Non-OECD oil product demand** has been slightly adjusted downwards in both 2007 and 2008. Revisions include minor downward changes to China and other Asian countries, and a slight increase in summer demand for gasoil and fuel oil in Gulf countries, given reported gas shortages in their power generation sector. Overall, non-OECD demand is expected to reach 36.5 mb/d in 2007 (+3.5% on an annual basis) and 37.8 mb/d in 2008 (+3.8%).

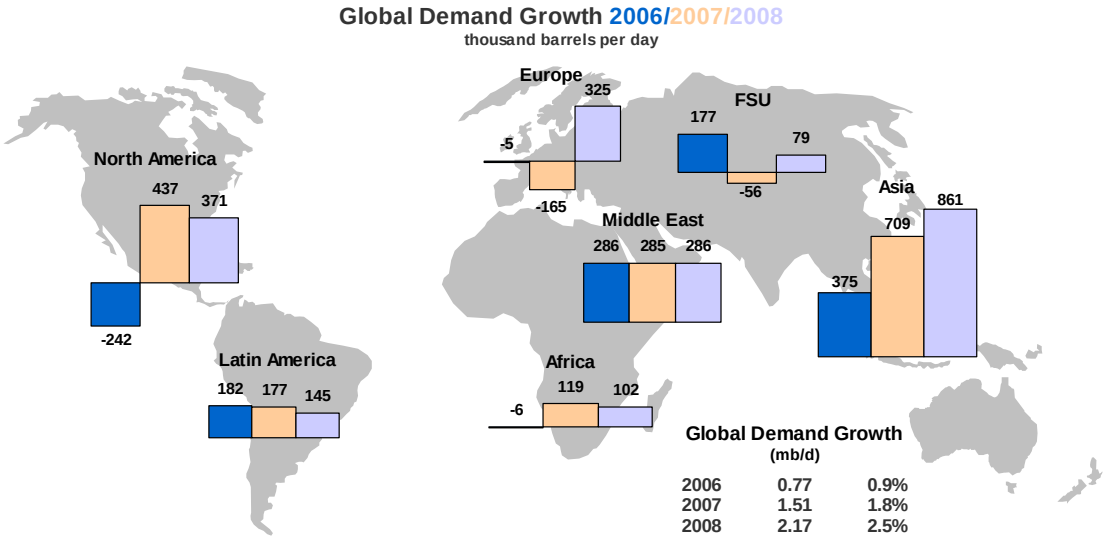
- **This demand forecast has not yet accounted for the effects of the gasoline rationing scheme in Iran.** Although official sources claim that demand has fallen sharply, anecdotal evidence suggests that traffic is back to pre-rationing levels. The lack of detailed data makes it premature to revise downwards the country's gasoline demand outlook, but this report will continue to monitor developments closely.

OECD

Preliminary data indicate that total OECD inland deliveries decreased by 1.2% in June, compared with the same month in 2006. This fall was related to demand weakness in Europe (-3.7% year-on-year) and the Pacific (-1.6%), which exceeded North America's modest gain (+0.5%).

The weakness in OECD Europe demand is largely related to lower-than-average deliveries of heating oil in several countries, notably Germany and France; overall, the region's heating oil demand plummeted by 16.7% on an annual basis. In addition, fuel oil demand contracted by 3.5% given relatively subdued electricity demand, although fuel oil consumption could rebound if drought conditions in southern Europe worsen. In OECD Pacific, demand was dragged down by weak transportation fuel deliveries (gasoline fell by 0.7% and diesel by 2.6%), particularly in Japan. In OECD North America, by contrast,

demand was supported by transportation fuels, notably in the US (where the driving season is in full swing) and Mexico. Regional deliveries of gasoline and diesel increased by 0.6% and 3.5%, respectively.

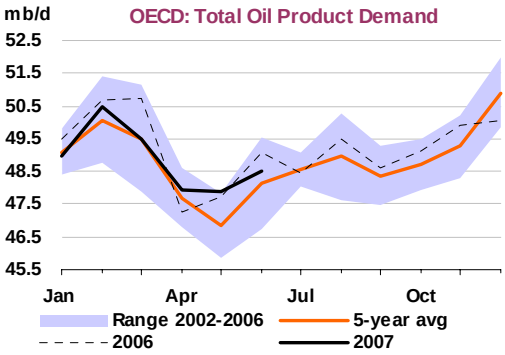


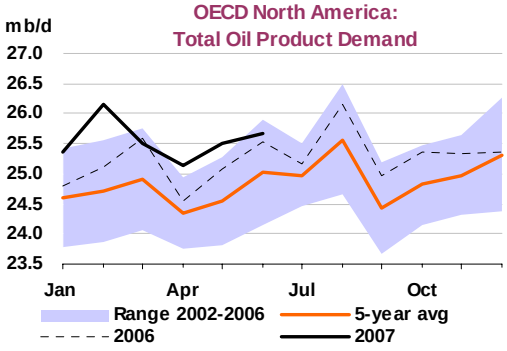
OECD Demand based on Adjusted Preliminary Submissions - June 2007

(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*	**11.03**	**0.6**	**1.92**	**-3.1**	**3.97**	**3.5**	**1.01**	**-15.0**	**1.21**	**8.0**	**6.55**	**1.34**	**25.68**	**0.5**
US50	9.47	0.1	1.67	-4.0	3.43	3.7	0.53	-25.3	0.66	7.9	5.18	0.8	20.93	-0.2
Canada	0.74	1.0	0.14	0.8	0.20	3.2	0.33	-0.6	0.11	-3.4	0.75	4.5	2.28	1.8
Mexico	0.75	6.8	0.07	10.5	0.28	1.4	0.12	1.4	0.34	14.9	0.55	2.5	2.11	5.9
OECD Europe	**2.61**	**-2.3**	**1.35**	**-1.2**	**4.34**	**1.6**	**1.53**	**-16.7**	**1.71**	**-3.5**	**3.58**	**-5.3**	**15.11**	**-3.7**
Germany	0.53	0.8	0.20	1.5	0.62	1.3	0.31	-36.3	0.17	-1.3	0.58	-5.5	2.42	-7.7
United Kingdom	0.43	3.6	0.34	-13.2	0.46	3.9	0.14	6.0	0.10	27.5	0.38	-8.2	1.84	-1.4
France	0.24	-6.0	0.16	1.6	0.70	2.1	0.21	-23.1	0.09	-12.4	0.47	1.9	1.87	-3.4
Italy	0.30	-7.3	0.09	5.3	0.57	1.1	0.07	-14.5	0.22	-15.8	0.35	-5.5	1.60	-5.1
Spain	0.16	-4.9	0.13	4.0	0.56	3.8	0.19	-5.0	0.22	-1.5	0.35	-2.5	1.61	-0.3
OECD Pacific	**1.53**	**-0.7**	**0.63**	**-2.7**	**1.29**	**-2.6**	**0.47**	**-14.8**	**0.90**	**1.4**	**2.91**	**0.1**	**7.74**	**-1.6**
Japan	1.00	-2.4	0.38	-7.3	0.61	-0.8	0.36	-16.4	0.52	4.0	1.71	-1.5	4.58	-2.9
Korea	0.16	4.9	0.12	10.3	0.34	-8.6	0.11	-9.3	0.35	-2.7	0.97	2.1	2.06	-0.7
Australia	0.32	1.1	0.10	2.9	0.29	3.1	0.00	62.6	0.02	1.4	0.21	4.6	0.95	2.7
OECD Total	**15.17**	**-0.1**	**3.90**	**-2.4**	**9.60**	**1.8**	**3.00**	**-15.8**	**3.82**	**1.0**	**13.03**	**-0.8**	**48.53**	**-1.2**

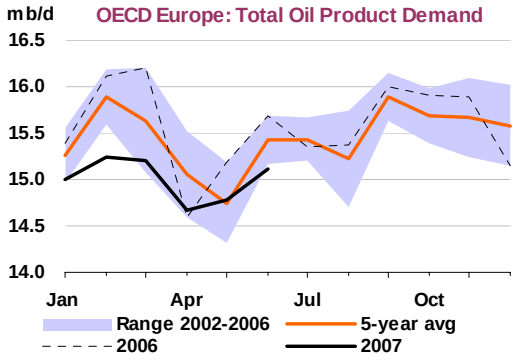
* Including US territories

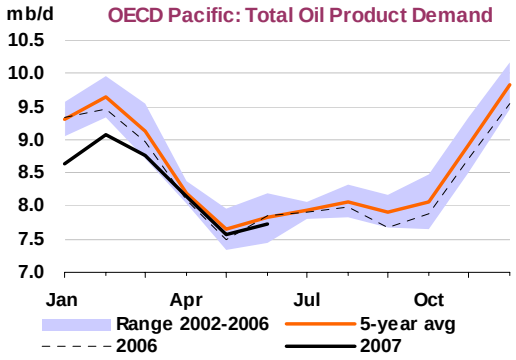




Overall, OECD demand is forecast to reach 49.5 mb/d in 2007 (+0.6%) and 50.3 mb/d in 2008 (+1.7%), on the premise that temperatures during the forthcoming winter will be in line with the previous 10-year average. Under this assumption, year-on-year growth in all OECD areas should be strong. North

America, which accounts for over half of OECD demand, will remain the OECD's main engine of demand growth, increasing by +1.4% in 2008. Meanwhile, Europe and the Pacific are both seen rebounding by +2.0%. It should be noted that forecast demand in the Pacific has been revised upwards following the outage of Japan's largest nuclear plant, which was closed down for safety reasons after a particularly strong earthquake in July. This unexpected event is likely to result in Japanese utilities burning additional fuel oil and crude to meet power demand at least until 3Q08.





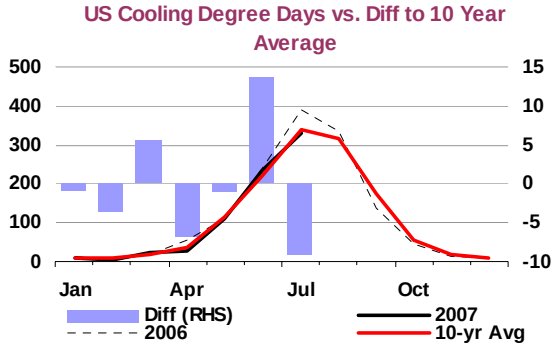
Total OECD Demand by Product
(million barrels per day)

	2006	2007	3Q06	4Q06	1Q07	2Q07	Mar 07	Apr 07	May 07*	Latest month vs. Apr 07	Latest month vs. May 06
LPG & Ethane	4.71	4.76	4.41	4.76	5.20	4.55	4.88	4.77	4.49	-0.28	0.02
Naphtha	3.15	3.24	3.13	3.35	3.39	3.04	3.28	3.12	3.07	-0.05	0.11
Motor Gasoline	14.86	14.97	15.26	14.92	14.47	15.05	14.82	14.85	15.12	0.27	0.20
Jet & Kerosene	4.17	4.17	3.98	4.27	4.36	3.90	4.20	4.00	3.80	-0.19	-0.06
Gas/Diesel Oil	13.24	13.27	12.91	13.59	13.56	12.56	13.65	12.60	12.49	-0.11	-0.15
Residual Fuel Oil	4.03	4.01	3.82	3.84	4.20	3.84	4.05	3.82	3.88	0.07	0.09
Other Products	5.04	5.07	5.34	4.98	4.46	5.17	4.60	4.79	5.02	0.23	-0.07
Total Products	**49.22**	**49.50**	**48.85**	**49.71**	**49.63**	**48.11**	**49.48**	**47.95**	**47.88**	**-0.07**	**0.13**

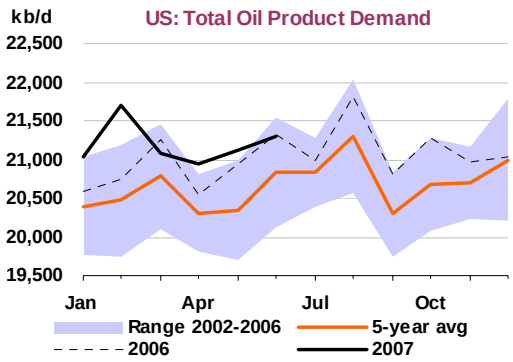
* Latest official OECD submissions (MOS)

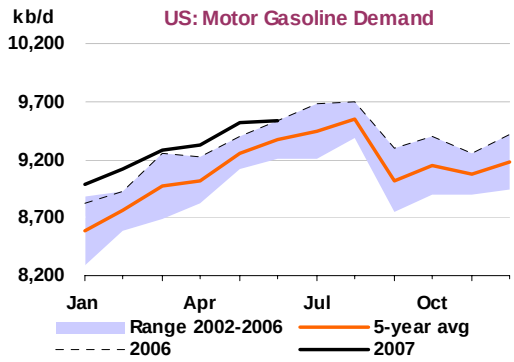
North America

According to June's adjusted preliminary data, inland deliveries in the continental **United States** – a proxy of oil product demand – shrank by 0.2% versus the same month in 2006. The main factor of weakness was once again heating oil, which plummeted by 25.3% year-on-year. This is related to both seasonal factors (warmer temperatures, with some 14 more cooling-degree days or CDDs than the ten-year average) but also to reclassification issues (low-sulphur distillates are now counted as 'diesel'). Jet/kerosene also fell (-4.0%), but in line with the five-year average.



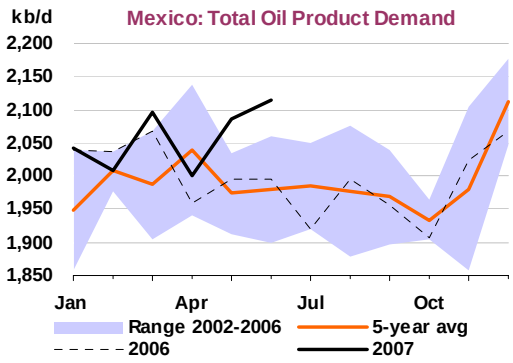
By contrast, diesel deliveries (mostly road-diesel, including ULSD) reported a year-on-year gain of 3.7%. Compared with the strong growth rates of the previous two months (almost 10% on average), this may suggest that economic activity, albeit resilient, is slowing down somewhat. Similarly, gasoline demand rose by only 0.1%, despite this being the driving season. This may indicate that high retail prices are also starting to eat into demand, but drawing such conclusions from primary demand (i.e. derived from refinery deliveries) may be premature.

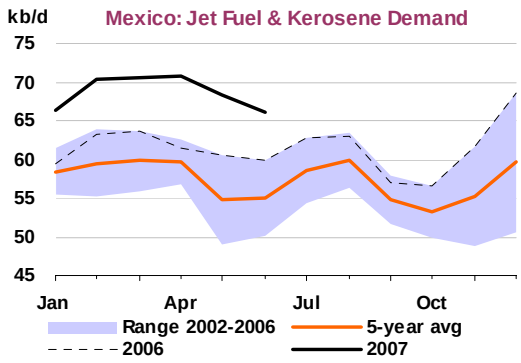




Indeed, the IMF still predicts relatively strong US economic growth in 2008 (+2.8%), despite having revised down by a notch its 2007 forecast (from +2.2% to +2.0%). There is a risk that the housing market woes and ensuing financial markets turmoil could herald a slowdown of consumer spending. Nevertheless, real GDP in 2Q07 grew by a surprisingly strong 3.4% (annualised). This suggests that, despite an often talked-about slowdown, the economy continues to hold its ground, albeit at below-trend growth for the second year in a row. On this basis, and assuming normal temperatures during the forthcoming winter, we still expect US50 demand to increase by 1.5% to 21.3 mb/d in 2008.

Mexican demand rebounded strongly in June (+5.9%), pulled up by vibrant growth in gasoline (+6.8%), jet fuel/kerosene (+10.5%) and residual fuel oil (+14.9%) deliveries. Gasoline is poised for its fifth year of buoyant growth in a row, as a result of a rapidly expanding vehicle fleet, which in turn has been fuelled by the spread of consumer credit and economic growth. More interestingly, the rise in jet fuel/kerosene is related to the emergence of several low-cost airlines over the past few years; competition has become fierce, and ticket prices have fallen significantly, thus further stimulating air travel demand. Meanwhile, the spike in fuel oil deliveries, after almost two years of falling or stagnating consumption, suggests that electricity demand is booming as a result of strong economic activity (and also in part due to seasonal, warmer weather). In the medium term this rebound is unlikely to last, as new gas-fuelled generation capacity comes on stream.





In early July, a rebel group, the People's Revolutionary Army (EPR by its Spanish acronym), claimed responsibility for an attack against several of Pemex's pipelines in west-central Mexico. The group justified its act against the state-owned company on the grounds that it no longer serves the interests of the 'people' but those of the 'oligarchy'. The attack severely disrupted natural gas supplies to households and industries in the area, as well as crude deliveries to Pemex's Salamanca refinery. Only a few of the 1,200 companies that were affected (notably car makers) reportedly managed to switch to other fuels in order to keep their operations running during the week-long gas outage. As such, a blip in LPG and fuel oil consumption is likely to have occurred in July, in addition to a drop in natural gas consumption.

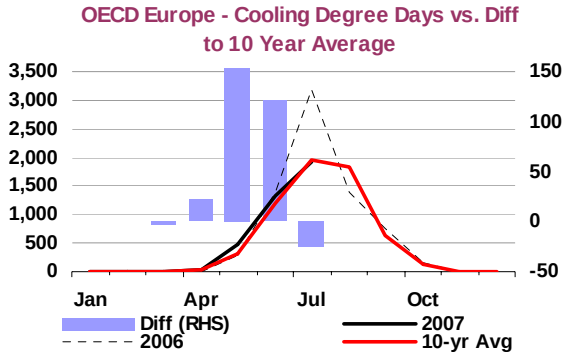
OECD North America Demand by Product
(million barrels per day)

	2006	2007	3Q06	4Q06	1Q07	2Q07	Mar 07	Apr 07	May 07*	Latest month vs. Apr 07	Latest month vs. May 06
LPG & Ethane	2.83	2.91	2.67	2.90	3.24	2.72	2.95	2.85	2.63	-0.21	-0.02
Naphtha	0.44	0.45	0.46	0.49	0.42	0.44	0.39	0.42	0.46	0.04	0.00
Motor Gasoline	10.72	10.87	10.99	10.77	10.53	10.91	10.71	10.69	10.99	0.30	0.18
Jet & Kerosene	1.91	1.91	1.94	1.89	1.88	1.89	1.84	1.90	1.86	-0.03	-0.07
Gas/Diesel Oil	5.18	5.27	5.07	5.28	5.49	5.07	5.45	5.13	5.09	-0.04	0.02
Residual Fuel Oil	1.20	1.26	1.16	1.09	1.38	1.24	1.35	1.21	1.31	0.10	0.20
Other Products	2.97	3.03	3.14	2.92	2.73	3.18	2.82	2.93	3.17	0.23	0.13
Total Products	**25.25**	**25.69**	**25.43**	**25.35**	**25.66**	**25.44**	**25.51**	**25.13**	**25.52**	**0.38**	**0.45**

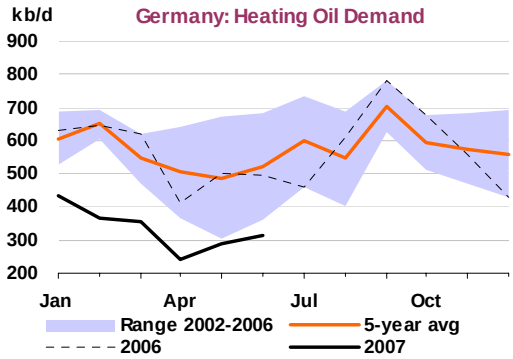
* Latest official OECD submissions (MOS)

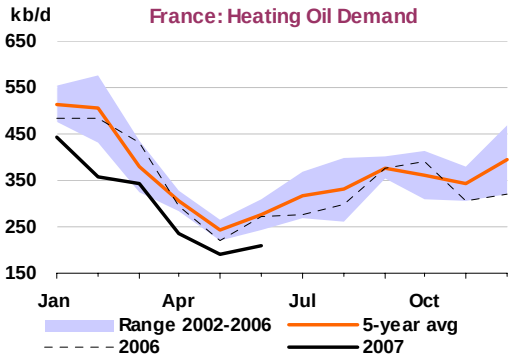
Europe

According to preliminary data, total oil product demand in Europe shrank by 3.7% in June, compared with the same month in the previous year. The fall was related to start of summer (there were about 121 more CDDs than the 10-year average). High prices may also have prompted end-users to draw stocks or postpone the seasonal refilling. As a result, heating oil deliveries contracted by 16.7% on an annual basis, while fuel oil demand shrank by 3.5% since electricity consumption remained somewhat anaemic.

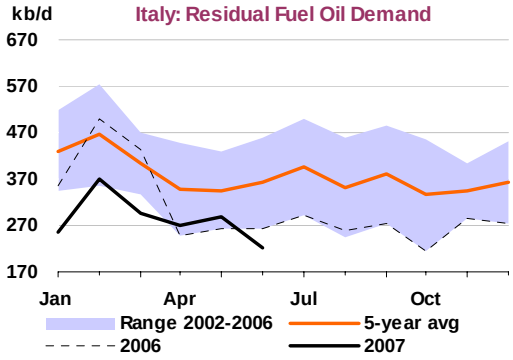


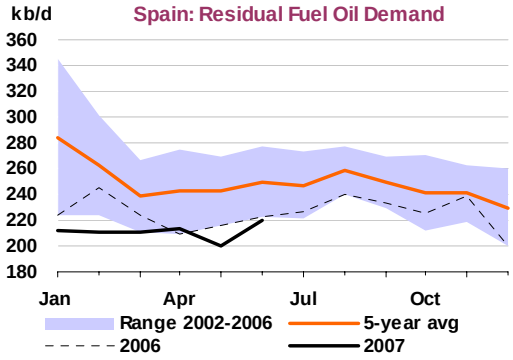
Regarding the main European countries, demand in **Germany** and **France** was dragged down by weak heating oil deliveries in June. According to preliminary data, total oil product deliveries were 7.7% lower in Germany on an annual basis, with heating oil plummeting by 36.3%; in France, the figures were -3.4% and -23.1%, respectively. Nevertheless, the German heating oil market – the largest in the continent – is showing some signs of revival: household stocks rose from 53% to 55% of capacity, albeit one month later than usual (stocks usually begin to rise in May). Nevertheless, it remains to be seen whether German households sustain their filling pace; as in 2006, it will likely be related to price fluctuations.





Further south, the picture was similar, with demand in both **Italy** and **Spain** constrained by weak heating oil and residual fuel oil deliveries in June. Total demand fell by 5.1% in Italy and by 0.3% in Spain on a yearly basis; heating oil contracted by 14.5% and 5.0%, respectively, while fuel oil shrank by 15.8% and 1.5%. Nevertheless, fuel oil demand in the region could rebound if the summer drought proves to be more severe than expected and curbs hydropower capacity utilisation. It should be remembered that Italy and Spain account together for about 25% of Europe's fuel oil market.





Finally, given the healthy outlook of the main European economies (both in terms of domestic demand and exports), coupled with expectations of normal temperatures during the forthcoming winter, we foresee that OECD Europe demand will rise by 2.0% to 15.7 mb/d in 2008.

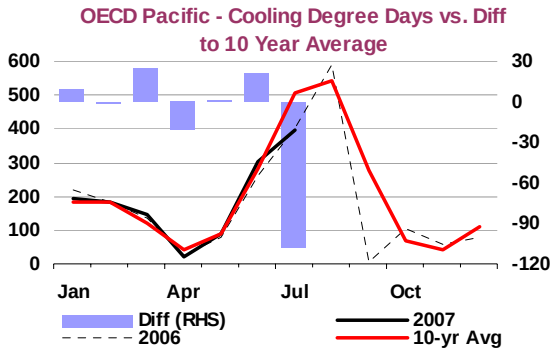
OECD Europe Demand by Product
(million barrels per day)

	2006	2007	3Q06	4Q06	1Q07	2Q07	Mar 07	Apr 07	May 07*	Latest month vs. Apr 07	Latest month vs. May 06
LPG & Ethane	0.96	0.93	0.84	0.91	0.99	0.91	0.99	0.94	0.95	0.01	-0.03
Naphtha	1.11	1.12	1.07	1.14	1.22	1.05	1.22	1.05	1.06	0.01	0.04
Motor Gasoline	2.57	2.53	2.66	2.55	2.41	2.60	2.53	2.61	2.59	-0.02	-0.02
Jet & Kerosene	1.28	1.30	1.37	1.28	1.23	1.29	1.20	1.23	1.28	0.05	0.00
Gas/Diesel Oil	6.24	6.19	6.15	6.43	6.23	5.75	6.27	5.67	5.71	0.04	-0.16
Residual Fuel Oil	1.85	1.78	1.77	1.78	1.83	1.71	1.72	1.71	1.70	-0.01	-0.06
Other Products	1.55	1.52	1.71	1.56	1.24	1.55	1.27	1.46	1.49	0.03	-0.15
Total Products	**15.56**	**15.38**	**15.57**	**15.64**	**15.15**	**14.85**	**15.20**	**14.67**	**14.78**	**0.12**	**-0.39**

* Latest official OECD submissions (MOS)

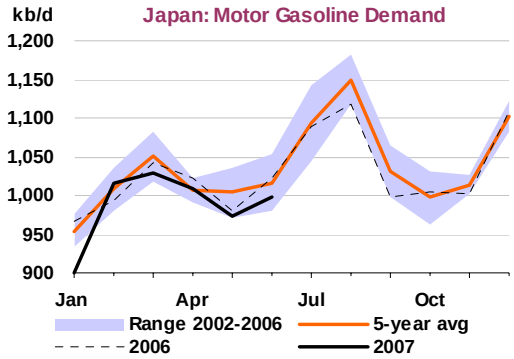
Pacific

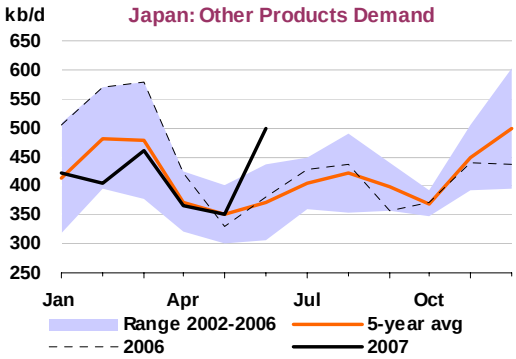
According to preliminary data, oil product demand in the Pacific declined by 1.6% in June, compared with the same month in the previous year. Overall demand was curbed by weak transportation fuel deliveries (gasoline fell by 0.7% and diesel by 2.6%), particularly in Japan. Demand for heating fuels (kerosene in Japan and Korea, and other gasoil elsewhere) remained weak (-2.7%). Residual fuel oil deliveries, meanwhile, rose by only 1.4%. By contrast, demand for 'other products' (which include direct crude burning for power generation) jumped by 15.5%, mostly as a result of rising electricity demand in Japan.



In **Japan**, oil product demand in June contracted for the fifth month in a row, falling by 2.9% on an annual basis. All products bar residual fuel oil (+4.0%) and crude for power generation (+30.9%, included in the 'other products' category) fell. Aside from the country's structural weakness in transportation fuels, the decline was largely seasonal; total demand was in line the five-year average.

The spike in both fuel oil and direct crude burning was due to strong industrial demand in June, coupled with lower nuclear and hydropower generation rates. Moreover, the strength of both products is likely to prevail in the months ahead, following the shutdown of the Kashiwazaki-Kariwa nuclear plant after the major earthquake that hit northwest Japan in mid-July.



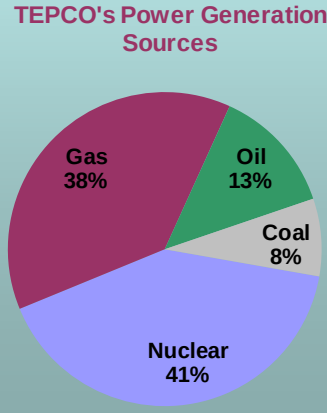


Coping with Japan's Nuclear Outages

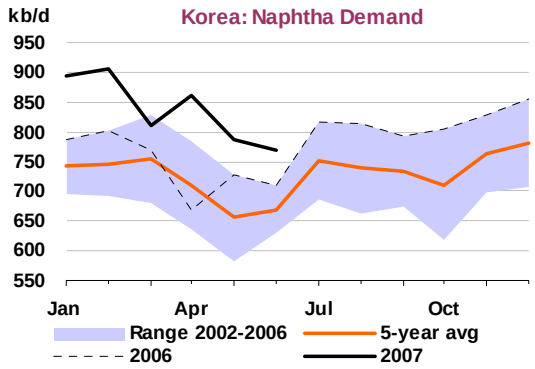
On July 16, a 6.8-magnitude earthquake (Japanese scale) hit the city of Kashiwazaki, located on the island of Honshu (in Niigata prefecture, about 250 km northwest of Tokyo). The earthquake led to the shutdown of the Kashiwazaki-Kariwa nuclear plant, the largest in the world. The facility, owned and operated by Tokyo Electric Power Company (TEPCO), has a total nameplate capacity of 8.2 GW – enough to provide electricity to some 16 million households (about 34% of Japan's total).

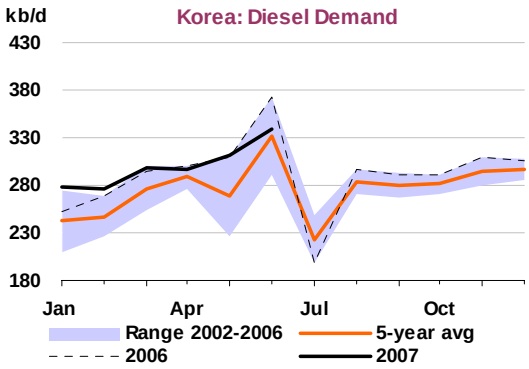
Although the plant itself suffered relatively minor damage, there were radiation leaks, prompting the government to order its shutdown on safety concerns – namely whether it can withstand another earthquake of such a magnitude (the plant was designed for a 6.5 scale), and more crucially, whether it was built over an active fault-line. This has further tarnished the reputation of Japan's nuclear industry, which has been recently sanctioned for having covered up serious incidents in several plants over the past two decades and falsified maintenance data.

This incident comes ahead of peak electricity demand (usually from late July through to September), and will oblige TEPCO to meet the shortfall with thermal generation using a panoply of fuels (low-sulphur fuel oil, low-sulphur crude, LNG and coal) and buy surplus power from other utilities and from industries equipped with co-generation facilities. As such, we have raised our forecast of fuel oil demand by an additional 55 kb/d and that of direct crude consumption by 85 kb/d through to July 2008. This prognosis assumes that the plant will be idle for one year, as has been reported; however, the shutdown could become permanent (local residents have attempted in the past to rescind the plant's license). Should this happen, we will revise our outlook for 2H08 and beyond accordingly.



In **Korea**, meanwhile, total oil product deliveries fell by 0.7% year-on-year in June, mostly because of falling gas/diesel and residual fuel oil demand (-8.6% and -2.7%, respectively). The weakness of these products offset the continued strength of naphtha (+8.1%), gasoline (+4.9%) and jet fuel/kerosene (+10.3%) deliveries. Although diesel deliveries remains above the five-year average, demand may fall further in July as the effects of the 7.5% diesel fuel tax hike, which began on 1 July, are fully felt by end-consumers.





Given Japan's nuclear predicament, we have revised up our outlook for 2008 demand in OECD Pacific, which is now seen growing by 2.0% on a yearly basis, to 8.6 mb/d. As with other OECD areas, it should again be emphasised that this forecast relies on sustained economic activity and normal winter temperatures.

OECD Pacific Demand by Product
(million barrels per day)

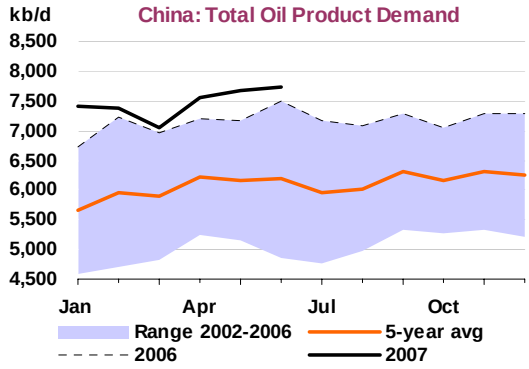
	2006	2007	3Q06	4Q06	1Q07	2Q07	Mar 07	Apr 07	May 07*	Latest month vs. Apr 07	Latest month vs. May 06
LPG & Ethane	0.92	0.92	0.91	0.94	0.97	0.92	0.95	0.98	0.90	-0.08	0.07
Naphtha	1.60	1.68	1.59	1.72	1.75	1.56	1.67	1.65	1.55	-0.10	0.07
Motor Gasoline	1.57	1.58	1.61	1.60	1.53	1.54	1.58	1.55	1.54	-0.01	0.03
Jet & Kerosene	0.98	0.96	0.67	1.10	1.25	0.72	1.16	0.87	0.66	-0.21	0.01
Gas/Diesel Oil	1.83	1.81	1.69	1.88	1.85	1.74	1.93	1.79	1.68	-0.11	-0.01
Residual Fuel Oil	0.98	0.97	0.89	0.97	0.99	0.89	0.98	0.90	0.88	-0.03	-0.05
Other Products	0.52	0.52	0.49	0.50	0.49	0.44	0.51	0.40	0.36	-0.04	-0.05
Total Products	**8.40**	**8.43**	**7.85**	**8.71**	**8.83**	**7.82**	**8.77**	**8.15**	**7.58**	**-0.57**	**0.08**

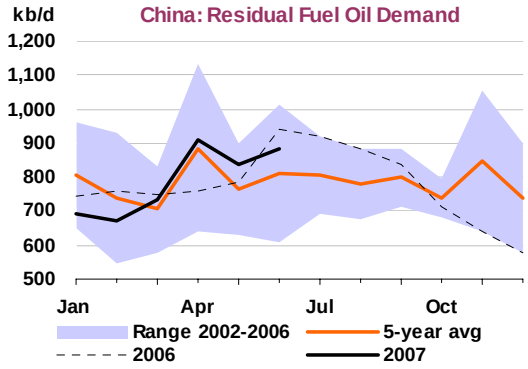
* Latest official OECD submissions (MOS)

Non-OECD

China

China's apparent demand (defined as refinery output plus net oil product imports, adjusted for fuel oil and direct crude burning, smuggling and stock changes) rose by an estimated 3.0% year-on-year in June. Continued petrochemical demand, farming activities and construction work supported strong demand for naphtha, gasoil and 'other products' (+9.9%, +9.5% and +12.1%, respectively). However, gasoil demand is likely to be somewhat less buoyant over the next few months as the yearly fishing ban is implemented and the country enters the rainy season, which tends to slow down construction activity.





By contrast, residual fuel oil consumption shrank in June by 6.5% on a yearly basis. This suggests that both fuel oil-fired power plants and 'teapot' refineries in southern China significantly cut their use as a result of soaring import prices (which have reached record highs in Singapore over the past three

months). Power plants have reportedly switched to coal and, to a lesser extent, LNG. Meanwhile 'teapot' refineries have seemingly cut their runs to around 30-40% of capacity as capped domestic retail prices make refining operations unprofitable in the face of higher feedstock prices. Despite the halving of the fuel oil import tax since 1 June (to 3%), only those users requiring higher-specification fuel oil have continued to purchase it abroad; the rest have turned to the lower-priced domestic fuel oil blend.

The renewed mismatch between international and domestic prices has led to a repeat of oil product shortages, notably gasoline. This has almost become a familiar sequence in China: 1) international prices rise, but domestic prices remain static; 2) margins fall, prompting refiners and retailers (particularly the large state-owned Sinopec and CNPC) to increase exports, which are much more lucrative; 3) the government then urges oil companies to fulfil their obligations to supply the domestic market; 4) oil companies more or less comply but loudly protest because of mounting downstream losses and demand once again a hike in domestic retail prices; and 5) the government placates state companies by offering a compensating end-year subsidy and adjusts – marginally – retail prices. So far this year, the cycle has reached the fourth step; the fifth one will likely take place over the next few months – however, inflationary pressures, the forthcoming People's Congress in October and next year's Olympics probably militate against a significant retail price increase.

China Demand by Product
(thousand barrels per day)

	Demand			Annual Chg (kb/d)		Annual Chg (%)	
	2005	**2006**	**2007**	**2006**	**2007**	**2006**	**2007**
LPG & Ethane	650	633	625	-17	-8	-2.6	-1.3
Naphtha	707	826	915	119	90	16.8	10.9
Motor Gasoline	1131	1170	1199	39	30	3.4	2.6
Jet & Kerosene	246	280	295	34	15	13.8	5.5
Gas/Diesel Oil	2239	2338	2479	99	141	4.4	6.0
Residual Fuel Oil	778	776	799	-2	23	-0.2	2.9
Other Products	943	1135	1255	192	120	20.3	10.5
Total Products	**6693**	**7157**	**7567**	**464**	**410**	**6.9**	**5.7**

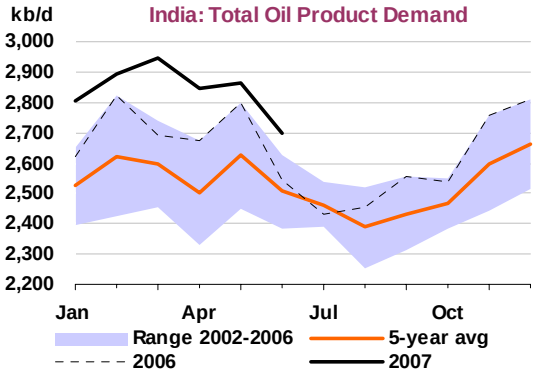
Given minor revisions to 2Q07 estimates, we now expect total Chinese oil product demand to increase by 5.7% in 2007, to 7.6 mb/d, and by 5.8% in 2008, to 8.0 mb/d, on the premise of continued strong economic growth. Indeed, the IMF has raised its own outlook for this year and the next (+11.2% and +10.5%, respectively). However, this reassessment does not necessarily mean that the Chinese economy is overheating, but rather that official data are becoming more accurate and credible (the IMF changes were arguably prompted by the government's own revisions to historical GDP growth data).

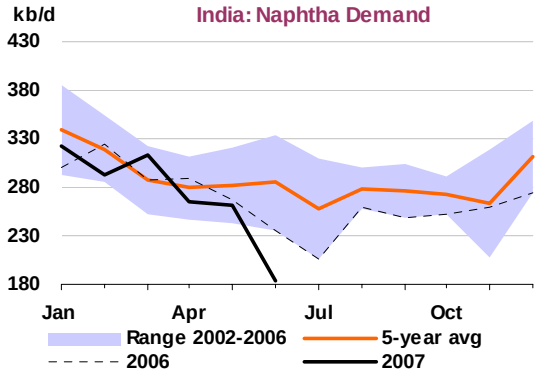
Other Non-OECD

According to preliminary data, oil product sales in **India** – a proxy of demand – increased by 6.2% in June on a yearly basis, pulled up by very strong increases in gasoline (+19.7%), gasoil (+19.8%) and residual fuel (+15.4%). By contrast, 'other products' (which include bitumen, lubricants, etc.) fell by 17% – possibly because of strong stockbuilding in the previous year, but most likely reflecting statistical glitches.

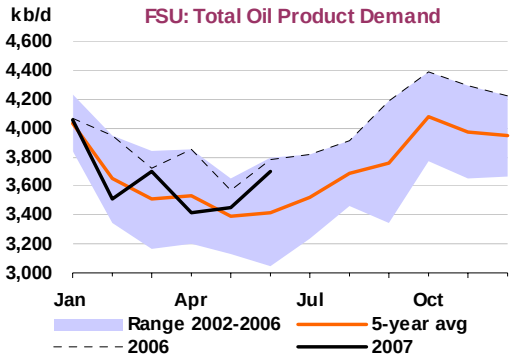
Indeed, May's figures were revised up to account for a 2.2% rise in total demand, instead of the small 0.2% drop previously reported, with the largest adjustment in the 'other products' category. Naphtha demand, meanwhile, fell for the third consecutive month (-22.5%), suggesting that natural gas supplies are growing, thus leading to the resumption of naphtha's gradual decline.

As such, India's oil product demand forecast remains largely unchanged when compared with last month's report. Demand is expected to rise by 4.3% in 2007 to slightly above 2.7 mb/d, but growth should slow down to 2.3% in 2008 (2.8 mb/d) as a result of naphtha's structural decline.





FSU apparent demand – defined as domestic crude production minus net exports of crude and oil products – has been slightly adjusted downwards in both 2007 and 2008, compared with last month's report. Downward revisions to supply figures, particularly in 2Q07, were larger than expected. Coupled with increased export duties from 1 June (crude duties rose by 28% to $200/tonne) and maintenance at Novorossiysk, the region's net exports, albeit still relatively buoyant, averaged 8.8 mb/d in June, down from May's 9.1 mb/d. As such, 3Q07 net exports are expected to fall to 8.6 mb/d. Overall, FSU demand is expected to average 3.9 mb/d in 2007 (1.4% lower than in 2006) and about 4.0 mb/d in 2008 (+2.0%). However, as noted in previous reports, this forecast is subject to great uncertainty given the volatility regional trade data.



Argentina's Energy Shortages

As noted in a previous report (*Oil Market Report* dated 13 December 2006), Argentina has been confronted to mounting energy shortages, notably since mid 2006, as supply has failed to match the fast pace of demand growth, which has soared as the economy has recovered from the country's economic meltdown of 2002. This year, the situation has become even more pressing, largely as a result of an extremely severe winter. Whereas gasoil shortages were the key issue a year ago, this time the problem concerns both gasoil and, more significantly, natural gas.

At issue is the government's continued reluctance to allow domestic retail prices to rise. This has not only discouraged private investment in domestic gas production (most of which comes from mature, declining fields) but has also prompted downstream players to reduce gasoil production in order to boost fuel oil output (exported at international prices or sold to domestic utilities) and to export as much gasoil as possible (or at least minimise imports). However, fearful of stoking inflation (which is already running at more than 10%) and of upsetting voters ahead of October's presidential election (the current president's wife is the leading candidate), the government has targeted and fined oil and pipeline companies, imposed an export tax and an export pre-approval rule on gasoil, cut gas exports to neighbouring Chile and increased prices (of gas) for industrial users. Residential users, by contrast, have not even been encouraged to save energy.

However, these measures, albeit politically expedient, have been predictably insufficient to solve the problem. For example, gasoil shortages reportedly caused delays in harvesting and planting new crops in various temperate regions in June, while several industrial users have been forced to significantly reduce their operations over the past two months because of the lack of gas and/or power. As such, the government has been obliged to import more gas from Bolivia and electricity from Brazil and Uruguay. More significantly, in mid July it launched a 90-day programme to subsidise gasoil and fuel oil consumption, hoping to temper the effects of the gas shortage. It remains to be seen, however, whether the programme will prove to be temporary, since the structural causes behind the surge in demand – extremely low retail prices – have not been tackled. In the end, Argentina could find itself in a situation reminiscent of that prevailing in Iran, namely galloping energy consumption, very onerous subsidies and a high import bill.

In the **Middle East**, oil product demand remains buoyant, given the encouraging combination of low retail prices, strong economic growth and favourable demographics. However, the region's rapid economic expansion, coupled with the start of summer, is causing power generation bottlenecks as gas supplies become insufficient to meet soaring electricity demand. Power shortages are reportedly acute in Kuwait, where the authorities have launched a rationing programme during peak hours, and the UAE (industrial users, such as cement producers, in Ras al-Khaimah and Fujairah were reportedly switching to coal, while rolling blackouts have occurred in Abu Dhabi and Sharjah). In other areas demand for gasoil and especially fuel oil, aimed at feeding power generators, has also reportedly spiked.

More generally, for some countries such as Kuwait, Saudi Arabia or Iran, turning to fuel oil for power generation makes economic sense, especially where power plants are close to refineries. Rather than upgrading refineries or processing lighter crude oil to reduce fuel oil output – whose value has sharply diminished as export markets have shrunk, notably in Europe – local refiners can process their readily available reserves of heavy crude to produce large volumes of fuel oil, which in turn can replace direct crude burning for power generation. This excess – and more valuable crude – can then be exported. Nevertheless, as highlighted in our July 2007 *Medium-Term Oil Market Report*, if fuel oil demand sharply increases, the region will arguably be obliged to become a net importer – just when the worldwide supply of fuel oil is expected to diminish as a large amount of upgrading capacity comes on stream by the end of the decade.

Although the start-up of Qatar's Dolphin gas project should help relieve the ongoing gas shortages in the short term, we have slightly increased our assessment of gasoil and fuel oil consumption in the region over the summer months. Middle East demand is now seen reaching 6.6 mb/d in 2007 (+4.5% year-on-year) and 6.9 mb/d in 2008 (+4.3%).

It is important to note that this forecast has not yet incorporated the effects of the gasoline rationing scheme in Iran, which was launched in June (following May's 25% hike in retail prices). Given the lack of detailed data, we believe it is premature to make an adjustment to the country's gasoline demand outlook for 2007 and the years ahead. Nevertheless, we will adjust our figures as new information becomes available.

Following Up on Iran's Gasoline Rationing

Iran's gasoline rationing scheme, which was introduced in late June with the aim of drastically cutting demand and hence imports, poses several analytical and policy challenges that make it difficult today to assess the outlook of the country's gasoline demand in the short- and medium-term. In a nutshell, the scheme establishes a defined monthly volume for each type of vehicle; motorists can buy up to six months' worth of gasoline in advance (instead of four months as initially announced), and unused rations can be carried over into the next rationing period. The rations are monitored by a system of electronic 'smart' cards.

Iran's Vehicle Fleet and Quota System as of July 2007

Vehicle Type	1,000 Units	Quota (litres per month)
Private cars and trucks	7,731	100 for private cars; 360-450 for light trucks; 600 for heavy trucks; 450 for ambulances; 450-600 for private taxis
Government cars & trucks	209	300-600
Gasoline-fueled taxis	198	800
Dual-fueled taxis (gasoline & CNG)	72	800
Motorcycles	6,710	30
Boats	19	60
Total	14,939	

Source: FACTS GLOBAL ENERGY, *Gasoline Rationing in Iran – Solution or Complications?*, July 2007.

Following Up on Iran's Gasoline Rationing (continued)

The first challenge is to assess the effectiveness of the scheme in its first month after implementation. According to official sources, over the course of July demand fell by as much as 150 kb/d (roughly 30% of total gasoline consumption). In addition, the government claims it won't buy spot gasoline cargoes for the rest of the year. However, anecdotal evidence suggests that traffic in Tehran is now back to pre-rationing levels.

Most likely, gasoline demand has fallen only slightly. Indeed, it could be argued that motorists have barely changed their behaviour, for two reasons. Firstly, despite May's 25% hike, retail prices are still very low (about 12 cents per litre), and the more so when compared with international prices; secondly, by allowing motorists to purchase up to the equivalent of a six-month quota in advance the government is only postponing the day of reckoning. Similarly, it is unclear whether imports have actually fallen and that stocks are being drawn down – after all, spot buying can be replaced by term contracts. In fact, imports will probably persist even if the rationing proves successful. According to the consultancy group FACTS GLOBAL ENERGY, domestic production will continue to be insufficient to meet demand at least until the end of the decade, when several refining projects will come on stream.

What will happen after the six-month period – or more likely, when motorists use up their allocation? By September, the government is expected to set a price for gasoline purchases in excess of the defined quotas. What remains unclear is at what level will the price be set: similar to international prices (some 60 cents per litre), closer to regional levels (around 30 cents on average), or somewhere in between. This issue has reportedly become very contentious. The government is torn between political imperatives – fearing that higher prices would stoke inflation (already running at some 16%) and prompt a repeat of the riots that erupted when the scheme was introduced – and economic realities – the need to curb the onerous subsidies and rising import bill that prompted the scheme in the first place. Another consideration is geopolitical: reducing the country's import vulnerability in case its nuclear program leads to import restrictions.

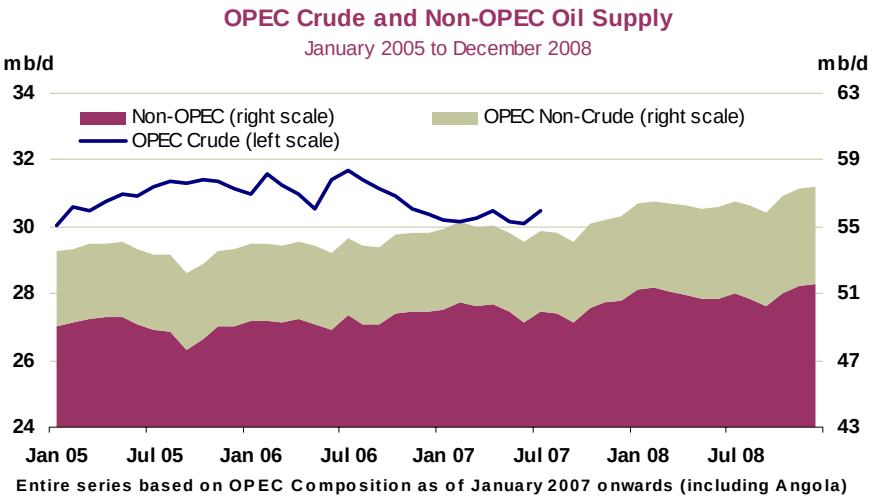
The answer is perhaps to be found in the black market, where gasoline is reportedly sold at or close to international prices. If rationing is maintained but quotas prove insufficient, the black market will effectively set the price for heavy users. As a result, smuggling out of Iran will probably cease, since Iranian prices would be higher than in neighbouring countries. Some users, such as taxis, may even find that reselling their entire quota is more profitable than actually working. In the end, overall consumption would probably fall.

However, the black market may also effectively ignite inflation and deepen social inequality. Higher gasoline prices may not show up at the pump, but may be reflected in the price of other goods, since the country is highly dependent on road transportation. In sum, the choices ahead are difficult, and at this point it is difficult to determine either current demand or to foresee an eventual outcome. Therefore, for now, we have left our forecast unchanged but will continue to monitor the situation closely.

SUPPLY

Summary

- **World oil supply** in July gained 1.1 mb/d compared with June, averaging 85.3 mb/d. However, the 2Q total of 84.9 mb/d stood only 0.1 mb/d above levels of a year ago. Total OPEC supply in July increased by 0.4 mb/d from June, while post-maintenance recovery from North America, the North Sea and FSU saw non-OPEC supply up by 0.7 mb/d. However, monthly gains from non-OPEC could prove short-lived as maintenance and seasonal factors will likely reverse the July increase in August and September.
- **Non-OPEC production** estimates for 2007 and 2008 remain largely unchanged from last month's, at 50.0 mb/d and 51.0 mb/d respectively. Despite marginal changes overall, North American, Asian and Middle Eastern supply profiles now look stronger, offset by weaker expectations for the North Sea, Australia, FSU, Vietnam, Brazil, and Africa. OPEC gas liquids contribute 4.9 mb/d to supply in 2007, rising to 5.5 mb/d next year. The FSU, China and global biofuels are key contributors to non-OPEC growth in 2007, augmented by Brazil, Australia, Canada's oil sands and Sudan for 2008.
- **A focus on OECD supply issues** suggests upside potential versus forecast **US GOM** supply, subject to the severity of the current Atlantic hurricane season. Our own 2007 storm outage assumption of some 33 mb, based on a five-year average, is higher than recent US EIA allowances. Moreover, the recent incorporation of a field reliability adjustment is aimed at minimising downside forecast risk for mature producing areas such as the **North Sea**.
- **OPEC crude supply** in July increased by 385 kb/d to 30.5 mb/d. Gains centred on previously shuttered Iraqi and Nigerian supply, rather than a concerted move to boost output in line with rising demand. However, there is no guarantee that July's increases from either country can be sustained. Delaying further increases in OPEC supply to beyond 11 September implies cargoes would only reach consuming markets very late in 2007. Spare capacity is also likely to remain tight, at or below current near-3 mb/d levels, for the balance of the year.
- **The 'call on OPEC crude and stock change'** rises this quarter to a midpoint centred on 31.9 mb/d and to 32.9 mb/d in 4Q, nearly 2.5 mb/d above current OPEC output. Moreover, against a backdrop of robust demand growth, the call potentially increases by at least 0.6 mb/d for 2008 as a whole. With risks over non-OPEC supply and global demand arguably lying in the same direction (downward), there appears to be little chance of overshoot were OPEC to raise supply to the market.



All world oil supply figures for July discussed in this report are IEA estimates. Estimates for OPEC countries, Alaska 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. This totals -410 kb/d for non-OPEC as a whole, with downward adjustment focused in the OECD.

OPEC

OPEC crude supply in July rose by 385 kb/d from a downward-revised June level, to average 30.5 mb/d. While this represents the sharpest gain in OPEC supply since June 2006, increases were largely confined to hitherto-disrupted output from Iraq and Nigeria (whose combined production was 440 kb/d higher than in June). A more accurate measure of where OPEC is in relative terms therefore comes from the observation that, despite July's increase, OPEC-10 production (excluding Iraq and Angola) stood 1.6 mb/d below levels of a year ago. Effective OPEC spare capacity remained anchored below 3.0 mb/d.

OPEC Crude Production[1]
(million barrels per day)

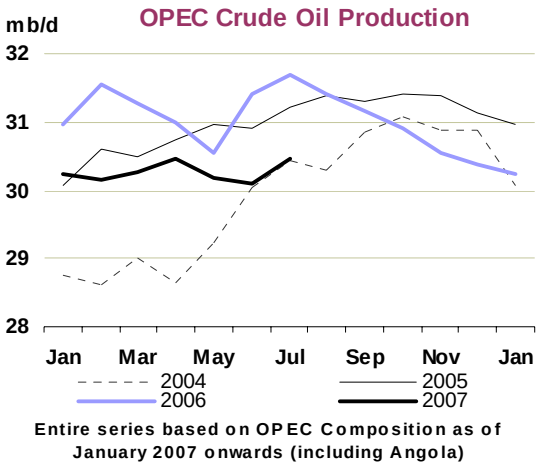
	June 2007 Production	July 2007 Production	Sustainable Production Capacity[2]	Spare Capacity vs July 2007 Production	Capacity end-2007	Capacity end-2008
Algeria	1.37	1.35	1.39	0.03	1.38	1.47
Indonesia	0.83	0.83	0.87	0.05	0.88	0.88
Iran	3.90	3.85	3.95	0.10	3.90	3.97
Kuwait[3]	2.34	2.34	2.64	0.30	2.68	2.83
Libya	1.70	1.70	1.73	0.03	1.78	1.84
Nigeria[4]	2.05	2.21	2.49	0.28	2.45	2.39
Qatar	0.81	0.83	0.90	0.07	1.01	1.09
Saudi Arabia[3]	8.62	8.62	10.80	2.18	10.91	11.35
UAE	2.59	2.58	2.75	0.18	2.90	2.89
Venezuela[5]	2.37	2.34	2.60	0.27	2.62	2.60
Subtotal	**26.57**	**26.64**	**30.11**	**3.47**	**30.50**	**31.31**
Angola[1]	1.60	1.64	1.64	0.00	1.79	2.15
Iraq	1.93	2.20	2.40	0.20	2.40	2.40
Total	**30.09**	**30.48**	**34.15**	**3.67**	**34.69**	**35.86**
(excluding Indonesia, Iraq, Nigeria, Venezuela				*2.89)*		

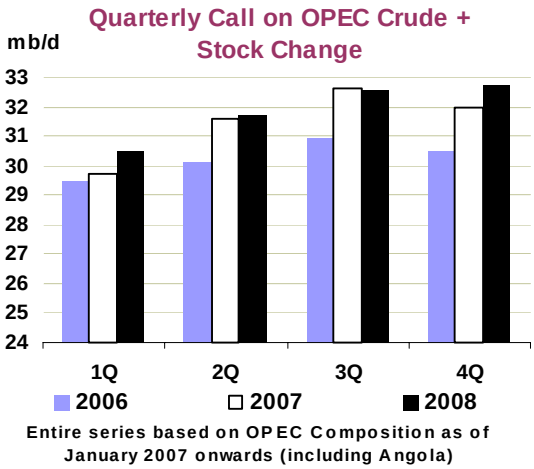
1 Angola joins OPEC effective 1 January 2007.
2 Capacity levels can be reached within 30 days and sustained for 90 days.
3 Includes half of Neutral Zone Production.
4 Nigeria excludes some 545 kb/d of shut-in capacity.
5 Includes Orinoco extra-heavy oil assumed at 455 kb/d in July.

In July and early August, OPEC representatives continued to play down the possibility of officially increasing supply ahead of the Organisation's 11 September meeting in Vienna. Refining constraints, geopolitics and speculative activity were again cited as the main drivers of high prices. Much has been made of high absolute US crude inventories, without reference to the tighter measures of forward demand cover, lower stocks elsewhere, and limited OPEC spare capacity. The scale (540 kb/d) and 'just-in-time' nature of OPEC capacity increases between now and end-2007 means that spare capacity is unlikely to change significantly, leaving the market facing equally unattractive alternatives. With capacity additions lagging demand growth, a belated rise in OPEC supply to put a floor under 4Q stocks would occur at the cost of narrowing spare capacity. Alternatively, static OPEC supply would see modest widening in the spare capacity margin, but sharply lower inventory.

Timing is also an issue, since any concerted increase in OPEC supply, even if agreed on 11 September, would likely affect October (or even November) liftings, therefore only reaching main consuming markets in November, or even December. Saudi Arabia tends to announce allocations for the following month in

the second decade of the preceding month, and could therefore presumably boost October supplies at relatively short notice. But other Middle East Gulf producers tend to announce allocations some five to six weeks before lifting, suggesting either that decisions to boost October liftings need to be made ahead of the September meeting, or that higher supply will not reach refineries until later in the year. Contract flexibility allows some leeway to change volumes at short notice, but either way, OPEC is leaving things late if it is to sustain market balance and avoid a sharp tightening of inventories.

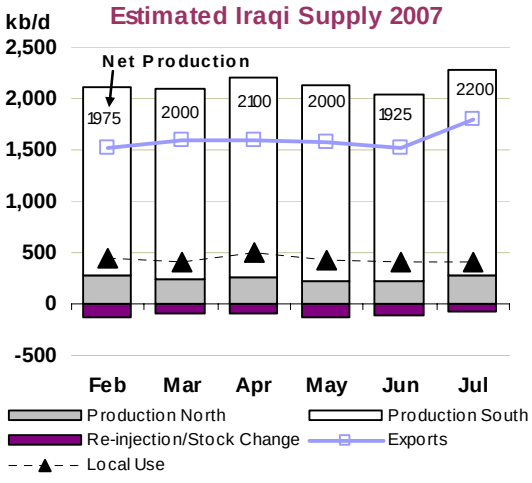




July's largest change came in the form of a 275 kb/d increase in **Iraqi** supply, which averaged 2.2 mb/d (its highest since October 2004). Local crude use is thought to have remained largely unchanged at June's level of 410 kb/d. Exports from southern ports increased from 1.5 mb/d in June to 1.69 mb/d, while around 95 kb/d (2.97 mb) of northern Kirkuk crude was lifted in three cargoes from Ceyhan in Turkey. Total exports were made up to 1.79 mb/d by some 10 kb/d of cross-border sales into Syria. There have been no reports of a new tender for Ceyhan exports, suggesting northern pipeline flows from Kirkuk to Ceyhan remain sporadic and inventory remains low. Despite encouraging signs last month therefore, total Iraqi August exports may struggle to match July levels.

Moreover, uncertainty continues to surround the regulatory framework for the country's oil sector. Kurdish regional authorities complain that the version of the federal oil law now before Parliament is different from the version they previously approved and are in the process of finalising separate legislation to apply to the Kurdish region. Nationally, parliamentarians have now departed on summer recess, stalling further progress on the legislation. And recent diplomatic activity suggests that the issue of Kurdish rebel incursions into Turkey from northern Iraq has yet to be solved.

Nigerian supply is estimated up by 165 kb/d in July to 2.21 mb/d. Repairs on the Nembe pipeline (Bonny Light crude) and indications of further recovery in production from the Forcados and Escravos streams underpin the rise in production. In line with rising July wellhead production levels, scheduled August export liftings also look likely to increase. However, offline production remained in excess of 620 kb/d for July as a whole, with producers stressing that full reactivation of production will take a long time.



Despite progress in reactivating shuttered production, the political situation remains volatile. That said, the new government of President Umaru Yar'Adua and

Niger Delta rebel groups are preparing the ground for formal talks which could aid restoration. Also, the controversial sale of stakes in the Port Harcourt and Kaduna refineries to a local consortium, which underpinned strike action in June, was reportedly cancelled in July by the government, removing for now a further possible source of disruption.

Angola saw production rise by an estimated 40 kb/d in July, reaching 1.64 mb/d of crude (plus 90 kb/d of gas liquids), despite a brief outage at the Dalia field. The end of scheduled maintenance work and rising supply from the recently started Rosa field drove Angolan supply higher. However this was countered by slippage from **Iran**, where supply is estimated to have fallen by 50 kb/d compared with June, based on preliminary tanker sailing data, at 3.85 mb/d. State National Iranian Oil Company (NIOC) reported production start-up at the Paranj oilfield in July which may attain 70 kb/d when fully developed. Also, initial production from the Azadegan field began, with a target of 20 kb/d by end-2007. Later-phase development to 300 kb/d will probably require Iran to find foreign partners to replace Japan's Inpex, which relinquished operatorship in 2006.

Venezuelan supply is estimated marginally lower in July at 2.34 mb/d. Official pronouncements in July variously put output from the four Orinoco projects at between 420 kb/d and 520 kb/d, compared with heavy crude upgrading capacity of 630 kb/d. On top of uncertainties surrounding Orinoco output following the departure last month of ExxonMobil and ConocoPhillips, there are reports that PDVSA is struggling to obtain sufficient rigs to sustain both Orinoco and conventional crude operations. Oil Minister Ramirez was quoted as having reduced the active rig target for 2007 from 191 to 120. Reluctance by rig contractors to contribute 10% of contract value to social programmes within Venezuela may be one cause of this.

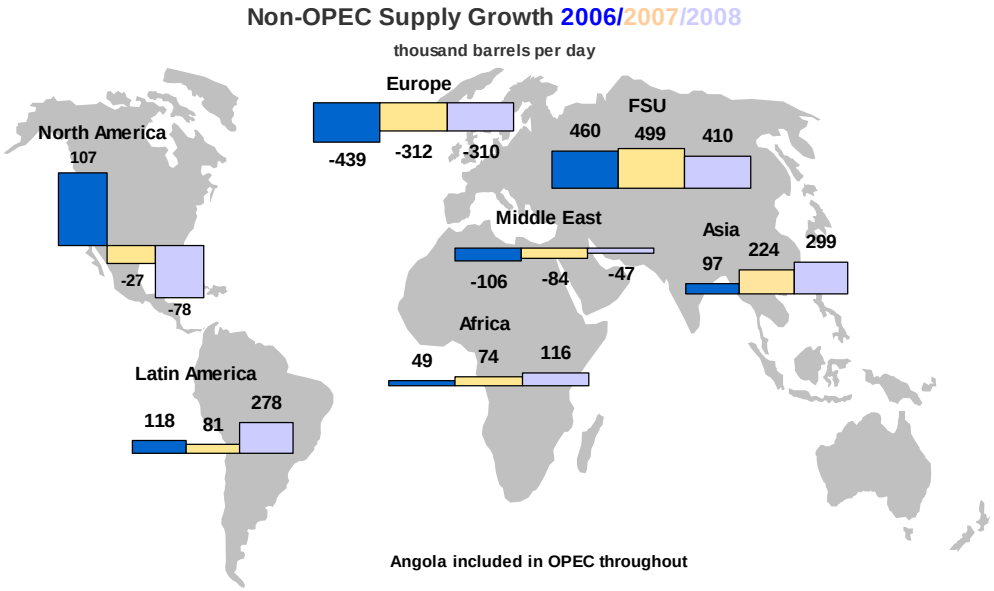
Non-OPEC Overview

Downward adjustments affect non-OECD supply for 2003-2005 after accounting for annual data received from non-member countries (the IEA's 'Green Book'). However, overall non-OPEC revisions are modest at -10 kb/d, -35 kb/d and -40 kb/d for the three years respectively. Syria, Oman, Ivory Coast, South Africa, Cuba, Guatemala and India all see downward revisions for 2004/2005, although these taper off for 2006, leaving the non-OPEC total for last year largely unchanged at 49.4 mb/d (net of Angola).

A stronger 2007 outlook now for China, Malaysia and North America adds 15 kb/d to this year's forecast (50.0 mb/d). However, these elements are outstripped in 2008 by a now-weaker outlook for the North Sea, Australia, the FSU, Latin America and Africa, which cut around 30 kb/d from 1Q08 supply (12 kb/d for 2008 as a whole). Non-OPEC supply for 2008 is now estimated at 51.0 mb/d. Annual non-OPEC growth accelerates from 465 kb/d in 2006 (net of Angola), to 620 kb/d in 2007 and 950 kb/d in 2008.

This year's growth derives largely from the FSU, China, biofuels, Canada and Brazil. In 2008, the FSU, Brazil and biofuels again drive the forecast, supported by Australia and Africa. The North Sea, Mexico and non-OPEC Middle East see continued decline for 2007 and 2008. Yearly non-OPEC growth slips from the near-1.0 mb/d levels evident between July 2006 and March 2007, averaging 0.7 mb/d during 2Q07, and 0.4 mb/d in the second half of 2007, before regaining 1.0 mb/d throughout 2008.

Unscheduled field outages and operational problems continued to impact on non-OPEC supply in June and July, including those at the Mutineer/Exeter field (Australia), liquids associated with the CATS gas pipeline outage (UK), Heidrun (Norway), Albacore Leste (Brazil), various Petrotrin fields (Trinidad), N'kossa (Congo) and Chinguetti (Mauritania). The list is not exhaustive, but tends to support the change in methodology we applied to the non-OPEC forecast from last month. 'Reliability' adjustments are now applied on a national basis, reducing the base case production forecast for those countries which historically have been most prone to unscheduled disruptions or delays.



Total Non-OPEC Supply Growth (kb/d)

2006	464
2007	618
2008	950

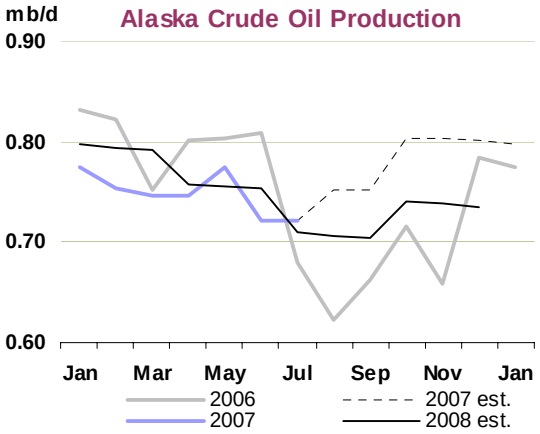
OPEC NGLs (kb/d)

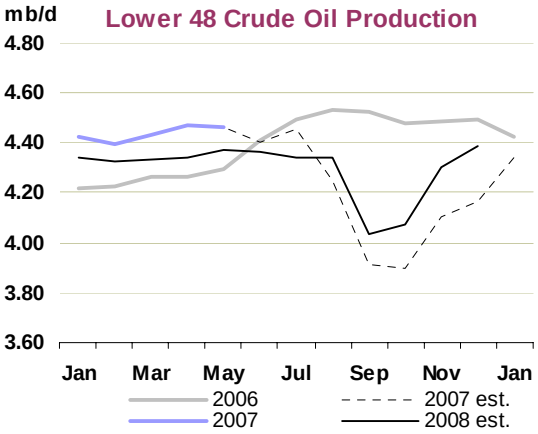
2006	149
2007	189
2008	658

OECD

North America

US – July Alaska actual, others estimated: Total US monthly oil output may already have peaked for 2007 during May at 7.6 mb/d. Preliminary weekly data suggest a dip to 7.5 mb/d in June/July, while a combination of summer pipeline work in Alaska and the use of fairly aggressive hurricane outage assumptions for the GOM (see below) could see US output constrained within a 7.0-7.3 mb/d range for the rest of the year. Rising ethanol supply only just offsets declining crude supply for 2007 as a whole, keeping total oil supply flat at 2006's level of 7.37 mb/d. An increase to 7.42 mb/d in 2008 depends on rising GOM crude supply, in turn partly driven by the start-up of Atlantis (late 2007) and Thunder Horse (late 2008).





Is US Forecast Risk Moving to the Upside?

This month sees estimates for US total oil output revised up by 50 kb/d for 2Q07 and 100 kb/d for 3Q07, with longer range supply revised higher by 20 kb/d. Higher-than-expected May US crude production data, and a stronger trend based on weekly numbers for June/July partly nullify for those months the 125 kb/d downward adjustment applied to the US forecast by last month's methodology change, although this field 'reliability' factor is retained for August onwards. May ethanol production of some 405 kb/d was also stronger than expected and we have added 10 kb/d to the ethanol forecast, which now averages 405 kb/d for 2007 and 455 kb/d for 2008.

July production estimates for the Federal Gulf of Mexico (GOM) are revised up by 55 kb/d, reflecting the absence of hurricane-related disruptions. Specific allowance for typical hurricane outages has always been included in the OMR's GOM forecast for the July-December period (over and above the more recent 125 kb/d field reliability adjustment mentioned above). Based on the 2002-2006 five-year average, storm adjustments for GOM output for 2007 (and 2008) are as follows:

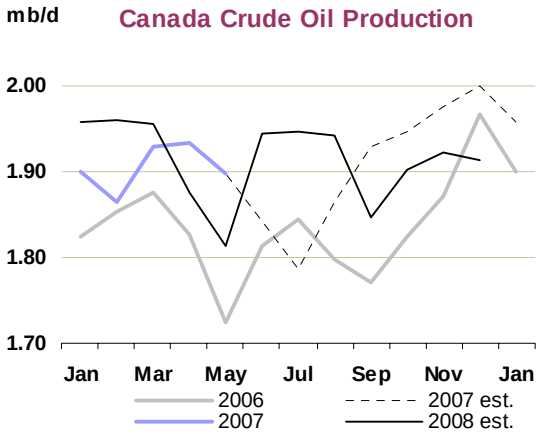
	Jul	Aug	Sep	Oct	Nov	Dec
GOM Storm Adjustment (kb/d)	-55*	-55	-380	-345	-185	-120

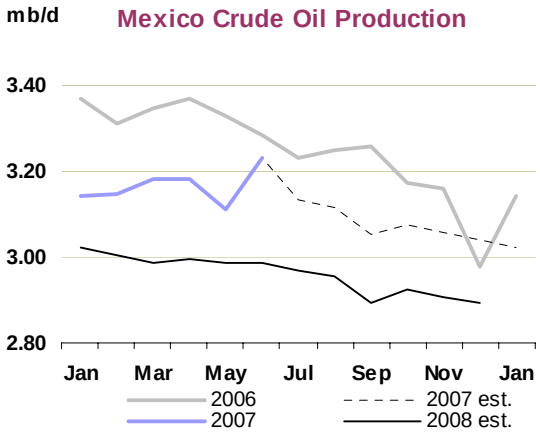
* now removed for 2007

This August-December profile suggests a total oil production loss in 2007 of 33 million barrels (versus a lower US EIA estimate of between 13-23 million barrels for crude oil alone). Obviously, our five year average is heavily influenced by developments in 2004 and 2005, when Hurricanes Ivan, Katrina and Rita saw September outages peak at 0.5 mb/d and 1.1 mb/d in 2004 and 2005 respectively. In contrast, 2006 saw no output lost due to hurricane-related shut-ins. Indeed, netting out 2004 and 2005, average peak monthly hurricane outages for the preceding decade are closer to 75 kb/d. Moreover, latest predictions for the June-November Atlantic hurricane season have modestly scaled back the number of storms expected for 2007, albeit most still see hurricane activity at above-average levels. For now, with much of the season still to come, we are sticking with the five-year average hurricane adjustment. Clearly however, a repeat of the uneventful weather seen in 2006 could result in further upward revision to GOM production.

Canada – Newfoundland June actual, others May actual: Canadian conventional crude production fell below 1.9 mb/d in May due to lower Albertan bitumen output. Combined with lower NGL and synthetic crude supply, this pushed total oil output down to 3.25 mb/d from 3.32 mb/d in April. However, syncrude unit outages had less of an impact than previously thought. Indications for June suggest a 350 kb/d fall in total oil supply derived from maintenance at syncrude units and at the offshore east coast Terra Nova field. July to September should see increases however as Alberta upgrader maintenance eases and new wells are brought onstream at the offshore Newfoundland White Rose field. Growth of some 110 kb/d in Canadian oil supply this year centres on offshore increases (after a heavily disrupted 2006), from Albertan un-upgraded bitumen and from syncrude. More modest growth in 2008 is heavily skewed to bitumen increases, with less of an increase from East Coast supply and Albertan syncrude.

Alberta oil sands remain the focus of longer-term Canadian supply growth. Both Shell and Suncor, currently operating a combined 0.5 mb/d of upgrading capacity, have announced plans for major expansions. Shell wants to add 400 kb/d of new upgrader capacity in four stages, with the first entering service in 2012. A similar time frame is seen for Suncor's Voyageur South project, which would add 120 kb/d to current oil sands mining capacity. However, oil sands expansion faces several barriers. In the short term, construction workers are threatening strike action which could halt work on new projects. Moreover, Alberta authorities in July ordered the shut-in of 121 gas wells to avoid pressure reduction in neighbouring oil sands deposits. And the country's National Energy Board has predicted tighter pipeline capacity availability to the USA. The Canadian Association of Petroleum Producers (CAPP) earlier suggested producers could face pipeline apportionment until 2008 when new capacity comes online.





Mexico – June actual: Forecast Mexican oil supply is revised up by 30 kb/d for 2007 and by 45 kb/d for 2008, following markedly stronger-than-expected performance in June. Recent months have seen a decline profile for the baseload Cantarell field which has been less extreme than preliminary indications from late 2006/early 2007 suggested. Moreover, progress continues on expanding output from the nearby Ku-Maloob-Zaap complex. Despite this, the overall trend in Mexican oil supply for 2007/2008 remains similar to last month's projection, falling by 140-150 kb/d in both years. Crude output falls to 3.12 mb/d in 2007 and to 2.96 mb/d in 2008, with NGL output broadly stable overall around 430 kb/d.

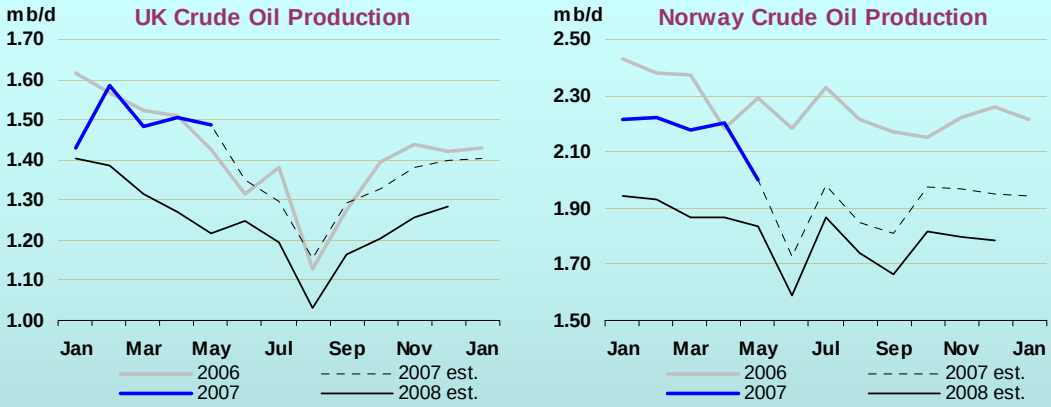
President Calderon, presenting the country's National Infrastructure Plan, indicated that exploration and production expenditure for 2007-2012 would amount to $80 billion. Under the plan, crude output is seen at between 2.5 mb/d and 3.2 mb/d by 2012, compared with our own *MTOMR* forecast last month of 2.7 mb/d. The likelihood of Mexico stemming decline by way of joint ventures with foreign companies was dealt a blow in early August with the announcement that a Brazil-Mexico energy agreement would not prompt any change in Mexico's constitution, which forbids upstream oil foreign investment.

North Sea Prospects Remain Weak, Despite Healthy 2006/2007 Spending

Spending surveys show companies increasing upstream expenditure at double-digit rates, but in mature areas like the North Sea, it is becoming increasingly difficult to translate incremental dollars into incremental barrels supplied. Sector-wide cost inflation partly explains the trend but, for the North Sea, a combination of ageing resource base and infrastructure also make sustaining production particularly difficult. Nor is relative under-performance versus initial expectation in the North Sea anything new. An examination of *OMR* forecast OECD Europe oil production for the 11 years 1996-2006 shows an average and fairly consistent 'error' of some 450 kb/d per year (original forecast versus eventual outcome).

The previous assumption of normal field operations (typical average maintenance schedules, undisrupted access to pipeline infrastructure, no unplanned outages due to mechanical problems or strikes etc) partly explains the exaggerated downside risk for North Sea forecasts, although new field delays, exceptional weather outages and accelerating decline rates also played a role. This in large part prompted the methodology change introduced in the July issues of the *OMR* and *MTOMR*, whereby an oilfield reliability adjustment is now included in forecasts at a national level. Adjustments for the UK and Norway are 125 kb/d and 160 kb/d respectively (based on the recent three year trend, net of new field delays). In individual months when all goes well, UK and Norway supply estimates may be prone to upward revision. But for any given year, the now lower projections should help to capture in a proactive fashion the proliferating problems that mature producing area face, rather than merely reacting 'after the event'.

North Sea Prospects Remain Weak, Despite Healthy 2006/2007 Spending (continued)



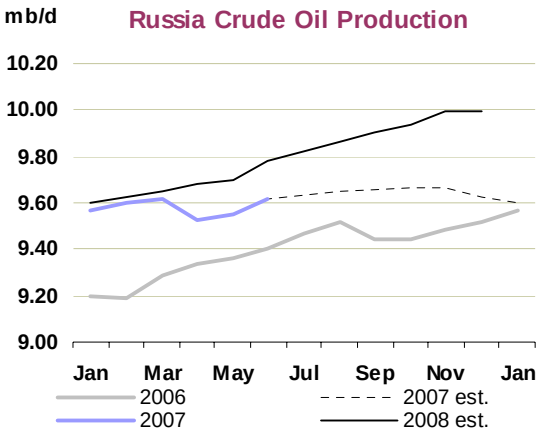
The challenges in sustaining North Sea supply are clearly evident. Summer field maintenance looks heavier than usual in 2007, notably in June and August. Longer scheduled stoppages can occur as facilities age. Unscheduled outages from ageing production and transport infrastructure can also proliferate, exacerbated by delays in sourcing service and maintenance crews in an overheated market. Replacing old equipment, performing well work-overs and refurbishing equipment can all be impeded by extended lead times. Recent damage to the Central Area Transmission System (the CATS pipeline) will keep up to 100 kb/d of UK liquids supply offline until late September, and Norway's Heidrun field also suffered an unplanned stoppage in July. Net output decline from the UK and Norway averages 10-15% for 2006-2008, despite offsets from new developments like Buzzard in the UK and Volve, Alvheim and Klegg in Norway. The two countries stand to lose 1.4 mb/d of combined output over 2006-2012.

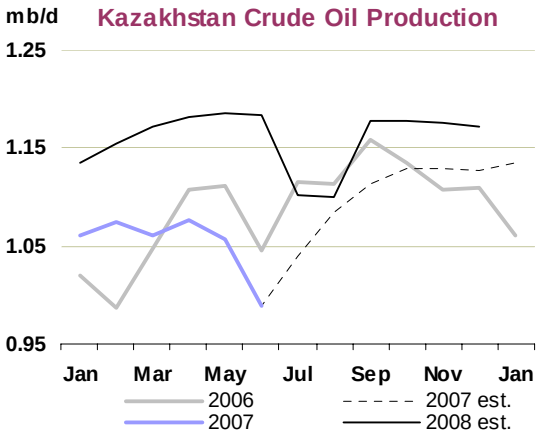
Moreover, spending itself in these areas may now have peaked. UK producers suggest that while upstream spend grew by 20% to $22.7 billion in 2006, a 10% decline in 2007 could be followed by steeper falls in 2008. *Statistics Norway* has suggested that oil and gas spending in 2007 of $18.5 billion could fall to $13.7 billion in 2008 (although early expectations for the following year are always prone to subsequent upward revision). This scaling back in spending may in part be a reflection of a welcome topping-off in cost inflation. But UK producers attribute some of the cut to a now more stringent fiscal regime. Moreover, the North Sea and parts of North America face an ongoing trend whereby major operators are leaving mature provinces to concentrate on a smaller number of newer, potentially higher growth, areas.

Former Soviet Union (FSU)

Russia – June actual, July provisional: Production data for June and July continued to show Russian output running around 2% ahead of 2006, averaging 9.9 mb/d. For July, Rosneft production, and that from the seasonal Sakhalin 2 project, came in ahead of this report's earlier expectations. However, this was offset by weaker than anticipated output from Lukoil, TNK-BP and Tatneft, leading to a 20 kb/d downward reduction in the Russian production forecast for 3Q07 onwards. Moreover, stronger Rosneft performance results in part from its now almost-complete takeover of former Yukos production assets. Either Rosneft or Gazprom are seen by most commentators as eventual owners of producer Russneft's assets (300 kb/d) after owner Mikhail Gutseriyev's end-July decision to sell up.

Russian growth in 2007 now comes in at 2.3% (+225 kb/d), followed by 1.8% (+175 kb/d) in 2008. Recent reports suggest that year-round Sakhalin 2 crude production could be attained earlier than this report's assumption of end-2008. Also, Gazpromneft (formerly Sibneft) announced it will boost spending by 66% in 2007 in order to raise output. In both instances, this report retains a more cautious outlook until signs emerge that the higher targets are close to being reached. The economy ministry's latest long-term production forecast sees output stable at 10.6 mb/d in 2015-2020. Our own *MTOMR* last month projected Russian output of 10.6 mb/d for 2010/2011 and 10.5 mb/d in 2012, potentially rising further by mid-decade.





Kazakhstan – June actual: June production (crude and condensate) came in 110 kb/d below earlier estimates, largely due to maintenance at the Tengiz field. This report had earlier assumed 3Q maintenance, so a 30 kb/d downward revision for 2Q07 is offset by a similar upward revision for 3Q, leaving the 2007 forecast largely unchanged at 1.36 mb/d. Production rises further in 2008 to 1.45 mb/d.

Further gains from Kazakhstan longer-term centre on the triumvirate of fields consisting of the existing Tengiz and Karachaganak and the currently underdevelopment Kashagan. Early August is due to see the government opening talks with Kashagan partners to renegotiate the field's production sharing agreement, after delays have successively pushed back start-up from an original 2005 to a latest estimate of late 2010 *(see MTOMR, July 2007, p38)*. Meanwhile, in early July, Karachaganak Petroleum Operating (KPO) BV awarded a front-end engineering and design (FEED) contract for phase three of the Karachaganak processing complex. This will substantially add to liquids production of 290 kb/d by 2012.

FSU Net Exports of Crude & Petroleum Products
(million barrels per day)

	2005	2006	3Q2006	4Q2006	1Q2007	2Q2007	Apr 07	May 07	Jun 07	Latest month vs. May 07	Latest month vs. Jun 06
Crude											
Black Sea	2.27	2.22	2.27	2.08	2.30	2.23	2.31	2.29	2.07	-0.22	-0.09
Baltic	1.59	1.55	1.49	1.43	1.58	1.60	1.79	1.57	1.45	-0.11	-0.34
Arctic/FarEast	0.19	0.15	0.20	0.19	0.29	0.30	0.29	0.29	0.30	0.01	0.18
BTC	0.00	0.00	0.22	0.38	0.43	0.58	0.45	0.64	0.64	0.00	0.61
Crude Seaborne	4.05	4.07	4.18	4.08	4.60	4.70	4.84	4.80	4.47	-0.33	0.36
Druzhba Pipeline	1.15	1.20	1.23	1.19	1.17	1.13	1.15	1.17	1.06	-0.10	-0.14
Other Routes	0.25	0.38	0.38	0.45	0.47	0.46	0.49	0.46	0.44	-0.02	0.03
Total Crude Exports	5.45	5.64	5.80	5.71	6.23	6.29	6.47	6.42	5.98	-0.45	0.25
Of Which: Transneft	4.12	4.22	4.30	4.06	4.33	4.31	4.56	4.36	4.01	-0.35	-0.38
Products											
Fuel oil	0.93	0.95	0.94	0.95	1.04	1.15	1.13	1.16	1.17	0.01	0.20
Gasoil	0.87	0.95	0.94	0.91	0.94	0.88	0.82	0.83	0.98	0.16	0.06
Other Products	0.58	0.61	0.63	0.54	0.59	0.69	0.66	0.69	0.72	0.02	0.05
Total Product	2.38	2.51	2.50	2.40	2.57	2.72	2.62	2.69	2.87	0.19	0.31
Total Exports	7.83	8.16	8.30	8.11	8.80	9.02	9.09	9.11	8.85	-0.26	0.56
Imports	0.02	0.04	0.05	0.04	0.02	0.03	0.04	0.02	0.03	0.01	0.01
Net Exports	7.81	8.12	8.25	8.07	8.78	8.98	9.05	9.08	8.81	-0.27	0.55

Sources: Petro-Logistics, IEA estimates
Note: Transneft data has been revised to exclude Russian CPC volumes.

FSU net oil exports in June averaged 8.8 mb/d, some 270 kb/d lower than May levels. Crude exports fell by 450 kb/d following a 28% increase in Russian crude export duties, from 1 June, to $200/tonne. This was partially offset by a 190 kb/d increase in product exports, including an extra 160 kb/d of gasoil.

June crude exports of 5.98 mb/d were at a six-month low. On top of higher Russian export duties, maintenance at Novorossiysk contributed to a 220 kb/d drop in Black Sea volumes. Moreover, 110 kb/d

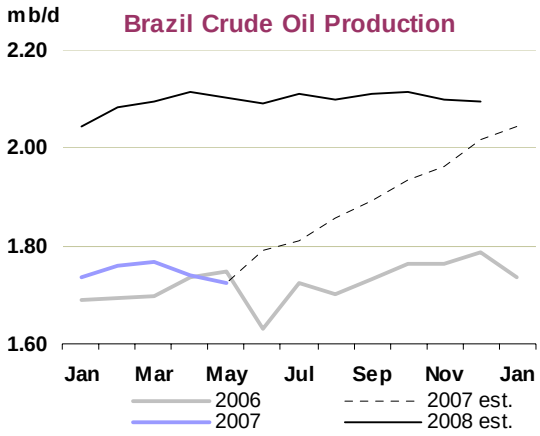
less crude was exported via the Baltic in June. A 100 kb/d month-on-month decrease in Druzhba volumes, and lower CPC transits after Tengiz field maintenance, saw total crude volumes via the Transneft pipeline system falling by 350 kb/d. BTC pipeline exports from Azerbaijan in June were unchanged from May.

FSU exports in July could be up to 100 kb/d higher than in June, with loading schedules showing 50 kb/d more oil coming through the Transneft system and an extra 20 kb/d via BTC. However, a further hike of 12% in Russian export duties was due on 1 August. While this is set to reduce volumes exported through Transneft by up to 100 kb/d, a partial offset will come from higher Caspian volumes via BTC.

Other Non-OPEC

Brazil – May actual, June partly estimated: The Brazilian crude production forecast for 2007 is trimmed by 5 kb/d and that for 2008 by 25 kb/d. Nonetheless, Brazil remains one of the key contributors to non-OPEC supply growth in 2007 and 2008, adding 130 kb/d this year and 275 kb/d next, when crude output reaches 2.13 mb/d for the year. In addition, NGL contributes 90 kb/d to 2008 supply and ethanol 360 kb/d.

A fire at the P-50 facility at the Albacore Leste field in the Campos Basin briefly shuttered 160 kb/d of capacity in early July but operations resumed in full within days. Oil workers also removed an earlier threat of strike action on 5 July. Meanwhile, Devon Energy began production on 30 July at the Polvo field, ahead of this report's previous start-up estimate (November), albeit build-up to 50 kb/d plateau is now likely delayed until end-2008, and not the April 2008 earlier assumed here. State company Petrobras's previous near-monopoly on production is diminishing, and foreign producers Shell and Devon will be joined in future by Chevron (the Frade field) and Anadarko/Norsk Hydro (Peregrino, formerly Chinook).



Revisions to Other Non-OPEC Estimates

As noted above, non-OPEC 2007 supply is revised up by 15 kb/d, while the 2008 forecast is cut by 10 kb/d. Behind these apparently negligible overall adjustments, North American, Chinese, Malaysian, Syrian and Yemeni estimates are revised up by a combined 150 kb/d for both 2007 and 2008. In contrast, the North Sea, Australia, FSU, Vietnam, Brazil, and Africa are trimmed by 145 kb/d in 2007 and by 180 kb/d in 2008.

An upward adjustment of 45 kb/d is applied for **China** from 3Q07 onwards. June data, while matching our forecast of 3.83 mb/d in aggregate, nonetheless redistributes between fields where supply is growing and those in decline, boosting the forecast accordingly. This continues a consistent, if unspectacular, trend of Chinese production growth seen so far this decade. For **Malaysia**, May and June data came in 50 kb/d higher-than-expected, with a similar adjustment applied to the forecast through 2008. **Syrian** and **Yemeni** historical data have been reassessed, leading to upward revisions of 5-10 kb/d each for 2007 and 2008.

Australian production is revised down by 30 kb/d for 2007 and 20 kb/d for 2008. Mechanical problems have hit the Exeter/Mutineer field off NW Australia and maintenance is scheduled for August. Start-up at the Puffin field, previously assumed for July, is now deferred to September. Aside from Russia and Kazakhstan, FSU supply is affected by a 45 kb/d downward adjustment applied to **Azerbaijan** from 2Q 2007 onwards. A database error resulted in our overforecasting supply for state producer SOCAR. Reconciliation of latest JODI and Oil Ministry data for **Vietnam** for January-June 2007 leads to a 20 kb/d cut in 2007 output and 10 kb/d for 2008. **Chad**, **Congo** and **Mauritania** now see lower supply for 2007/2008, with African supply overall curbed by 15 kb/d for 2007 and by 30 kb/d for 2008. In **Chad**, new

Revisions to Non-OPEC Oil Supply
(million barrels per day)

	Last Month's OMR				This Month's OMR				This Month vs. Last Month			
	2007	2008	07 v 06	08 v 07	2007	2008	07 v 06	08 v 07	2007	2008	07 v 06	08 v 07
North America	14.13	14.09	-0.12	-0.04	14.22	14.14	-0.03	-0.08	0.09	0.05	0.09	-0.04
Europe	4.92	4.63	-0.27	-0.29	4.88	4.59	-0.30	-0.30	-0.03	-0.04	-0.03	-0.01
Pacific	0.67	0.78	0.09	0.11	0.64	0.77	0.06	0.13	-0.03	-0.01	-0.03	0.01
Total OECD	**19.71**	**19.50**	**-0.30**	**-0.21**	**19.74**	**19.50**	**-0.26**	**-0.25**	**0.03**	**-0.01**	**0.03**	**-0.04**
Former USSR	12.64	13.06	0.54	0.43	12.60	13.01	0.50	0.41	-0.04	-0.06	-0.04	-0.02
Europe	0.13	0.12	-0.01	-0.01	0.13	0.12	-0.01	-0.01	0.00	0.00	0.00	0.00
China	3.82	3.88	0.15	0.05	3.84	3.92	0.17	0.08	0.02	0.04	0.02	0.02
Other Asia	2.69	2.77	-0.02	0.07	2.70	2.80	-0.01	0.10	0.01	0.03	0.01	0.02
Latin America	4.48	4.76	0.08	0.29	4.47	4.75	0.08	0.28	0.00	-0.01	0.00	-0.01
Middle East	1.64	1.59	-0.09	-0.05	1.65	1.61	-0.08	-0.05	0.02	0.02	0.01	0.00
Africa*	2.59	2.71	0.09	0.13	2.57	2.69	0.08	0.12	-0.02	-0.03	-0.02	-0.01
Total Non-OECD*	**27.99**	**28.90**	**0.73**	**0.91**	**27.97**	**28.89**	**0.72**	**0.92**	**-0.01**	**-0.01**	**-0.01**	**0.01**
Processing Gains	1.92	1.95	0.02	0.03	1.92	1.95	0.02	0.03	0.00	0.00	0.00	0.00
Other Biofuels	0.40	0.66	0.15	0.25	0.40	0.66	0.15	0.25	0.00	0.00	0.00	0.00
Total Non-OPEC*	**50.03**	**51.00**	**0.60**	**0.98**	**50.04**	**50.99**	**0.62**	**0.95**	**0.02**	**-0.01**	**0.02**	**-0.03**

OMR = Oil Market Report
* adjusted to exclude Angola

field increments may sustain supply at around 150 kb/d, rather than to increase it towards 200 kb/d as was assumed earlier. Production restart at **Congo's** N'Kossa field, closed by fire in May, has been pushed back to August, and operator Total now sees a slower build back towards a 60 kb/d plateau. Ongoing technical difficulties at **Mauritania's** Chinguetti field have reduced January-April output to 20 kb/d, and 10 kb/d is shaved off our production forecast to reflect the field's uncertain output profile.

OECD STOCKS

Summary

- **OECD industry stocks built by 13.3 mb in June** as higher North American and Pacific inventories offset declines in Europe. US crude and 'other products' saw the largest monthly change, increasing by 11.3 mb and 12.8 mb respectively, but US gasoline and Pacific distillates also saw substantial gains. European crude and product stocks fell following lower regional crude supplies due to maintenance and unscheduled production outages and substantially reduced refinery throughputs respectively.

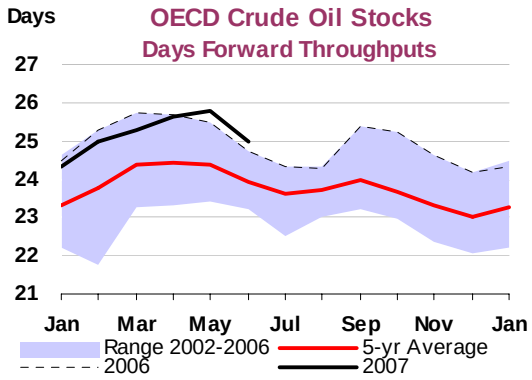
Preliminary Industry Stock Change in June 2007 and Second Quarter 2007

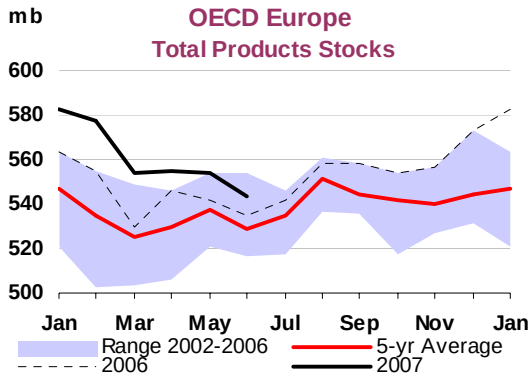
	June (preliminary) (million barrels)				June (preliminary) (million barrels per day)				Second Quarter 2007 (million barrels per day)			
	N. Am	Europe	Pacific	Total	N. Am	Europe	Pacific	Total	N. Am	Europe	Pacific	Total
Crude Oil	**12.5**	**-2.6**	**0.4**	**10.4**	**0.42**	**-0.09**	**0.01**	**0.35**	**0.31**	**0.09**	**-0.02**	**0.38**
Gasoline	3.6	-2.3	-1.1	0.3	0.12	-0.08	-0.04	0.01	0.04	-0.11	0.00	-0.07
Distillates	-0.9	-7.4	4.5	-3.8	-0.03	-0.25	0.15	-0.13	0.05	0.05	0.08	0.17
Fuel Oil	-0.2	-0.5	0.1	-0.7	-0.01	-0.02	0.00	-0.02	-0.04	-0.02	0.01	-0.05
Other Products	11.2	-0.1	2.9	14.0	0.37	0.00	0.10	0.47	0.28	-0.03	0.04	0.29
Total Products	**13.8**	**-10.3**	**6.4**	**9.9**	**0.46**	**-0.34**	**0.21**	**0.33**	**0.33**	**-0.11**	**0.12**	**0.34**
Other Oils[1]	-4.1	-0.9	-2.1	-7.0	-0.14	-0.03	-0.07	-0.23	0.01	0.02	-0.02	0.01
Total Oil	**22.2**	**-13.7**	**4.8**	**13.3**	**0.74**	**-0.46**	**0.16**	**0.44**	**0.64**	**0.01**	**0.09**	**0.73**

1 Other oils includes NGLs, feedstocks, and other hydrocarbons.

- **Preliminary data for July** show OECD crude stocks falling by 11.7 mb as refinery throughputs increased seasonally. Higher product stocks offset the drop, however, leaving total industry stocks 11.2 mb higher than at the end of June.

- **Crude oil inventories at Cushing, Oklahoma,** the delivery point for the NYMEX WTI contract, have fallen for the last eleven weeks and stocks, at 19.3 mb in early August, were at their lowest level since December 2005. As a result, the NYMEX WTI front month spread has moved back into backwardation after having spent almost three years in contango. Lower forward prices support further crude draws as it is becoming very costly to store crudes priced off WTI.





- **The total second-quarter OECD industry stock build amounted to 0.73 mb/d, or a total of 67 mb**. This is below a 2Q five-year average stock build of 0.85 mb/d (10-yr average: 0.82 mb/d). A counter-seasonal stock draw during 3Q looks likely ahead of the northern hemisphere winter as global throughputs peak in July and August. With continued field maintenance in the Atlantic Basin and likely suppressed OPEC supplies, the crude supply gap will have to be filled from inventories.

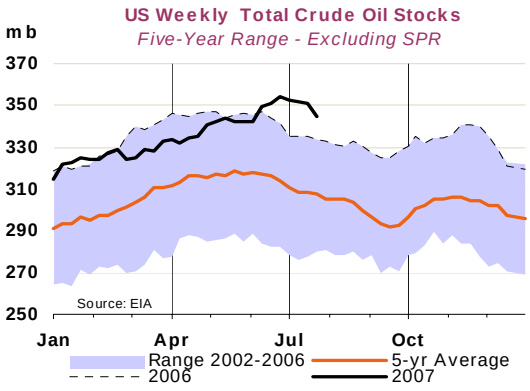
- **Forward demand cover** for total OECD industry stocks stood at 54.0 days at the end of June, 0.1 day lower that at end-May and 0.4 days below June of last year. On a regional basis, forward cover came to 50.2 days for North America, 61.0 days for Europe and 52.5 for the Pacific.

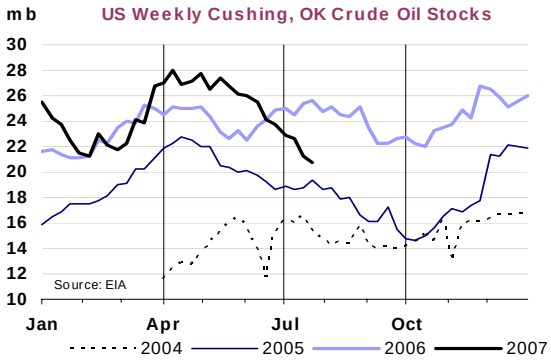
OECD Industry Stock Changes in June 2007

OECD North America

Total North American industry inventories built by 22.2 mb in June as both crude and product stocks increased. Total US crude oil stocks added 11.3 mb in June to close the month at 371.5 mb (including an allowance for territories), the highest monthly level on record. Refinery demand continued to lag expectations, averaging almost 0.5 mb/d less than in June last year. The year-on-year stock overhang was centred on the Gulf Coast as the narrowing of the front-month spread of WTI made the economics of floating storage less attractive, forcing an estimated 19 mb of light sweet crude stored in ships in the Gulf of Mexico to be offloaded.

In July, preliminary data showed crude stocks fell by 12 mb, the fall concentrated in the latter part of the month as refinery demand, particularly on the Gulf Coast, picked up sharply. Crude stocks at Cushing continued to fall, finally reaching 19.3 mb in early August and the lowest level since December 2005. This caused the front month spread of the NYMEX WTI contract to move into backwardation. The forward price structure makes it costly to hold crude in storage, supporting further stock draws. WTI also moved to a premium over Brent, possibly attracting light sweet grades to the US. In July, the US recommenced crude deliveries to the SPR at a daily rate of 51.6 kb/d.





North American product inventories built by a total of 13.8 mb in June following higher gasoline and 'other products' inventories in the US. As mentioned above, refinery output trended well below last year and average historical rates, but product imports more than made up for the shortfall. Total US petroleum product imports averaged 3.7 mb/d in June, 200 kb/d higher than in the same period last year.

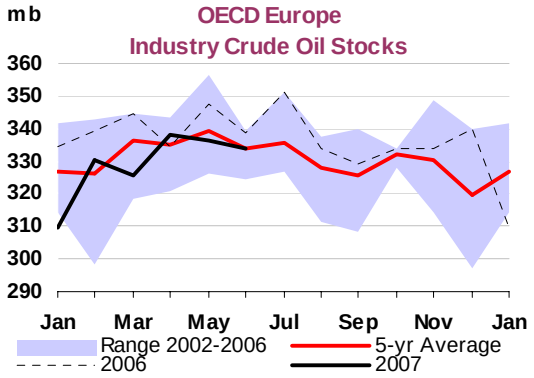
In July, US gasoline stocks continued to build, albeit at a slower rate, as record-high gasoline output and high imports offset strong demand. In the week ending 20 July, total gasoline imports, including blending components, hit a record weekly average of 1.65 mb/d. In the following week, gasoline output hit a record 9.43 mb/d. In terms of forward cover, gasoline stocks remain tight as demand remains robust.

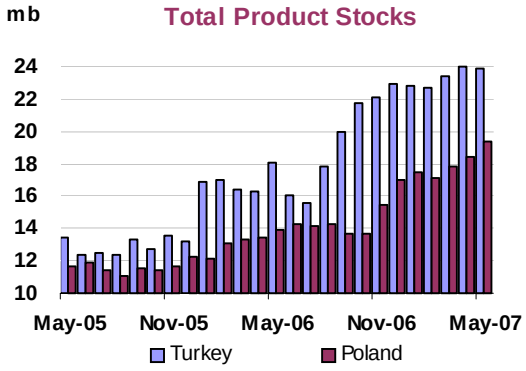
Distillate stocks were rising faster than the seasonal norm in July due to high throughputs and increasing yields. The diesel crack overtook gasoline in mid-July on the Gulf Coast. Distillate demand remains very strong, however, growing by 4.1% for the last four weeks compared with the same period last year.

Total distillate inventories increased by 5.4 mb in July, to close the month at 127 mb, close to their five-year average. The bulk of the increase came in heating oil stocks, narrowing their year-on-year gap to 21 mb. The low heating oil stocks are mostly offset by higher diesel, in particular by ultra low sulphur diesel (ULSD) stocks. The shifts in the composition of distillate stocks recently is in part due to a specification change for off-road diesel, this no longer substitutable by heating oil. Differences in the date of implementation at the refinery, terminal and retail level may have caused part of the distortion. In terms of forward demand cover, total distillate stocks are still trending at the bottom of their five-year range.

OECD Europe

European crude stocks fell by 2.6 mb in June as an increase in France (+2.8 mb) and other Europe (+2.1 mb) was offset by declines elsewhere. European refinery throughputs, in France in particular, were sharply lower in June. Refinery margins for simple hydroskimming refineries in Northwest Europe and the Mediterranean turned negative in June, but runs were not cut until July when the economics deteriorated further. Offline capacity from several complex refineries which were in turnarounds was partly offset by lower regional crude supplies as unscheduled outages compounded seasonal maintenance in the North Sea. At 334 mb, total European crude stocks are 4.8 mb lower than last year and on par with their five-year average. In terms of forward crude cover, however, stocks are 24.4 days, on a par with last year.





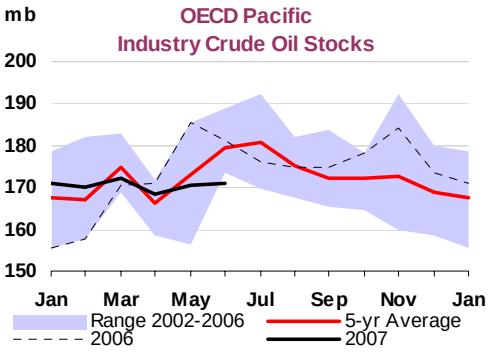
Product inventories in Europe continued their downward trend seen since the beginning of this year as all product categories fell in June. The largest draw was seen in France, where reduced output largely offset lower year-on-year demand. Deliveries in Germany and Italy were also weak. German heating oil stocks rose to 55% of capacity in June, from 53% at the end of May, as end-users started to replenish their stockpiles ahead of the coming winter. Consumers are taking advantage of oversupply in the inland markets and European heating oil barge prices being at their lowest since April. This is the first monthly increase in German consumer stocks since last November, but not out of line with historical patterns.

Although total European product stocks, at 543.9 mb, remain 9.4 mb above those of last June, the majority of this year-on-year gain stems from Poland and Turkey, where product stocks have been increasing quite sharply since the beginning of the year. In Poland, stocks are rising as the government strives to meet EU obligations by the end of 2008. Turkey's stockpile has almost doubled over the last two years, the increase has most notably been seen in motor gasoline and middle distillate inventories. If these two countries are excluded from the European aggregate for May (the last month where data for Turkey and Poland are available), total product stocks were less than 1 mb above last year compared with 12.3 mb for Europe as a whole.

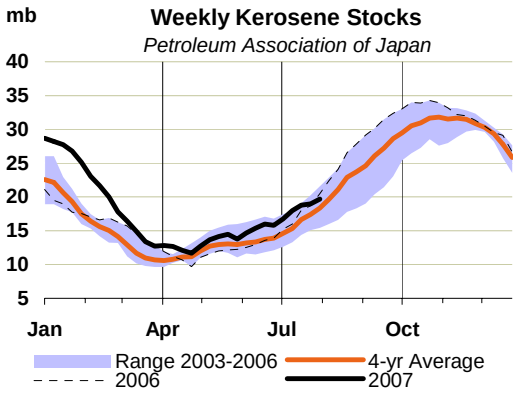
Preliminary Euroilstock data for July show total industry stocks down by 2.3 mb as both crude and product stocks fell from end-June levels.

OECD Pacific

Crude stocks in the OECD Pacific moved sideways in June, as an increase in Japan was offset by a draw in Korean inventories. Japanese stocks built by 4.7 mb despite higher crude runs. Preliminary data show that June crude imports were 10% higher than May and 12% higher than last year In July, PAJ weekly data show that Japanese throughputs increased by another 570 kb/d to trend above their recent five-year range. Onshore crude stocks continued to build (+1.9 mb), however, as imports offset higher demand.



Weak product demand in the OECD Pacific in the first half of this year has reduced the impact of low product output on inventories. In the January to June period, Pacific crude runs have been lagging levels of a year ago by an average of 70 kb/d. Only in June did total Pacific crude runs surpass levels of a year ago, as higher Korean runs offset a continued lag in Japan. The trend in oil demand for the Pacific is expected to be reversed in the latter part of this year, largely due to increased utility demand. The shutdown of Japan's largest nuclear plant, TEPCO's Kashiwazaki-Kariwa, following the 16 July earthquake, has created additional demand for fuel oil and crude oil for power generation, adding 55 kb/d and 85 kb/d respectively for the next 12 months, or until the nuclear plant reopens. In all, product stocks were on par with the five-year average and last year, but as demand is seen higher, forward stock cover has been reduced to 53 days, 3 days lower that last year.



OECD Inventory Position at End-June and Revisions to Preliminary Data

Total OECD industry stocks ended June at 2,672.6 mb, 13.3 mb higher than May and 15.8 mb higher than a year ago. The year-on-year increase is concentrated in US crude stocks and European product inventories. In Europe, distillates in particular are trending above historical levels, with Germany, Poland and Turkey responsible for the bulk of the difference. In terms of forward demand, however, both North America and Europe are relatively unchanged from last year, while the Pacific at 52.5 days is 3 days below last year. For the OECD as a whole, forward demand cover stood at 54 days, cover was 0.4 days lower than last year.

Year-on-Year OECD Industry Stock Comparisons for June 2007

	(million barrels)					*(Days of Forward Demand)*			
	North America	Europe	Pacific	Total		North America	Europe	Pacific	Total
Crude Oil	**34.2**	**-4.8**	**-10.2**	**19.2**	**Total Oil**	**0.1**	**0.2**	**-3.0**	**-0.4**
Total Products	-8.1	9.4	-1.2	0.1	*Versus 2005*	0.4	1.8	-0.1	0.7
Other Oils[1]	-6.6	3.1	-0.1	-3.5	*Versus 2004*	3.4	0.7	1.0	2.1
Total Oil	**19.5**	**7.7**	**-11.4**	**15.8**	**Total Products**	**-0.7**	**0.5**	**-0.8**	**-0.4**
Versus 2005	19.8	28.1	2.2	50.1	*Versus 2005*	-0.9	1.8	0.9	0.2
Versus 2004	101.9	20.5	4.7	127.1	*Versus 2004*	0.9	1.0	1.4	1.0

1 Other oils includes NGLs, feedstocks, and other hydrocarbons.

Finalised data for May show a net upward revision of 12.9 mb for total industry stocks, mostly accounted for by adjustments to crude and NGLs. US and European crude oil inventories were adjusted upwards by 7.5 mb and 5.3 mb respectively, partly offset by a downward adjustment of 5 mb in Japanese crude stocks. Total product inventories were relatively unchanged as a smaller downward revision to North America was offset by upward changes elsewhere.

Revisions versus 13 July 2007 Oil Market Report

(million barrels)

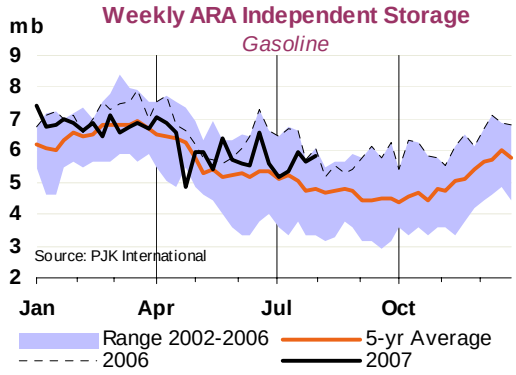
	North America		*Europe*		*Pacific*		*OECD*	
	Apr 07	May 07	Apr 07	May 07	Apr 07	May 07	Apr 07	May 07
Crude Oil	**0.1**	**7.3**	**-0.6**	**5.3**	**0.1**	**-4.5**	**-0.5**	**8.1**
Gasoline	0.0	-1.6	0.2	0.1	0.0	1.3	0.2	-0.2
Distillates	0.0	-1.4	-1.4	1.7	0.0	0.2	-1.4	0.4
Residual Fuel Oil	0.0	1.9	0.8	0.4	0.0	0.1	0.8	2.4
Other Products	0.0	-0.8	-0.2	-2.0	0.1	0.4	-0.1	-2.5
Total Products	**0.0**	**-2.0**	**-0.6**	**0.2**	**0.1**	**1.9**	**-0.5**	**0.1**
Other Oils[1]	1.0	4.2	-1.3	-0.4	0.0	0.9	-0.3	4.7
Total Oil	**1.1**	**9.5**	**-2.5**	**5.1**	**0.2**	**-1.7**	**-1.3**	**12.9**

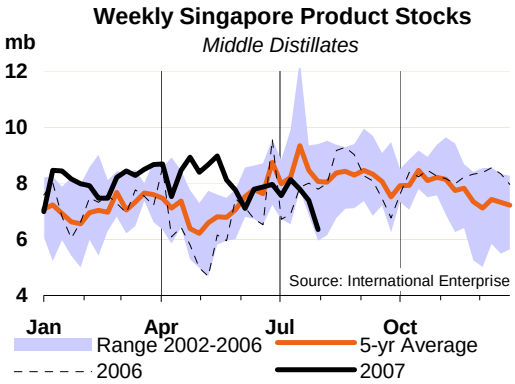
1 Other oils includes NGLs, feedstocks, and other hydrocarbons.

Recent Developments in ARA Independent Storage

Stocks held in independent storage in the Amsterdam-Rotterdam-Antwerp area built by 440 kb in July to close the month at 27.75 mb. Gasoline stocks increased slightly despite continued high exports to the US, Middle East and Nigeria and as European refiners maximised distillate output and as local demand remained sluggish.

Gasoil stocks added 0.63 mb in July, and remain at the upper end of their five-year range. Strong diesel cracks have encouraged refiners to maximize diesel output, while gasoil demand has been relatively weak. Additional supplies came from inland German markets as barge flows up the Rhine were reversed, bringing supplies to ARA. FSU imports slipped amid strong exports from the Latvian port of Ventspils to the US. In addition, a strong contango on ICE gasoil futures further encouraged storage.





Fuel oil stocks moved lower for most of July as bunker demand remained strong and at least two VLCCs were loaded and shipped to Asia. In the latter part of the month, supplies moved higher on increased Russian arrivals.

Recent Developments in Singapore Stocks

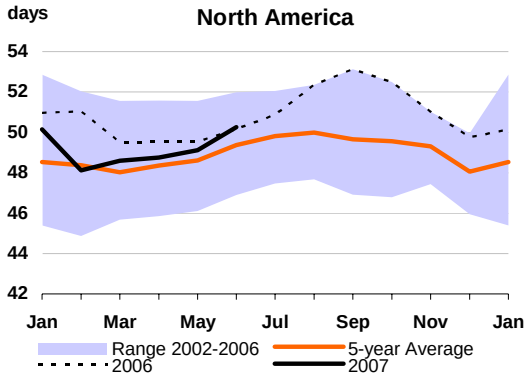
Inventories held in Singapore, as surveyed by International Enterprise, fell for all product categories in July due to lower refinery output as ExxonMobil shut a 300 kb/d crude unit for maintenance. Light distillates, including gasoline and naphtha, fell by close to a million barrels, or 10%, from the end of June. Tighter supplies from the region's two main exporters, China and Taiwan, and robust demand from Indonesia supported the draw. Weaker forward prices further supported moving product out of storage.

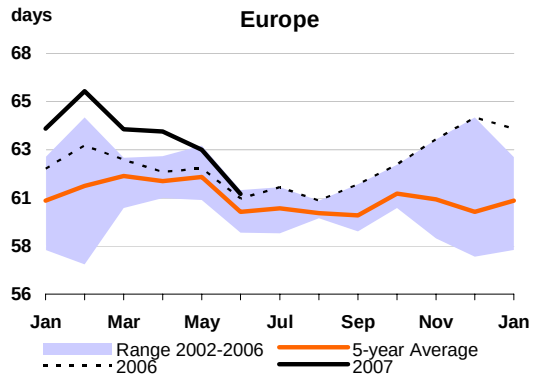
The draw in middle distillates was even steeper with stocks declining by 1.3 mb, or 16%. Increased demand came from Vietnam and Indonesia, who both moved to tighter sulphur specifications for transportation fuels this summer. Regional supplies of gasoil were also limited as shipments to Europe and Chile continued apace. Chile has had to import gasoil for power generation after Argentina reduced natural gas shipments due to extreme winter temperatures and increased domestic demand. Fuel oil stocks drew by 0.5 mb on lower European and Middle Eastern arrivals and high bunkering demand. Japan's nuclear problems will likely tighten the Asia-Pacific fuel oil market in the coming months.

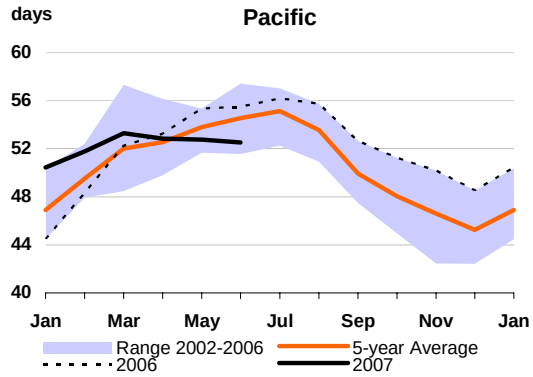
Regional OECD End-of-Month Industry Stocks

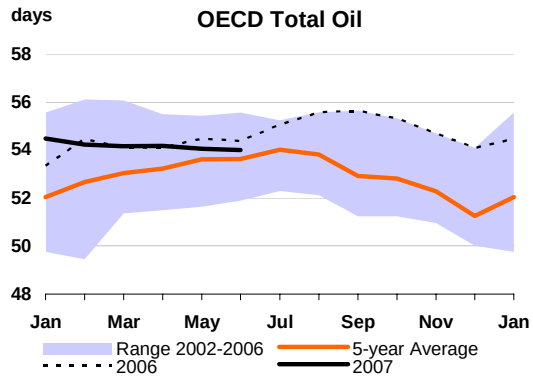
(in days of forward demand and millions barrels of total oil)

Days[1]

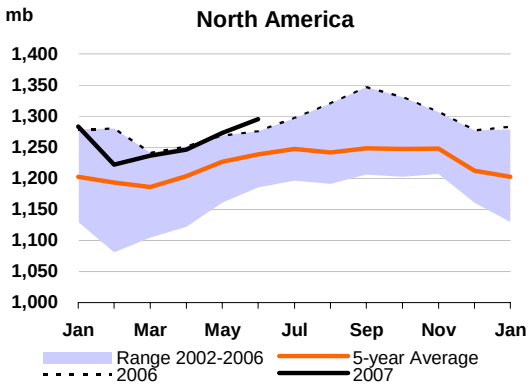


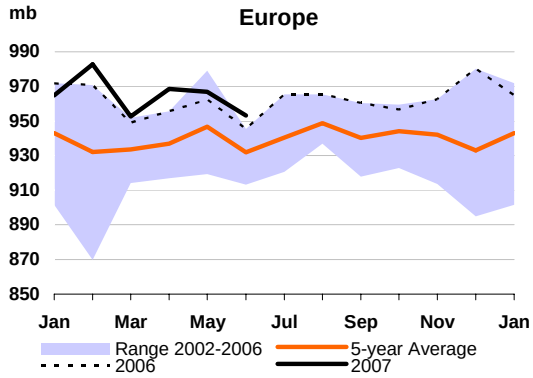


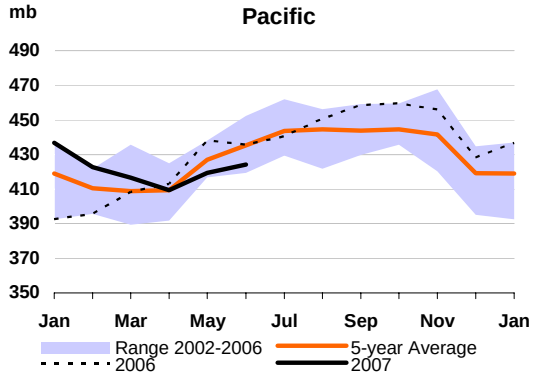


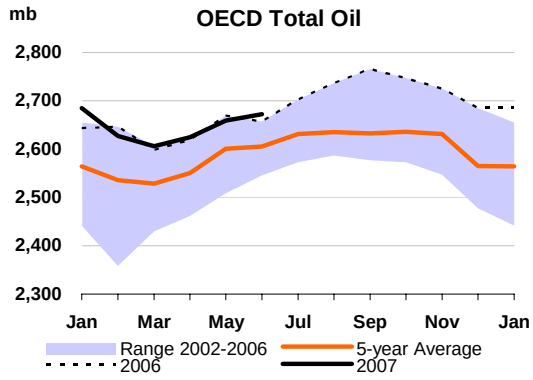


Million Barrels







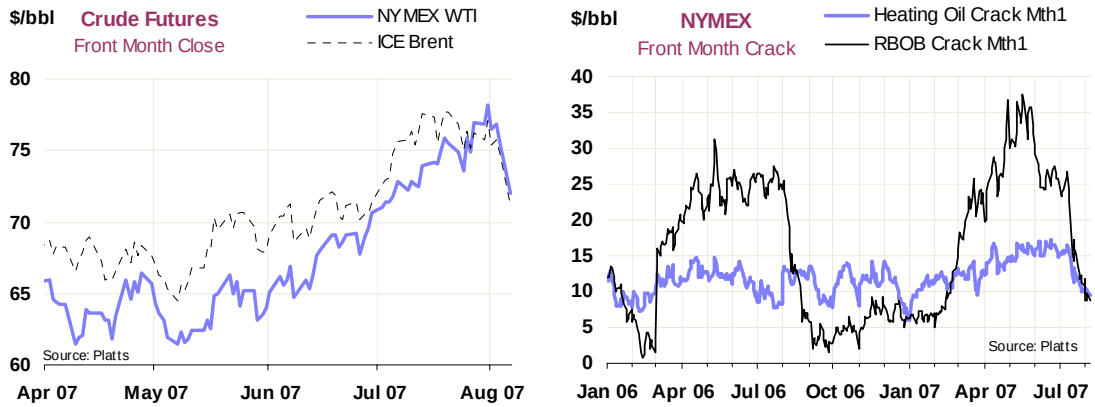


1 Days of forward demand are based on average demand over the next three months

PRICES

Summary

- **Benchmark WTI prices fell sharply in early August, correcting from the record high of $78.77/bbl** made in late July. Price volatility has increased as a combination of high crude prices and higher refinery runs put downward pressure on refinery margins. This is a familiar cycle in the oil market, whereby crude tightness is initially transferred to product stocks. Forward spreads have also been volatile. NYMEX WTI has moved into backwardation following 11 consecutive weeks of stockdraws at its Cushing, Oklahoma delivery point, while spot Brent has flip-flopped between a premium and a discount to future months on shifting supplies of the North Sea benchmark.
- **In July crude took its strength from existing and anticipated near-term supply tightness**, on a combination of lower non-OPEC crude output and OPEC's apparent determination to constrain its production. In contrast, geopolitical issues were less prominent.
- **Refining margins fell in all regions in July**, as crude's strength outweighed gains in fuel oil and, to a lesser extent, middle distillates. Gasoline prices fell, dragging down US refining margins in particular. Unconfirmed talk of economic run cuts at marginal refineries in Europe and China emerged.
- **July average product prices rose but failed to keep up with crude's gains** as throughputs increased sharply, particularly in the US where downstream constraints eased. US refinery utilisation moved back in line with its five-year average, allowing a slight rise in product stocks even as demand neared its seasonal peak. Fuel oil was boosted by tight fundamentals in Asia and anticipation that Japanese utility TEPCO would hike purchases after it was forced to shut down its largest nuclear power plant.
- **Crude tanker rates continued to fall in July**, with VLCC rates from the Middle East Gulf declining to two-year lows. Volumes of long-haul oil-in-transit continue to be reported at unseasonably low levels, especially on westbound routes. Clean tanker rates to Asia firmed in July but weakened west of Suez.



Overview

WTI oil futures rose to new heights in early August as strong crude fundamentals and stock draws at the NYMEX delivery point of Cushing, Oklahoma (see *WTI: Contango to Backwardation*) caused a dramatic revaluation of the US benchmark. ICE Brent however traded sideways for the second half of July having reached a peak mid-month, with a relaxation of product tightness offsetting upward pressures from WTI and refiner buying. The front-month NYMEX WTI contract reached $78.77/bbl in trading on 1 August, surpassing last summer's mid-July record of $78.40/bbl. Both WTI and ICE Brent swung back into backwardation on the front month during July, which for the US contract was the first time since October 2005, reflecting an increased perception of near-term crude tightness. WTI also rose to a premium over Brent futures for the first time since early March.

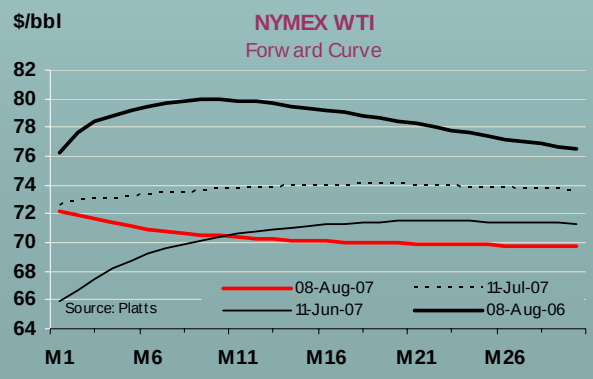
WTI: Contango to Backwardation

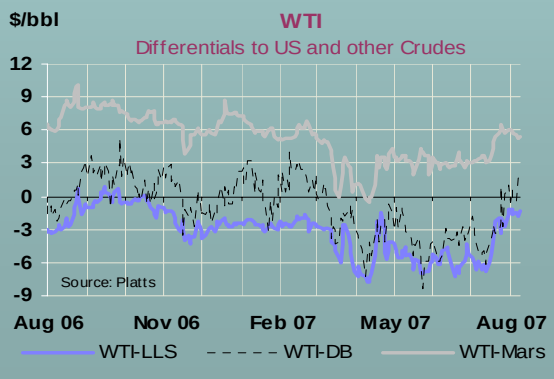
After spending 20 months in contango and, more unusually, nearly five months at a discount to ICE Brent, NYMEX futures first swung back into backwardation in late July and subsequently returned to a premium to Brent. The change in market structure came as global crude fundamentals tightened. However, WTI's actual price level itself, including a new record high of $78.77/bbl, was arguably due more to the sharp decline in crude stocks at its delivery point in Cushing, Oklahoma. These rapid changes in price dynamics again raise the question of WTI's viability as a key crude oil benchmark (see '*Distorting a Benchmark*' in report dated 12 April 2007).

As we noted in April, WTI's decline earlier this year was mostly due to a steady build-up in Cushing crude stocks as a result of Midwestern refinery outages. However, following 11 consecutive weeks of draws in Cushing, stock levels have fallen by 30% to a relatively low 19.3 mb. Moreover, some argue that perhaps only three-quarters of this volume is actually light sweet crude, deliverable against the WTI contract, while the rest is lower-quality Canadian oil. The partial shutdown of BP's 410 kb/d Whiting, Indiana, refinery has not forced it to raise its usual 200 kb/d light sweet intake, but the fact that it is running 200 kb/d less sour means that the relative sweet/sour share in Cushing-area storage may have changed.

Arguably, this makes WTI's behaviour appear more reflective of local rather than global tightness. Then again, were it really only local concerns that affected WTI, this begs the question as to why Brent also rose sharply and switched to backwardation (though the latter has since seen the first three months return to contango). Admittedly, crude supplies have been constrained in Europe too, by virtue of tighter North Sea output on maintenance and outages. And for that matter, the debate over Dated Brent's lower quality due to a temporarily higher proportion of Buzzard in Forties crude may also play a role. Furthermore, it seems clear that a sharp increase in speculative buying has also contributed to WTI and Brent's recent resurgence.

In addition to the return of more refineries in the Cushing area from maintenance and outages, another reason crude stocks have fallen is lower Canadian oil sands upgrader production during May/June. Most of their crude is sent to the US Midwest. July volumes of upgraded Canadian crude should already have been around 200 kb/d higher than June, and August should see a full return. In addition, as highlighted in *Distorting a Benchmark*, the influx of Canadian oil will, in any case, increase pressure on the market, at least until new pipeline routes are built to take the crude on to the US Gulf Coast. Developments over the next few months should shed more light on the debate over whether WTI is a global or purely regional benchmark.

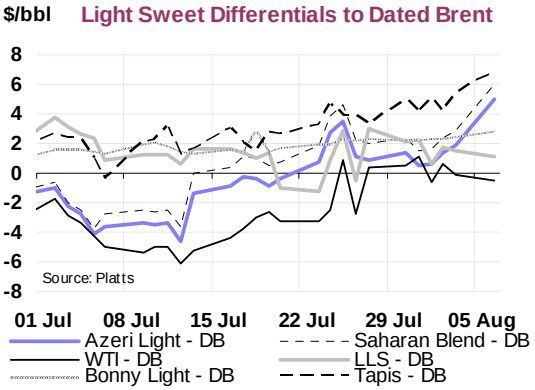


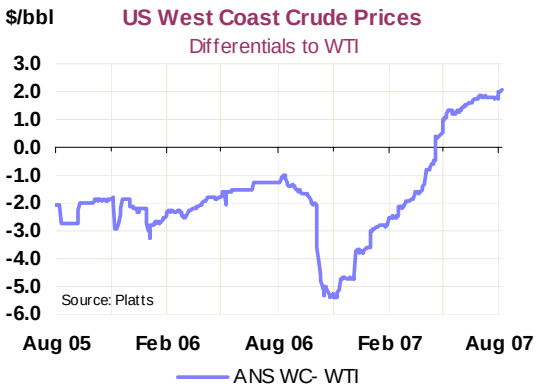


However, in early August, prices dipped sharply as US and other stock markets fell on credit woes and reports showing US economic weakness in the housing and job markets. Traders also noted considerable fund selling on the decline and may have redressed some of the large non-commercial net-long positions that had built up over the previous weeks.

While there are genuine concerns over the economic impact of the spill-over effects of weakness in the subprime mortgage market, there are other fundamental reasons to have supported a decline. Demand and supply appeared relatively balanced in July following a temporary lull in OECD oilfield maintenance and higher-than-expected OPEC output. Also, while global product demand is expected to remain high in August and September, crude demand may dip as Atlantic Basin refiners undertake maintenance in

September. In the same way that upward crude buying pressures emerged ahead of peak throughput at the end of July, the impact of lower crude demand would likely be felt in late August. Refinery margins also weakened considerably, prompting talk of run cuts in Europe and China.



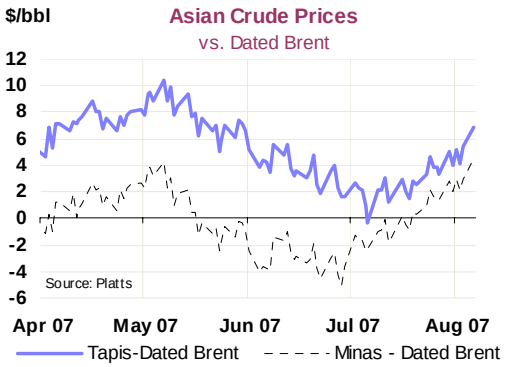


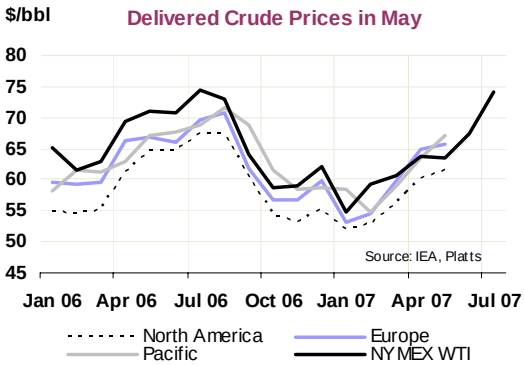
Unlike last summer, however, when prices fell sharply from early August after a relaxation in product markets, GSCI's withdrawal from the NYMEX Unleaded contract, and the end to hostilities in Lebanon, this year the anticipated crude tightness is pervasive and more based on fundamentals. While North Sea outages and maintenance dipped in July, non-OPEC supply is still expected to fall by around 700 kb/d by September on further maintenance work. FSU exports are also expected to dip in August on strong domestic demand and a further 12% hike in crude export duties from 1 August, while OPEC's output remains restrained. Comments from OPEC officials have (so far) indicated little willingness to change its policy ahead of its 11 September meeting in Vienna.

Compared with previous months, in July and early August, geopolitical issues appeared relatively low-key – and in Nigeria, where unrest has been constraining supply for a year and a half, output restoration exceeded new shut-ins. Furthermore, weather effects have been insignificant so far this summer. However, until it becomes clearer what the outcome of the developments in financial markets will be, any signs of increased tension or hurricane activity, coupled with renewed speculative activity, are likely to keep markets volatile.

Spot Crude Oil Prices

Spot crude prices in July rose over June, primarily on the above-mentioned refinery buying. The recent dip in refining margins may yet inspire some economic run cuts and take some pressure off the forward futures curve, but there are other factors at play. In particular, the perception remains that the market will be undersupplied in the fourth quarter, raising the price at which refiners will be prepared to draw on stocks and putting upward pressure on spot prices. These opposing forces are contributing to the flip-flopping of the forward curve between contango and backwardation.





Despite North Sea supply issues (maintenance, outages such as the one related to the shutting of the CATS pipeline, and the ongoing debate over Forties' quality), Dated Brent lost some of its strength vis-à-vis other light sweets such as WTI, Tapis or Azeri Light. Moreover, Dated Brent has also declined versus sour benchmark Dubai, reducing the incentive seen in much of July for Asian refiners to buy more Middle Eastern and Asian crudes. West African grades have been predominantly US-bound, driven partly by seasonal gasoline demand (US gasoline cracks are still higher than in other regions), but also due to factors relating to Asian demand. Reports indicate that only 860 kb/d of West African crude are to head to Asia in August, the lowest flow in four years. China, for example, imported more Iranian crude in the first six months of the year, around 440 kb/d, and refiners are bringing forward maintenance possibly in part due to low state-administered domestic retail prices.

Spot Crude Oil Prices and Differentials

(monthly and weekly averages, $/bbl)

	May	Jun	Jul	Jul-Jun Avg Change	%	Week Commencing: 09 Jul	16 Jul	23 Jul	30 Jul	06 Aug
Crudes										
Dated Brent	67.23	71.54	77.01	5.46	7.6	78.02	78.41	76.62	76.38	71.50
Brent (Asia) Mth1 adjusted	68.10	70.42	75.99	5.57	7.9	76.29	77.99	76.63	76.13	72.69
WTI (Cushing) Mth1 adjusted	63.40	67.44	74.10	6.66	9.9	72.69	74.99	75.17	76.69	72.07
Urals (Mediterranean)	64.15	67.82	73.90	6.07	9.0	75.26	75.46	73.55	73.78	69.57
Dubai Mth1 adjusted	64.61	65.79	69.49	3.70	5.6	69.79	70.07	70.21	69.58	67.58
Tapis (Dated)	75.13	75.18	79.64	4.45	5.9	80.09	80.77	80.41	81.10	77.72
Differential to Dated Brent										
WTI (Cushing) Mth1 adjusted	-3.82	-4.11	-2.90	1.20		-5.33	-3.42	-1.45	0.31	0.57
Urals (Mediterranean)	-3.08	-3.72	-3.11	0.61		-2.76	-2.95	-3.07	-2.60	-1.92
Dubai Mth1 adjusted - Dated Brent	-2.62	-5.75	-7.51	-1.76		-8.23	-8.33	-6.41	-6.79	-3.92
Tapis (Dated)	7.90	3.64	2.63	-1.01		2.07	2.36	3.79	4.72	6.22
Prompt Month Differential										
Forward Cash Brent Mth1-Mth2 adj.	-0.28	0.10	0.36	0.26		0.33	1.04	0.47	0.18	-0.27
Forward WTI Cushing Mth1-Mth2 adj	-1.27	-0.58	-0.06	0.51		-0.30	-0.12	0.21	0.41	0.06

Source: Platts

However, these crude spreads do not paint the whole picture, as refining margins fell sharply in July, especially on the US Gulf Coast, where they were dragged down by falling gasoline cracks. Were margins to remain low, we might see less crude moving to the US, in theory encouraging a drawdown in stocks rather than an increase in imports. In Europe meanwhile, anecdotal news reports hinted at possible economic run cuts in both Northwest Europe and the Mediterranean. In the US, WTI's return to strength sharply narrowed its discount to similar LLS, though not to ANS, which has by now risen to a strong premium on above-average refinery throughputs on the US West Coast. In Asia meanwhile, anticipated Japanese interest in heavy sweet crude for direct burning has caused Indonesian Minas to rise to a premium to Dated Brent.

Refining Margins

Refining margins were down in all regions in July, as crude's strength outweighed modest gains in all products except gasoline. This is reflective of tight crude fundamentals rather than product demand weakness, and the steady downturn in margins since mid-May highs is by now quite pronounced. This was particularly true in the US, where gasoline's weakness had a greater impact on margins. On the US West Coast, ANS's unusual strength meant its cracking margin even turned negative in late July. Margins in Europe and Singapore in any case remained weaker than in the US but were also affected by the latter's gasoline malaise and subsequently less favourable arbitrage economics. Even gasoil and fuel oil, which were far stronger, failed to lift margins in July, given crude price increases.

However, weak refining margins have already tempted talk of economic run cuts, which could lower demand for crude while tightening product fundamentals, thus raising margins again. Indeed, calculations for early August show an uptick in European and US Gulf Coast margins following the recent price correction.

Selected Refining Margins in Major Refining Centres

($/bbl)

		Monthly Average			Change	Average for week ending:				
		May 07	Jun 07	Jul 07	Jul 07-Jun 07	11 Jul	18 Jul	25 Jul	01 Aug	08 Aug
NW Europe	Brent (Cracking)	10.11	6.82	2.98	-3.84	4.67	2.27	1.00	2.39	4.34
	Urals (Cracking)	11.19	8.47	4.07	-4.40	5.10	3.07	2.76	3.58	4.72
	Brent (Hydroskimming)	1.58	-0.90	-3.50	-2.60	-2.67	-4.40	-4.63	-3.54	-1.28
	Urals (Hydroskimming)	0.78	-1.24	-4.31	-3.07	-4.47	-5.68	-4.41	-3.66	-2.39
Mediterranean	Es Sider (Cracking)	9.68	7.17	3.06	-4.10	4.27	1.88	1.70	2.22	2.93
	Urals (Cracking)	10.85	7.65	3.80	-3.85	4.73	2.48	2.75	3.39	3.91
	Es Sider (Hydroskimming)	0.86	-0.64	-3.38	-2.74	-2.89	-4.60	-4.06	-3.79	-2.37
	Urals (Hydroskimming)	0.43	-1.85	-4.39	-2.54	-4.41	-6.00	-4.60	-3.73	-2.73
US Gulf Coast	Bonny (Cracking)	10.89	7.79	2.54	-5.25	6.22	0.60	0.23	-0.47	0.21
	Brent (Cracking)	11.99	5.71	1.08	-4.63	4.46	-0.99	-1.00	-1.02	0.04
	LLS (Cracking)	14.74	9.38	4.95	-4.43	8.67	3.10	3.53	2.43	2.88
	Mars (Cracking)	13.86	7.89	4.06	-3.83	7.41	2.54	3.13	1.68	1.67
	Mars (Coking)	21.94	15.45	10.88	-4.57	15.73	9.42	8.74	7.14	6.61
	Maya (Coking)	25.34	17.90	13.52	-4.38	19.54	12.79	9.99	8.25	8.63
US West Coast	ANS (Cracking)	16.63	8.90	4.18	-4.72	7.88	4.57	1.94	-1.06	-1.18
	Kern (Cracking)	17.49	10.82	8.23	-2.59	10.42	8.59	6.13	2.62	3.74
	Oman (Cracking)	12.69	8.56	7.24	-1.32	9.81	7.47	5.07	3.94	2.75
	Kern (Coking)	36.58	27.24	21.68	-5.56	26.34	21.63	17.73	14.30	10.79
Singapore	Dubai (Hydroskimming)	-0.26	-0.60	-0.64	-0.03	-0.83	-0.54	-0.61	-0.51	-0.60
	Tapis (Hydroskimming)	-3.46	-3.34	-5.39	-2.05	-4.13	-5.50	-6.54	-7.46	-7.32
	Dubai (Hydrocracking)	5.43	4.17	3.56	-0.61	3.94	3.98	2.94	2.91	2.50
	Tapis (Hydrocracking)	0.55	-0.55	-2.59	-2.05	-1.16	-2.50	-3.89	-5.04	-4.92
China	Cabinda (Hydroskimming)	-3.02	-3.11	-6.09	-2.97	-6.03	-6.98	-6.09	-6.56	-5.30
	Daqing (Hydroskimming)	-5.87	-2.31	-8.51	-6.19	-7.50	-9.20	-9.95	-10.29	-10.09
	Dubai (Hydroskimming)	-0.88	-1.07	-1.03	0.04	-1.25	-0.95	-0.98	-0.83	-0.90
	Daqing (Hydrocracking)	1.42	2.86	-3.61	-6.48	-2.13	-4.19	-5.45	-6.16	-6.17
	Dubai (Hydrocracking)	4.78	3.67	3.11	-0.55	3.48	3.51	2.52	2.56	2.15

For the purposes of this report, refining margins are calculated for various complexity configurations, each optimized 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.

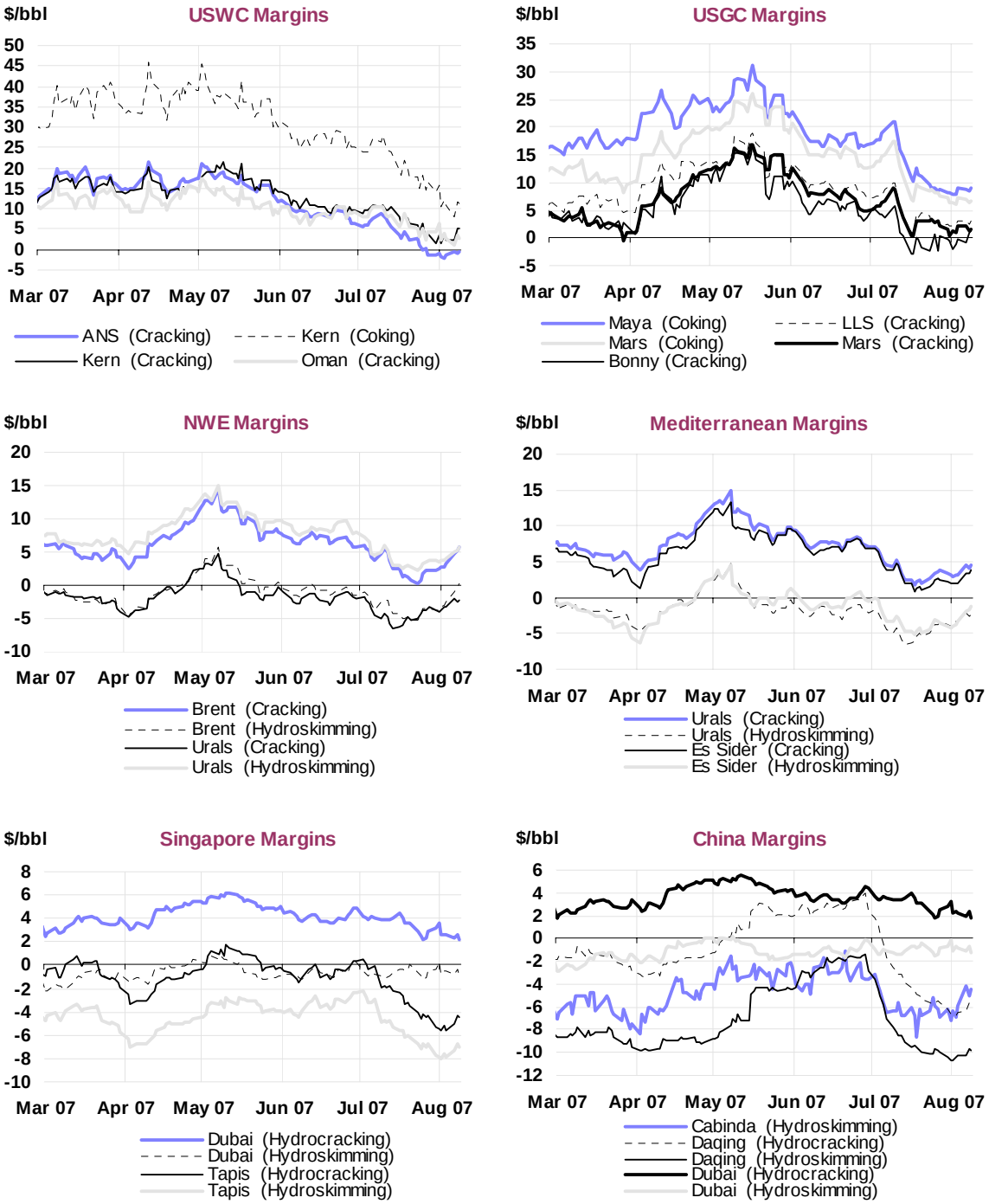
*The China refinery margin calculation represents a model based on spot product import/export parity, and does not reflect internal pricing regulations.
Sources: IEA, Purvin & Gertz Inc.

Spot Product Prices

In absolute terms, product prices gained overall in July, with the exception of gasoline, which fell as the end of the summer driving season approached. The change in sentiment emanating from higher US gasoline production spilled over to Europe, where slightly less interest in transatlantic shipments was reported. In addition, some news reports suggest Iran has tempered its spot gasoline buying, adding to the bearish sentiment. Gasoline demand in Asia has also been weak on less interest from large spot buyers Indonesia and Vietnam so far for the third quarter, though this could pick up.

Middle distillates in contrast were quite strong. A combination of light distillate yield maximisation, strong diesel and jet buying, and cold Latin American temperatures strengthened prices. Chile has reportedly been sourcing cargoes in Asia due to a lack of exports from Argentina, and Singapore gasoil stocks have fallen to the bottom of their five-year average range. In Europe, gasoil took some strength from Russian exporters sending more to the US, and Asian exporters redirecting some cargoes to the Middle East.

Regional Full-Cost Refining Margins



Fuel oil prices gained most in July. Changes in fundamentals were subtle, with slightly lower Korean and Russian exports and higher buying interest from Japanese power utility TEPCO (if not actually significantly more purchases so far) the most noteworthy. Korean refineries were undergoing maintenance in July, some of which slipped into August. Russia reportedly briefly halved its product exports through Estonia (mainly fuel oil), following a dispute, amid government claims it would generally curb energy outflows through neighbouring countries. However, at the time of writing, flows through Estonia had apparently been restored. Lastly, August fuel oil arrivals in Singapore from the West were expected to be at an eight-month low of 2.2-2.3 million tonnes, lending additional support.

Spot Product Prices

(monthly and weekly averages, $/bbl)

	May	Jun	Jul	Jul-Jun Change	Jul-Jun %	Week Commencing: 09 Jul	16 Jul	23 Jul	30 Jul	06 Aug	May	Jun	Jul
Rotterdam, Barges FOB											**Differential to Brent**		
Premium Unleaded	91.35	88.90	87.63	-1.27	-1.4	92.48	86.59	83.18	83.60	82.22	24.13	17.36	10.62
Naphtha	75.76	73.69	75.60	1.91	2.6	77.95	75.46	73.41	72.81	70.95	8.53	2.15	-1.41
Jet/Kerosene	84.02	87.24	90.26	3.02	3.5	91.54	90.75	89.53	90.25	87.06	16.79	15.70	13.25
ULSD	81.72	85.50	89.12	3.62	4.2	90.02	89.81	88.90	89.54	86.24	14.49	13.96	12.11
Gasoil .2%	79.11	82.31	86.13	3.82	4.6	86.97	86.74	86.05	86.59	82.99	11.88	10.76	9.12
LSFO 1%	47.48	48.58	54.75	6.17	12.7	54.65	55.90	55.46	57.76	57.83	-19.75	-22.96	-22.26
HSFO 3.5%	49.35	50.91	56.31	5.40	10.6	55.79	56.94	57.98	58.72	56.97	-17.88	-20.64	-20.70
Mediterranean, FOB Cargoes											**Differential to Urals**		
Premium 50 ppm	90.23	87.23	86.23	-1.00	-1.1	90.43	84.61	83.08	81.62	79.28	26.08	19.40	12.33
Naphtha	73.91	72.19	75.00	2.81	3.9	77.46	74.85	72.71	72.20	70.40	9.76	4.36	1.10
Jet Aviation fuel	81.38	84.76	88.49	3.73	4.4	89.78	89.16	87.86	88.64	85.56	17.23	16.94	14.59
Gasoil .2%	79.87	82.45	87.20	4.76	5.8	87.81	88.16	87.35	87.93	84.68	15.72	14.62	13.30
LSFO 1%	51.95	54.68	60.61	5.93	10.8	61.13	60.84	60.93	60.31	60.18	-12.20	-13.15	-13.29
HSFO 3.5%	48.47	50.75	55.97	5.22	10.3	54.76	56.54	57.42	58.96	57.17	-15.68	-17.07	-17.93
New York Harbour, Barges											**Differential to WTI**		
Super Unleaded	102.74	102.39	101.91	-0.48	-0.5	107.24	100.11	96.30	96.37	90.55	39.33	34.95	27.81
Unleaded	93.89	91.52	89.86	-1.67	-1.8	94.93	87.57	84.92	85.02	79.79	30.49	24.09	15.75
Jet/Kerosene	87.34	88.82	91.45	2.63	3.0	91.60	90.95	91.09	91.30	85.28	23.94	21.38	17.34
No. 2 (Heating Oil)	79.10	83.64	87.00	3.36	4.0	88.07	86.89	85.90	86.27	80.56	15.69	16.20	12.90
LSFO 1%	52.45	54.03	57.13	3.09	5.7	57.08	57.30	57.48	57.65	54.90	-10.96	-13.40	-16.97
No. 6 3%	52.08	52.06	57.33	5.26	10.1	56.42	57.50	58.68	59.58	56.40	-11.32	-15.37	-16.77
Singapore, Cargoes											**Differential to Dubai**		
Premium Unleaded	88.77	84.79	85.35	0.56	0.7	87.72	84.81	82.22	80.84	79.31	24.16	19.00	15.86
Naphtha	76.73	73.12	75.10	1.99	2.7	76.70	74.98	73.87	72.15	71.87	12.12	7.33	5.61
Jet/Kerosene	82.14	83.75	87.16	3.41	4.1	87.21	88.55	87.43	87.18	85.78	17.53	17.96	17.66
Gasoil .5%	81.73	81.80	85.73	3.94	4.8	86.67	87.50	85.49	85.83	83.85	17.12	16.01	16.24
LSWR Cracked	54.94	60.70	62.73	2.02	3.3	62.74	62.69	63.03	63.62	61.80	-9.67	-5.09	-6.76
HSFO 180 CST	53.34	55.45	59.55	4.10	7.4	58.79	60.27	60.93	61.42	61.01	-11.27	-10.34	-9.94
HSFO 380 CST 4%	53.27	55.58	60.15	4.57	8.2	59.03	61.06	62.08	62.09	61.31	-11.34	-10.21	-9.34

Source: Platts

In Japan, much has been made of TEPCO's need for alternative feedstocks after it was forced to shut down a large nuclear power plant in mid-July. Much of the incremental demand looks to be met by coal and gas, but the prospect of more fuel oil buying appears to have supported the market. Both low-sulphur and high-sulphur fuel oil reached highs on the Singapore market as a consequence, in turn giving fuel-oil rich Middle Eastern crudes a boost.

End-User Product Prices in July

OECD countries mostly experienced rising end-user product prices in July. Ex–tax, US-dollar gasoline prices in the US, Germany and Canada fell by 2.7%, 2.5% and 0.3% respectively, while in other OECD countries they rose by 2.6% on average. OECD automotive diesel and heating oil ex-tax prices in US dollars increased by 2.6% and 3.7%. Reflecting tightness in the global fuel oil market, the ex-tax price of LSFO increased by 6.6% on average in US dollars.

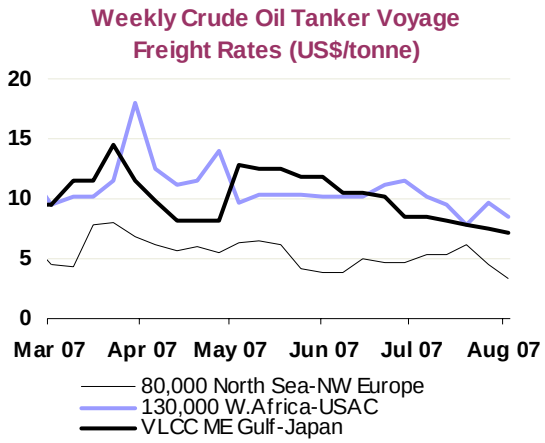
Freight

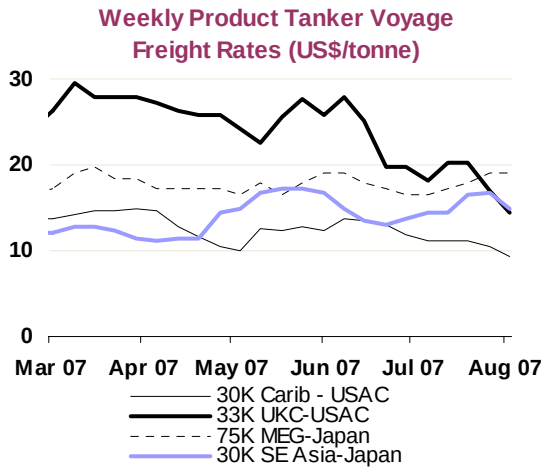
Crude tanker rates continued to fall in July, sinking to multi-year lows on several routes. Weak vessel demand caused VLCC rates from the Middle East Gulf to sink to two-year lows. Tanker movement reports suggest oil in transit is well below seasonal norms, especially on westbound routes, and will remain so for several weeks. In the Atlantic Basin, production outages and economic run cuts in Europe offer further downside to prospective crude vessel interest. Clean tanker rates trading to Asia firmed in July but weakened west of Suez.

From around $8.50/tonne in early July, VLCC rates from the Middle East Gulf to Japan had fallen to two-year lows of just over $7/tonne by early August. Although Japanese throughputs increased in July, rates from the Middle East Gulf were eroded by weak regional tanker fundamentals. In the third week of July, VLCC rates from the Middle East Gulf to the US Gulf fell to $13.43/tonne, their lowest level for nearly two

years. Recent low interest in chartering long-haul westbound vessels was reflected in oil tanker movement reports, which have been repeatedly stressing the significant dearth in oil currently in transit, especially to western destinations. Saudi Arabia reportedly plans to keep US-bound term volumes steady until October and spot buying opportunities also remain limited by restraints on OPEC output.

West African VLCC rates to the US Gulf gained over $3/tonne in the last week of July, to breach $12/tonne. Nigerian production recovery aided export flows, despite some minor loading delays at the Bonny terminal, while a strong WTI price may have also encouraged crude exports to the US. However, West African crude tanker rates corrected downwards in early August. Asian demand for West African cargoes reportedly fell to its lowest level in four years for August loading. A seasonal dip in trade coincided with an extremely high Brent premium over Dubai, potentially undermining the economic incentive for July eastbound spot trading.





North Sea Aframax rates firmed in the first half of July by over $1/tonne to surpass $7/tonne, as North Sea production maintenance eased. However, a combination of higher planned outages in August and unplanned problems, such as with the CATS pipeline, quickly reversed the early-month increases. Rates were down to $4.45/tonne in early August. Purported economic refinery run cuts in Europe may also further dent trade (and vessel demand) if refining margins remain weak.

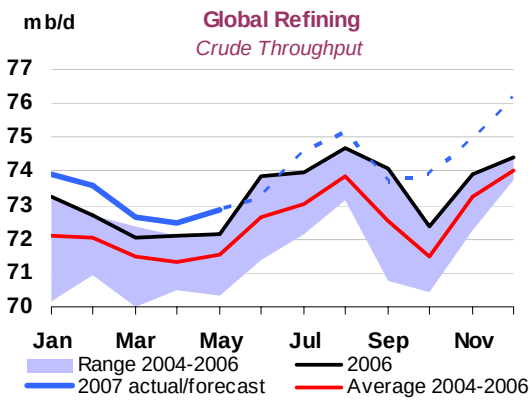
Charter rates for clean tankers trading to Asia rose in July. Lower naphtha prices spurred clean vessel interest from Eastern petrochemical manufacturers. There were also reports of firm transpacific diesel trading to the US West Coast as well as South America, which is enduring an extremely cold winter, especially in Argentina and Chile. Elsewhere, transatlantic 33,000-tonne clean rates to the US fell by over $5/tonne, to $14/tonne, in July. Higher domestic gasoline and ethanol production in the US potentially reduced the need to import gasoline and gasoline blending components, although volumes remain firm at present. Lower reported Iranian gasoline imports may also have contributed to weaker clean vessel demand in July.

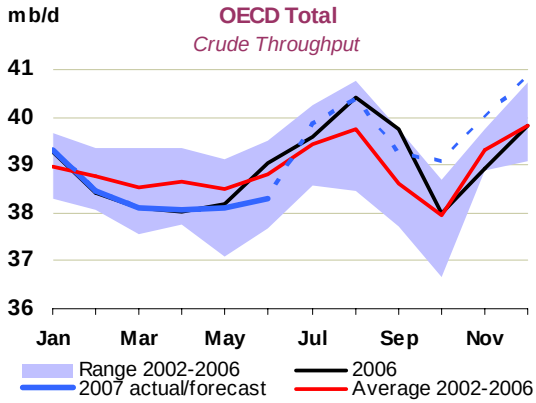
REFINING

Summary

- **Global refinery crude throughput is estimated at 73.3 mb/d in June,** 0.5 mb/d higher than May, but 0.6 mb/d lower year-on-year, underscoring refinery problems, particularly in the US. Record crude throughput in China of 6.8 mb/d and higher crude runs in Canada and the OECD Pacific underpin the monthly increase. July crude runs are estimated to have average 74.6 mb/d, up 1.3 mb/d from June.

- **Third and fourth-quarter global crude throughput is forecast to average 74.5 mb/d and 75.0 mb/d respectively.** Peak summer crude runs in August, are seen 0.1 mb/d lower at 75.1 mb/d on the back of higher non-OECD maintenance activity, primarily in the FSU and China, and voluntary run cuts in Europe. Crude throughput is forecast to dip in September before recovering strongly in the fourth quarter.





- **OECD refinery crude throughput is estimated at 38.3 mb/d in June, 0.2 mb/d higher than in May.** Higher crude runs in the Pacific and North America offset the maintenance–related decline in Europe. OECD crude throughput in July is estimated to be 1.6 mb/d higher at 39.9 mb/d, with increases in all regions. August crude throughput is forecast to increase by a further 0.5 mb/d to a summer peak of 40.4 mb/d.

- **Refineries in Europe and the Pacific boosted gasoline yields in May to capture the strong margins available following production problems in the US and Canada.** Despite these problems, North American gasoline yields increased in line with their five-year average. Consequently, naphtha yields declined, reaching their lowest level in Europe since at least 1995. Gasoil/diesel yields remained strong, compared with the five-year range, while jet fuel was similarly strong in Europe and the Pacific, but weak in North America.

Global Refinery Throughput

Global crude throughput is estimated to have increased in June by 0.5 mb/d to 73.3 mb/d. Higher runs in the OECD, largely driven by North America, and record throughputs in China of 6.8 mb/d, underpinned the increase. Preliminary data show July crude throughput increased further, to an estimated 74.6 mb/d. This increase comes despite reports that weak margins forced some refiners to cut runs in Europe and possibly the Pacific. The full impact of any cuts, however, is not expected to be seen until August. Furthermore, we have increased our estimate of maintenance for August in China, where heavy losses due to artificially low domestic prices have encouraged refiners to bring forward maintenance to curtail crude throughput where possible and Korea, where some work has slipped back from July. Partly countering these negative impacts, we have increased our forecast for Japanese crude runs, following the outage at TEPCO's nuclear power plant, which will result in higher fuel oil use by utilities. On balance, our forecast for the summer peak of crude throughput in August has been reduced to 75.1 mb/d from 75.2 mb/d due to the aforementioned factors.

Increasing refinery maintenance in September is forecast to reduce crude runs by 1.4 mb/d globally and is likely to tighten product markets ahead of higher demand in the fourth quarter. Global crude runs in the fourth quarter are forecast to average 75.0 mb/d, an increase of 0.5 mb/d over the third quarter and 1.4 mb/d higher year-on-year. Higher crude throughput in the OECD, China and other Asia (mainly India) account for the majority of this increase, driven by strong demand growth and additions to crude distillation capacity.

Global Refinery Crude Throughput[1]

million barrels per day

	Apr 07	*May 07*	*Jun 07*	*Jul 07*	*Aug 07*	*Sep 07*	*Oct 07*	*Nov 07*	*Dec 07*
OECD Crude Runs									
North America	17.9	18.1	18.4	19.0	19.3	18.8	18.3	18.7	19.3
Europe	13.3	13.6	13.3	13.7	13.8	13.6	13.7	13.8	14.1
Pacific	6.9	6.5	6.6	7.1	7.3	6.8	7.1	7.4	7.5
Total OECD	38.1	38.1	38.3	39.9	40.4	39.2	39.1	40.0	40.8
NON-OECD Crude Runs									
FSU	*5.5*	*5.6*	*5.8*	*6.0*	*5.8*	*5.5*	*5.6*	*5.8*	*5.8*
Europe	*0.7*	*0.7*	*0.8*	*0.8*	*0.8*	*0.8*	*0.8*	*0.7*	*0.8*
China	*6.5*	*6.6*	*6.8*	*6.7*	*6.4*	*6.3*	*6.5*	*6.6*	*6.7*
Other Asia	*8.0*	*8.0*	*7.8*	*7.3*	*7.8*	*8.1*	*8.2*	*8.0*	*8.2*
Latin America	*5.5*	*5.4*	*5.4*	*5.4*	*5.6*	*5.5*	*5.5*	*5.5*	*5.5*
Middle East	*6.0*	*6.0*	*6.1*	*6.2*	*6.1*	*6.0*	*5.9*	*5.9*	*6.0*
Africa	*2.1*	*2.4*	*2.4*	*2.4*	*2.3*	*2.4*	*2.4*	*2.4*	*2.4*
Total Non-OECD	*34.4*	*34.7*	*35.0*	*34.8*	*34.7*	*34.5*	*34.8*	*34.9*	*35.3*
Total Crude Runs	*72.5*	*72.8*	*73.3*	*74.6*	*75.1*	*73.7*	*73.9*	*74.9*	*76.2*

1 Crude runs in Italics are estimates

Global crude runs in May have been revised to 72.8 mb/d, 0.1 mb/d higher than last month's estimate. Data published by non-OECD countries lead us to increase Middle Eastern (+0.2 mb/d), African and Latin American crude runs (both +0.1 mb/d) for the month. Offsetting these gains, our estimates for non-OECD Europe have been adjusted lower for May and the balance of the year.

OECD Refinery Throughput

OECD Third and Fourth-Quarter Forecasts

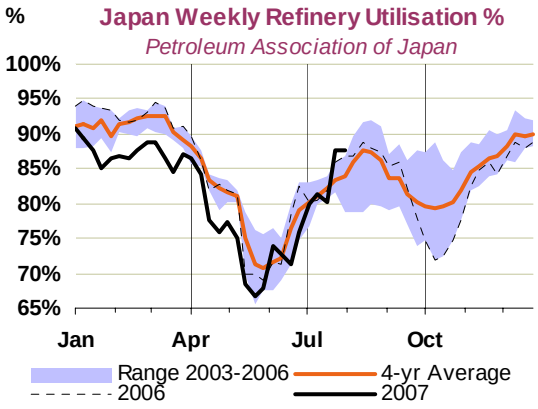
Third-quarter crude throughput is expected to average 39.8 mb/d, in line with last year and an increase of 1.6 mb/d from the second quarter, as refiners increase runs to meet the seasonal peak in demand. Crude runs are rising through July and into August in all three OECD regions.

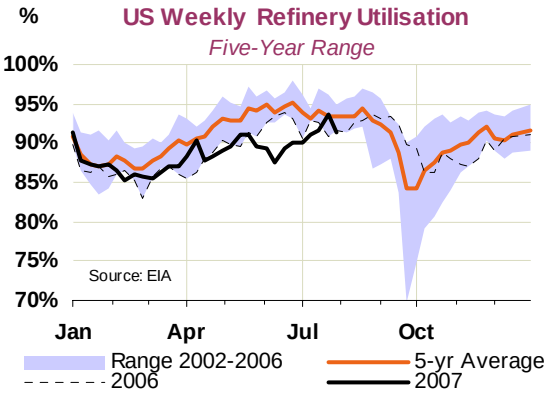
September is forecast to see a material slowdown in OECD crude throughput, with runs falling by 1.1 mb/d month-on-month to 39.2 mb/d, 0.5 mb/d below last year's level. A heavy programme of maintenance work is the cause of the lower throughput. Maintenance work is expected to similarly limit October throughputs to 39.1 mb/d, but thereafter runs are expected to increase rapidly to 40.8 mb/d in December.

Incremental European crude throughput in August is likely to be limited by the implementation of economic runs cuts, due to the weak margin environment for hydroskimming refineries in the region. We have assumed that run cuts were implemented gradually through July and that the majority of the impact will be seen in August. In total, we have factored in a reduction in throughput of around 100 kb/d, at plants in Germany, Sweden and Greece, but some unconfirmed reports indicate the offline capacity may be as high as 300 kb/d.

Weekly data from Japan show crude runs reaching 4.2 mb/d in early August, which is just above the five-year weekly range for this time of year. Japanese runs are likely to be raised further by the increased demand for fuel oil from TEPCO following the closure of its Kashiwazaki-Kariwa nuclear plant after the recent earthquake.

Similarly, weekly data for the US point to crude runs reaching 16.2 mb/d in late July, their highest level since late August 2005, just ahead of the disruption caused by Hurricane Katrina. The return of refineries from maintenance on the Gulf and West Coasts, as well as fewer refinery reliability problems in July, have allowed crude runs to recover strongly from previous weak levels. US weekly data indicate that July crude runs were, on average, 15.8 mb/d, in line with our forecast for the month and the July 2006 level. Gulf Coast crude runs reached 8.0 mb/d, the highest level since July 2005, despite some 150-175 kb/d of capacity still shut-in at BP's Texas City refinery. However, a spate of unplanned outages on the East and Gulf Coasts in early August reduced runs by 0.4 mb/d, with current reports suggesting that crude runs may not recover immediately.



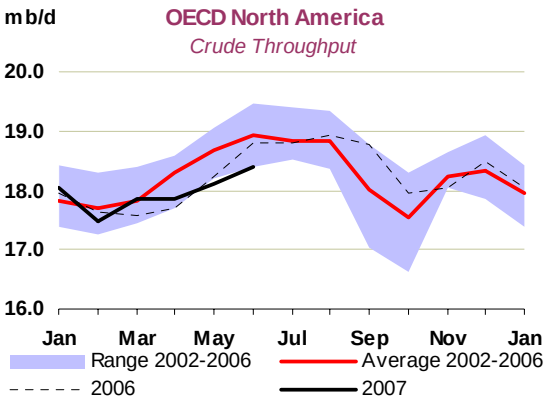


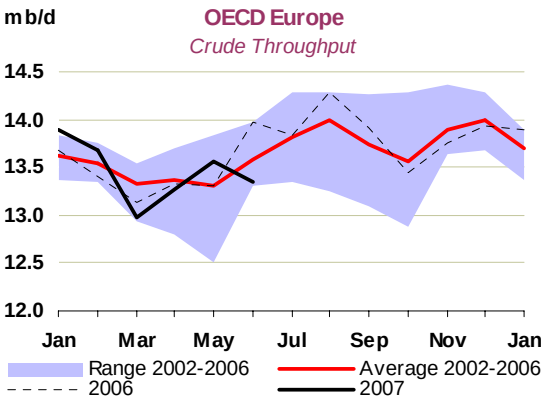
There appears to be little prospect of a full resumption of the shut-in capacity at BP Texas City until the fourth quarter, at which time the refinery expects to resume processing of sour crude grades. The restart of processing units after such a lengthy period is seldom trouble-free and further delays remain possible. Midwestern crude runs remain lower than average, largely due to problems at BP's Whiting, Indiana, refinery, where the crude slate is restricted to sweet crudes, following the reduction in hydrotreating capacity. BP now expects full output to be restored only in 2008, having taken the opportunity to improve process safety by upgrading the pressure-relief system through the installation of a new flare stack at the end of this year.

OECD Data for June

OECD crude throughput in June averaged 38.3 mb/d, 0.1 mb/d below our forecast. Higher-than-expected runs in the Pacific and North America were more than offset by lower-than-forecast runs in Europe. Crude throughput was 0.2 mb/d higher than May although 0.8 mb/d lower than June 2006 with the year-on-year shortfall largely in Europe and the US.

North American crude runs were 0.3 mb/d higher in June than in May. Higher throughput in Canada accounts for the majority of the increase, as runs recovered, following outages, at Imperial's Nanticoke





and Sarnia refineries and the completion of the turnaround at its Dartmouth refinery. Pacific crude throughput recovered more strongly than anticipated in June with higher than forecast runs in Korea explaining the difference. Japanese crude runs increased as refiners wound down maintenance activity, offset partly by some unplanned shutdowns, which carried on into early July.

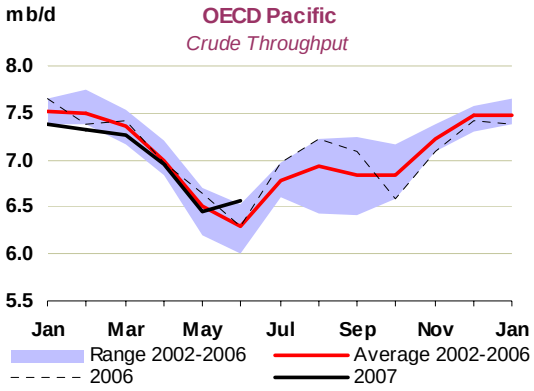
Refinery Crude Throughput and Utilisation in OECD Countries

	million barrels per day						*Change from*		Utilisation rate[2]	
	Jan 07	Feb 07	Mar 07	Apr 07	May 07	Jun 07	*May 07*	*Jun 06*	Jun 07	Jun 06
OECD North America										
US[3]	14.96	14.43	14.84	15.04	15.37	15.36	-0.01	-0.48	87.94	91.09
Canada	1.80	1.77	1.77	1.59	1.50	1.77	0.27	0.04	87.66	85.87
Mexico	1.27	1.26	1.24	1.24	1.23	1.26	0.04	0.04	82.05	71.96
Total	18.04	17.47	17.85	17.87	18.10	18.39	0.29	-0.41	87.48	89.12
OECD Europe										
France	1.79	1.71	1.50	1.59	1.88	1.56	-0.32	-0.07	79.79	82.71
Germany	2.26	2.31	2.21	2.19	2.15	2.29	0.14	-0.05	94.56	96.40
Italy	1.91	1.93	1.91	1.83	1.88	1.82	-0.07	-0.05	77.68	80.40
Netherlands	1.01	0.97	0.88	1.01	1.04	0.96	-0.08	-0.03	79.44	80.99
Spain	1.19	1.14	1.17	1.22	1.19	1.16	-0.04	-0.10	90.97	98.90
UK	1.59	1.42	1.49	1.60	1.63	1.56	-0.07	-0.05	82.58	85.46
Other OECD Europe	4.14	4.20	3.81	3.83	3.81	4.00	0.19	-0.27	83.58	88.53
Total	13.89	13.67	12.98	13.27	13.57	13.34	-0.23	-0.63	84.07	87.71
OECD Pacific										
Japan	4.13	4.11	4.04	3.88	3.32	3.41	0.09	-0.10	72.93	75.14
Korea	2.49	2.51	2.48	2.37	2.43	2.45	0.02	0.31	95.12	83.22
Other OECD Pacific	0.76	0.70	0.75	0.70	0.71	0.71	0.01	0.07	88.47	79.83
Total	7.38	7.32	7.27	6.95	6.45	6.57	0.12	0.28	81.58	78.19
OECD Total	39.32	38.46	38.10	38.08	38.12	38.31	0.18	-0.75	85.22	86.67

1 Estimate
2 Based on crude throughput and current operable refining capacity
3 US50

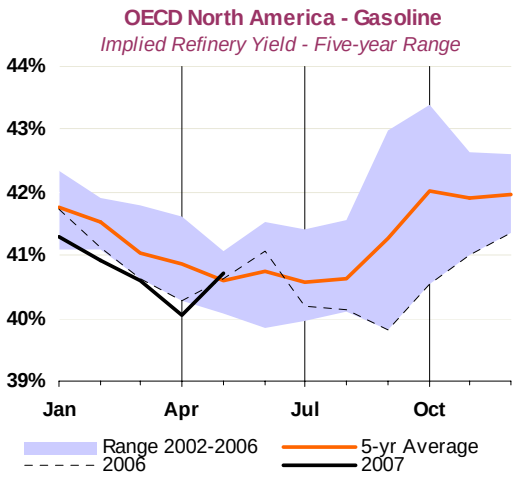
European crude runs were universally lower than June 2006 with the exception of Denmark. France's month-on-month decline in throughput of 0.3 mb/d was partly due to the turnaround at Total's 140 kb/d Mardyck refinery, but the reason for the balance of the decline is as yet unclear, although it is likely that other, unreported, maintenance work occurred elsewhere.

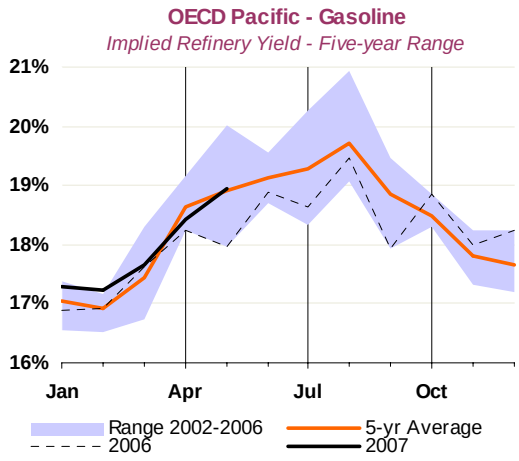
Elsewhere, runs increased month-on-month in Germany, following the completion of maintenance at PCK's Schwedt refinery, but decreased by 70 kb/d in Italy as the turnaround at Sarras's Sarroch refinery continued.



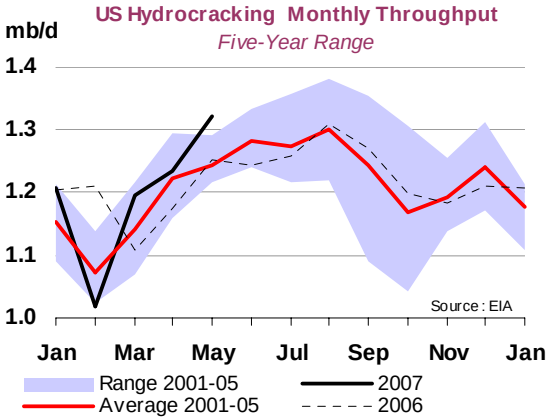
OECD Refinery Yields

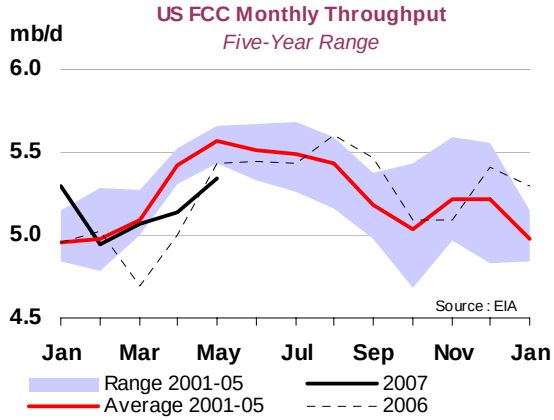
OECD refinery yields in May reflect the regional variations in refinery performance and the extent to which refiners were undertaking maintenance. Gasoline yields in North America increased from the April level, but only as far as the five-year average, despite the problems affecting Canadian and US refineries. The increased need for US imports during this period and strong gasoline cracks, appear to have enticed higher gasoline production from refineries in the Pacific and Europe, with strengthening gasoline yields and declining naphtha yields. Furthermore, the extent to which the strong margin environment resulted in higher runs by marginal refining capacity may have resulted in additional supplies of middle distillates and fuel oil.



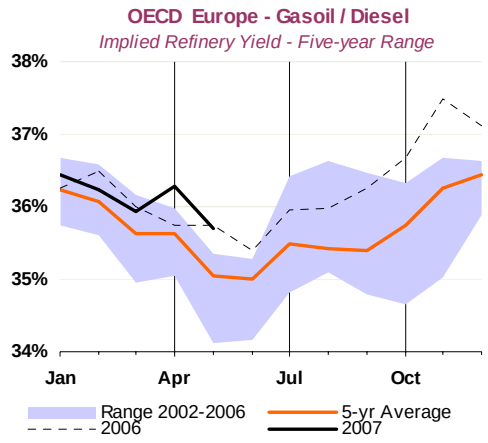


Monthly US data for May indicate that catalytic cracking (FCC) throughput remained weaker than average, slipping below levels of the previous year for the first time since February. This data tie in with the peak of reported outages and the peak in margins, both also seen in May. Conversely, coking throughput increased above the five-year average and hydrocracking feed rates in May continued to rebound strongly from their 1Q low, moving above the five-year range. The feed rates for hydrocracking and coking capacity will be boosted over time by the continued investment by refineries to add new capacity.





Jet/kerosene yields remain strong in Europe, with data for France indicating that the recently commissioned hydrocracker at Total's Normandy refinery may be contributing to higher yields of diesel and jet fuel. Conversely, North American jet/ kerosene yields remain under pressure, at the very bottom of the five-year range, despite a small increase from April's 10-year low.



By comparison, gasoil/diesel yields in North America continue to be at the top of the range. Pacific gasoil/diesel yields are similarly strong as refiners in Korea approach the seasonal, tax-related, peak in distillate production in June and the corresponding trough in jet/kerosene yields. However, with the completion of third-quarter maintenance we expect to see the seasonal increase in kerosene yields begin as refiners build stocks of heating-related kerosene inventories ahead of the winter.

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

	2004	2005	1Q06	2Q06	3Q06	4Q06	2006	1Q07	2Q07	3Q07	4Q07	2007	1Q08	2Q08	3Q08	4Q08	2008
OECD DEMAND																	
North America	25.4	25.5	25.2	25.1	25.4	25.4	25.3	25.7	25.4	25.8	25.9	25.7	26.1	25.9	26.1	26.2	26.1
Europe	15.5	15.6	15.9	15.2	15.6	15.6	15.6	15.1	14.9	15.6	15.9	15.4	15.8	15.2	15.8	16.0	15.7
Pacific	8.5	8.6	9.2	7.8	7.9	8.7	8.4	8.8	7.8	8.1	9.0	8.4	9.4	8.0	8.1	8.9	8.6
Total OECD	49.4	49.7	50.3	48.0	48.9	49.7	49.2	49.6	48.1	49.5	50.7	49.5	51.2	49.1	50.0	51.0	50.3
NON-OECD DEMAND																	
FSU	3.8	3.8	3.9	3.7	4.0	4.3	4.0	3.8	3.5	3.9	4.5	3.9	3.9	3.6	4.0	4.5	4.0
Europe	0.7	0.7	0.8	0.7	0.7	0.8	0.7	0.8	0.8	0.7	0.8	0.8	0.9	0.8	0.7	0.8	0.8
China	6.4	6.7	7.0	7.3	7.2	7.2	7.2	7.3	7.6	7.6	7.7	7.6	7.8	8.1	8.0	8.2	8.0
Other Asia	8.6	8.8	9.0	9.0	8.7	8.9	8.9	9.2	9.2	9.0	9.2	9.1	9.4	9.4	9.2	9.5	9.4
Latin America	5.0	5.1	5.2	5.3	5.4	5.4	5.3	5.3	5.5	5.6	5.5	5.5	5.5	5.6	5.7	5.7	5.6
Middle East	5.7	6.0	6.2	6.2	6.5	6.3	6.3	6.4	6.5	6.8	6.5	6.6	6.7	6.8	7.1	6.8	6.9
Africa	2.8	3.0	3.0	3.0	2.9	2.9	2.9	3.1	3.1	3.0	3.1	3.1	3.2	3.2	3.1	3.2	3.2
Total Non-OECD	33.0	34.1	34.9	35.2	35.2	35.8	35.3	35.9	36.2	36.6	37.3	36.5	37.2	37.5	37.9	38.7	37.8
Total Demand[1]	82.3	83.7	85.2	83.2	84.1	85.5	84.5	85.5	84.3	86.1	88.1	86.0	88.4	86.6	87.9	89.7	88.2
OECD SUPPLY																	
North America	14.6	14.1	14.2	14.2	14.3	14.3	14.2	14.4	14.3	14.1	14.1	14.2	14.4	14.1	14.0	14.1	14.1
Europe	6.1	5.6	5.5	5.1	4.9	5.2	5.2	5.2	4.9	4.6	4.8	4.9	4.9	4.5	4.4	4.6	4.6
Pacific	0.6	0.6	0.5	0.5	0.7	0.6	0.6	0.6	0.6	0.7	0.7	0.6	0.7	0.8	0.8	0.8	0.8
Total OECD	21.2	20.3	20.2	19.8	19.9	20.1	20.0	20.2	19.8	19.3	19.7	19.7	20.0	19.3	19.1	19.5	19.5
NON-OECD SUPPLY																	
FSU	11.2	11.6	11.8	12.0	12.2	12.4	12.1	12.5	12.5	12.6	12.8	12.6	12.8	12.9	13.0	13.3	13.0
Europe	0.2	0.2	0.2	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	3.5	3.6	3.7	3.7	3.7	3.6	3.7	3.7	3.8	3.9	3.9	3.8	3.9	3.9	3.9	3.9	3.9
Other Asia	2.7	2.7	2.7	2.7	2.7	2.8	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.8	2.8	2.9	2.8
Latin America	4.1	4.3	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.5	4.6	4.5	4.7	4.8	4.8	4.7	4.8
Middle East	1.9	1.8	1.8	1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.6	1.7	1.6	1.6	1.6	1.6	1.6
Africa[2]	3.4	3.7	3.9	3.8	3.9	4.0	3.9	2.6	2.5	2.6	2.6	2.6	2.7	2.7	2.7	2.7	2.7
Total Non-OECD	27.0	27.9	28.4	28.5	28.8	29.0	28.7	27.8	27.7	28.0	28.4	28.0	28.6	28.8	28.9	29.2	28.9
Processing Gains[3]	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0
Other Biofuels[4]	0.1	0.1	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.7	0.7	0.7	0.7	0.7
Total Non-OPEC[5]	50.1	50.2	50.8	50.5	50.8	51.3	50.8	50.3	49.8	49.7	50.4	50.0	51.2	50.8	50.7	51.3	51.0
Non-OPEC excl. Angola[2]	49.1	49.0	49.3	49.2	49.3	49.9	49.4	50.3	49.8	49.7	50.4	50.0	51.2	50.8	50.7	51.3	51.0
OPEC																	
Crude[6]	28.9	29.7	29.9	29.7	30.0	29.2	29.7	30.2	30.2								
NGLs	4.2	4.5	4.6	4.6	4.6	4.7	4.6	4.8	4.8	4.8	5.0	4.9	5.2	5.4	5.6	5.8	5.5
Total OPEC	33.1	34.2	34.5	34.3	34.7	33.9	34.3	35.0	35.0								
OPEC incl. Angola[2]	34.1	35.5	35.9	35.6	36.1	35.3	35.7	35.0	35.0								
Total Supply[7]	83.2	84.4	85.2	84.8	85.4	85.2	85.2	85.2	84.9								
STOCK CHANGES AND MISCELLANEOUS																	
Reported OECD																	
Industry	0.1	0.1	0.0	0.6	1.2	-0.9	0.2	-0.9	0.7								
Government	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0								
Total	0.2	0.2	0.0	0.7	1.2	-0.8	0.3	-0.8	0.8								
Floating Storage/Oil in Transit	0.0	-0.1	0.1	-0.1	0.3	-0.6	-0.1	0.2	-0.1								
Miscellaneous to balance[8]	0.6	0.5	-0.2	0.9	-0.2	1.2	0.4	0.4	-0.1								
Total Stock Ch. & Misc	0.8	0.7	0.0	1.5	1.3	-0.3	0.7	-0.3	0.6								
Memo items:																	
Call on OPEC crude + Stock ch.[9]	28.1	29.0	29.9	28.1	28.7	29.5	29.0	30.5	29.7	31.6	32.6	31.1	32.0	30.5	31.7	32.5	31.7
Adjusted Call on OPEC + Stock ch.[10]	28.7	29.6	29.7	29.0	28.5	30.7	29.5	30.9	29.6	32.1	33.1	31.4	32.5	30.9	32.2	33.0	32.1
"Call" incl. Angola[2]	29.1	30.3	31.3	29.5	30.1	30.9	30.5	30.5	29.7	31.6	32.6	31.1	32.0	30.5	31.7	32.5	31.7
"Adjusted Call" incl. Angola[2]	29.7	30.8	31.1	30.4	30.0	32.1	30.9	30.9	29.6	32.1	33.1	31.4	32.5	30.9	32.2	33.0	32.1

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 With effect from OMR of 13 February 2007, Angolan production will be reclassified within OPEC and excluded from the Non-OPEC and Africa totals, for the period January 2007 onwards. Secondary aggregates allow comparison with previous year totals by including Angola within OPEC retroactively.
3 Net volumetric gains and losses in the refining process (excludes net gain/loss in former USSR, China and non-OECD Europe) and marine transportation losses
4 Biofuels from sources outside Brazil and US.
5 Non-OPEC supplies include crude oil, condensates, NGL and non-conventional sources of supply such as synthetic crude, ethanol and MTBE. No allowance is made in the non-OPEC forecast for exceptional events which have, at certain times historically, reduced non-OPEC supply by 300-400 kbd on an annual basis
6 As of the March 2006 OMR, Venezuelan Orinoco heavy crude production is included within Venezuelan crude estimates. Orimulsion fuel remains within the OPEC NGL & non-conventional category, but Orimulsion production will reportedly cease from January 2007.
7 Comprises crude oil, condensates, NGLs, oil from non-conventional sources and other sources of supply
8 Includes changes in non-reported stocks in OECD and non-OECD areas
9 Equals the arithmetic difference between total demand minus total non-OPEC supply minus OPEC NGLs
10 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 plus an extra 350 kb/d allowance for average understatement of non-OPEC supply added for forecast periods.

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

(million barrels per day)

	2004	2005	1Q06	2Q06	3Q06	4Q06	2006	1Q07	2Q07	3Q07	4Q07	2007	1Q08	2Q08	3Q08	4Q08	2008
OECD DEMAND																	
North America	-	-	-	-	-	-	-	-	0.2	-0.1	-0.1	-	-	0.1	-	-0.1	-
Europe	-	-	-	-	-	-	-	-	-0.1	-	-	-	-	-	-	-	-
Pacific	-	-	-	-	-	-	-	-	-	0.1	0.1	0.1	0.1	0.1	0.1	-	0.1
Total OECD	-	-	-	-	-	-	-	-	-	-	-	-	0.1	0.2	0.1	-0.1	0.1
NON-OECD DEMAND																	
FSU	-	-	-	-	-	-	-	-	-0.1	-0.1	-	-	-	-0.2	-0.1	-	-0.1
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-	-	-	-0.1	-0.1	-	-	-
Other Asia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Latin America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Middle East	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Non-OECD	-	-	-	-	-	-	-	-	-0.1	-0.1	-	-	-0.1	-0.2	-0.1	-	-0.1
Total Demand	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-0.1	-
OECD SUPPLY																	
North America	-	-	-	-	-	-	-	-	0.2	0.1	0.1	0.1	-	-	0.1	-	-
Europe	-	-	-	-	-	-	-	-	-	-0.1	-	-	-	-	-	-	-
Pacific	-	-	-	-	-	-	-	-	-	-0.1	-	-	-	-	-	-	-
Total OECD	-	-	-	-	-	-	-	-	0.1	-	-	-	-	-	-	-	-
NON-OECD SUPPLY																	
FSU	-	-	-	-	-	-	-	-	-0.1	-	-0.1	-	-0.1	-0.1	-0.1	-0.1	-0.1
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Asia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Latin America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Middle East	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Non-OECD	-	-	-	-	-	-	-	-	-0.1	-	-	-	-	-	-	-	-
Processing Gains	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Biofuels	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Non-OPEC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Non-OPEC excl. Angola	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OPEC																	
Crude	-	-	-	-	-	-	-	-	-								
NGLs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total OPEC	-	-	-	-	-	-	-	-	-								
OPEC incl. Angola	-	-	-	-	-	-	-	-	-								
Total Supply	-	-	-	-	-	-	-	-	-								
STOCK CHANGES AND MISCELLANEOUS																	
REPORTED OECD																	
Industry	-	-	-	-	-	-	-	-									
Government	-	-	-	-	-	-	-	-									
Total	-	-	-	-	-	-	-	-									
Floating Storage/Oil in Transit	-	-	-	-	-	-	-	-									
Miscellaneous to balance	-	-	-	-	-	-	-	-									
Total Stock Ch. & Misc	-	-	-	-	-	-	-	-	-								
Memo items:																	
Call on OPEC crude + Stock ch.	-	-	-	-	-	-	-	-	-0.1	-0.1	-	-	-	0.1	-	-0.1	-
Adjusted Call on OPEC + Stock ch.	-	-	-	-	-	-	-	-	-0.7	-0.2	-0.1	-0.3	-0.1	-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

	2005	1Q06	2Q06	3Q06	4Q06	2006	1Q07	2Q07	3Q07	4Q07	2007	1Q08	2Q08	3Q08	4Q08	2008
Demand (mb/d)																
North America	25.49	25.17	25.06	25.43	25.35	25.25	25.66	25.44	25.78	25.88	25.69	26.09	25.85	26.15	26.16	26.06
Europe	15.59	15.89	15.15	15.57	15.64	15.56	15.15	14.85	15.64	15.85	15.38	15.75	15.24	15.76	15.96	15.68
Pacific	8.57	9.24	7.82	7.85	8.71	8.40	8.83	7.82	8.08	9.00	8.43	9.35	8.04	8.09	8.91	8.60
Total OECD	49.65	50.30	48.03	48.85	49.71	49.22	49.63	48.11	49.49	50.73	49.50	51.20	49.13	49.99	51.03	50.34
FSU	3.80	3.91	3.73	3.97	4.30	3.98	3.77	3.52	3.93	4.46	3.92	3.86	3.59	4.02	4.53	4.00
Europe	0.72	0.80	0.75	0.70	0.75	0.75	0.83	0.77	0.72	0.77	0.77	0.85	0.79	0.74	0.79	0.79
China	6.69	6.96	7.29	7.17	7.20	7.16	7.27	7.65	7.62	7.73	7.57	7.75	8.08	8.03	8.17	8.01
Other Asia	8.79	8.95	8.96	8.66	8.90	8.87	9.17	9.20	8.98	9.21	9.14	9.40	9.44	9.24	9.51	9.40
Latin America	5.13	5.15	5.29	5.40	5.38	5.31	5.32	5.47	5.60	5.54	5.48	5.46	5.62	5.74	5.69	5.63
Middle East	5.99	6.16	6.21	6.47	6.27	6.28	6.41	6.55	6.79	6.51	6.57	6.70	6.82	7.08	6.80	6.85
Africa	2.95	2.99	2.98	2.87	2.95	2.95	3.10	3.06	3.00	3.10	3.07	3.21	3.16	3.09	3.20	3.17
Total Non-OECD	34.09	34.92	35.22	35.25	35.75	35.29	35.88	36.22	36.63	37.32	36.52	37.23	37.50	37.94	38.69	37.84
World	83.74	85.22	83.25	84.10	85.46	84.51	85.51	84.33	86.12	88.05	86.01	88.43	86.63	87.94	89.72	88.18
of which:																
US50	*20.80*	*20.49*	*20.60*	*20.86*	*20.73*	*20.67*	*20.88*	*20.78*	*21.10*	*21.07*	*20.96*	*21.24*	*21.15*	*21.41*	*21.28*	*21.27*
Euro4	*8.21*	*8.49*	*7.94*	*8.14*	*8.18*	*8.19*	*7.88*	*7.69*	*8.17*	*8.26*	*8.00*	*8.22*	*7.92*	*8.22*	*8.29*	*8.17*
Japan	*5.31*	*5.89*	*4.72*	*4.75*	*5.29*	*5.16*	*5.39*	*4.62*	*4.90*	*5.50*	*5.10*	*5.79*	*4.78*	*4.85*	*5.35*	*5.19*
Korea	*2.19*	*2.29*	*2.04*	*2.04*	*2.32*	*2.17*	*2.35*	*2.12*	*2.09*	*2.37*	*2.23*	*2.45*	*2.17*	*2.13*	*2.41*	*2.29*
Mexico	*2.05*	*2.05*	*1.98*	*1.96*	*2.00*	*2.00*	*2.05*	*2.07*	*2.02*	*2.08*	*2.06*	*2.10*	*2.11*	*2.08*	*2.14*	*2.11*
Canada	*2.30*	*2.26*	*2.14*	*2.26*	*2.26*	*2.23*	*2.35*	*2.26*	*2.30*	*2.36*	*2.31*	*2.35*	*2.25*	*2.30*	*2.36*	*2.31*
Brazil	*2.19*	*2.18*	*2.20*	*2.28*	*2.30*	*2.24*	*2.25*	*2.27*	*2.35*	*2.35*	*2.30*	*2.30*	*2.33*	*2.41*	*2.41*	*2.36*
India	*2.58*	*2.71*	*2.67*	*2.48*	*2.70*	*2.64*	*2.88*	*2.80*	*2.55*	*2.79*	*2.75*	*2.93*	*2.87*	*2.61*	*2.85*	*2.82*
Annual Change (% per annum)																
North America	0.5	-1.6	-0.9	-0.6	-0.7	-0.9	1.9	1.5	1.4	2.1	1.7	1.7	1.6	1.4	1.1	1.4
Europe	0.7	1.2	-0.6	-0.5	-0.9	-0.2	-4.7	-2.0	0.4	1.4	-1.2	4.0	2.6	0.8	0.6	2.0
Pacific	0.8	-2.5	-2.7	-2.1	-0.3	-1.9	-4.5	0.0	2.9	3.2	0.3	6.0	2.8	0.1	-0.9	2.0
Total OECD	0.6	-0.9	-1.1	-0.8	-0.7	-0.9	-1.3	0.2	1.3	2.1	0.6	3.1	2.1	1.0	0.6	1.7
FSU	1.2	2.4	0.6	4.8	10.5	4.6	-3.7	-5.7	-0.9	3.8	-1.4	2.5	2.0	2.1	1.6	2.0
Europe	4.2	3.4	3.4	3.4	3.4	3.4	3.2	3.1	2.9	2.5	2.9	2.6	2.9	2.9	2.9	2.8
China	4.2	4.2	12.1	7.1	4.6	6.9	4.5	4.9	6.2	7.3	5.7	6.6	5.6	5.4	5.7	5.8
Other Asia	2.0	-0.2	-0.7	1.6	2.8	0.9	2.5	2.6	3.7	3.5	3.1	2.4	2.7	2.9	3.2	2.8
Latin America	2.9	3.7	3.2	2.9	4.4	3.6	3.3	3.4	3.6	3.0	3.3	2.7	2.6	2.6	2.7	2.6
Middle East	4.6	4.8	4.2	4.7	5.3	4.8	4.1	5.4	4.9	3.8	4.5	4.5	4.1	4.3	4.5	4.3
Africa	6.4	-1.2	-0.7	0.0	1.2	-0.2	3.9	2.8	4.3	5.2	4.0	3.4	3.3	3.3	3.4	3.3
Total Non-OECD	3.3	2.4	3.4	3.7	4.6	3.5	2.7	2.8	3.9	4.4	3.5	3.8	3.5	3.6	3.7	3.6
World	1.7	0.4	0.7	1.0	1.4	0.9	0.3	1.3	2.4	3.0	1.8	3.4	2.7	2.1	1.9	2.5
Annual Change (mb/d)																
North America	0.12	-0.41	-0.23	-0.14	-0.19	-0.24	0.49	0.39	0.34	0.53	0.44	0.43	0.41	0.37	0.28	0.37
Europe	0.11	0.19	-0.10	-0.07	-0.13	-0.03	-0.74	-0.30	0.07	0.21	-0.19	0.61	0.39	0.12	0.10	0.30
Pacific	0.07	-0.24	-0.22	-0.17	-0.03	-0.16	-0.42	0.00	0.23	0.28	0.03	0.53	0.22	0.01	-0.08	0.17
Total OECD	0.30	-0.46	-0.55	-0.39	-0.35	-0.43	-0.67	0.09	0.64	1.02	0.28	1.56	1.02	0.50	0.30	0.84
FSU	0.05	0.09	0.02	0.18	0.41	0.18	-0.15	-0.21	-0.03	0.16	-0.06	0.10	0.07	0.08	0.07	0.08
Europe	0.03	0.03	0.02	0.02	0.02	0.02	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
China	0.27	0.28	0.79	0.47	0.32	0.46	0.31	0.35	0.45	0.52	0.41	0.48	0.43	0.41	0.44	0.44
Other Asia	0.17	-0.02	-0.07	0.13	0.25	0.07	0.22	0.24	0.32	0.32	0.27	0.22	0.24	0.26	0.29	0.26
Latin America	0.14	0.19	0.16	0.15	0.23	0.18	0.17	0.18	0.19	0.16	0.18	0.14	0.14	0.15	0.15	0.15
Middle East	0.26	0.28	0.25	0.29	0.31	0.29	0.25	0.33	0.32	0.24	0.29	0.29	0.27	0.29	0.29	0.29
Africa	0.18	-0.04	-0.02	0.00	0.03	-0.01	0.12	0.08	0.12	0.15	0.12	0.10	0.10	0.10	0.10	0.10
Total Non-OECD	1.10	0.81	1.16	1.26	1.57	1.20	0.96	1.00	1.38	1.57	1.23	1.35	1.28	1.31	1.37	1.33
World	1.39	0.36	0.61	0.87	1.22	0.77	0.29	1.09	2.02	2.59	1.51	2.92	2.30	1.81	1.67	2.17
Revisions to Oil Demand from Last Month's Report (mb/d)																
North America	0.00	0.02	0.00	0.00	0.00	0.01	0.00	0.15	-0.09	-0.08	-0.01	-0.04	0.11	-0.01	-0.08	-0.01
Europe	0.00	0.00	0.00	0.00	0.00	0.00	-0.03	-0.08	-0.02	-0.02	-0.04	-0.04	-0.02	0.01	-0.01	-0.02
Pacific	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.03	0.12	0.14	0.06	0.13	0.13	0.07	0.01	0.08
Total OECD	0.00	0.02	0.00	0.00	0.00	0.01	-0.03	0.04	0.01	0.04	0.02	0.06	0.21	0.06	-0.08	0.06
FSU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.10	-0.09	0.00	-0.05	-0.02	-0.15	-0.09	0.00	-0.06
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
China	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.03	0.00	0.00	-0.01	-0.05	-0.06	0.00	-0.03	-0.03
Other Asia	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.02	-0.01	0.00	0.00	0.00
Latin America	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	0.00
Middle East	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.02	0.00	0.02	0.00	0.02	0.02	-0.01	0.01
Africa	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	0.00	0.00	0.00	0.00	-0.08	-0.06	0.00	-0.04	-0.09	-0.18	-0.07	-0.02	-0.09
World	0.00	0.02	0.00	0.00	0.00	0.01	-0.03	-0.04	-0.05	0.05	-0.02	-0.04	0.03	-0.01	-0.11	-0.03
Revisions to Oil Demand Growth from Last Month's Report (mb/d)																
World	0.00	0.02	0.00	0.00	0.00	0.01	-0.06	-0.04	-0.05	0.05	-0.02	0.00	0.07	0.04	-0.15	-0.01

Table 3
WORLD OIL PRODUCTION
(million barrels per day)

	2006	2007	2008	1Q07	2Q07	3Q07	4Q07	1Q08	May 07	Jun 07	Jul 07
OPEC											
Crude Oil											
Saudi Arabia	8.93			8.34	8.37				8.43	8.35	8.35
Iran	3.89			3.88	3.92				3.90	3.90	3.85
Iraq	1.90			1.89	2.01				2.00	1.93	2.20
UAE	2.62			2.55	2.56				2.57	2.59	2.58
Kuwait	2.21			2.16	2.08				2.07	2.07	2.07
Neutral Zone	0.58			0.55	0.55				0.55	0.55	0.55
Qatar	0.82			0.80	0.80				0.80	0.81	0.83
Angola[6]				1.53	1.60				1.60	1.60	1.64
Nigeria	2.24			2.22	2.10				2.01	2.05	2.21
Libya	1.71			1.69	1.69				1.69	1.70	1.70
Algeria	1.35			1.33	1.36				1.36	1.37	1.35
Venezuela	2.56			2.44	2.37				2.37	2.37	2.34
Indonesia	0.89			0.85	0.84				0.85	0.83	0.83
Total Crude Oil	29.69			30.22	30.24				30.17	30.09	30.48
Total NGLs[1]	4.63	4.85	5.51	4.76	4.80	4.83	5.03	5.21	4.80	4.80	4.82
Total OPEC	34.32			34.99	35.04				34.97	34.89	35.30
OPEC incl. Angola[6]	35.73			34.99	35.04				34.97	34.89	35.30
NON-OPEC[2]											
OECD											
North America	14.25	14.22	14.14	14.36	14.30	14.09	14.14	14.43	14.39	14.02	14.21
United States	7.37	7.37	7.42	7.44	7.54	7.30	7.21	7.48	7.62	7.46	7.52
Mexico	3.68	3.55	3.40	3.57	3.60	3.53	3.49	3.44	3.53	3.66	3.57
Canada	3.19	3.30	3.33	3.35	3.16	3.26	3.44	3.51	3.25	2.90	3.12
Europe	5.18	4.88	4.59	5.22	4.88	4.59	4.84	4.87	4.91	4.50	4.74
UK	1.66	1.64	1.50	1.76	1.69	1.48	1.64	1.65	1.73	1.60	1.53
Norway	2.78	2.51	2.37	2.72	2.46	2.38	2.48	2.49	2.46	2.17	2.48
Others	0.74	0.73	0.71	0.74	0.73	0.73	0.72	0.73	0.72	0.73	0.74
Pacific	0.58	0.64	0.77	0.59	0.62	0.65	0.71	0.73	0.58	0.66	0.64
Australia	0.53	0.57	0.66	0.53	0.56	0.57	0.60	0.62	0.52	0.60	0.57
Others	0.05	0.08	0.11	0.06	0.06	0.08	0.10	0.10	0.06	0.06	0.07
Total OECD	20.01	19.74	19.50	20.17	19.80	19.33	19.69	20.02	19.88	19.18	19.60
NON-OECD											
Former USSR	12.10	12.60	13.01	12.55	12.51	12.56	12.77	12.79	12.53	12.51	12.64
Russia	9.69	9.92	10.10	9.91	9.87	9.95	9.95	9.92	9.86	9.91	9.93
Others	2.40	2.68	2.91	2.63	2.64	2.61	2.82	2.86	2.68	2.61	2.71
Asia	6.39	6.55	6.72	6.45	6.48	6.61	6.65	6.66	6.49	6.52	6.58
China	3.67	3.84	3.92	3.75	3.79	3.92	3.92	3.93	3.78	3.83	3.91
Malaysia	0.75	0.74	0.78	0.74	0.74	0.73	0.76	0.76	0.74	0.75	0.72
India	0.79	0.82	0.82	0.82	0.81	0.82	0.82	0.82	0.82	0.82	0.81
Others	1.17	1.14	1.20	1.14	1.14	1.15	1.15	1.15	1.15	1.12	1.14
Europe	0.15	0.13	0.12	0.14	0.14	0.13	0.13	0.13	0.14	0.13	0.13
Latin America	4.39	4.47	4.75	4.38	4.40	4.51	4.61	4.75	4.35	4.44	4.47
Brazil	2.10	2.23	2.55	2.15	2.14	2.25	2.37	2.52	2.11	2.19	2.20
Argentina	0.77	0.77	0.75	0.77	0.77	0.77	0.76	0.76	0.77	0.77	0.77
Colombia	0.53	0.54	0.54	0.52	0.53	0.54	0.54	0.54	0.52	0.54	0.55
Ecuador	0.54	0.50	0.47	0.50	0.51	0.50	0.48	0.48	0.51	0.50	0.50
Others	0.45	0.44	0.44	0.44	0.44	0.45	0.45	0.44	0.44	0.44	0.45
Middle East[3]	1.74	1.65	1.61	1.67	1.66	1.66	1.63	1.64	1.66	1.65	1.67
Oman	0.75	0.71	0.68	0.72	0.72	0.70	0.69	0.69	0.72	0.71	0.71
Syria	0.42	0.39	0.36	0.40	0.39	0.38	0.38	0.37	0.39	0.39	0.39
Yemen	0.38	0.37	0.38	0.36	0.36	0.38	0.37	0.39	0.36	0.36	0.38
Africa	3.91	2.57	2.69	2.58	2.54	2.57	2.60	2.65	2.52	2.54	2.56
Egypt	0.67	0.63	0.62	0.64	0.63	0.63	0.63	0.63	0.63	0.63	0.63
Angola[6]	1.37										
Gabon	0.23	0.23	0.24	0.23	0.23	0.23	0.23	0.24	0.23	0.23	0.23
Others	1.63	1.71	1.83	1.71	1.68	1.70	1.74	1.79	1.65	1.67	1.69
Total Non-OECD	28.67	27.98	28.89	27.77	27.72	28.03	28.38	28.61	27.69	27.79	28.05
Processing Gains[4]	1.90	1.92	1.95	1.92	1.92	1.92	1.92	1.95	1.92	1.92	1.92
Other Biofuels[5]	0.26	0.40	0.66	0.40	0.40	0.40	0.40	0.66	0.40	0.40	0.40
TOTAL NON-OPEC	50.84	50.05	50.99	50.26	49.84	49.69	50.39	51.24	49.89	49.30	49.96
Non-OPEC excl. Angola[6]	49.43	50.05	50.99	50.26	49.84	49.69	50.39	51.24	49.89	49.30	49.96
TOTAL SUPPLY	85.16			85.24	84.89				84.86	84.19	85.26

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 will reportedly cease from January 2007.
2 Comprises crude oil, condensates, NGLs and oil from non-conventional sources. No allowance is made in the non-OPEC forecast for exceptional events, which have, at certain times historically, reduced non-OPEC supply by 300-400 kbd on an annual basis.
3 Includes small amounts of production from Israel, Jordan and Bahrain.
4 Net volumetric gains and losses in refining (excludes net gain/loss in FSU, China and non-OECD Europe) and marine transportation losses.
5 Comprises Fuel Ethanol and Biodiesel supply from outside Brazil and US.
6 With effect from OMR of 13 February 2007, Angolan production will be reclassified within OPEC and excluded from the Non-OPEC total, for the period January 2007 onwards. Secondary aggregates allow comparison with previous year totals by including Angola within OPEC retroactively

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			
	Feb2007	Mar2007	Apr2007	May2007	Jun2007*	Jun2004	Jun2005	Jun2006	3Q2006	4Q2006	1Q2007	2Q2007
North America												
Crude	451.2	464.8	471.5	480.3	492.9	418.3	446.1	458.7	0.02	-0.25	0.31	0.31
Motor Gasoline	242.5	230.6	223.6	230.5	234.1	237.9	246.5	241.6	0.03	-0.02	-0.13	0.04
Middle Distillate	191.0	190.8	192.4	195.8	194.9	182.6	191.8	199.9	0.26	-0.08	-0.29	0.05
Residual Fuel Oil	44.4	47.7	47.0	44.4	44.2	45.2	46.3	52.3	0.01	-0.03	-0.03	-0.04
Total Products[3]	636.6	631.6	630.2	647.7	661.5	629.7	679.8	669.5	0.60	-0.33	-0.70	0.33
Total[4]	1221.6	1236.6	1246.2	1273.0	1295.2	1193.3	1275.4	1275.7	0.77	-0.76	-0.45	0.64
Europe												
Crude	330.6	325.7	337.9	336.6	334.0	339.4	339.4	338.7	-0.10	0.11	-0.16	0.09
Motor Gasoline	116.4	110.2	104.1	102.6	100.4	110.5	101.9	99.7	0.04	0.11	-0.04	-0.11
Middle Distillate	282.4	268.4	277.5	280.3	272.9	235.4	241.5	258.0	0.17	0.05	-0.10	0.05
Residual Fuel Oil	75.4	73.3	72.0	72.1	71.6	77.3	71.4	75.7	-0.03	0.04	-0.04	-0.02
Total Products[3]	577.6	553.7	554.5	554.1	543.9	522.0	516.3	534.5	0.25	0.16	-0.21	-0.11
Total[4]	982.8	952.7	968.6	966.9	953.1	932.6	925.1	945.4	0.16	0.21	-0.31	0.00
Pacific												
Crude	169.9	172.4	168.5	170.5	171.0	176.6	176.4	181.2	-0.07	-0.02	-0.01	-0.02
Motor Gasoline	25.2	24.5	24.0	25.1	24.0	24.6	24.5	24.6	-0.01	-0.01	0.03	0.00
Middle Distillate	71.3	60.9	59.3	63.5	68.0	60.3	58.9	69.7	0.18	-0.14	-0.14	0.08
Residual Fuel Oil	22.3	22.1	22.3	22.5	22.6	22.6	23.4	23.2	0.01	-0.01	-0.01	0.01
Total Products[3]	179.4	171.1	167.3	175.7	182.1	172.3	173.2	183.2	0.30	-0.30	-0.14	0.12
Total[4]	422.7	416.5	409.5	419.5	424.3	419.5	422.1	435.7	0.25	-0.33	-0.13	0.09
Total OECD												
Crude	951.8	962.8	977.8	987.4	997.8	934.2	961.8	978.5	-0.15	-0.16	0.14	0.38
Motor Gasoline	384.1	365.2	351.7	358.2	358.5	373.1	372.9	366.0	0.06	0.08	-0.15	-0.07
Middle Distillate	544.7	520.1	529.1	539.6	535.8	478.3	492.3	527.7	0.61	-0.16	-0.54	0.17
Residual Fuel Oil	142.2	143.0	141.3	139.0	138.4	145.1	141.0	151.1	-0.01	0.00	-0.07	-0.05
Total Products[3]	1393.5	1356.5	1352.0	1377.5	1387.4	1324.0	1369.3	1387.3	1.15	-0.46	-1.05	0.34
Total[4]	2627.1	2605.8	2624.2	2659.4	2672.6	2545.5	2622.5	2656.8	1.19	-0.88	-0.88	0.73

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			
	Feb2007	Mar2007	Apr2007	May2007	Jun2007*	Jun2004	Jun2005	Jun2006	3Q2006	4Q2006	1Q2007	2Q2007
North America												
Crude	688.6	688.6	689.4	690.3	690.3	662.4	696.4	687.9	0.00	0.01	0.00	0.02
Products	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	0.00	0.00	0.00	0.00
Europe												
Crude	173.7	174.3	174.7	175.0	175.0	157.9	164.9	173.5	0.02	-0.01	-0.01	0.01
Products	237.7	239.9	241.1	239.9	239.9	207.5	235.1	236.2	-0.01	0.00	0.05	0.00
Pacific												
Crude	385.8	385.1	385.1	385.0	385.0	386.8	383.4	380.9	0.01	0.03	0.01	0.00
Products	11.8	11.8	11.8	11.8	11.8	11.0	11.1	11.8	0.00	0.00	0.00	0.00
Total OECD												
Crude	1248.1	1248.0	1249.1	1250.3	1250.3	1207.1	1244.8	1242.2	0.03	0.04	0.00	0.03
Products	251.6	253.7	254.9	253.7	253.7	220.6	248.2	249.9	-0.01	0.00	0.05	0.00
Total[4]	1500.7	1502.7	1505.0	1505.0	1505.0	1428.7	1493.9	1493.1	0.02	0.04	0.05	0.03

* 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 2006		End September 2006		End December 2006		End March 2007		End June 2007 [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	169.7	75	179.2	79	180.1	77	185.8	-	-	-
Mexico	42.1	22	47.0	24	42.3	21	40.5	-	-	-
United States[4]	1731.6	83	1788.3	87	1722.9	83	1678.8	-	-	-
Total[4]	1965.5	78	2036.5	81	1967.4	77	1927.2	76	1987.5	77
Pacific										
Australia	38.9	42	35.3	37	34.8	37	34.3	-	-	-
Japan	627.2	132	649.1	123	630.8	117	615.3	-	-	-
Korea	155.4	76	160.5	69	151.8	65	156.1	-	-	-
New Zealand	6.8	48	7.0	46	7.1	46	7.7	-	-	-
Total	828.3	105	851.9	98	824.6	93	813.4	104	821.1	102
Europe[5]										
Austria	19.7	62	19.0	64	21.9	76	23.8	-	-	-
Belgium	30.4	54	30.5	53	30.2	48	28.5	-	-	-
Czech Republic	19.5	88	19.3	94	19.7	101	20.2	-	-	-
Denmark	20.4	110	21.2	113	18.5	97	18.3	-	-	-
Finland	30.5	139	26.8	118	26.6	114	29.5	-	-	-
France	188.7	98	187.5	96	192.4	98	177.0	-	-	-
Germany	283.1	103	281.9	104	282.8	117	290.5	-	-	-
Greece	34.9	84	38.2	79	39.2	84	35.6	-	-	-
Hungary	17.6	107	17.4	97	16.5	107	18.0	-	-	-
Ireland	12.6	71	13.9	70	12.5	62	12.9	-	-	-
Italy	126.0	75	134.1	78	133.1	79	133.9	-	-	-
Luxembourg	1.0	17	0.9	15	1.0	16	0.9	-	-	-
Netherlands	123.1	119	121.1	119	118.7	135	117.7	-	-	-
Norway	21.8	93	29.4	127	35.1	156	20.2	-	-	-
Poland	35.7	66	37.3	70	41.5	89	43.9	-	-	-
Portugal	24.7	80	23.8	83	24.0	77	23.7	-	-	-
Slovak Republic	7.7	90	7.4	95	7.5	101	7.0	-	-	-
Spain	129.2	82	133.9	84	134.8	83	129.3	-	-	-
Sweden	39.6	116	38.6	104	33.8	94	35.6	-	-	-
Switzerland	39.3	143	38.9	135	38.1	150	38.7	-	-	-
Turkey	51.6	78	53.7	83	55.5	88	56.8	-	-	-
United Kingdom	99.0	56	97.4	54	108.5	60	105.8	-	-	-
Total	1356.0	87	1372.1	88	1391.7	92	1367.9	92	1369.0	88
Total OECD	4149.9	85	4260.6	86	4183.7	84	4108.5	85	4177.6	84
DAYS OF IEA Net Imports[6]	-	116	-	118	-	122	-	121	-	-

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 2007 and June 2007 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. 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]*		
2Q2004	3974	1429	2545	81	29	52
3Q2004	4016	1435	2581	80	28	51
4Q2004	3997	1450	2547	79	29	50
1Q2005	4005	1462	2543	82	30	52
2Q2005	4116	1494	2623	84	30	53
3Q2005	4132	1494	2638	83	30	53
4Q2005	4083	1487	2597	81	30	52
1Q2006	4085	1487	2598	85	31	54
2Q2006	4150	1493	2657	85	31	54
3Q2006	4261	1495	2766	86	30	56
4Q2006	4184	1499	2685	84	30	54
1Q2007	4108	1503	2606	85	31	54
2Q2007	4178	1505	2673	84	30	54

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 1Q2007 and 2Q2007 (when latest forecasts are used).

Table 6

IEA Member Country Destinations of Selected Crude Streams[1]

(million barrels per day)

	2004	2005	2006	2Q06	3Q06	4Q06	1Q07	Mar 07	Apr 07	May 07	Year Earlier May 06	Year Earlier change
Saudi Light & Extra Light												
North America	0.55	0.46	0.60	0.68	0.62	0.60	0.68	0.65	0.81	0.80	0.82	-0.02
Europe	1.03	0.90	0.78	0.80	0.72	0.78	0.72	0.78	0.70	0.55	0.83	-0.28
Pacific	1.24	1.31	1.32	1.33	1.29	1.28	1.17	1.22	1.28	1.10	1.25	-0.15
Saudi Medium												
North America	0.80	0.81	0.64	0.61	0.68	0.61	0.47	0.30	0.57	0.50	0.60	-0.10
Europe	0.11	0.16	0.14	0.14	0.14	0.10	0.05	0.04	0.06	0.18	0.12	0.06
Pacific	0.23	0.26	0.35	0.35	0.35	0.32	0.34	0.37	0.36	0.28	0.34	-0.06
Saudi Heavy												
North America	0.22	0.17	0.21	0.21	0.21	0.19	0.15	0.04	0.04	0.09	0.14	-0.05
Europe	0.23	0.23	0.18	0.22	0.21	0.14	0.09	0.07	0.21	0.11	0.17	-0.06
Pacific	0.15	0.25	0.23	0.20	0.22	0.23	0.20	0.18	0.21	0.19	0.20	-0.01
Iraqi Basrah Light[2]												
North America	0.71	0.60	0.52	0.60	0.60	0.46	0.52	0.54	0.31	0.37	0.56	-0.18
Europe	0.21	0.23	0.32	0.29	0.40	0.36	0.29	0.21	0.29	0.20	0.32	-0.12
Pacific	0.12	0.06	0.08	0.09	0.10	0.07	0.11	0.13	0.15	0.17	-	-
Iraqi Kirkuk												
North America	0.02	-	0.00	-	0.01	-	-	-	-	-	-	-
Europe	0.08	0.05	0.01	-	0.04	0.01	0.04	-	-	-	-	-
Pacific	-	-	-	-	-	-	-	-	-	-	-	-
Iranian Light												
North America	-	-	-	-	-	-	-	-	-	-	-	-
Europe	0.24	0.20	0.26	0.27	0.31	0.27	0.31	0.20	0.32	0.37	0.24	0.14
Pacific	0.16	0.15	0.13	0.12	0.10	0.11	0.12	0.17	0.06	0.04	0.18	-0.14
Iranian Heavy[3]												
North America	-	-	-	-	-	-	-	-	-	-	-	-
Europe	0.57	0.63	0.58	0.57	0.67	0.60	0.55	0.51	0.65	0.63	0.60	0.03
Pacific	0.65	0.62	0.56	0.48	0.51	0.61	0.66	0.78	0.63	0.55	0.54	0.00
Venezuelan Light & Medium												
North America	0.67	0.82	0.66	0.68	0.62	0.57	0.65	0.64	0.66	0.61	0.73	-0.13
Europe	0.01	0.04	0.11	0.15	0.08	0.11	0.09	0.07	0.13	0.04	0.10	-0.05
Pacific	-	-	-	-	-	-	-	-	-	-	-	-
Venezuelan 22 API and heavier												
North America	0.88	0.72	0.72	0.72	0.74	0.72	0.55	0.50	0.72	0.69	0.71	-0.02
Europe	0.05	0.06	0.06	0.05	0.06	0.05	0.06	0.06	0.07	0.11	0.06	0.05
Pacific	-	-	-	-	-	-	-	-	-	-	-	-
Mexican Maya												
North America	1.36	1.27	1.24	1.24	1.30	1.15	1.19	1.22	1.17	1.29	1.22	0.06
Europe	0.16	0.17	0.16	0.20	0.16	0.15	0.14	0.14	0.11	0.01	0.18	-0.17
Pacific	0.00	-	-	-	-	-	-	-	-	-	-	-
Mexican Isthmus												
North America	-	0.03	0.04	0.03	0.01	0.02	0.02	-	-	0.03	-	-
Europe	0.01	0.03	0.01	0.00	0.00	0.01	0.01	0.02	0.00	0.18	-	-
Pacific	0.00	-	-	-	-	-	-	-	-	-	-	-
Russian Urals												
North America	0.12	0.13	0.09	0.16	0.16	0.05	0.11	0.18	0.21	0.10	0.19	-0.09
Europe	1.86	1.77	1.68	1.83	1.66	1.54	1.85	1.72	2.06	1.73	1.88	-0.15
Pacific	0.01	0.00	0.00	-	0.01	-	0.00	-	-	-	-	-
Nigerian Light[4]												
North America	0.80	0.90	0.79	0.79	0.78	0.72	0.96	0.86	0.70	0.84	0.65	0.19
Europe	0.28	0.35	0.33	0.27	0.39	0.37	0.23	0.18	0.22	0.28	0.21	0.07
Pacific	0.11	0.05	0.04	0.03	0.02	0.03	0.02	-	0.01	0.05	-	-
Nigerian Medium												
North America	0.23	0.17	0.17	0.17	0.16	0.17	0.24	0.35	0.17	0.08	0.16	-0.08
Europe	0.04	0.07	0.10	0.08	0.08	0.14	0.06	0.06	0.03	-	0.06	-
Pacific	0.01	0.01	0.00	-	0.01	-	0.02	0.03	-	-	-	-

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, Poland and the Slovak Republic.
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)

	2004	2005	2006	2Q2006	3Q2006	4Q2006	1Q2007	Mar-07	Apr-07	May-07	Year Earlier May-06	Year Earlier % change
Crude Oil												
North America	8431	8457	8156	8265	8686	7937	8051	8492	8189	8277	7556	10%
Europe	9478	9792	9771	9747	10158	9770	9379	8765	10005	9802	9755	0%
Pacific	6659	6801	6813	6508	6680	6674	6953	6936	6469	6139	6841	-10%
Total OECD	24569	25050	24740	24520	25524	24381	24382	24194	24662	24219	24771	-2%
LPG												
North America	24	18	14	8	12	28	16	19	14	16	9	76%
Europe	225	248	249	243	210	263	264	226	289	249	260	-4%
Pacific	541	527	579	576	595	497	565	630	581	596	581	3%
Total OECD	790	793	842	826	818	788	845	875	884	862	850	1%
Naphtha												
North America	99	115	62	49	64	96	33	14	35	34	78	-56%
Europe	282	273	312	277	304	314	307	229	258	220	424	-48%
Pacific	769	746	754	731	810	783	838	817	710	859	616	39%
Total OECD	1150	1133	1128	1057	1178	1193	1177	1060	1003	1113	1118	-1%
Gasoline[3]												
North America	794	1034	1148	1365	1166	944	924	986	1248	1473	1568	-6%
Europe	137	165	154	143	122	157	292	303	189	221	220	0%
Pacific	105	102	97	135	74	96	76	70	49	98	153	-36%
Total OECD	1035	1301	1399	1643	1363	1197	1293	1359	1486	1792	1941	-8%
Jet & Kerosene												
North America	101	173	152	191	203	130	178	210	221	186	227	-18%
Europe	293	375	375	382	398	407	331	356	371	440	353	25%
Pacific	77	66	71	39	43	76	49	23	29	44	48	-8%
Total OECD	471	614	598	612	644	612	558	589	621	670	628	7%
Gasoil/Diesel												
North America	123	143	170	173	181	116	130	161	156	121	285	-58%
Europe	751	845	960	926	901	937	893	806	676	596	888	-33%
Pacific	74	79	81	100	65	81	83	94	79	97	119	-18%
Total OECD	947	1067	1211	1199	1147	1134	1106	1060	912	814	1293	-37%
Heavy Fuel Oil												
North America	453	527	340	320	309	254	362	449	360	290	331	-12%
Europe	397	491	478	474	419	502	485	432	441	376	446	-16%
Pacific	76	85	92	105	76	65	79	75	95	96	110	-12%
Total OECD	926	1102	910	899	804	821	926	956	895	762	887	-14%
Other Products												
North America	872	1024	1106	1162	1298	991	1035	1107	1154	1308	1183	11%
Europe	676	781	897	855	922	915	833	776	878	786	854	-8%
Pacific	256	248	243	209	224	267	256	312	167	238	203	17%
Total OECD	1805	2052	2246	2225	2444	2173	2124	2195	2199	2332	2240	4%
Total Products												
North America	2466	3034	2993	3268	3233	2559	2677	2947	3187	3428	3681	-7%
Europe	2759	3177	3425	3299	3277	3495	3406	3128	3103	2888	3445	-16%
Pacific	1898	1852	1918	1894	1888	1865	1947	2020	1710	2029	1830	11%
Total OECD	7123	8063	8336	8461	8398	7919	8029	8095	8001	8345	8957	-7%
Total Oil												
North America	10897	11490	11149	11533	11919	10496	10727	11439	11376	11705	11856	-1%
Europe	12237	12969	13196	13046	13435	13265	12784	11894	13108	12690	13201	-4%
Pacific	8558	8654	8731	8402	8568	8539	8900	8956	8179	8168	8671	-6%
Total OECD	31692	33113	33075	32981	33922	32300	32412	32289	32663	32563	33728	-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

OIL MARKET REPORT CONTACTS

Editorial Enquiries

Editor — Lawrence Eagles
Head, Oil Industry & Markets Division
(+33) 0*1 40 57 65 90
e-mail: lawrence.eagles@iea.org

Demand — Eduardo Lopez
(+33) 0*1 40 57 65 93
e-mail: eduardo.lopez@iea.org

Supply — David Fyfe
(+33) 0*1 40 57 65 94
e-mail: david.fyfe@iea.org

Prices — Julius Walker
(+33) 0*1 40 57 65 22
e-mail: julius.walker@iea.org

Refining — David Martin
(+33) 0*1 40 57 65 95
e-mail: david.martin@iea.org

OECD Stocks/Trade — Toril Ekeland Bosoni
(+33) 0*1 40 57 66 36
e-mail: toril.bosoni@iea.org

Statistics/Freight/Trade — James Ryder
(+33) 0*1 40 57 66 18
e-mail: james.ryder@iea.org

Statistical Support/Refining — Miklós Bánkuti
(+33) 0*1 40 57 67 76
e-mail: miklos.bankuti@iea.org

Editorial Assistant — Anne Mayne
(+33) 0*1 40 57 65 96
e-mail: anne.mayne@iea.org

Fax: *(+33) 0*1 40 57 65 99/40 57 65 09*

* 0 only within France

Media Enquiries

Press Office — Gwyn Darling
(+33) 0*1 40 57 65 54
e-mail: ieapressoffice@iea.org

Subscription and Delivery Enquiries

Oil Market Report Subscriptions (Attn: Ms. Sandra Coleman)
International Energy Agency
BP 586-75726 PARIS Cedex 15, France

Tel. +33 (0) 1 40 57 65 57
Fax. +33 (0) 1 40 57 65 59
e-mail: sandra.coleman@iea.org

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 Report (MTOMR) Report and Annual Statistical Supplement* (current issue of the statistical supplement dated 10 August 2007), 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 (© 2007 Platts - a division of McGraw-Hill Inc.).

INTERNATIONAL ENERGY AGENCY/AGENCE INTERNATIONALE DE L'ENERGIE

OIL MARKET REPORT

A MONTHLY OIL MARKET AND STOCKS ASSESSMENT

www.oilmarketreport.org

INTERNATIONAL ENERGY AGENCY

AGENCE INTERNATIONALE DE L'ENERGIE

12 September 2007

HIGHLIGHTS

- **Benchmark crudes moved close to record highs in early September**, despite the economic uncertainty stemming from the US subprime market collapse. Falling stocks in August underscored higher prices and a widening backwardation, while seasonal hurricane fears intensified.
- **Global oil product demand has been slightly revised down to 85.9 mb/d in 2007** (+1.7% over 2006) and 88.0 mb/d in 2008 (+2.4%), reflecting weaker-than-anticipated demand in both June and July, largely as a result of high prices and poor weather in OECD countries. The outcome of the recent financial market turbulence remains unclear.
- **World oil supply fell by 430 kb/d to 84.6 mb/d in August**, on North Sea and Mexican outages, plus lower Iraqi exports. Forecast non-OPEC supply remains 50.0 mb/d in 2007 and 51.1 mb/d in 2008. Saudi Arabia underpins 660 kb/d of OPEC NGL growth next year. Risks to 2008's broad-based growth are biased towards the FSU, project delays and extended field outages.
- **OPEC August crude supply averaged 30.4 mb/d** as lower Iraqi exports offset higher Angolan and Nigerian output. Effective spare capacity remained below 3 mb/d. The forecast 'call on OPEC crude and stock change' is revised down by 0.2-0.3 mb/d but reaches at least 32.4 mb/d at end-2007 and in 2008 is 300-600 kb/d higher than in 2007. In Vienna, OPEC decided to raise supply by 500 kb/d from 1 November 2007.
- **Global refinery throughput increased by 0.8 mb/d in July** to 74.2 mb/d, 1.8 mb/d higher than the 2Q low. A summer peak of 74.9 mb/d in August was tempered by economic run cuts. Runs are seen falling in September and October as further scheduled maintenance is undertaken.
- **OECD industry stocks rose by 29.8 mb in July**. The rise was dominated by product stock builds as refinery runs reached seasonal peaks, while crude stocks rose a modest 2.0 mb. Total OECD forward demand cover remained steady from June at 54.4 days, but down from 55.1 days one year ago. Preliminary US, Japanese and EU-16 data for August show a net stock draw of 7.1 mb.

Next Issue: 11 October 2007

CONTENTS

LOOKING BEYOND SUBPRIME RISKS

The turmoil from the US subprime mortgage market remains at the heart of every musing on oil markets. The cost of credit has clearly risen and its availability has tightened – even some small and medium-sized oil independents are complaining that it is difficult to raise finance. Economic growth will probably suffer to some degree, conferring a downside risk to oil demand, but the impact is as yet very uncertain. But despite this, the oil price has continued to rise and the backwardation in crude futures is widening.

It is not yet clear to what extent the subprime turmoil will affect US GDP, let alone being able to quantify the associated impact on other countries. The cost of risk is likely to rise, but this is a cost relative to the price of risk-free lending, rather than an absolute cost, and so its economic impact will depend on the actions of monetary and fiscal authorities in the coming weeks and the speed with which derivatives losses can be quantified. For oil, the degree to which it affects the three key growth regions, North America, the Middle East or China will be paramount. Until a clearer path emerges, we have only made a modest adjustment to oil demand growth for the rest of this year and in 2008.

There are other, possibly more substantial unknowns, which could work both ways. Price effects for one. While recent weak preliminary US demand data appear to show some effects from recent high prices, caution is needed. It is dangerous to extrapolate too much from short-term shifts in primary demand that may only reflect stock shifts from wholesalers and retailers. True price effects require sustained increases in prices. Although oil prices have been rising throughout 2007 they have done so in a mirror copy of price action in 2006. But, if the crude price remains high, it will have a lasting impact on demand next year.

Weather risks too are high. Two category-five hurricanes in the Gulf of Mexico in quick succession have elevated the awareness of the potential for outages this year. Even though Hurricane Dean did not damage Mexican production facilities, the temporary shutdown and restart resulted in a 430 kb/d loss in total Gulf of Mexico output for August - much more than the 55 kb/d seasonal average allowed for in our assessments. This adjustment rises to 440 kb/d in September and 345 kb/d in October, the equivalent of two similar-sized precautionary shut-ins. With a bit of luck, there could be some upside to the supply forecasts, but clearly, a direct hit from a major hurricane could cause, as in 2005, a much greater level of damage.

But weather issues do not come to an end in October. Winter temperatures can have a significant impact on demand. We estimate that the exceptionally mild winter in the northern hemisphere trimmed demand by around 900 kb/d in 4Q06 and 1Q07. With our forecasts estimating a return to normal, there is clearly a downside risk. Similarly, a cold spell could have the opposite impact.

Other risks are harder to quantify. Geopolitical issues could swing either way, with output paths from Iraq, Iran and Nigeria particularly unclear. Data risks will only be resolved with time, and there is the omnipresent risk of unforeseen disruptions.

For the oil market, the spot price is set by near-term issues, which are clearly skewed to the upside, even if there are perhaps downward demand-side risks as we head into 2008. Falling crude stocks in the US and Japan in August show that it is stockholders who have become the marginal supplier of oil to the market. As such, with expectations of tighter crude supplies ahead, the price at which they are prepared to release those stocks rises. That situation will only change when total stocks are deemed sufficient to see out the winter.

DEMAND

Summary

- **Global oil product demand** has been slightly revised down to 85.9 mb/d in 2007 (+1.7% over 2006) and 88.0 mb/d in 2008 (+2.4%). Downward revisions to the second half of 2007 reflect weaker-than-anticipated data in June and July, particularly in the 'other products' category, which has been carried through the rest of the year. Mild weather and interfuel substitution have contributed to the fall in demand. Looking ahead, continued high prices may further dent demand.
- **The forecast also incorporates a preliminary adjustment of economic growth prospects in the United States.** This is based on the OECD's *Interim Assessment* published in early September, which lowered its 2007 outlook for the US economy amid concerns regarding the housing market, although the potential spill-over effects of the subprime crisis, which became particularly acute in August, are yet to be assessed. However, it is likely that credit conditions in the US and other developed countries will tighten. As such, we may further revise our 2008 forecast as events unfold.

Global Oil Demand (2006-2008)

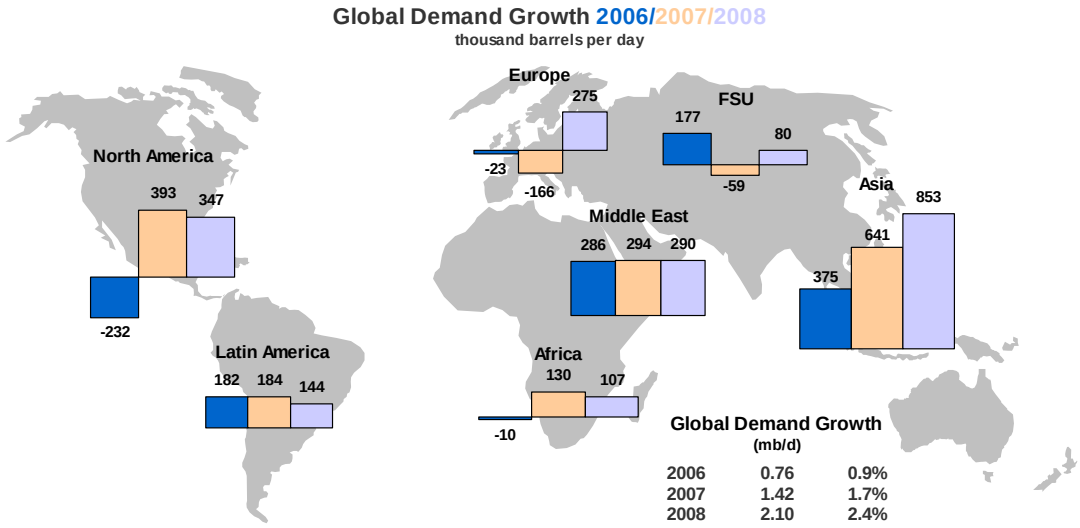
(million barrels per day)

	1Q06	2Q06	3Q06	4Q06	2006	1Q07	2Q07	3Q07	4Q07	2007	1Q08	2Q08	3Q08	4Q08	2008
Africa	3.0	3.0	2.9	2.9	2.9	3.1	3.1	3.0	3.1	3.1	3.2	3.2	3.1	3.2	3.2
Americas	30.3	30.4	30.8	30.7	30.6	31.0	31.0	31.3	31.4	31.1	31.5	31.5	31.8	31.8	31.6
Asia/Pacific	25.2	24.1	23.7	24.8	24.4	25.3	24.7	24.5	25.8	25.1	26.4	25.5	25.3	26.5	25.9
Europe	16.7	15.9	16.3	16.4	16.3	16.1	15.7	16.2	16.6	16.1	16.6	16.0	16.4	16.7	16.4
FSU	3.9	3.7	4.0	4.3	4.0	3.8	3.5	3.9	4.5	3.9	3.9	3.6	4.0	4.5	4.0
Middle East	6.2	6.2	6.5	6.3	6.3	6.4	6.6	6.8	6.5	6.6	6.7	6.8	7.1	6.8	6.9
World	**85.2**	**83.3**	**84.1**	**85.4**	**84.5**	**85.6**	**84.5**	**85.7**	**87.8**	**85.9**	**88.2**	**86.6**	**87.7**	**89.6**	**88.0**
Annual Chg (%)	0.4	0.8	1.0	1.4	0.9	0.5	1.5	1.9	2.8	1.7	3.0	2.5	2.3	2.0	2.4
Annual Chg (mb/d)	0.3	0.6	0.8	1.2	0.8	0.4	1.3	1.6	2.3	1.4	2.6	2.1	1.9	1.8	2.1
Changes from last month's report (mb/d)	-0.01	0.02	-0.01	-0.01	0.00	0.12	0.20	-0.41	-0.25	-0.09	-0.19	-0.02	-0.28	-0.16	-0.16

- **OECD oil product demand** has been revised downwards in both 2007 and 2008. Fuel oil and heating oil deliveries in June and July turned out to be weaker than expected, particularly in Europe and the Pacific, thus offsetting upward revisions in 1H07. OECD demand is now poised to increase by 0.4% in 2007 to 49.4 mb/d, and by 1.6% in 2008 to 50.2 mb/d. This forecast is based on the current economic outlook provided by major international institutions and on normal weather conditions during the forthcoming winter. However, it is open to revisions should the fallout of the subprime meltdown in the US prove to be more harmful than currently expected.
- **Non-OECD oil product demand** has remained virtually unchanged, as slight upward adjustments in China and the Middle East offset downward changes elsewhere. Overall, non-OECD demand is expected to reach 36.5 mb/d in 2007 (+3.5% on an annual basis) and 37.8 mb/d in 2008 (+3.6%). This relatively strong outlook continues to be supported by strong oil consumption in both China and the Middle East, which together account for over half of worldwide demand growth. As such, if subprime woes are limited purely to the OECD, global demand would likely remain robust.

OECD

Preliminary data indicate that total OECD inland deliveries (a measure of oil products supplied by refineries, pipelines and terminals) remained flat in July, compared with the same month in 2006. Demand weakness in both the Pacific (-2.6% year-on-year) and Europe (-1.2%) offset North America's gains (+1.6%). The weakness in OECD Europe demand continues to be largely related to lower-than-average deliveries of heating oil in several countries, notably Germany and France, where end-users normally replenish their tanks ahead of the forthcoming winter. In July, overall, Europe's heating oil deliveries plummeted by 9.8% on an annual basis. In addition, fuel oil demand contracted by 7.3% mostly because of



relatively subdued electricity demand; poor weather, notably in northern Europe, reduced the need for air-conditioning. In OECD Pacific, demand was dragged down by weak jet fuel/kerosene (-13.6%) and gasoline deliveries (-1.6%), particularly in Japan. Unseasonably cool summer conditions curbed intra-regional air travel, leisure driving and power demand. In OECD North America, by contrast, demand continued to be supported by transportation fuels, notably in the US (where the driving season was in full swing) and Mexico, and by warm weather conditions. Regional deliveries of gasoline and diesel increased by 1.7% and 12.2%, respectively (the jump in diesel, though, reflects the ongoing shift towards low-sulphur distillates).

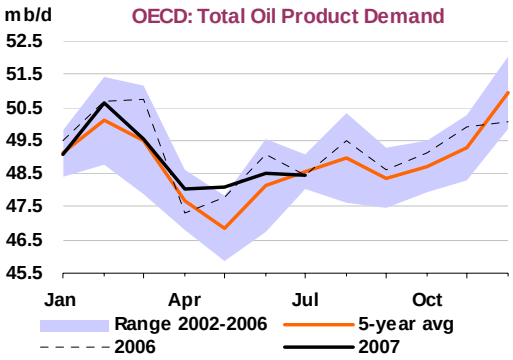
OECD Demand based on Adjusted Preliminary Submissions - July 2007

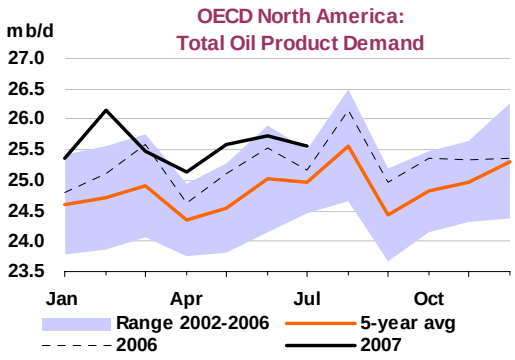
(million barrels per day)

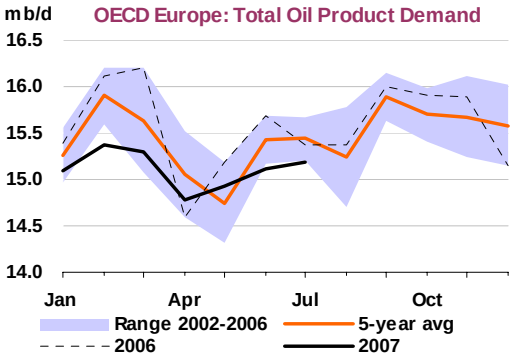
	Gasoline		Jet/Kerosene		Diesel		Other Gasoil		RFO		Other		Total Products	
	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa
OECD North America*	**11.28**	**1.7**	**1.94**	**-1.2**	**4.14**	**12.2**	**0.80**	**-30.6**	**1.32**	**12.5**	**6.07**	**-0.24**	**25.55**	**1.6**
US50	9.74	1.3	1.71	-1.6	3.64	13.5	0.36	-48.5	0.80	20.0	4.65	-1.7	20.90	1.2
Canada	0.74	1.3	0.12	-5.1	0.17	2.6	0.29	-5.8	0.13	-9.8	0.81	6.8	2.27	1.2
Mexico	0.72	6.5	0.07	13.7	0.27	5.0	0.12	5.0	0.30	9.3	0.55	2.4	2.03	5.7
OECD Europe	**2.63**	**-2.3**	**1.34**	**1.2**	**4.29**	**5.1**	**1.58**	**-9.8**	**1.67**	**-7.3**	**3.67**	**-1.1**	**15.18**	**-1.2**
Germany	0.53	-0.5	0.20	1.1	0.65	3.9	0.31	-32.3	0.18	3.5	0.64	4.1	2.51	-3.6
United Kingdom	0.42	-4.2	0.34	7.9	0.42	1.6	0.13	-10.3	0.08	8.0	0.36	-3.0	1.75	-0.4
France	0.25	-1.9	0.17	2.9	0.71	6.9	0.24	-11.9	0.11	-4.6	0.47	-1.3	1.95	0.1
Italy	0.31	-2.1	0.11	4.4	0.59	6.4	0.08	-0.6	0.23	-22.4	0.36	-0.6	1.68	-2.1
Spain	0.17	-4.9	0.13	-4.9	0.54	3.6	0.19	6.6	0.22	-2.1	0.35	-0.6	1.59	0.5
OECD Pacific	**1.60**	**-1.6**	**0.59**	**-13.6**	**1.16**	**1.2**	**0.45**	**-13.1**	**0.86**	**-3.1**	**3.05**	**-0.1**	**7.71**	**-2.6**
Japan	1.04	-4.5	0.34	-22.7	0.56	-10.6	0.35	-19.6	0.48	-9.1	1.79	-1.4	4.56	-7.6
Korea	0.17	7.0	0.12	3.1	0.27	33.3	0.10	23.2	0.36	5.2	1.04	2.2	2.05	7.3
Australia	0.34	5.6	0.10	1.1	0.29	5.8	0.00	100.9	0.02	6.0	0.20	2.2	0.95	4.5
OECD Total	**15.51**	**0.6**	**3.88**	**-2.6**	**9.58**	**7.5**	**2.83**	**-17.3**	**3.85**	**-0.3**	**12.79**	**-0.4**	**48.44**	**0.0**

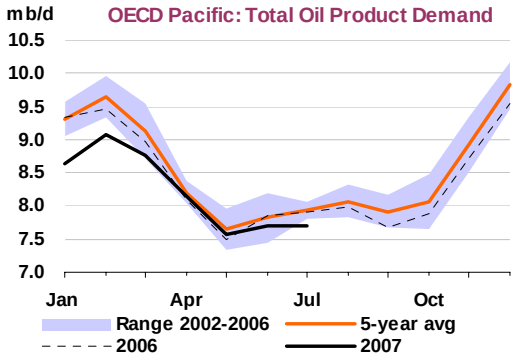
* Including US territories

Overall, OECD demand is forecast to reach 49.4 mb/d in 2007 (+0.4%) and 50.2 mb/d in 2008 (+1.6%), on the premise that temperatures during the forthcoming winter will be in line with the average of the previous ten years. North American demand, which accounts for over half of OECD demand, is poised to increase by +1.4% in 2008, while Europe and the Pacific are both also seen rebounding strongly (+1.7% and +2.3%). It is important to note, however, that we have made a slight downward adjustment with regards to the 2007 GDP forecasts of the main OECD economies given the weakness of the US housing market and based on the OECD's *Interim Assessment* (5 September 2007). However, as the nature and magnitude of the potential effects of the ongoing subprime crisis, which erupted in August, are unclear and still to be fully appraised (see *Subprime Consequences*), we believe it is premature to make more drastic downward adjustments. Nevertheless, we may continue to revise these figures based on forthcoming assessments of the major economic institutions – IMF and OECD – which are due respectively in late October and early December.









Total OECD Demand by Product

(million barrels per day)

	2006	2007	3Q06	4Q06	1Q07	2Q07	Apr 07	May 07	Jun 07*	Latest month vs. May 07	Latest month vs. Jun 06
LPG & Ethane	4.72	4.76	4.41	4.76	5.23	4.65	4.84	4.61	4.49	-0.12	-0.06
Naphtha	3.15	3.26	3.13	3.35	3.37	3.05	3.12	3.07	2.96	-0.11	0.02
Motor Gasoline	14.86	14.99	15.26	14.92	14.47	15.09	14.85	15.15	15.25	0.10	0.07
Jet & Kerosene	4.17	4.13	3.98	4.27	4.36	3.90	4.00	3.80	3.91	0.11	-0.09
Gas/Diesel Oil	13.24	13.29	12.91	13.59	13.56	12.64	12.59	12.49	12.83	0.33	-0.17
Residual Fuel Oil	4.03	4.01	3.82	3.84	4.19	3.88	3.81	3.90	3.93	0.03	0.14
Other Products	5.05	4.98	5.34	4.98	4.56	5.02	4.84	5.06	5.15	0.09	-0.50
Total Products	**49.23**	**49.41**	**48.85**	**49.71**	**49.73**	**48.22**	**48.06**	**48.09**	**48.52**	**0.44**	**-0.58**

* Latest official OECD submissions (MOS)

Subprime Consequences

As we have repeatedly noted, economic uncertainties, weather conditions, interfuel substitution and price volatility are major sources of uncertainty regarding short-term projections. This uncertainty has been dramatically brought to the fore by the ongoing problems in the US subprime mortgage market, which we have flagged over the past few months. The crisis gained momentum in August, leading to substantial volatility in the world's main stockmarkets. Financial risks, which had been sliced and sold to a wide spectrum of investors thanks to the past decade's financial innovations, have turned out to be more widely spread across the global financial system than previously thought, extending beyond mortgage companies to funds and banks as well.

Facing a potential crisis of confidence in the credit market, central banks in the US, Europe and Japan have injected massive amounts of liquidity into the system over the past few weeks. The Federal Reserve even lowered its discount rate (the price at which it lends to banking institutions) in August, while the European Central bank kept its key rate unchanged in early September, despite having strongly indicated – before the crisis erupted – that it would raise it given persistent inflationary pressures. Many observers also expect an imminent loosening of monetary conditions in the US (a cut in the federal funds rate) – although central bankers themselves appear to disagree on whether it is appropriate to lower interest rates to bail out investors and hence create a moral hazard.

Subprime Consequences (continued)

So far, the financial turmoil has apparently been contained; stockmarkets have somewhat rebounded, but volatility remains high and there are concerns that the 'real' economy may be affected. Previous financial crises have generally followed a similar script: 1) a period of rising asset values and growing leverage; 2) an unexpected surprise (in this case, subprime woes and mounting questions about the reliability of rating agencies and the quality of asset-backed commercial paper) that prompts a frantic search of safer investments; 3) a shift from fundamentals to investor behaviour (the 'herd' effect), which leads to massive liquidations ('deleveraging') and hence falling prices; 4) tighter credit conditions if fiscal and monetary policies are not accommodating, with banks facing growing uncertainties about potential and actual losses and becoming reluctant to lend to third parties or to each other; 5) job redundancies and falling private consumption; and 6) weaker or even negative oil demand growth.

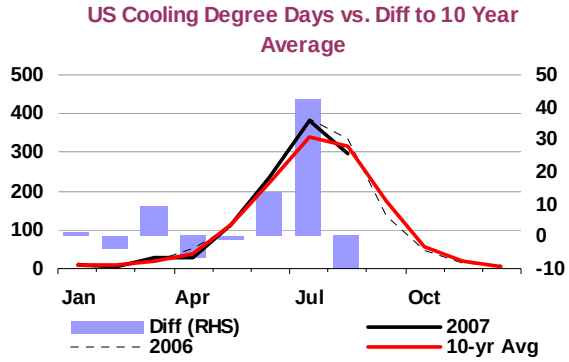
However, even though the downside risk to the current US economic outlook has arguably increased, it is unclear whether events will follow the above sequence. There is an ongoing, vigorous debate regarding the likely consequences of the subprime meltdown, not only for the US but for the world as a whole. Views range from the gloomy – the inevitability of a worldwide economic recession – to the moderately optimistic – a limited slowdown in the US and Europe, but continued strong economic growth worldwide of around 5% per year (instead of current forecasts of 5.2-5.5%).

- The massive liquidity injections by central banks (the *availability* of money), which capped the spike in short-term interest rates, may have helped to stabilise financial markets in the short-term and may prevent pullovers to other sectors and industries, thus reducing the need – or at least the magnitude – of future cuts in interest rates (the *price* of money). Nevertheless, credit may become more expensive, as investors will demand higher risk premia.
- The recent bout of global economic growth has not relied on corporate borrowing and purchases of assets that later proved worthless (as during the dotcom bubble, for example). In fact, corporate indebtedness in the main economies has sharply fallen over the past few years. However, although the present crisis has to a large extent spared equity markets *per se*, it may probably result in permanently higher borrowing costs across the economy.
- Potential losses in the subprime sector could be as high as $300 billion, according to some estimates. However, it is yet unclear how much of that will be borne by banks and whether such losses may erode banks' profitability. Bank losses are put at $100-$150 billion, but a better picture will emerge with the forthcoming publication of 3Q07 results. Apart from two small regional banks in Germany, no major US or international bank has announced crippling losses, but there are concerns that some big names have been hit.
- Even though a systemic banking crisis seems remote, house prices may stall or even fall as demand dries up given more expensive financing – although probably less so in the prime sector, which so far has been largely unscathed. Nevertheless, even if foreclosures and price falls are limited to the subprime market, they will likely negatively impact consumer confidence and hence spending. Refinancing will be more costly, especially of the so-called 'jumbo' loans, which are not covered by the federal government's mortgage arms (Fanny Mae and Freddie Mac) because of their large size.
- The crisis has not yet affected other major global centres of economic activity, namely emerging countries in Asia and the Middle East. This 'decoupling' is arguably related to their relatively less sophisticated financial systems (hence less able to spread risks), but also to strong domestic demand (in the Middle East, but less so in China and the rest of Asia). But even if a slowdown in US and in other major developed economies were to curb Chinese exports, China has arguably enough savings to induce a counter-cyclical fiscal stimulus in order to keep its economy growing.
- US government securities appear have become once again a safe heaven in the flight to quality – not only for private investors but for governments as well, notably in Asia (and especially China). This has lent some support to the dollar, and limits the risk of a sudden unwinding of global balance-of-payments imbalances.

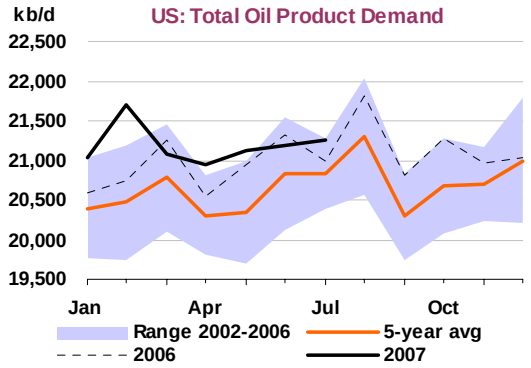
Overall, the evidence at this point suggests that the subprime crisis may not severely damage the US – and the global – economy. By the same token, even though we have slightly toned down the economic outlook of several developed economies based on the OECD's recent *Interim Assessment*, there are no indications that oil demand is poised to contract dramatically in the US – and neither in emerging economies, which account for the bulk of oil demand growth (notably China and the Middle East).

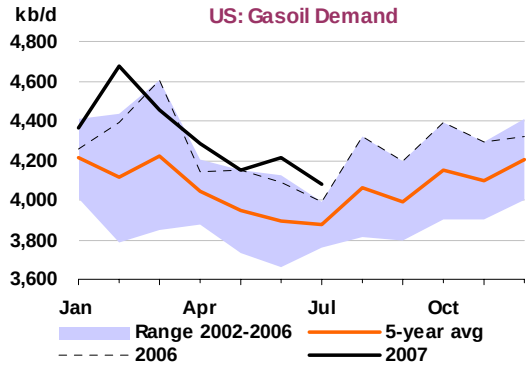
North America

Inland deliveries in the continental **United States** – a proxy of oil product demand – rose by 1.2% in July versus the same month in 2006, according to adjusted preliminary data. This strength resulted from buoyant transportation fuel demand. Gasoline deliveries rose by 1.3% as the driving season entered in full swing, helped by warm weather conditions (there were 43 more cooling-degree days or CDDs than the 10-year average).



Meanwhile, gasoil demand (diesel and other distillates) jumped by 2.4%, suggesting that economic activity continues to be resilient. It is worth noting that the phasing out of high-sulphur, non-road-transportation, rail and marine distillate (3,000 ppm) and its replacement by a lower-sulphur product (500 ppm) is proceeding apace (even earlier than mandated), while ultra-low sulphur, road-transportation diesel (ULSD) demand is reaching new records. Finally, fuel oil deliveries were also strong in July (+20.0%), as warm temperatures boosted power demand. Nevertheless, fuel oil's rebound has been limited by its relatively high price, which over the past few months has been higher on an energy-content basis than that of natural gas. Gas prices have been held down by abundant stocks and weak weather-driven demand.

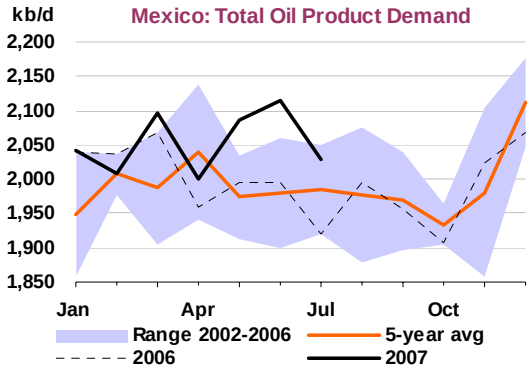


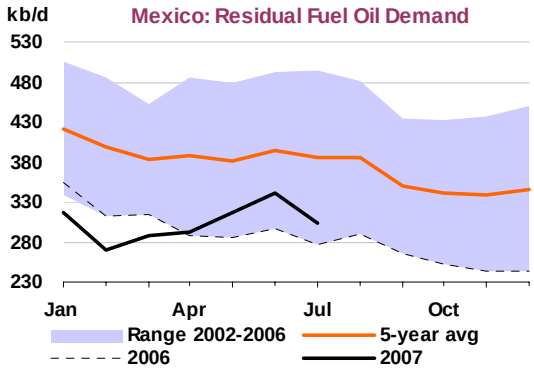


As noted, there is a risk that the spread of the housing market woes may affect credit conditions, eventually curb consumer spending and in the end take a toll on oil consumption. However, the EIA's preliminary assessment for the week ending on 31 August showed that US deliveries for gasoline and road diesel – which are highly dependent on economic conditions – remain in positive territory. Admittedly, the pace of gasoline growth is weaker than in the past, likely due to this summer's spikes in retail prices, but the dip in demand growth has been too brief to read anymore into it. The only fuel that has been contracting over the past few months is jet fuel/kerosene, but this seems mostly related to significant efficiency improvements and fuel-saving procedures in the airline industry. The corollary is that a fall in the number of passengers would probably not have a significant impact on jet fuel/kerosene demand, as was the case following the 2001 terrorist attacks. As such, until there are clearer indications of the country's economic outlook, we foresee US50 demand increasing by 1.5% to 21.2 mb/d in 2008 on the basis of current conditions and assuming normal temperatures during the forthcoming winter.

Mexican demand continued to soar; deliveries rose by +5.7% year-on-year in July, according to preliminary data – the third month in a row that overall demand increases at a pace of more than 4% per year. As in previous months, demand was driven by vigorous growth in transportation fuels: gasoline jumped by 6.5% on a yearly basis, jet/kerosene by 13.7% and diesel by 5%. This reflects strong economic growth, a rapidly expanding vehicle fleet and rising air travel. However, there are concerns that the

country's economic expansion could recede somewhat later this year and in 2008 if the economic woes in the US prove more important than currently expected, hence penalising Mexican imports. At this point, however, given the uncertainties surrounding the subprime meltdown, we believe it is premature to revise down our demand forecasts. As such, Mexican demand is currently poised to expand by +3.2% in 2007 to roughly 2.1 mb/d, slowing down slightly to +1.8% in 2008.





Another oil product that continues to feature buoyant growth since May, after almost two years of falling or stagnating consumption, is fuel oil. Deliveries rose by 9.3% year-on-year in July – following +14.9% in June – as a result of strong electricity demand fuelled by economic activity and growing air-conditioning needs, notably in northern Mexico, where temperatures can become very warm. In addition, fuel oil demand in July was probably also supported by the attack against several of Pemex's LPG, gasoline, crude and natural gas pipelines in west-central Mexico, which forced some large industries, such as carmakers, to find alternatives to natural gas to keep their operations running during the week-long outage. (At the time of writing, there were reports of another series of pipeline blasts in eastern Mexico, but information was sketchy.)

OECD North America Demand by Product
(million barrels per day)

	2006	2007	3Q06	4Q06	1Q07	2Q07	Apr 07	May 07	Jun 07*	Latest month vs. May 07	Latest month vs. Jun 06
LPG & Ethane	2.84	2.89	2.67	2.90	3.24	2.78	2.87	2.68	2.79	0.11	0.17
Naphtha	0.44	0.45	0.46	0.49	0.42	0.45	0.42	0.46	0.45	0.00	0.04
Motor Gasoline	10.72	10.88	10.99	10.77	10.53	10.94	10.69	11.01	11.10	0.09	0.14
Jet & Kerosene	1.91	1.90	1.94	1.89	1.88	1.89	1.90	1.86	1.92	0.05	-0.07
Gas/Diesel Oil	5.18	5.31	5.07	5.28	5.48	5.13	5.13	5.10	5.15	0.05	0.13
Residual Fuel Oil	1.20	1.29	1.16	1.09	1.37	1.27	1.20	1.30	1.31	0.01	0.19
Other Products	2.97	2.94	3.14	2.92	2.73	3.03	2.93	3.16	3.00	-0.17	-0.44
Total Products	**25.26**	**25.66**	**25.43**	**25.35**	**25.65**	**25.48**	**25.14**	**25.58**	**25.72**	**0.14**	**0.17**

* Latest official OECD submissions (MOS)

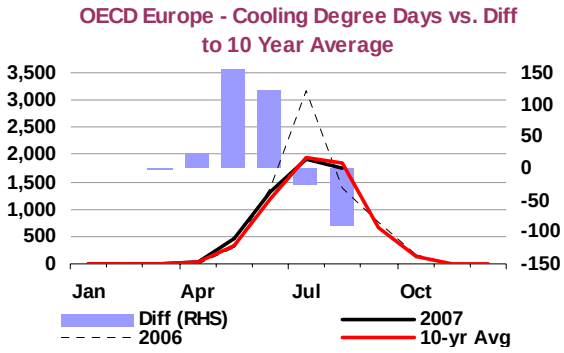
Meanwhile, President Calderón vetoed a biofuels bill that had been approved last April by Congress' Lower Chamber. The main motives invoked were the bill's limited scope, given its focus on sugar and corn (leaving aside other potential feedstocks), and its alleged lack of promotion of new technologies. But even if the veto is grounded on technical, rather than political reasons, the development of suitable infrastructure would be very costly, as we noted in earlier reports. In addition, it is unclear how a market in alternative energy sources may arise given the country's constitutional constraints, which dictate the state's energy monopoly.

Europe

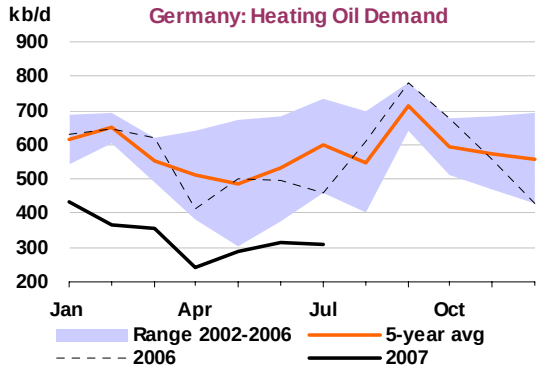
Official submissions of June data left total European demand unchanged since last month's report. Higher figures for France (+30kb/d), Germany (+66 kb/d) and Italy (+66 kb/d) were offset by lower deliveries in Switzerland (-56 kb/d), Turkey (-68 kb/d), and the UK (-72 kb/d). The stagnation in demand

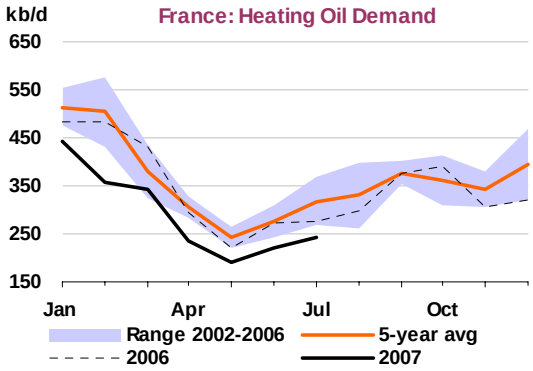
is very much related to heating and fuel oil. End-users seemingly continued drawing stocks or postponing the seasonal refilling of heating oil tanks as a result of high prices (deliveries of the fuel shrank by 9.8% on an annual basis). Moreover, the relatively poor weather, notably in northern Europe (there were almost 25 less CDDs than the 10-year average in the continent as a whole), also limited cooling and hence electricity needs; fuel oil deliveries contracted by 7.3% year-on-year. The weather is indeed becoming a swing factor that complicates forecasting; according some to meteorologists, as a result of global warming strong shifts to extreme conditions in any given region will likely become recurrent.

Oil product demand in **Germany** continued to be dragged down by weak heating oil deliveries in July. According to preliminary data, total oil product deliveries fell by 3.6% on a yearly basis, and those of heating oil were 32.3% lower. Excluding heating oil, demand for all other products actually *rose* by 2.6% on a yearly basis.



The timid recovery of the German heating oil market – the largest in the continent – that had been observed in June has apparently stalled: household stocks barely rose in July, from 55% to 56% of capacity. Consumer inventories have been trending well above historical levels this year, due to last winter's extremely mild temperatures. However, as the supply overhang is being eroded, consumers should start filling their tanks. Nevertheless, the filling pace will likely continue to depend on price fluctuations, as has been the case for the past few years.

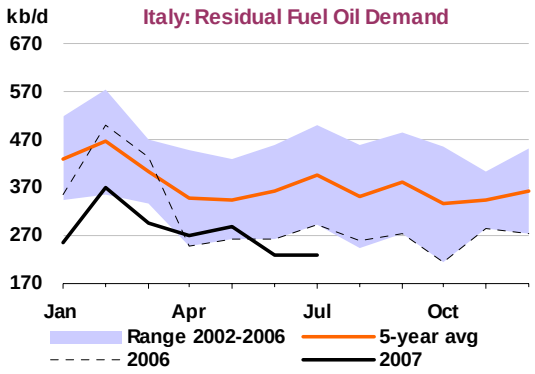


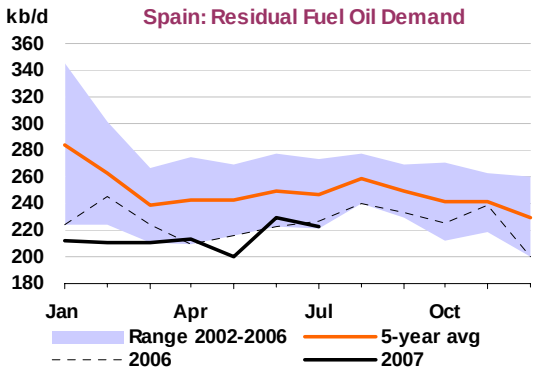


German demand for transportation fuels, meanwhile, posted robust growth, despite July's damp and cold weather. Diesel deliveries rose by 3.9% year-on-year, followed by jet fuel/kerosene with 1.1%.

In **France**, total deliveries rose slightly (+0.1% year-on-year) in July, despite the weakness of its heating oil market (deliveries plummeted by 11.9%, according to preliminary figures). Demand was supported by healthy jet fuel deliveries (+2.9%), heralding the start of the country's holiday season.

Further south, the picture was similar, with demand in **Italy** penalised by weak residual fuel oil deliveries in July. Total demand fell by 2.1% on a yearly basis, while fuel oil contracted by 22.4%. In **Spain**, meanwhile, total demand rose by 0.5%, on the back of strong gasoil/diesel deliveries (+4.3%). Nevertheless, as in Italy, Spanish fuel oil demand remained weak, despite very warm weather, notably in the south – however, the month as a whole posted lower-than-normal temperatures, thus reducing power demand. Aside from the weather, natural gas continues to make inroads in power generation in both countries, thus reducing the pressure on hydropower and fuel-oil fired sources.





Regarding projections, we have slightly revised down the 2007 economic outlook for France, based on the OECD's *Interim Assessment*. That country is now seen growing at 1.8% this year, instead of 2.2% previously. However, this reduced pace is expected to be somewhat compensated by the United Kingdom, whose forecast GDP expansion in 2007 has been significantly revised, from 2.9% to 3.1%. Further adjustments for 2007 may occur, as some uncertainties surrounding demand data for the **Netherlands** are dispelled. We are awaiting clarification regarding changes in the Dutch reporting system and the reclassification of some products, notably concerning petrochemicals. In the meantime, Dutch demand for LPG, naphtha and 'other products' has been revised so as to be kept unchanged from last year.

Overall, European demand has been slightly adjusted downwards, and is now expected to average 15.4 mb/d in 2007 (-1.2% versus 2006); meanwhile, under current economic assumptions and expectations of normal temperatures during the forthcoming winter, we foresee that demand will rise by 1.7% to 15.6 mb/d in 2008. However, Europe's economic outlook for this year and the next could be revised in future as the effects of the US subprime crisis are fully ascertained.

Don't Forget The Weather

Surely, short of a major economic slowdown, demand will fall anyway because of high oil prices? Albeit prices do indeed have an influence on demand, the often-made claim that last year's weakness in OECD demand (-0.9% year-on-year, equivalent to approximately 440 kb/d) was *solely* related to high crude oil prices ignores two factors that played a key role: weather conditions and interfuel substitution.

1. The extraordinarily mild temperatures that prevailed during the 2006-07 winter significantly curbed heating and fuel oil consumption in North America and Europe, and kerosene in the Pacific (where it is used for heating purposes). This occurrence, which was highly unusual, was largely behind the successive revisions to our demand forecasts in late 2006 and early 2007.

2. Non-transportation fuels were replaced by other energy sources, particularly natural gas. This, in turn, resulted from two main causes. On the one hand, environmental and logistical concerns, particularly in Europe and the Pacific, have encouraged a greater use of natural gas, thus leading to a gradual, structural decline of fuel oil demand. On the other hand, there was a circumstantial price effect, notably in North America, where many industrial users and utilities can switch away from gasoil or fuel oil to natural gas or coal, depending on the relative price of each fuel. In 2006, natural gas competed favourably with other oil-based fuels in terms of price, mostly because of mild weather conditions, reclaiming market share lost when gas prices spiked following the 2005 hurricanes.

The combination of both factors help explain why the consumption of LPG, naphtha, heating oil and fuel oil – which together account for roughly a third of total OECD demand – plummeted collectively by 5.2% in 2006 (-890 kb/d), thus contributing to a drag-down of total demand. Although some of the structural gains made by natural gas are likely to prevail, demand for some of these products is likely to bounce back. Indeed, assuming normal weather conditions in the forthcoming winter, we would expect a rebound of heating oil demand, notably in large consuming countries such as Germany or France. Summer cooling demand in the US has already prompted a resurgence in fuel oil demand, suggesting that natural gas substitution has reached a technical limit. By the same token, a cold winter would likely mean higher natural gas prices in North America, leading to further interfuel substitution back into fuel oil.

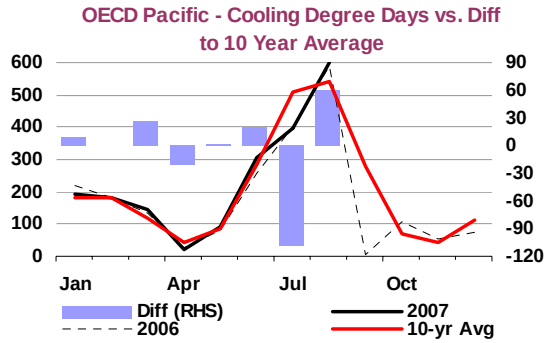
OECD Europe Demand by Product
(million barrels per day)

	2006	2007	3Q06	4Q06	1Q07	2Q07	Apr 07	May 07	Jun 07*	Latest month vs. May 07	Latest month vs. Jun 06
LPG & Ethane	0.96	0.95	0.84	0.91	1.01	0.95	1.00	1.03	0.83	-0.20	-0.19
Naphtha	1.11	1.13	1.07	1.14	1.21	1.04	1.05	1.06	1.01	-0.06	-0.02
Motor Gasoline	2.57	2.53	2.66	2.55	2.41	2.61	2.61	2.60	2.62	0.02	-0.04
Jet & Kerosene	1.28	1.29	1.37	1.28	1.23	1.28	1.23	1.28	1.33	0.06	-0.03
Gas/Diesel Oil	6.24	6.17	6.15	6.43	6.23	5.76	5.67	5.71	5.90	0.20	-0.20
Residual Fuel Oil	1.85	1.76	1.77	1.78	1.83	1.72	1.71	1.72	1.73	0.01	-0.05
Other Products	1.55	1.55	1.71	1.56	1.34	1.58	1.51	1.53	1.69	0.15	-0.05
Total Products	**15.56**	**15.38**	**15.57**	**15.64**	**15.25**	**14.94**	**14.78**	**14.93**	**15.11**	**0.18**	**-0.58**

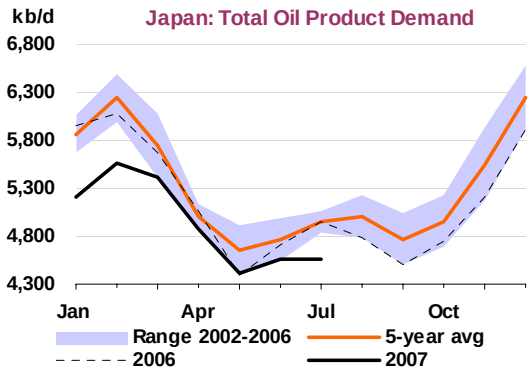
* Latest official OECD submissions (MOS)

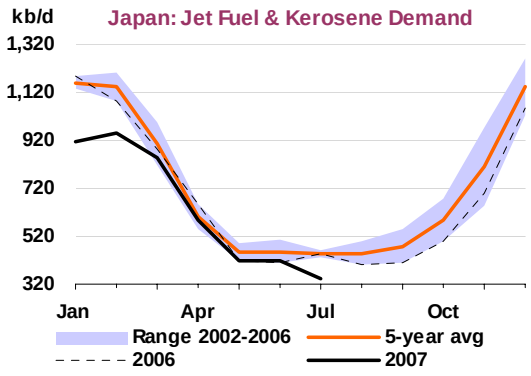
Pacific

In July, according to preliminary data, oil product demand in the Pacific declined by 2.6%, compared with the same month in the previous year. Overall demand was curbed mostly by weak deliveries in all product categories bar naphtha (+1.0% year-on-year), diesel (+1.2%) and 'other products' (+9.5%). Thus, LPG deliveries declined by 6.8%, gasoline by 1.6%, jet fuel/kerosene by 13.6% and residual fuel by 3.1%. The largest product demand contractions occurred in Japan, and were arguably related to poor summer conditions, which curbed air travel, leisure driving and power demand. Indeed, there were almost 109 less CDDs than normal in July.

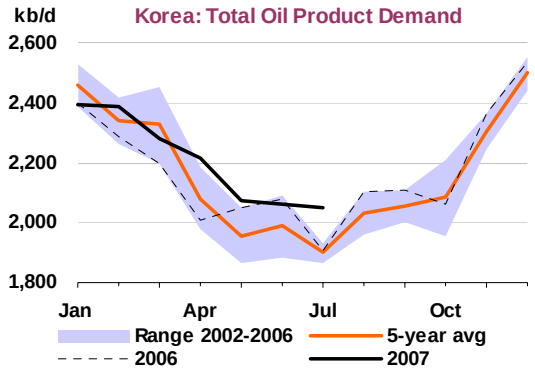


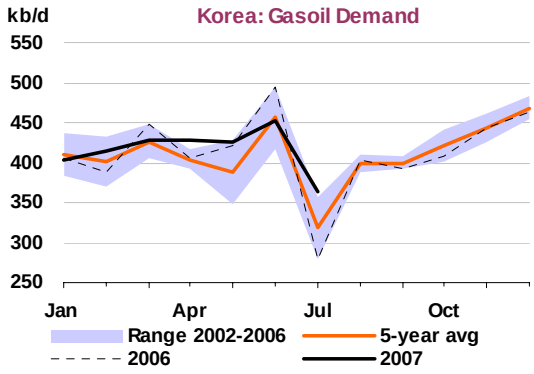
In **Japan**, oil product demand contracted by 7.6% on an annual basis in July, according to preliminary data. All products bar crude for power generation (+13.2%, included in the 'other products' category) fell. The continuing decline in the country's demand is largely structural (notably regarding transportation fuels, as the population ages and drivers turn to smaller, more efficient cars). However, July's fall but was also weather-related (conditions were poor compared with previous years and had a negative impact on leisure travel) and price-biased (retail gasoline prices have almost reached record levels over the past few months). As such, total demand was well below its five-year average.





In **Korea**, preliminary data indicate that total oil product demand soared by 7.3% year-on-year in July, mostly on strong gasoil and residual fuel oil deliveries (+30.4% and 5.2%, respectively). The strength of gasoil (diesel and other distillates) is probably indicative of a strong stock build ahead of the 7.5% diesel fuel tax hike, which kicked in on 23 July (rather than 1 July, as in 2006). Meanwhile, naphtha deliveries continued to race ahead (+6.8%), as new units are added or expanded, or come back from maintenance. In





late June, for example, the country's largest ethylene producer, Yeochun Naphtha Cracking Centre (YNCC), came back from a month-long maintenance, while Samsung Total is reportedly using more naphtha for its cracker, whose expansion was completed in early June.

OECD Pacific Demand by Product
(million barrels per day)

	2006	2007	3Q06	4Q06	1Q07	2Q07	Apr 07	May 07	Jun 07*	Latest month vs. May 07	Latest month vs. Jun 06
LPG & Ethane	0.92	0.92	0.91	0.94	0.97	0.92	0.98	0.90	0.88	-0.03	-0.04
Naphtha	1.60	1.68	1.59	1.72	1.75	1.57	1.65	1.55	1.50	-0.05	0.00
Motor Gasoline	1.57	1.58	1.61	1.60	1.53	1.54	1.55	1.54	1.52	-0.01	-0.02
Jet & Kerosene	0.98	0.95	0.67	1.10	1.25	0.73	0.87	0.66	0.66	0.00	0.01
Gas/Diesel Oil	1.83	1.81	1.69	1.88	1.85	1.75	1.79	1.68	1.77	0.09	-0.11
Residual Fuel Oil	0.98	0.96	0.89	0.97	0.99	0.89	0.90	0.88	0.88	0.01	0.00
Other Products	0.52	0.49	0.49	0.50	0.49	0.41	0.40	0.36	0.47	0.11	-0.02
Total Products	**8.40**	**8.38**	**7.85**	**8.71**	**8.83**	**7.80**	**8.15**	**7.58**	**7.69**	**0.12**	**-0.17**

* Latest official OECD submissions (MOS)

Our outlook for 2008 demand in OECD Pacific remains roughly unchanged at 8.6 mb/d (+2.3% on a yearly basis). As with other OECD areas, it should again be emphasised that this forecast relies on current economic barometers – which may be revised in light of the subprime financial turmoil – and on normal winter temperatures.

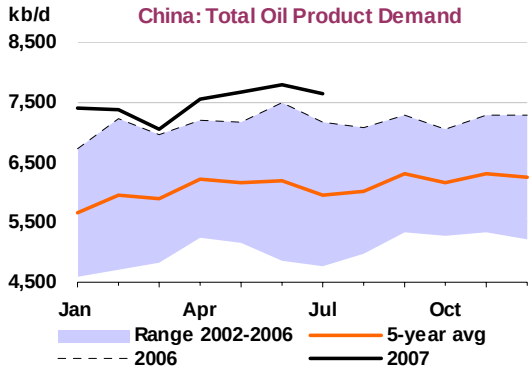
Non-OECD

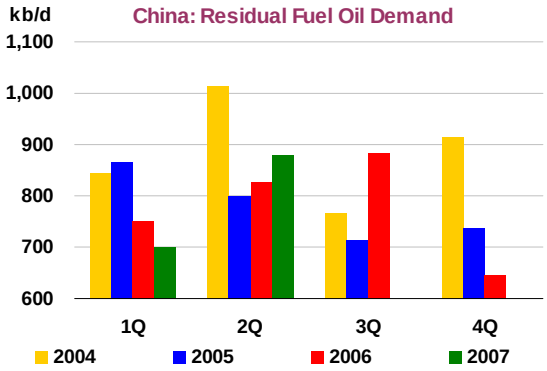
China

In July, China's apparent demand (defined as refinery output plus net oil product imports, adjusted for fuel oil and direct crude burning, smuggling and stock changes) rose by an estimated 6.5% year-on-year, according to preliminary data. The main driver was the start of the holiday season, with transportation fuels rising sharply: demand for jet fuel/kerosene soared by 32.9%, followed by gasoline (+3.5%). Gasoil demand (which includes diesel and other distillates) was also buoyant (+5.8%), despite the beginning of the rainy season, which tends to slow down agricultural and construction activities. Naphtha demand growth, meanwhile, slowed down slightly (+4.3% year-on-year, instead of the double-digit pace seen in the previous two months) as demand for ethylene softened, possibly due to cracker maintenance. LPG demand contracted by 3.8% as temperatures rose.

Residual fuel oil consumption rebounded in July (+3.1% on a yearly basis), after a sharp fall in June (-5.5%), and more generally, a pattern of continued weakness since late 2006. The rise is probably due to the halving of the fuel oil import tax since 1 June (to 3%); imports, however, are reportedly limited to higher-spec fuel oil. As indicated in previous reports, fuel oil import prices have soared, prompted both by higher crude prices and lower availability of fuel oil, as Middle Eastern countries use more for power generation.

More interestingly, fuel oil demand is facing a structural and geographical shift. In southern Guangdong province, the supply of liquefied natural gas (LNG) – which began with the arrival of the first cargo ever in May 2006 – has been gradually displacing residual fuel oil. As such, fuel oil shipments to the port of Huangpu (near Guangzhou) have dropped by some 45% in 1H07 (compared with the same period in the previous year). Only, a few oil-fired power plants and 'teapot' refineries continue to use fuel oil, although high prices, as noted, have become a deterrent. Meanwhile, fuel oil shipments to the port of Qingdao, in eastern Shandong province, have risen by about 51% in 1H07, mostly to feed local teapots.





These changing patterns may explain the sudden interest by the central government to survey the number, size and capabilities of teapot refineries. On September 9, the National Development and Reform Commission (NDRC) reportedly decreed that state-owned companies and regional governments will have ten days to provide such information. The data, if made public, could greatly contribute to enhancing the understanding of China's oil demand. The calculations of Chinese apparent demand tend to differ significantly, in part due to diverging estimates of the size of the teapot sector (which range between 500 kb/d to as much as 1.6 mb/d, with the IEA assuming 1.0 mb/d).

China Demand by Product
(thousand barrels per day)

	Demand			Annual Chg (kb/d)		Annual Chg (%)	
	2005	2006	2007	2006	2007	2006	2007
LPG & Ethane	650	633	621	-17	-13	-2.6	-2.0
Naphtha	707	826	905	119	80	16.8	9.6
Motor Gasoline	1,131	1,170	1,206	39	36	3.4	3.1
Jet & Kerosene	246	280	302	34	23	13.8	8.1
Gas/Diesel Oil	2,239	2,338	2,483	99	145	4.4	6.2
Residual Fuel Oil	778	776	800	-2	24	-0.2	3.1
Other Products	943	1,135	1,262	192	127	20.3	11.2
Total Products	**6,693**	**7,157**	**7,580**	**464**	**422**	**6.9**	**5.9**

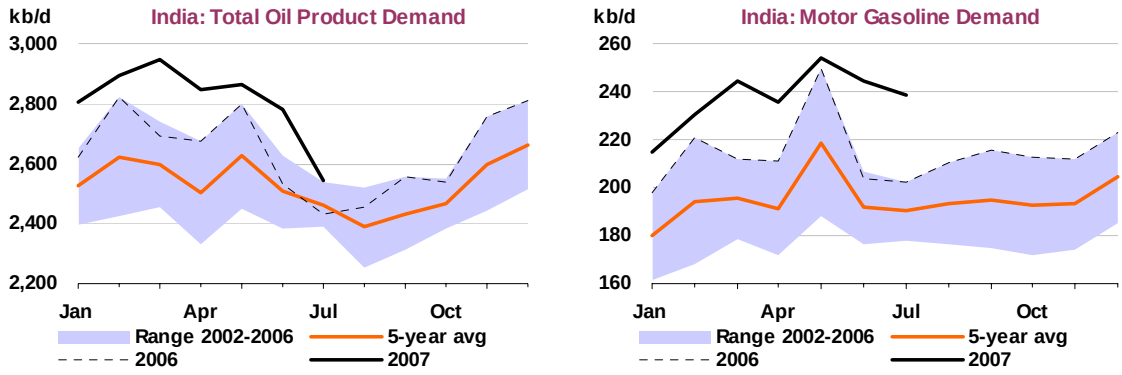
Our forecast of total Chinese oil product demand remains virtually unchanged, despite minor upward revisions to 2Q07 and 3Q07 estimates. Demand is expected to increase by 5.9% in 2007, to 7.6 mb/d, and by 5.7% in 2008, to 8.0 mb/d, on the premise of continued strong economic growth. As argued earlier, at this point it is difficult to discern the effects that China may experience from the ongoing financial turmoil in developed countries.

Other Non-OECD

In July, according to preliminary data, oil product sales in **India** – a proxy of demand – increased by 4.8% on a yearly basis, pulled up by continued buoyant growth in LPG (+9.3%), gasoline (+17.8%) and gasoil (+14.2%) demand. The strength of gasoline sales is directly related to the country's rising vehicle fleet, which is expanding at some 15% per year and is thus expected to exceed 2 million vehicles by the end of the decade, compared with 1.3 million in 2006.

By contrast, 'other products' (which include bitumen, lubricants, etc.) fell again by 17% – suggesting statistical glitches that over the past few months have become a recurrent pattern of preliminary figures, which appear to underestimate actual demand. June's total oil product demand growth has been revised up to +9.8%, instead of +6.2% as previously reported, with the largest adjustment again in the 'other products' category. Naphtha demand, meanwhile, fell for the fourth consecutive month (-12.7%), suggesting that natural gas supplies are steadily growing. Despite these revisions, India's oil demand forecast remains largely unchanged when compared with last month's report. Total oil product demand is expected to rise by 4.3% in 2007 to almost 2.8 mb/d, but growth should slow down to 2.3% in 2008 (2.8 mb/d), given the resumption of naphtha's structural decline.

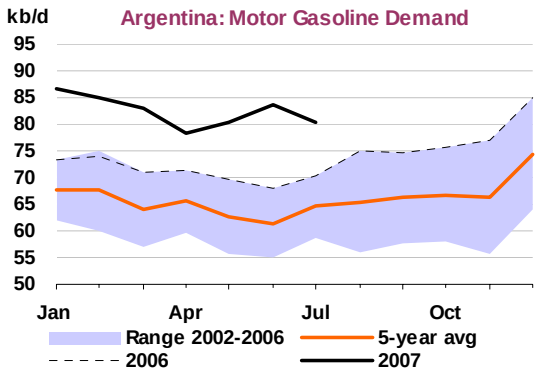
Nevertheless, the outlook of India's domestic natural gas market is still somewhat blurred, as several key pricing issues remain unsolved. One concerns the dual pricing system currently in place – whereby gas from state-owned ONGC and Oil India is sold at subsidised prices, while gas from private companies is sold at much higher market prices – with the local NOCs complaining of continuing financial losses. Another relates to the price – which must be approved by the government – at which Reliance Industries (RIL) plans to sell gas from its D6 field in the Krishna Godavari basin; the decision has been put on hold largely because of policy differences within the government coalition (for example, power and fertiliser companies, which in turn must sell their output at capped prices, have loudly complained about RIL's proposed price). Should it continue to linger on, the dispute will not only likely delay D6's development but also deter other players. Meanwhile, India finds itself in the paradoxical situation of facing electricity shortages despite having built several major gas-fired power plants, notably in Andhra Pradesh state, that currently do not have access to the fuel.

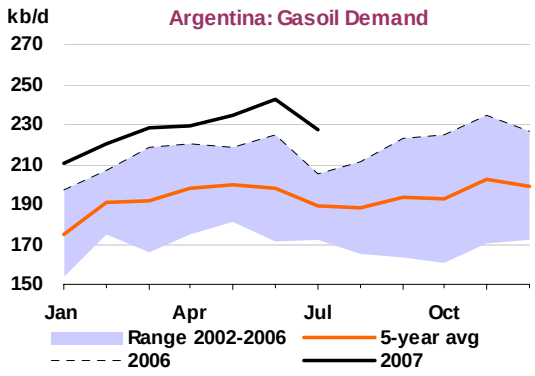


In **Argentina**, the saga surrounding mounting shortages of gasoil and natural gas has taken a new twist. In early August, the Environment Ministry decreed the preventive closure of Shell's 100,000 b/d refinery in the Dock Sud canal, on the grounds of serious pollution as well as unauthorized use of water from the Rio de la Plata. Dock Sud, an industrial zone on the outskirts of Buenos Aires, is indeed severely polluted, but this problem dates back several decades. The move appears to signal an escalation of an ongoing dispute between the government and the company. In March 2005, Shell tried to raise its retail prices, but President Néstor Kirchner himself called for a consumer boycott against the company. Since last year, moreover, Shell has been repeatedly accused of failing to supply enough diesel to its service stations – allegedly to export its production instead – and has been threatened with huge fines. Company executives also face the threat of arrest.

However, as we have noted in earlier reports, the shortages are essentially related to capped domestic retail prices. As the economy has recovered from the country's meltdown of 2002, oil product consumption, particularly of gasoline and gasoil, has soared and shortages have ensued. The government, reluctant to liberalise retail prices for political reasons but anxious to ensure sufficient

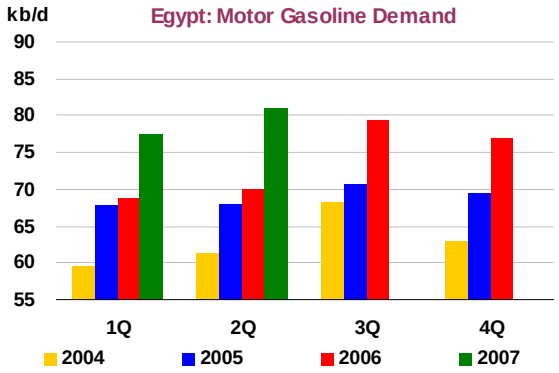
supplies because the shortages are disrupting key economic areas, has instead put strong pressure on private companies on the basis of a resurrected Supply Law, originally enacted in 1974.

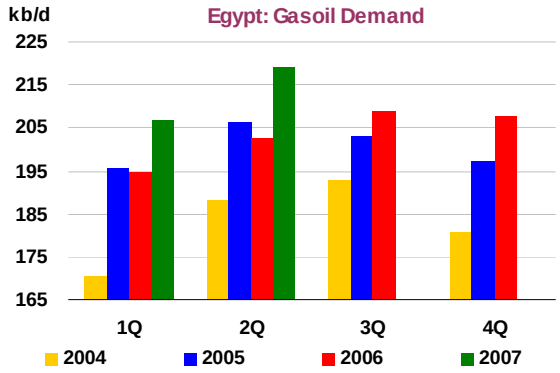




Shell – which accounts for around 12% of the country's fuel production – has been forced to declare *force majeure* on fuel deliveries to service stations following the refinery closure. In addition, another major private player – ExxonMobil – is reportedly considering divesting its downstream assets in Argentina (branded as Esso, with a similar share of fuel sales as Shell). An easing of tensions, though, may be in sight: in early September the Environment Ministry said that Shell's refinery could reopen before the end of the month, provided that a clean-up plan – to be presented by the company – is accepted by the government.

Rising international prices are putting pressure on administered price schemes in yet another country: **Egypt**. Seeking to reduce its budget deficit (estimated at 7% of GDP in fiscal 2006), the government has announced that it will phase out energy subsidies over the next three years, hoping to save some $2.6 billion over that period. It is unclear, however, whether the move will extend to gasoline and gasoil – which together account for roughly 45% of total oil product demand – or only be limited to industrial fuels (notably natural gas) and electricity.





Indeed, the government had been generally reluctant to raise transportation fuel prices for fear of sparking social unrest, but has been forced to cave in as a result of mounting international oil prices. The price of gasoline, for example, remained unchanged from 1993 to 2006 – when it was increased by 30%. Meanwhile, the price of gasoil – the fuel of choice for trucks and private minibuses – was also static from almost a decade – but doubled in December 2004 and increased again by 25% in July 2006. Still, prices remain low by international standards (gasoline costs about 23 cents per litre, and gasoil some 13 cents per litre). Coupled with strong economic growth, this has unsurprisingly stimulated the demand for both fuels (gasoline consumption is expected to soar by some 11% in 2007 when compared with 2006, while gasoil demand is forecast to jump by almost 6% this year).

The gasoline rationing scheme in **Iran**, which was launched in June, will probably only reduce the country's gasoline demand by about 10% at best, rather than earlier official claims of a 30% reduction. The government continues prevaricating and thus postponing the day when consumers will face the full brunt of rationing. On the one hand, the price for gasoline purchases in excess of the quotas, due to be announced in September, has not yet been set. Some officials have hinted that it could be as high as 6,000 rials (about 72 cents or six times as high as subsidized rations), only to be disavowed by other government sources. On the other hand, in late August the government unexpectedly raised the quota by 100 litres (equivalent to one month), allegedly to allow Iranians to travel as the holiday season began. Meanwhile, the rationing scheme appears to be boosting, as expected, a flourishing black market: taxi fares in Tehran have reportedly soared, since many drivers are finding it more profitable to sell their quota rather than work – thus sharply reducing the availability of cabs.

SUPPLY

Summary

- **World oil supply** in August fell by 430 kb/d to 84.6 mb/d, as hurricane outages in Mexico and scheduled and unscheduled maintenance in the North Sea augmented an Iraqi-derived drop in OPEC crude supply. Global supply has been running below year-ago levels since June.

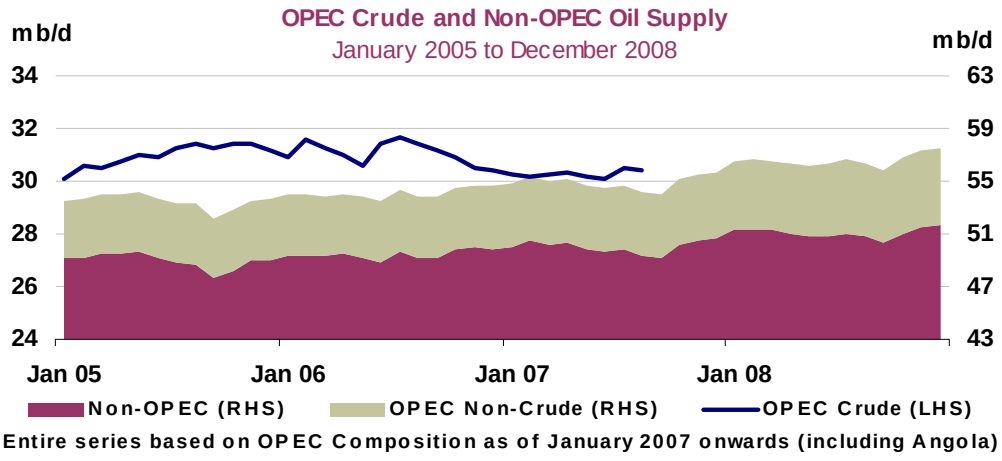
- **Non-OPEC production** estimates for 2007 are unchanged at 50.0 mb/d but are revised up modestly to 51.1 mb/d for 2008. Higher baseline Canadian and Mexican supply carries through the forecast, while Azerbaijan and Malaysia also see positive adjustments for 2008. A temporary lull in non-OPEC growth in 3Q07 reverts to 0.5 mb/d yearly growth in 4Q07 and around 1.0 mb/d throughout 2008. Russia, Azerbaijan, Kazakhstan, Brazil, Sudan, China, Malaysia, Australia, Canada's oilsands and the US GOM drive 2008's expansion. OPEC NGL growth also accelerates next year, driven by Saudi Arabia.

- **Russia and the Caspian states** account for 80% of 2007's non-OPEC growth and 45% of the 2008 total. But growth here, as elsewhere, is risk-prone. Speculation surrounds Russia's largest producer Rosneft's ability to finance expansion, Kazakhstan's late-decade 1.5 mb/d Kashagan project is temporarily stalled and rebel threats against the BTC pipeline in Turkey, if realised, could stem Azerbaijan's growth.

- **Recent analyses of upstream activity levels** point to strong recent capital expenditure growth but limited results in terms of reserve replacement, at least among IOCs. Exploration activity is increasing, but access to reserves remains a problem. Tight labour, raw materials and equipment markets could persist into the next decade, as could the risks of project delays and extended maintenance stoppages.

- **August OPEC crude supply** averaged 30.4 mb/d, some 80 kb/d lower than in July. Iraq (-230 kb/d) and Iran (-50 kb/d) saw lower export liftings, and thus weaker implied supply, in August, while Angola and Nigeria collectively pushed their supplies higher by a combined 120 kb/d. Individual changes in output from other producers were minor. OPEC effective spare capacity remains below 3 mb/d.

- **The 'call on OPEC crude and stock change'** is trimmed by 0.2-0.3 mb/d for the second half of 2007 and for 2008, largely on the basis of demand-side adjustments. It nonetheless rises to at least 32.4 mb/d by 4Q07. The average 2008 call increases by 450 kb/d compared with 2007.



All world oil supply figures for August discussed in this report are IEA estimates. Estimates for OPEC countries, Alaska, Kazakhstan 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. This totals -410 kb/d for non-OPEC as a whole, with downward adjustment focused in the OECD.

OPEC

August OPEC crude supply averaged 30.4 mb/d, some 80 kb/d lower than in July. Iraq (-230 kb/d) and Iran (-50 kb/d) saw lower export liftings, and thus weaker implied supply, while Angola and Nigeria collectively pushed their supplies higher by 120 kb/d. Individual changes in output from other producers were more minor. Turning to the OPEC-10 however, there are some signs of higher supply, with July revised up by 120 kb/d to 26.75 mb/d and August rising by a further 85 kb/d. Superficially this may suggest a slackening of compliance from cuts put in place from last November. These had seen output for OPEC-10 output hit a low of 26.57 mb/d in May, although that low level, and August's stronger 26.8 mb/d, were both partly the result of rebel activity in the Niger Delta, and subsequent recovery, rather than OPEC target considerations.

STOP PRESS

145th Ordinary Meeting of the OPEC Conference, 11 September 2007, Vienna, Austria

OPEC Ministers concluded their meeting on 11 September with an agreement that the OPEC-10 (excluding Angola and Iraq) would raise supplies to the market by 500 kb/d, effective 1 November 2007. No individual production allocations were mentioned, but comments from OPEC officials after the release of the official communiqué suggested that increases will be on top of current production. Tight US product markets, a shift of market structure into backwardation and the need to ensure adequate winter supplies were cited as justifying the increase. The communiqué said that OPEC will continue to monitor the supply/demand situation over coming months and affirmed that an Extraordinary Meeting will be held to reassess the market situation on 5 December 2007 in Abu Dhabi.

OPEC sustainable production capacity remains little-changed at 34.2 mb/d, with baseload decline marginally lowering Nigerian capacity, but this is countered by modest rises for Libya and Qatar. Capacity is expected to rise to 34.5 mb/d by the end of this year, and by a more substantial 1.3 mb/d during 2008 (attaining 35.8 mb/d by end-year). Angola, Saudi Arabia and Qatar underpin this year's capacity growth, with Saudi Arabia, Angola, Kuwait and the UAE responsible for the bulk of 2008's increase. As noted before, if OPEC production tracks the expected 'call on OPEC crude and stock change' through 4Q07, spare capacity is likely to temporarily decline from effective levels around 2.7 mb/d now.

Iraq Highlighting Plans for Increased Export Capacity

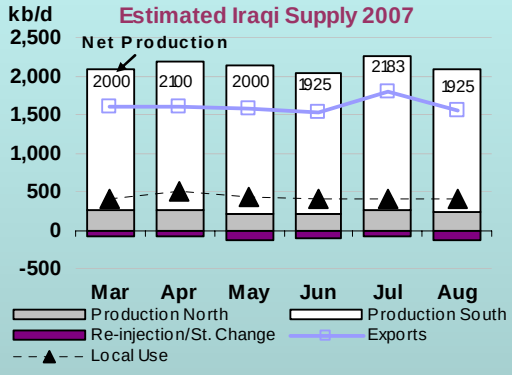
While foreign upstream investment in Iraq awaits the passing of a long-delayed hydrocarbon law, Iraqi officials have again outlined plans for raising production to 4.0 mb/d and a corresponding goal to boost crude exports. This report previously noted an inability to secure consistent offtake by refineries and export pipelines as the key *short-term* impediment to raising Iraqi supply consistently above 2.0 mb/d. While July supply hit a three year peak of 2.18 mb/d, renewed pipeline outages saw output dip in August to 1.97 mb/d. Power outages curtailed production and low stocks precluded a repeat of July's 100 kb/d of Ceyhan exports. Southern exports from Basrah and Khor al-Amaya fell from 1.68 mb/d in July to 1.56 mb/d in August, and refineries are still running at less than 60% of their 700 kb/d capacity. So what are the options for improved off-take which could drag Iraqi supply higher once again?

In the past two years, **Kirkuk-Ceyhan pipeline** outages have restricted average exports to 35 kb/d, versus notional capacity of 500 kb/d. Pre-war some 900 kb/d was exported via Ceyhan, while original design capacity of the pipelines was 1.7 mb/d. A new 500 kb/d section of pipeline between Kirkuk and Baiji has been completed, and is reportedly more heavily guarded, potentially boosting northbound exports and deliveries to the 300 kb/d Baiji refinery. Moreover, crude in storage at Ceyhan stood at 6 mb in the second week of September, ahead of a tender which should add 5 mb, or 165 kb/d, to this month's Iraqi exports. Time will tell if a sustained security improvement has occurred on this route, though there are anecdotal reports that attacks have eased and recent outages have tended to be more technical in nature.

Iraqi Supply Capacity based on Offtake

(thousand barrels per day)

	Current Effective	Mid-Term Potential
Exports via:		
Ceyhan	<100	500
Basrah	1800	2000
Syria	10	300
Jordan	-	100
Basrah-Abadan	-	200
Domestic Crude Use	500	800
	2400	**3900**



The core of Iraq's export infrastructure recently has been the southern tanker terminals at **Basrah and Khor al-Amaya (KAA),** with combined capacity of 1.8 mb/d. Expansion here might be limited to an extra 0.2 mb/d from KAA unless extra storage capacity above prevailing 2 mb levels is built. However, concerns remain over a potential escalation in insurgent activity in the south, an area to date immune from the export disruptions elsewhere. The Oil Minister in August said that construction could begin soon on a crude pipeline from **Basrah to Abadan in Iran**. An initial 100-200 kb/d could flow through the 350 kb/d line within six months, with Iraq receiving refined products in return.

Jordan's Energy Ministry recently disclosed that Iraqi crude supplies will recommence under the terms of an agreement signed in August 2006. Initial volumes **trucked to Jordan** will amount to 10 kb/d, but could rise later to 100 kb/d. Jordan has opted to receive lower sulphur Kirkuk crude in preference to Basrah Light. Jordan received 100 kb/d of Iraqi crude via truck pre-war in 2002/2003 under terms agreed by the UN. The Saddam regime had also been discussing plans to reinstate a pipeline direct to Jordan's Zarqa refinery. Recently Jordan has imported occasional cargoes of Iraqi crude via Aqaba on the Red Sea.

Iraq also plans to augment the current 10 kb/d of cross-border trade with Syria. A visit by Iraq's Prime Minister and Oil Minister to Damascus ended on 22 August with an agreement to reinstate the **Kirkuk to Banias pipeline**. This was used pre-2003 to supply 200-300 kb/d of crude to Syria in contravention of international sanctions, but the Iraqi segment was shut by US military action in March 2003.

All told, existing Iraqi export and refining infrastructure can accommodate some 2.4 mb/d of production, with the Syrian, Iranian and Jordanian expansions adding a further 500-600 kb/d. Full reactivation of Iraq's idled domestic refining capacity, together with feasible export potential, could take outlets for Iraqi production into a 3.5-4.0 mb/d range. This also represents the Oil Ministry's latest target production level for end-2009. How soon the necessary upstream investment environment (both in terms of security and regulatory regime) can be put in place to facilitate this rise remains to be seen.

OPEC Crude Production[1]

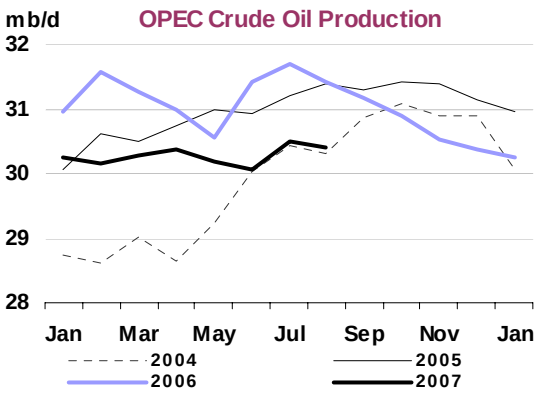
(million barrels per day)

	July 2007 Production	August 2007 Production	Sustainable Production Capacity[2]	Spare Capacity vs Aug 2007 Production	Capacity end-2007	Capacity end-2008
Algeria	1.35	1.35	1.39	0.03	1.38	1.47
Indonesia	0.83	0.84	0.87	0.04	0.88	0.88
Iran	3.92	3.87	3.95	0.08	3.88	3.97
Kuwait[3]	2.44	2.45	2.64	0.19	2.68	2.83
Libya	1.70	1.70	1.76	0.06	1.78	1.84
Nigeria[4]	2.10	2.15	2.47	0.32	2.45	2.39
Qatar	0.83	0.83	0.92	0.09	0.98	1.06
Saudi Arabia[3]	8.67	8.70	10.80	2.10	10.91	11.35
UAE	2.59	2.60	2.75	0.15	2.77	2.89
Venezuela[5]	2.34	2.36	2.60	0.25	2.62	2.60
Subtotal	**26.76**	**26.84**	**30.14**	**3.30**	**30.32**	**31.27**
Angola[1]	1.56	1.62	1.62	0.00	1.79	2.15
Iraq	2.19	1.96	2.40	0.45	2.40	2.40
Total	**30.50**	**30.41**	**34.16**	**3.75**	**34.51**	**35.82**
(excluding Indonesia, Iraq, Nigeria, Venezuela				*2.7)*		

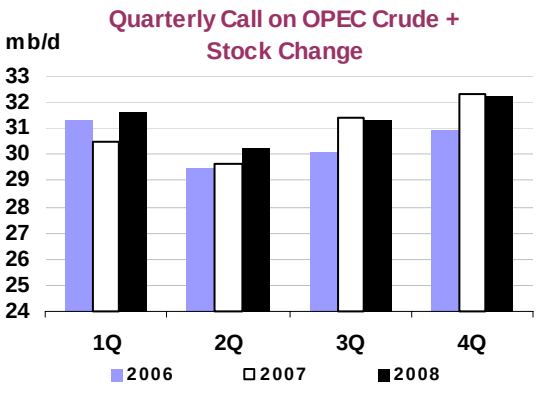
1 Angola joins OPEC effective 1 January 2007.
2 Capacity levels can be reached within 30 days and sustained for 90 days.
3 Includes half of Neutral Zone Production.
4 Nigeria excludes some 545 kb/d of shut-in capacity.
5 Includes Orinoco extra-heavy oil assumed at 475 kb/d in August

Angolan July output is revised down to 1.55 mb/d from an original 1.64 mb/d, with maintenance outages more prevalent than first thought. August indications show crude at 1.62 mb/d, with the Dalia field close to plateau 220 kb/d output, but start-up at the Greater Plutonia field believed to have been deferred from August into September. The first three 1 mb cargoes of Plutonio crude are not now expected to be loaded for export until late-September. Crude capacity is seen reaching 1.79 mb/d in 4Q07 and 2.1 mb/d by the end of 2008. OPEC's Secretary General visited Luanda in August and reported that, while no production allocation will be made for Angola in 2007, it would be included in 2008.

Nigerian supply has been revised down by 115 kb/d for July to 2.1 mb/d, rising to 2.15 mb/d in August. The July revision follows indications of both weaker exports and domestic refinery activity, while stronger exports underpin the higher August estimate. Some 550 kb/d of production remain shut-in on a long-term basis, largely Bonny, Forcados and offshore EA output. A further 100 kb/d of capacity is temporarily offline but could be reactivated at relatively short notice. We exclude the longer-term shut-ins from our 2.47 mb/d estimate for sustainable capacity. However, there are reports that the nomination of three 1 mb Forcados cargoes for October lifting will comprise some reactivated output.



Entire series based on OPEC Composition as of January 2007 onwards (including Angola)



Entire series based on OPEC Composition as of January 2007 onwards (including Angola)

State oil company NNPC is to be broken up into five operating companies according to the government, while a new National Energy Council will supervise reorganisation of the energy sector. Meanwhile, there are reports that crude pipeline repairs will allow the re-opening of the Warri and Kaduna refineries in September. Recent months have seen only sporadic operations at the Port Harcourt refinery and reinstating 335 kb/d of Warri and Kaduna capacity would help curb crippling gasoline imports.

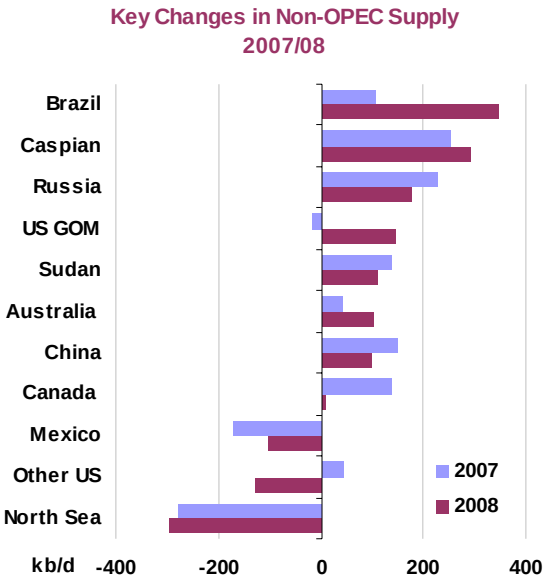
The supply estimate for **Saudi Arabia** in July is also revised up by 50 kb/d to 8.67 mb/d and further to 8.7 mb/d for August. Stronger exports account for the July change. This report uses crude supply (comprising exports and domestic refinery throughput) as a proxy for production for Saudi Arabia and some other OPEC producers. Hence data on the JODI system showing 8.9 mb/d output for Saudi Arabia in July include substantial deliveries into storage. This report would normally account for that extra oil in subsequent months when it is exported. Nonetheless, Saudi supply does appear to be edging higher, despite buyers generally suggesting flat-term volumes for the period through October.

UAE supply estimates stand at 2.59 mb/d and 2.6 mb/d for July and August respectively. Supply appears to have bottomed out at the height of OPEC cuts last February and has risen in advance of October/November maintenance at the offshore Umm Shaif, Upper and Lower Zakum fields. This could reduce production by some 600 kb/d in November, although production of distillate-rich onshore Murban crude, generally destined for Asian markets, is unlikely to be affected.

Non-OPEC Overview

Third quarter non-OPEC growth now stands at an estimated 0.1 mb/d versus 2006, following four quarters of near-1.0 mb/d growth. While the slow-down appears dramatic, it is in line forecasts reflecting scheduled seasonal maintenance and an assumption of heavy weather-related stoppages. Last month we discussed the potential upside for US GOM supply should 2007 see a repeat of 2006's uneventful Atlantic Hurricane season. The passage of two category five hurricanes through the Caribbean in August however suggests that actually implementing upward revisions for GOM supply forecasts before the November end of the hurricane season would be premature. Hurricane Dean in the third week of August shut-in 2.6 mb/d of Mexican oil production and 2.3 bcf/d of gas, albeit damage to facilities was slight. Nonetheless we estimate that temporary, combined outages for Mexico and the US curbed supply in August by 430 kb/d, compared with this report's assumption of 55 kb/d. Our hurricane assumptions rise to 440 kb/d for September and 340 kb/d for October (based on the five-year average disruption pattern), higher than some other estimates, but perhaps beginning to look more prudent in the aftermath of Dean.

Supply growth is expected to recover to 0.5 mb/d in the fourth quarter based on seasonal supply recovery and new field start-ups. Notable in the latter category are Brazil, Australia, Malaysia, the North Sea and US GOM. Growth then averages 1.0 mb/d for most of 2008, centred on Russia, Azerbaijan, Kazakhstan, Brazil, Sudan, China, Malaysia, Australia, Canada's oilsands and the US GOM. These increments help to offset accelerating decline elsewhere in North America, the North Sea and non-OPEC Middle East. FSU growth accounts for 80% of incremental non-OPEC supply in 2007 and 45% in 2008, although the precarious nature of projections for the FSU, as elsewhere, was highlighted by recent reports on Rosneft in Russia, the Kashagan project in Kazakhstan and potential threats against the BTC pipeline in Turkey.



Biofuels growth outside of the US and Brazil contributes 145 kb/d to the 2007 growth level of 0.6 mb/d and 250 kb/d to next year's non-OPEC total of 1.1 mb/d. And despite worsening biofuel economics recently, US ethanol output growth actually appears to be running slightly ahead of our forecast.

Forecasting Through Interesting Times

Taking a longer-term view of upstream trends, several recent studies (including analyses from Lehman Brothers, Simmons and Co, John S. Herold, the USGS and Norway's NPD) have highlighted a renewed surge in upstream activity after 20 years of underinvestment and recent resultant higher prices, but persistent questions over the reserve base. Double-digit spending growth could continue into the next decade although, as noted previously, rising costs swallow much of the increase. Moreover, despite an encouraging rise in 2005/2006 exploration activity by major companies, after a decade of decline, IOCs still struggle to replace oil production (albeit gas replacement rates have remained in excess of 100%). But the nadir seems to have been 2004, when only 50% of production was replaced and this ratio has since risen.

That said, the size of the resource base from which future production will come remains uncertain. Arctic oil is often cited as a key future source of supply and increasingly, the subject of territorial claims between Russia, Canada, the US and Denmark. The USGS recently downgraded East Greenland Rift Basin undiscovered oil resources by 80%, partly offset by a 6% increase for gas and 100% increase for NGL. But Norway's NPD has suggested that Barents Sea undiscovered oil resources may now be 20% higher.

Oil company focus does now appear more firmly centred on exploration again, although access constraints remain a problem. Reserve replacement levels could improve further if spending is sustained. Interestingly, upstream spending levels by Chinese and Russian national oil companies (NOCs) are reportedly rising by over 20% and 30% respectively in 2007. With absolute levels, and disclosure, of reserves more opaque in the rising proportion of countries where NOCs dominate, global reserve trends may be less clear cut than suggested by the SEC filings of the IOCs alone. This only adds to the already urgent need for a comprehensive, standardised and transparent system of global reserve reporting.

Other key points emerging from these studies are:

- That tight labour, raw materials, drilling and service markets will persist into the next decade;
- The rising importance for major operators of deepwater production, which could attain 10-15% of their production portfolios by around 2010;
- That typical global project cost inflation currently stands at 15-20% per year, with onshore and shallow water cost inflation potentially easing henceforward, but persisting for the deepwater ;
- The intense pressure on offshore service and maintenance capacity as companies face the need to replace ageing infrastructure. This is forcing companies to undertake more risky 'off-season' winter maintenance to ensure access to stretched service capacity.

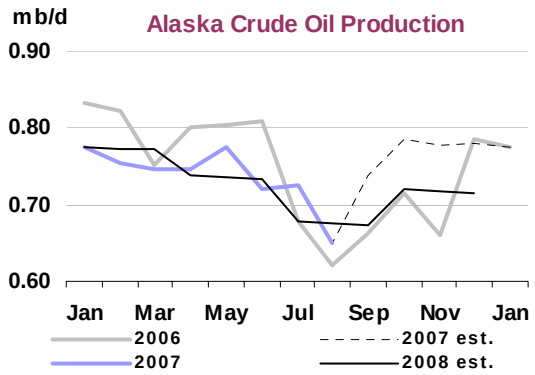
All of the above – tightening access terms, ageing infrastructure, technologically more complex operations and availability constraints for the 'nuts and bolts' companies need to sustain or augment production – suggest that project delays and unscheduled outages from the existing production base could be with us for some time to come. To paraphrase, *may we forecast in interesting times.*

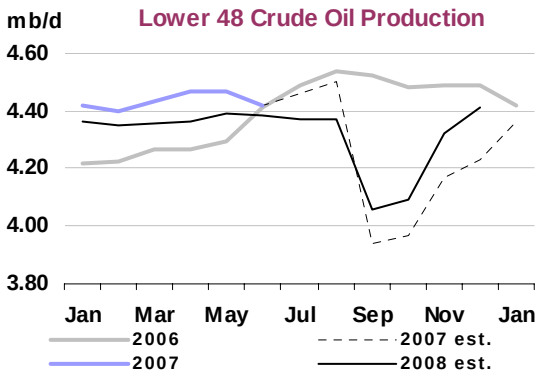
OECD

North America

US – August Alaska actual, others estimated: US total oil supply projections remain relatively unchanged by recent data adjustments. The 2007 total is revised up 30 kb/d to 7.4 mb/d after Gulf of Mexico facilities emerged unscathed from August's passing of storms Dean, Erin and Felix. Heavier summer maintenance trends at ageing infrastructure on Alaska's North Slope seen this year are carried forward into the forecast for 2008, but this is offset by stronger baseline output from smaller states. June ethanol production is also running 20 kb/d ahead of initial expectations, partly offset by lower MTBE supply. Neither additive sees a change in forecast for now however. The 2008 US oil output projection remains at 7.42 mb/d (crude oil 5.04 mb/d), with a 150 kb/d GOM rise offset by declines elsewhere.

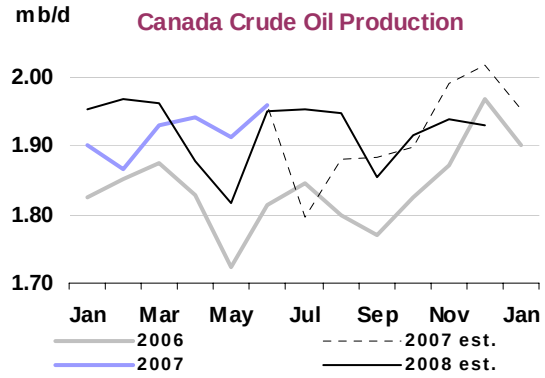
US GOM production outages caused by Atlantic hurricanes in August averaged only 5 kb/d, compared with a previous assumption of 55 kb/d based on the five year historical average (although this was over-shadowed by 425 kb/d of Mexican outages compared with an August assumption of zero). Precautionary shut-ins ahead of Dean's passage reached 45 kb/d of oil on 21 August, but production was rapidly re-instated as it became clear that Dean would follow a more southerly path over Mexico. Assumed US GOM outages peak at 380 kb/d in September and 345 kb/d in October.

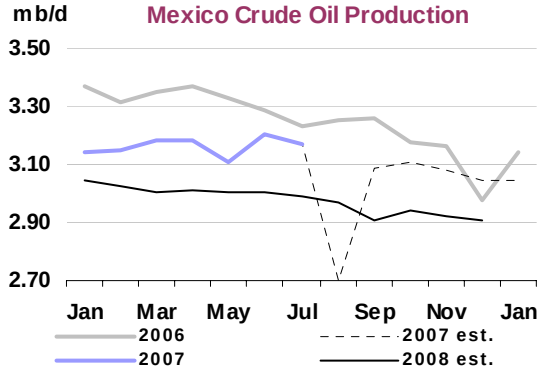




Canada – June actual: Canadian oil output is seen repeating last year's 135 kb/d rise in 2007, before flattening off at 3.34 mb/d in 2008. Oil sands supply growth of 100 kb/d-plus both years is augmented by recovering offshore east coast crude in 2007. Data through June sees a 120 kb/d upward revision for 2Q supply overall, although this is largely caused by a lower-than-expected impact from upgrader unit maintenance, and the impact on the forecast (aside from higher baseline bitumen production) is limited.

The Hibernia field offshore Newfoundland suffered water seepage problems in early September which are assumed to curb output by some 60 kb/d below 180 kb/d capacity in September and October. Meanwhile, agreement was reached on the nearby Hebron-Ben Nevis development, whereby the provincial government will take a 4.9% equity stake and receive extra royalties when prices are above $50/bbl. In return, the government has dropped demands requiring domestic processing of Hebron oil. The Chevron-operated project could come on-stream in 2015 and attain peak output of 150 kb/d.



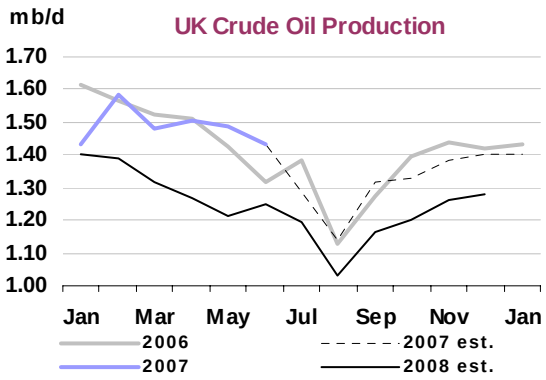


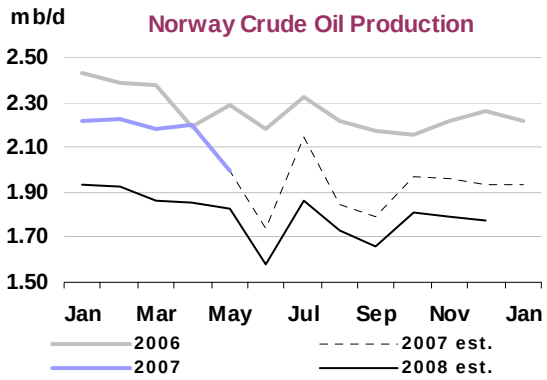
Mexico – July actual: Despite substantial downward revisions to Mexican August production due to the impact of Hurricane Dean, overall the Mexican output forecast sees a 15-20 kb/d upward revision for the balance of 2007 and 2008. This follows the inclusion of higher-than-expected, field-specific July production data and the lack of damage caused by Dean. That said, we still envisage steep overall decline from Mexico, with crude production of 3.1 mb/d in 2007 and 2.98 mb/d in 2008, versus 3.26 mb/d in 2006.

Offshore facilities began to be shut down on 20 August as a precautionary measure ahead of Hurricane Dean, affecting 2.6 mb/d of oil production and 2.6 bcf/d of gas. The category five hurricane weakened after passing over the Yucatan peninsula and then the offshore Campeche region. Production was restarted on 23 August but it took until 30 August to fully reinstate output to pre-storm levels. Damage levels were not believed to have been significant. This report estimates that some 425 kb/d of Mexican oil production was deferred by Dean, although a more accurate assessment will be possible next month after the release of official Mexican production data.

North Sea

UK and Norway – June actual, Norway July provisional: North Sea production forecasts remain largely unchanged from last month's report. July provisional Norwegian data came in some 135 kb/d above our earlier estimate, and in line with a stronger post-maintenance rebound suggested by loading schedules. However, the impact on forecast Norwegian supply is limited, with extensive outages for maintenance expected for August and September. UK September supply is revised up by 25 kb/d on reports of an earlier-than-assumed supply recovery following reinstatement of the CATS pipeline. Most of this production was scheduled to be reinstated in the first half of September. Peak outages are estimated at a combined 70 kb/d of crude and NGL from the J-Block, Shearwater, Erskine and Armada fields.





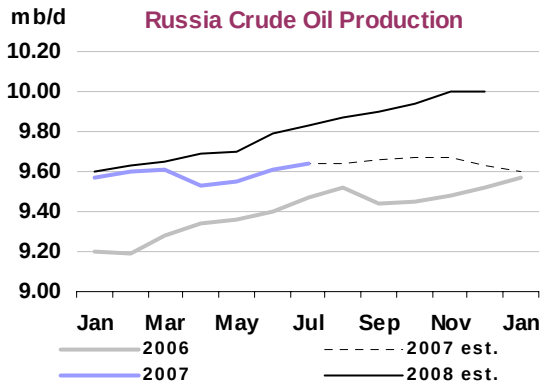
In total, Norwegian supply falls by 260 kb/d to 2.52 mb/d in 2007, with several new field start-ups moderating decline to 155 kb/d in 2008 (giving total supply of 2.36 mb/d). UK oil production (including gas liquids) is forecast flat in 2007 at 1.64 mb/d, as rising Buzzard field supply counters decline elsewhere. However, decline re-emerges from 2008, with UK production slipping by 140 kb/d to 1.50 mb/d.

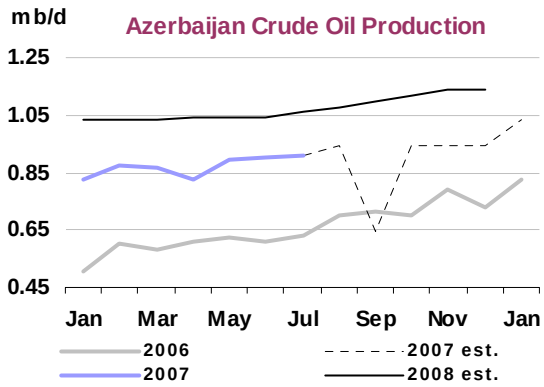
Former Soviet Union (FSU)

Russia – July actual, August provisional: Russian projections are also held steady, with total oil production in 2007 of 9.92 mb/d and 10.10 mb/d in 2008 representing growth of 2.5% and 1.8% respectively. Growth this year has slowed from 1Q levels near 400 kb/d, although inflated early-2007 growth levels need to be seen in the context of weak 1Q06 production due to weather. That said, August growth stood at a more modest 125 kb/d year-on-year. Recent months have seen production drift lower from Lukoil, Gazpromneft (formerly Sibneft), TNK-BP and Gazprom, partly offset by Rosneft increases.

Yearly growth by Rosneft currently stands close to 600 kb/d, with total production of 2.2 mb/d representing a five-fold increase on 2004 levels. Some commentators have suggested that organic production growth has been sacrificed to a programme of acquisitions that has reportedly pushed Rosneft debt to around $30 billion. This is seen as potentially undermining Rosneft's ability to finance future development at fields such as Vankor, Sakhalin and Verknechonskoye, which helped underpin *MTOMR* projections for Russian output reaching 10.6 mb/d by end-decade. A further twist in the tale emerged from press reports in August suggesting that the government is planning to establish a new state

producer incorporating the oil assets of Rosneft, Gazprom and Surgutneftegaz. Surgutneftegaz's inclusion may in part reflect its cash-rich status, which in turn might help alleviate Rosneft debts.





Azerbaijan – July actual: Azeri oil production remains on track for growth of around 200 kb/d both this year and next. Prevailing output of some 950 kb/d could dip to 650 kb/d in September owing to construction work on the Central Azeri platform, part of the 700 kb/d offshore ACG complex. Work should largely be completed by October however, based on higher expected shipments via the Baku-Tbilisi-Ceyhan (BTC) pipeline. Total Azerbaijan production attains 1.1 mb/d in the second half of 2008, with increased contributions from the Azeri field and from start-up at the deep Guneshli complex. Growth will be dependent however, on maintaining the integrity of the BTC pipeline, after a Kurdish rebel group said BTC would be attacked unless Turkey desists from attacks on Kurdish rebel forces.

Stakes Rise in Kashagan Row

The Kazakh government has ordered a three month freeze on work at the Eni-operated, 13 billion barrel Kashagan field in the shallow waters of the north Caspian sea. The government has cited environmental violations in justifying the move, while also itemising customs-related infringements, and has long been expressing concerns about cost over-runs at the delayed project. Initial estimates had the project scheduled for start-up in 2005, later deferred to 2008 and most recently to late-2010 at the earliest. Phase one plateau production of 300 kb/d is seen potentially rising in later phases to 1.5 mb/d by 2019, the latter level being 25% higher than original estimates. Total project costs have ballooned from $55 billion to $135 billion according to the government, with the operator citing high reservoir pressure, hydrogen sulphide contamination and extreme winter operating conditions as explanatory factors. Under the project's production sharing agreement, the developers are allowed to recoup costs before sharing revenues with the Kazakh government, so cost escalation acts to further delay government receipt of revenues.

Stakeholders in the Kashagan Project

Eni (operator)	18.52%	ConocoPhillips	9.26%
ExxonMobil	18.52%	Inpex	8.33%
Shell	18.52%	KazMunaiGaz	8.33%
Total	18.52%		

In August, Kazakhstan said it wanted to boost its share in the project from an original 8.3% to 40%. The Prime Minister in early-September said that state producer KazMunaiGaz should become joint operator of the project. A statement from Kazakhstan's finance ministry has now said that, in addition, it will seek at least $10 billion in compensation for the project delays. At the time of writing, talks on Kashagan were continuing between Eni and the Kazakhstan government, with a visit by Eni's Chief Executive to Astana due for 11 September. Separately, Italy's Prime Minister is due to visit Kazakhstan in October.

FSU Net Exports of Crude & Petroleum Products
(million barrels per day)

	2005	2006	3Q2006	4Q2006	1Q2007	2Q2007	May 07	Jun 07	Jul 07	Latest month vs. Jun 07	Latest month vs. Jul 06
Crude											
Black Sea	2.27	2.22	2.27	2.08	2.30	2.23	2.29	2.07	2.11	0.04	-0.18
Baltic	1.59	1.55	1.49	1.43	1.58	1.60	1.57	1.45	1.54	0.09	-0.05
Arctic/FarEast	0.19	0.15	0.20	0.19	0.29	0.30	0.29	0.30	0.34	0.03	0.16
BTC	0.00	0.00	0.22	0.38	0.43	0.58	0.64	0.64	0.63	-0.01	0.45
Crude Seaborne	4.05	4.07	4.18	4.08	4.60	4.70	4.80	4.47	4.62	0.15	0.38
Druzhba Pipeline	1.15	1.20	1.23	1.19	1.17	1.13	1.17	1.06	1.01	-0.05	-0.28
Other Routes	0.25	0.38	0.38	0.45	0.47	0.46	0.46	0.44	0.43	-0.01	0.07
Total Crude Exports	5.45	5.64	5.80	5.71	6.23	6.29	6.42	5.97	6.06	0.09	0.17
Of Which: Transneft	4.12	4.22	4.30	4.06	4.33	4.31	4.36	4.01	4.09	0.08	-0.31
Products											
Fuel oil	0.93	0.95	0.94	0.95	1.04	1.15	1.16	1.17	1.17	0.00	0.23
Gasoil	0.87	0.95	0.94	0.91	0.94	0.88	0.83	1.00	1.00	0.00	0.09
Other Products	0.58	0.61	0.63	0.54	0.59	0.69	0.69	0.71	0.69	-0.02	0.00
Total Product	2.38	2.51	2.50	2.40	2.57	2.73	2.69	2.88	2.86	-0.02	0.32
Total Exports	7.83	8.16	8.30	8.11	8.80	9.02	9.11	8.86	8.93	0.07	0.50
Imports	0.02	0.04	0.05	0.04	0.02	0.04	0.03	0.04	0.04	0.00	-0.02
Net Exports	7.81	8.12	8.25	8.07	8.78	8.98	9.08	8.82	8.89	0.07	0.52

Sources: Petro-Logistics, IEA estimates
Note: Transneft data has been revised to exclude Russian CPC volumes.

According to preliminary data, **FSU net oil exports** totalled 8.89 mb/d in July, up 70 kb/d from June and 520 kb/d higher than July 2006. A 150 kb/d month-on-month increase in seaborne crude exports, including an extra 90 kb/d leaving Baltic ports, was tempered by another drop in Druzhba transits, this time by 50 kb/d (see *Refining* section, page 44). There are reports of Lukoil having curbed June-July deliveries to German refineries, in part due to pricing issues. However, latest information suggests re-instated volumes for September. Average monthly FSU product exports fell by 20 kb/d in July.

August loading schedules suggest that exports via Transneft may have been 100 kb/d below July volumes, coinciding with an increase in Russian export duties from 1 August. However, higher BTC flows may have restricted any drop in aggregate FSU supplies to around 50 kb/d. Further declines in FSU exports are anticipated later this year. The threat from late-August of a strike by Turkish ship pilots, if realised, may hinder traffic through the Turkish straits which could restrict trade flows from FSU ports in the Black Sea. Maintenance is due to reduce Caspian output by up to 300 kb/d in September, which should overshadow extra Russian barrels exported before the next rise in crude and product export duties, effective 1 October.

Revisions to Non-OPEC Estimates

As was the case last month, adjustments to the 2007 and 2008 non-OPEC forecasts are relatively minor. The 2007 total is trimmed by 30 kb/d, to 50.0 mb/d, while 2008 supply is revised up by 75 kb/d to 51.1 mb/d. Reductions for 2007 are restricted to the current quarter (3Q) with weather and other unscheduled stoppages affecting Mexico, China and Brazil. For **Mexico**, production data for July prior to the passage of Hurricane Dean came in stronger than expected, limiting the forward impact of downward revision for August. Underlying Chinese and Brazilian growth also remains robust, dissuading us from extending adjustments to the rest of 2007. For **Brazil**, our existing forecast already anticipated some downside potential from earlier Petrobras targets, which have now been trimmed to 1.8 mb/d for 2007.

Azerbaijan, Malaysia, Canada and Mexico all now come in stronger for 2008 than in the previous forecast. In the case of **Malaysia**, July data for crude and condensate came in 30 kb/d above our projection, and Petronas reported on 17 August the start-up the country's first deepwater field, Kikeh. Plateau production of 120 kb/d is scheduled for late 2008, slightly earlier than this report's prevailing estimate.

Revisions to Non-OPEC Oil Supply

(million barrels per day)

	Last Month's OMR				This Month's OMR				This Month vs. Last Month			
	2007	2008	07 v 06	08 v 07	2007	2008	07 v 06	08 v 07	2007	2008	07 v 06	08 v 07
North America	14.22	14.14	-0.03	-0.08	14.24	14.17	0.00	-0.07	0.02	0.03	0.02	0.01
Europe	4.88	4.59	-0.30	-0.30	4.90	4.59	-0.29	-0.31	0.01	0.00	0.01	-0.01
Pacific	0.64	0.77	0.06	0.13	0.64	0.78	0.06	0.13	0.00	0.01	0.00	0.01
Total OECD	**19.74**	**19.50**	**-0.26**	**-0.25**	**19.78**	**19.53**	**-0.23**	**-0.25**	**0.04**	**0.04**	**0.04**	**0.00**
Former USSR	12.60	13.01	0.50	0.41	12.58	13.05	0.48	0.47	-0.02	0.04	-0.02	0.06
Europe	0.13	0.12	-0.01	-0.01	0.13	0.12	-0.01	-0.01	0.00	0.00	0.00	0.00
China	3.84	3.92	0.17	0.08	3.82	3.92	0.15	0.10	-0.02	0.00	-0.02	0.02
Other Asia	2.70	2.80	-0.01	0.10	2.70	2.79	-0.01	0.09	0.00	-0.01	0.00	-0.01
Latin America	4.47	4.75	0.08	0.28	4.45	4.75	0.05	0.31	-0.03	0.00	-0.03	0.03
Middle East	1.65	1.61	-0.08	-0.05	1.65	1.61	-0.08	-0.05	0.00	0.00	0.00	0.00
Africa*	2.57	2.69	0.08	0.12	2.57	2.69	0.08	0.12	0.00	0.00	0.00	0.00
Total Non-OECD*	**27.97**	**28.89**	**0.72**	**0.92**	**27.91**	**28.93**	**0.65**	**1.02**	**-0.07**	**0.04**	**-0.07**	**0.10**
Processing Gains	1.92	1.95	0.02	0.03	1.92	1.95	0.02	0.03	0.00	0.00	0.00	0.00
Other Biofuels	0.40	0.66	0.15	0.25	0.40	0.66	0.15	0.25	0.00	0.00	0.00	0.00
Total Non-OPEC*	**50.04**	**50.99**	**0.62**	**0.95**	**50.01**	**51.07**	**0.59**	**1.05**	**-0.03**	**0.07**	**-0.03**	**0.10**

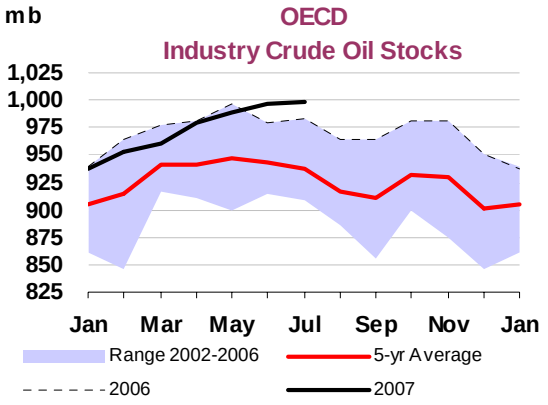
OMR = Oil Market Report

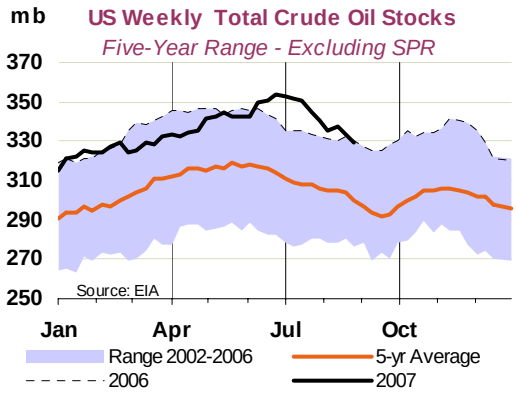
* adjusted to exclude Angola

OECD STOCKS

Summary

- **OECD industry stocks rose by 29.8 mb in July**, mostly due to strong product builds in North America and the Pacific. While refinery runs reached seasonal peaks, heating oil consumer stock builds lagged historical rates in Europe, and mild weather in the Pacific tempered air conditioning use. Crude stocks in contrast rose by a mere 2.0 mb, as a 12.8 mb draw in North America offset crude builds elsewhere. Despite the stock build, which is in line with previous July increases, total OECD forward demand cover was only marginally higher than June at 54.4 days, but down from 55.1 days one year ago.





- **Preliminary data for August** show a net stock draw of 7.1 mb, as a fall in US inventories of 11.7 mb offset increases in Japan and Europe of 3.8 mb and 0.8 mb respectively. Combined crude stocks fell by 17.8 mb, while products rose by 10.7 mb. Crude stocks in the US have now fallen around 25 mb since their end-June peak.

- **Total June stock data were revised down by 3.4 mb** compared with last month's report. Total products and crude were 10.6 mb and 1.0 mb lower respectively, but were offset by an 8.3 mb upward hike in 'other' oils. The largest change was a 6.6 mb downward revision to North American product stocks.

OECD Inventory Position at End-July and Revisions to Preliminary Data

Total OECD industry stocks rose to 2,699 mb at the end of July, 29.8 mb higher than end-June but 4.0 mb lower year-on-year. Compared with last year, crude stocks were 15.1 mb higher, which was more than offset by product and 'other' oil inventories being 17.5 mb and 1.6 mb lower respectively. While total OECD gasoline stocks are only 2.6 mb lower year-on-year, they remain at the bottom of their five-year average range.

Preliminary Industry Stock Change in July 2007 and Second Quarter 2007

	July (preliminary)								Second Quarter 2007			
	(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	**-12.8**	**8.1**	**6.7**	**2.0**	**-0.41**	**0.26**	**0.22**	**0.06**	**0.31**	**0.10**	**-0.01**	**0.40**
Gasoline	-1.6	1.9	-1.1	-0.8	-0.05	0.06	-0.03	-0.03	0.04	-0.11	0.00	-0.08
Distillates	5.9	-1.9	7.1	11.1	0.19	-0.06	0.23	0.36	0.05	0.04	0.08	0.16
Fuel Oil	3.6	-0.1	2.5	5.9	0.12	0.00	0.08	0.19	-0.03	-0.02	0.00	-0.05
Other Products	10.2	0.0	0.6	10.8	0.33	0.00	0.02	0.35	0.20	-0.03	0.05	0.22
Total Products	**18.0**	**-0.2**	**9.1**	**27.0**	**0.58**	**-0.01**	**0.30**	**0.87**	**0.27**	**-0.13**	**0.12**	**0.25**
Other Oils[1]	0.7	-0.9	1.0	0.8	0.02	-0.03	0.03	0.03	0.06	0.04	0.00	0.10
Total Oil	**5.9**	**7.0**	**16.8**	**29.8**	**0.19**	**0.23**	**0.54**	**0.96**	**0.63**	**0.01**	**0.11**	**0.76**

1 Other oils includes NGLs, feedstocks, and other hydrocarbons.

Year-on-Year OECD Industry Stock Comparisons for July 2007

	(million barrels)					*(Days of Forward Demand)*			
	North America	Europe	Pacific	Total		North America	Europe	Pacific	Total
Crude Oil	**21.1**	**-8.2**	**2.2**	**15.1**	**Total Oil**	**-0.5**	**-0.4**	**-1.5**	**-0.7**
Total Products	-13.9	-2.1	-1.5	-17.5	*Versus 2005*	0.0	1.0	-0.9	0.2
Other Oils[1]	-7.3	3.5	2.1	-1.6	*Versus 2004*	2.9	0.7	2.4	2.1
Total Oil	**-0.1**	**-6.8**	**2.9**	**-4.0**	**Total Products**	**-0.8**	**-0.1**	**-1.0**	**-0.7**
Versus 2005	20.7	15.8	1.7	38.2	*Versus 2005*	-1.1	0.5	0.1	-0.4
Versus 2004	89.2	23.2	14.0	126.4	*Versus 2004*	0.6	-0.3	2.3	0.6

1 Other oils includes NGLs, feedstocks, and other hydrocarbons.

June data were revised down by 3.4 mb, with downward changes in North America (-4.2 mb) and Europe (-1.5 mb) outweighing a 2.3 mb upward revision in the OECD Pacific. Total products for all regions were revised down by 10.6 mb, while crude decreased by 1.0 mb. These moves however were offset by an upward revision for 'other' oils of 8.3 mb, most of which was in North America.

Revisions versus 10 August 2007 Oil Market Report

(million barrels)

	North America		*Europe*		*Pacific*		*OECD*	
	May 07	Jun 07	May 07	Jun 07	May 07	Jun 07	May 07	Jun 07
Crude Oil	**0.3**	**-2.6**	**1.9**	**0.9**	**-0.1**	**0.7**	**2.1**	**-1.0**
Gasoline	0.0	-0.6	0.3	-0.3	0.4	0.0	0.6	-0.9
Distillates	0.6	0.4	-0.5	-1.8	0.4	-0.1	0.4	-1.6
Residual Fuel Oil	-0.1	0.5	-1.6	-1.7	0.0	-0.4	-1.7	-1.7
Other Products	0.8	-6.8	0.0	-0.1	0.0	0.4	0.8	-6.4
Total Products	**1.2**	**-6.6**	**-1.8**	**-3.9**	**0.8**	**-0.1**	**0.2**	**-10.6**
Other Oils[1]	-0.4	5.0	0.3	1.6	0.0	1.7	-0.2	8.3
Total Oil	**1.1**	**-4.2**	**0.4**	**-1.5**	**0.8**	**2.3**	**2.2**	**-3.4**

1 Other oils includes NGLs, feedstocks, and other hydrocarbons.

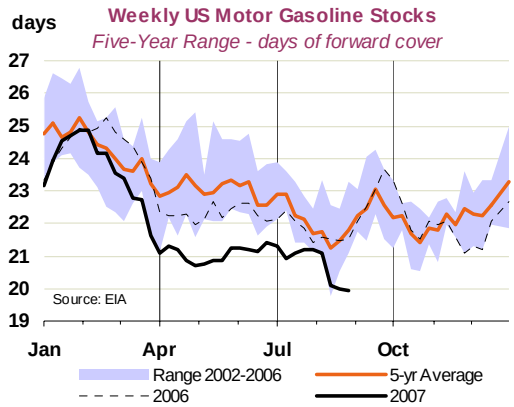
OECD Industry Stock Changes in July 2007

OECD North America

Total North American industry inventories rose by 5.9 mb in July, with product stock builds outweighing a drop in crude. Total crude stocks fell by 12.8 mb but remain above their five-year average range. US refineries belatedly reached near-average throughputs during the peak summer demand season, though some plants remained dogged by problems. Hence US crude stocks fell by 12.0 mb, while in Mexico they were down by 0.8 mb.

In contrast, North American product stocks built by 18.0 mb in July. The greatest increase stemmed from 'other products', which rose by 10.2 mb, while middle distillates and residual fuel oil built by 5.9 mb and 3.6 mb respectively. Gasoline inventories however fell by 1.6 mb and remain below their five-year average range. 1.3 mb of this drop was in the US, while Mexico registered a further 0.3 mb draw.

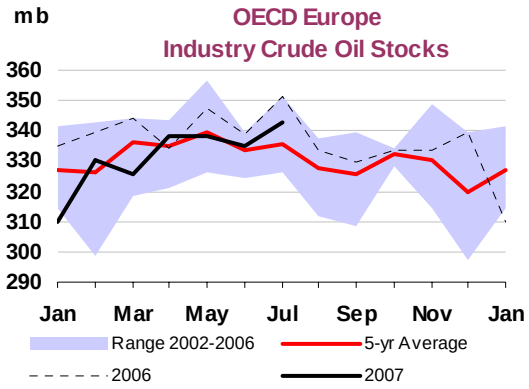
In August, preliminary data for the US show a further 12.5 mb draw in crude stocks, bringing them down to levels of a year ago at the end of the month and 24.4 mb lower than their end-June peak. Half of this draw took place on the US Gulf Coast, where stocks had been (and remain) above average. WTI futures' move into backwardation in late July likely contributed to the incentive to reduce inventories, but it is also a reflection of the tight crude market. Cushing, Oklahoma, crude stocks meanwhile rose by 630 kb in August, but failed to put any downward pressure on prices. Looking ahead, lower Mexican output due to shutdowns ahead of Hurricane Dean should also show up in either US or Mexican crude stocks data.



August product stock data showed a further drop of 12.7 mb in US gasoline stocks, bringing levels to their lowest since Hurricanes Katrina and Rita hit the US Gulf Coast in the late summer of 2005. This represents 20 days of forward demand, the lowest level of cover since August 2003. However, the sharp fall in gasoline inventories was offset by increases in distillates (+5.1 mb), 'other' oil (+4.1 mb) and unfinished products (+1.0 mb), while fuel oil levels fell by 1.6 mb. In total, US products thus rose by 0.8 mb. Despite their increase, total distillate stocks also remain at the bottom of their five-year average range in terms of forward demand cover.

OECD Europe

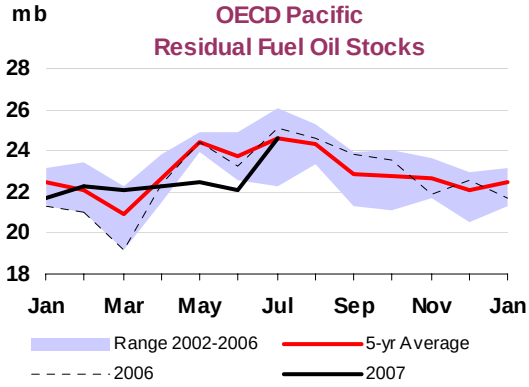
Total European industry stocks built by 7.0 mb in July, but in contrast to North America, this stemmed from an increase of 8.1 mb in crude, while products declined marginally. This was largely due to a strong build of 8.2 mb in Norway, where production bounced back after field maintenance, increasing by 450 kb/d over June. Meanwhile, in the large European consuming countries, crude stock increases in Italy and France of 1.5 mb and 1.4 mb respectively were offset by a 3.0 mb draw in the Netherlands.



Total European products were virtually unchanged in July, falling by a marginal 0.2 mb, despite refinery throughputs reaching 13.6 mb/d, a rise on June. A distillate draw of 1.9 mb cancelled out a gasoline build of the same volume. Preliminary August data for the Amsterdam-Rotterdam-Antwerp region showed a net stock build and light and middle distillate stocks remaining above average.

OECD Pacific

July inventory data for the Pacific showed a total build of 16.8 mb which, despite bringing levels in line with their five-year average, still leaves regional forward demand cover at the lowest in the OECD. Of the increase 6.7 mb (5.1 mb of which was in Japan) stemmed from crude stocks, as refineries boosted inventories ahead of peak summer throughputs in August and some Japanese problems.



Total Pacific product stocks rose by 9.1 mb by the end of July. Most of this increase was in distillates, which built by 7.1 mb, though fuel oil also rose by 2.5 mb, perhaps on additional purchases to counter additional demand for electricity generation. Despite lower throughputs, around two-thirds of the total product stock build (5.2 mb) was in Korea, and the rest in Japan (3.9 mb).

Preliminary August data for Japan show a modest stock build of 3.8 mb in total. A draw of 6.0 mb in crude stocks was countered by 9.8 mb rise in product stocks, 6.3 mb of which was due to a seasonal rise in kerosene. The latter are 2.0 mb lower than one year ago – when stocks were exceptionally high – but remain above their four-year average.

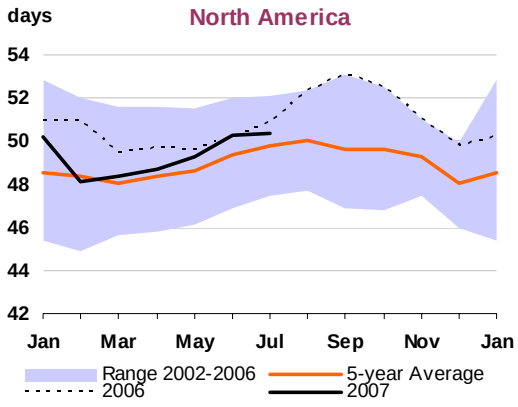
Recent Developments in Singapore Stocks

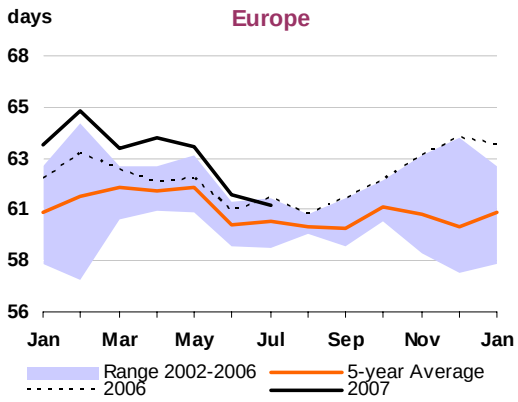
Singapore product inventories, as surveyed by International Enterprise, were virtually unchanged at the end of August. A fall in light distillates balanced a rise in middle distillates, while fuel oil stocks were unchanged. Middle distillates remain below their five-year average range on strong shipments to Europe and Latin America. Fuel oil inventories in contrast are above average but could tighten again in September, as a lower 1.9-2.0 million tonnes of residue is due to arrive from the west in September, compared with around 2.5 million tonnes in August.

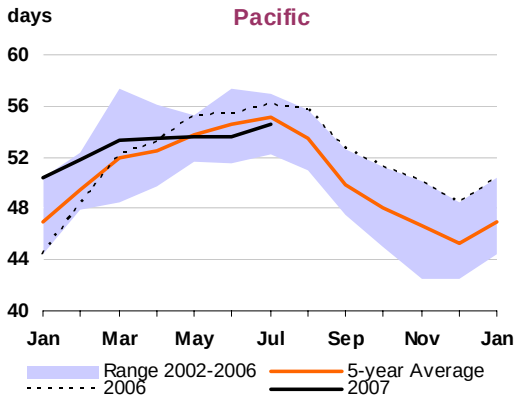
Regional OECD End-of-Month Industry Stocks

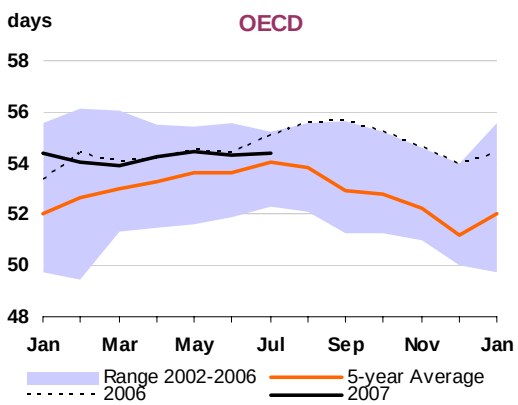
(in days of forward demand and millions barrels of total oil)

Days[1]

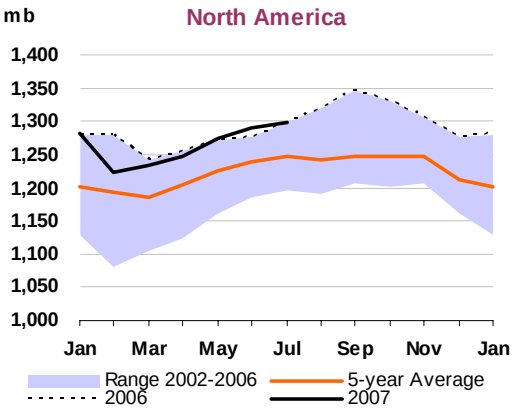


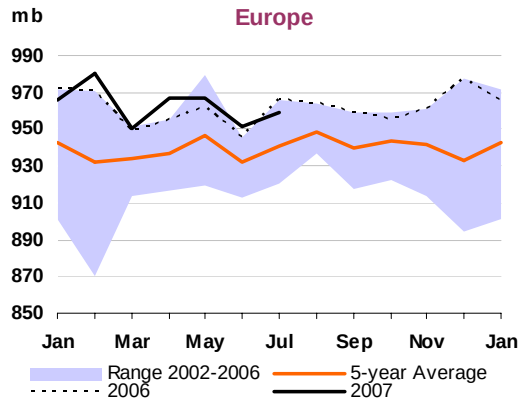


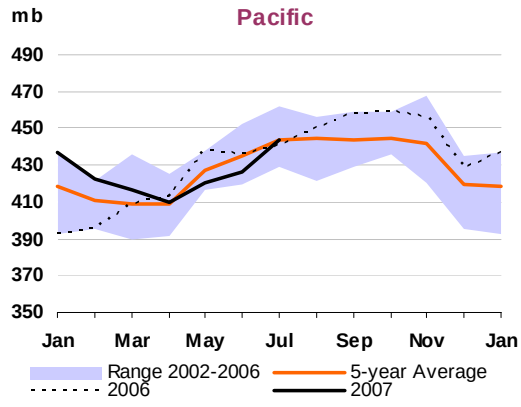


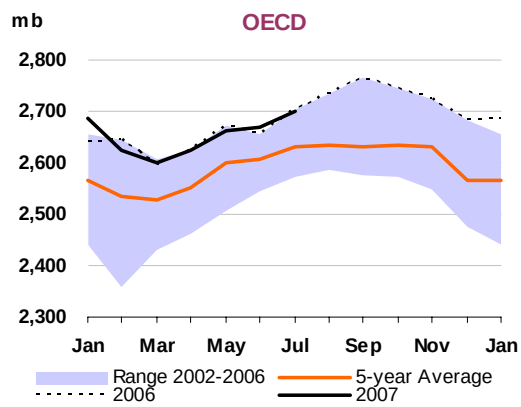


Million Barrels









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

PRICES

Summary

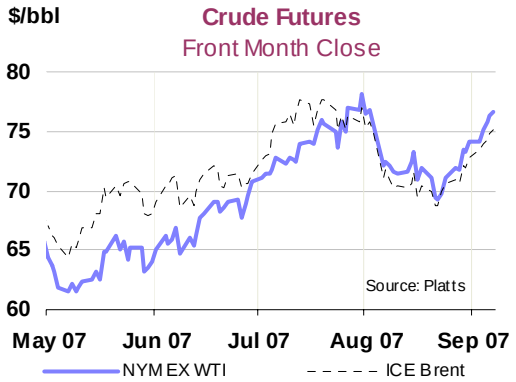
- **Oil prices remained strong in early September**, despite worries of an economic downturn related to US subprime mortgage problems. Falling stocks in August underscored higher prices and a widening backwardation, while seasonal hurricane fears intensified. Category-five Hurricane Dean caused little damage to oil installations, but cut Mexican supply by 425 kb/d in August and (with Hurricane Felix) served as a reminder of the vulnerability of infrastructure in the region. Expectations of no output change at OPEC's 11 September meeting in Vienna had supported prices in August and early September. But in the event, the group decided to raise supply by 500 kb/d.

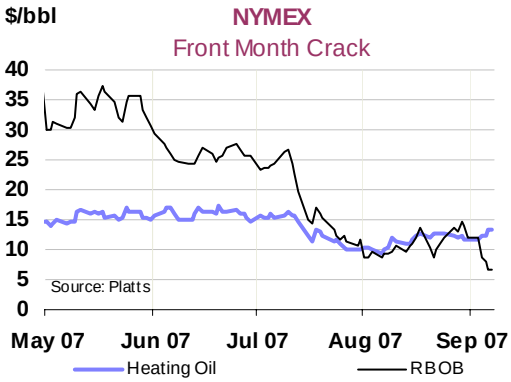
- **Geopolitical concerns moved back into focus**, as Syrian claims of an Israeli air strike stoked existing Middle Eastern tension and the US and Iran continued their verbal sparring over events in Iraq. Denmark and Germany claimed to have prevented serious terrorist attacks in the lead-up to the sixth anniversary of 9/11. However, the geopolitical impact on oil prices has not been significant, barring continued support from crude supply shut-ins in Nigeria, where US authorities this month warned of terrorist attacks on western interests.

- **Refining margins were mixed in August**, with gains seen in Europe but not matched elsewhere. European cracking margins remain stronger than on the US Gulf Coast, and a pick-up in hydroskimming margins encouraged simple refineries to restart or hike runs.

- **Oil product prices generally followed crude**, keeping crack spreads steady. Distillates have now overtaken gasoline following the end of the summer driving season. Low gasoline stocks could present a challenge if demand stays strong over the coming months, constraining the seasonal switch to higher heating oil output, but this may be partly offset by the move to winter-specification gasoline.

- **Crude tanker rates**, already at multi-year lows in early August, showed no real recovery throughout the month. A slight mid-month rebound in VLCC rates from the Middle East to Japan, possibly buoyed by higher OPEC eastbound sailings, was short-lived. Clean tanker rates fell on most routes in August.



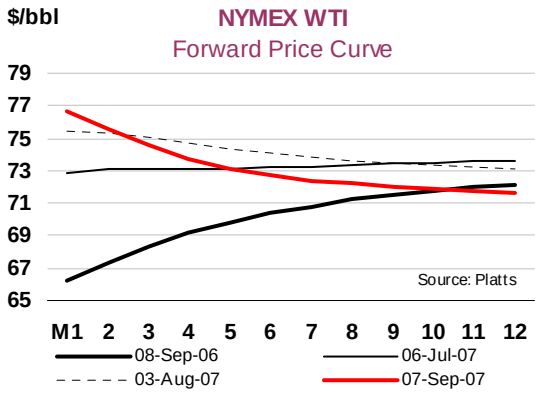


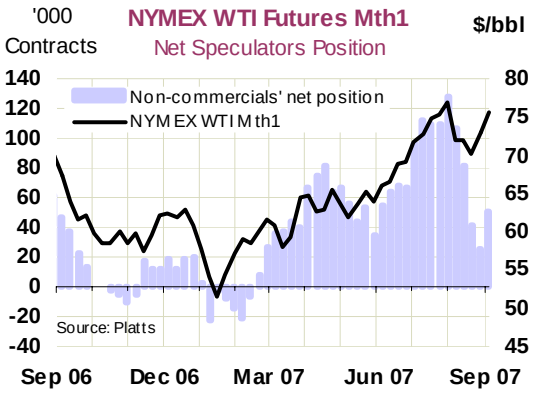
Overview

Oil prices fell in August on average, but strengthened again late in the month and in early September, as tight fundamentals and renewed geopolitical concerns outweighed worries of an economic downturn. Before OPEC's decision on 11 September to raise output by 500 kb/d, the market's apparent assumption that no change would occur had supported prices.. Hurricane Dean, which hit the Mexican coast in mid-August, caused no long-lasting damage, but knocked out 425 kb/d of crude production and served as a

reminder that last year's absence of storm outages was unusual. Indications that the US government was prepared to offer oil from the strategic reserve should supplies be hit, helped to moderate the price effect, but the rapid development of another category five hurricane, Felix, shortly afterwards accentuated awareness of the potential for storm damage.

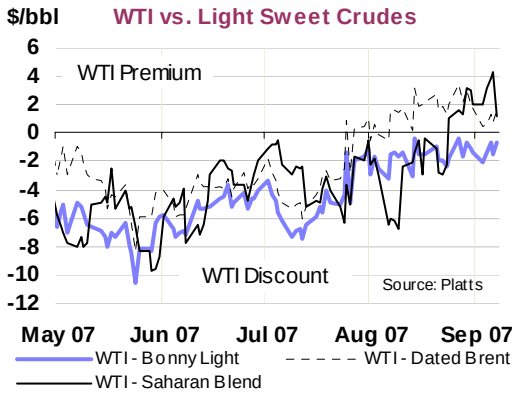
But until mid-August, oil prices had come under pressure from spill-over economic concerns stemming from the collapse of the US subprime mortgage sector. The financial market volatility also triggered some liquidation of speculative (long) positions held in crude futures. However, there was also an increase in non-commercial short positions, suggesting funds started to position themselves for a possible economic slowdown. Non-commercial net-longs and open interest picked up again in early September as prices resumed their uptrend.

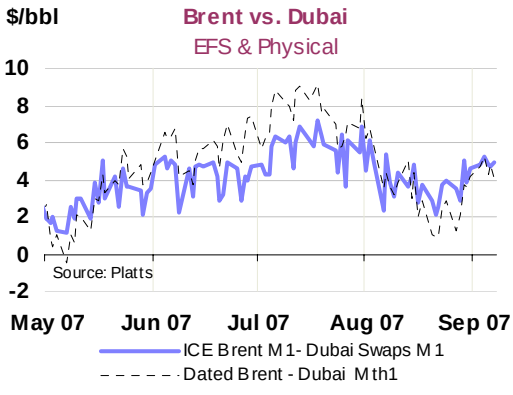




Nearly all futures contracts remain in backwardation, and in most cases steepened. Crude stocks fell by a combined 18.5 mb in the US and Japan in August, based upon weekly data, while refinery issues in the US have kept utilisation below average and gasoline and distillate stocks at low levels of forward cover. Refiners' need to produce more heating oil ahead of winter will prove a challenge due to low gasoline stocks, though this may be partly offset by the seasonal switch to winter-grade fuel, into which it is easier to blend ethanol and other, more volatile components (and hence raises volumes).

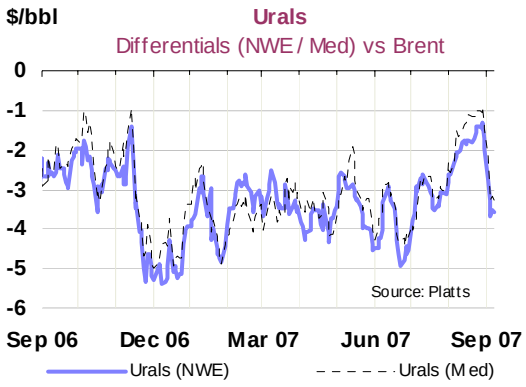
Geopolitical concerns have moved back into focus. Tension is evident in the Middle East, after (unconfirmed) Syrian reports of an Israeli air strike in early September and tough rhetoric between the US and Iran over the latter's alleged influence in Iraq. In Europe, Danish and German security forces prevented allegedly serious and advanced plans for major terrorist attacks around the anniversary of the 11 September 2001 attacks. Lastly, the US government warned of a possible threat of an attack on western interests in Nigeria.

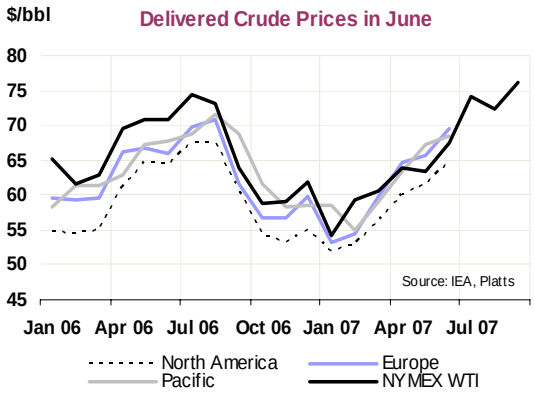




Spot Crude Oil Prices

Crude was the greater market driver, rather than products, in August and early September as refineries reached peak summer output levels. Weekly data for the US, Japan and EU-16 show a 17.8 mb stock draw in August, and crude futures remain steeply backwardated. On the other hand, the **US** saw lower-than-average refinery utilisation and relatively high crude imports. Physical WTI strengthened versus other Atlantic Basin light sweet crudes such as Dated Brent or Bonny Light, potentially attracting barrels, and related refinery margins on the US Gulf Coast increased in August. US sours in contrast weakened against WTI on higher Canadian inflows, after oil sands upgraders returned from maintenance. Sweet/sour differentials widened in all regions.





In **Europe**, Dated Brent was also supported by improved refining margins and rose in late August and early September. Previously, however, the benchmark weakened and saw its premium to medium sours narrow. Russian Urals moved to within $1/bbl of Brent as Middle Eastern crude supply remained tight, and news reports indicated several spot cargoes moving to Asia. Brent may yet weaken again, as the restart of the CATS pipeline should increase supply of related crude. Conversely, maintenance work on the Forties field will soon come to an end, raising its quality, which had been diminished due to a higher proportion of higher-sulphur Buzzard. Urals has also subsequently been pressured by the announcement of a 5 mb Kirkuk tender for mid-September loading.

The narrow Brent/Dubai spread in late August encouraged strong **Asia-Pacific** interest in West African crudes. September-loading volumes reportedly increased to 1.3 mb/d, still lower than in July, but higher than August's 860 kb/d. Nigerian Bonny Light rose to a $4/bbl premium in late August on strong buying.

Spot Crude Oil Prices and Differentials

(monthly and weekly averages, $/bbl)

	Jun	Jul	Aug	Aug-Jul Avg Change	%	Week Commencing: 06 Aug	13 Aug	20 Aug	27 Aug	03 Sep
Crudes										
Dated Brent	71.54	77.01	70.73	-6.27	-8.1	70.66	70.08	68.40	70.52	74.73
Brent (Asia) Mth1 adjusted	70.42	75.99	71.33	-4.66	-6.1	71.66	70.29	69.28	71.37	74.08
WTI (Cushing) Mth1 adjusted	67.44	74.10	72.36	-1.74	-2.3	71.86	71.99	70.29	73.02	76.05
Urals (Mediterranean)	67.82	73.90	69.24	-4.65	-6.3	68.94	68.78	67.26	69.35	71.74
Dubai Mth1 adjusted	65.79	69.49	67.38	-2.11	-3.0	66.99	66.63	66.76	67.54	70.10
Tapis (Dated)	75.18	79.64	76.32	-3.32	-4.2	76.66	75.12	74.46	76.23	79.63
Differential to Dated Brent										
WTI (Cushing) Mth1 adjusted	-4.11	-2.90	1.63	4.54		1.20	1.91	1.90	2.50	1.32
Urals (Mediterranean)	-3.72	-3.11	-1.49	1.62		-1.72	-1.30	-1.14	-1.17	-2.99
Dubai Mth1 adjusted - Dated Brent	-5.75	-7.51	-3.35	4.16		-3.67	-3.45	-1.63	-2.98	-4.63
Tapis (Dated)	3.64	2.63	5.58	2.95		6.00	5.04	6.07	5.71	4.90
Prompt Month Differential										
Forward Cash Brent Mth1-Mth2 adj.	0.10	0.36	-0.14	-0.50		-0.31	-0.27	-0.19	0.08	0.45
Forward WTI Cushing Mth1-Mth2 adj	-0.58	-0.06	0.29	0.35		0.15	0.22	0.12	0.68	0.99

Source: Platts

Middle Eastern sours also weakened significantly against Dated Brent from mid-August. Differentials could be boosted by a substantial volume of Abu Dhabi crude reportedly set to be offline due to maintenance in October/November, as well as seasonal interest in kerosene-rich grades by Japanese refiners wishing to build heating fuel stocks ahead of the winter. Perhaps in view of anticipated lower UAE volumes, but also amid more favourable fuel oil differentials, Saudi Arabia raised its official selling prices (OSPs) for all crude grades to Asia-Pacific for October.

Refining Margins

Refining margins were mixed in August. Spreads in Europe increased across-the-board as middle distillate (and some gasoline) cracks rose, in contrast to the US and Asia. After we reported one month ago that marginal refiners such as Conoco's Wilhelmshaven and Preem's Gothenburg plants had shut down and reduced runs respectively on deteriorating margins, more profitable hydroskimming operations have subsequently seen refiners hike runs by a total of 250 kb/d again. Cracking margins also rose, particularly in Northwest Europe.

In the US, most margins were down on weakened gasoline cracks. Only Gulf Coast cracking rose, but this was due to steeper late-August crude price falls. Some distillate cracks there also improved in August, in contrast to the depressed West Coast, as was true for jet. Cracking margins in August were once again better in Europe than on the US Gulf Coast, which was likely another reason for more West African crude heading to Asia. Lastly, Asian margins all deteriorated in August. Chinese refineries are suffering from low domestic retail prices, reportedly causing them to cut runs, as they cannot pass on their higher costs.

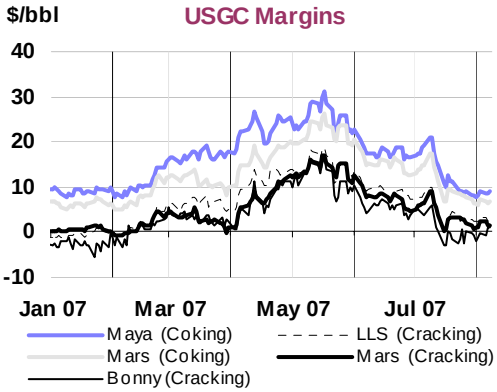
Selected Refining Margins in Major Refining Centres

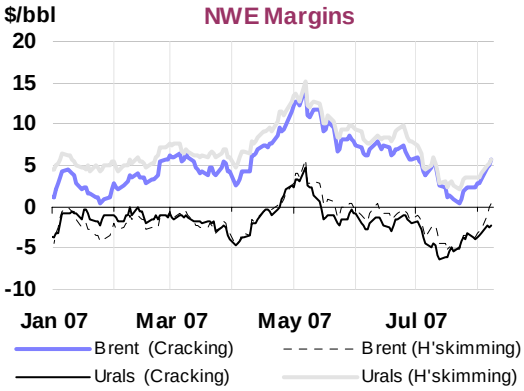
($/bbl)

		Monthly Average			Change	Average for week ending:				
		Jun 07	Jul 07	Aug 07	Aug 07-Jul 07	08 Aug	15 Aug	22 Aug	29 Aug	05 Sep
NW Europe	Brent (Cracking)	6.82	2.98	5.74	2.76	4.32	5.83	6.35	6.73	5.85
	Urals (Cracking)	8.47	4.07	5.62	1.55	4.70	5.57	6.16	6.12	6.56
	Brent (Hydroskimming)	-0.90	-3.50	-0.03	3.47	-1.29	0.36	0.60	0.72	-0.59
	Urals (Hydroskimming)	-1.24	-4.31	-1.83	2.48	-2.40	-1.79	-1.20	-1.73	-1.38
Mediterranean	Es Sider (Cracking)	7.17	3.06	4.09	1.03	2.91	4.02	4.79	4.90	4.88
	Urals (Cracking)	7.65	3.80	4.87	1.07	3.89	4.83	5.45	5.53	5.62
	Es Sider (Hydroskimming)	-0.64	-3.38	-1.62	1.76	-2.38	-1.36	-1.02	-1.23	-1.58
	Urals (Hydroskimming)	-1.85	-4.39	-2.29	2.10	-2.74	-2.17	-1.88	-2.10	-2.18
US Gulf Coast	Bonny (Cracking)	7.80	2.55	3.32	0.77	0.22	3.37	5.15	5.16	4.69
	Brent (Cracking)	5.72	1.09	3.59	2.50	0.05	3.57	5.79	5.70	4.45
	LLS (Cracking)	9.39	4.96	5.62	0.66	2.88	5.42	7.49	7.03	6.84
	Mars (Cracking)	7.90	4.07	3.19	-0.88	1.68	3.11	3.91	4.23	4.03
	Mars (Coking)	15.46	10.89	9.44	-1.45	6.62	9.11	10.98	11.20	11.14
	Maya (Coking)	17.92	13.54	12.17	-1.37	8.64	11.98	14.32	14.03	14.87
US West Coast	ANS (Cracking)	8.91	3.95	-0.44	-4.38	-1.17	0.18	0.30	-0.63	-0.94
	Kern (Cracking)	10.83	7.53	4.38	-3.15	3.75	5.91	4.58	4.36	3.09
	Oman (Cracking)	8.57	6.99	2.58	-4.41	2.77	3.65	1.82	2.21	1.98
	Kern (Coking)	27.25	20.97	12.79	-8.18	10.81	12.92	12.40	14.94	14.78
Singapore	Dubai (Hydroskimming)	-0.60	-0.64	-1.17	-0.53	-0.60	-0.84	-1.63	-1.75	-1.38
	Tapis (Hydroskimming)	-3.33	-5.38	-5.57	-0.19	-7.32	-5.81	-4.23	-4.68	-5.89
	Dubai (Hydrocracking)	4.17	3.56	2.27	-1.30	2.51	2.44	2.02	1.86	2.33
	Tapis (Hydrocracking)	-0.54	-2.59	-3.25	-0.66	-4.91	-3.30	-2.00	-2.56	-3.43
China	Cabinda (Hydroskimming)	-3.11	-6.09	-6.38	-0.30	-5.29	-4.63	-1.80	-2.95	-4.44
	Daqing (Hydroskimming)	-2.31	-8.51	-10.67	-2.16	-10.08	-9.05	-6.48	-6.04	-6.68
	Dubai (Hydroskimming)	-1.07	-1.03	-1.06	-0.02	-0.89	-1.13	-1.98	-2.21	-1.72
	Daqing (Hydrocracking)	2.86	-3.61	-6.76	-3.15	-6.16	-4.91	-3.10	-2.66	-2.71
	Dubai (Hydrocracking)	3.67	3.11	2.28	-0.83	2.16	2.11	1.62	1.34	1.96

For the purposes of this report, refining margins are calculated for various complexity configurations, each optimized 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.

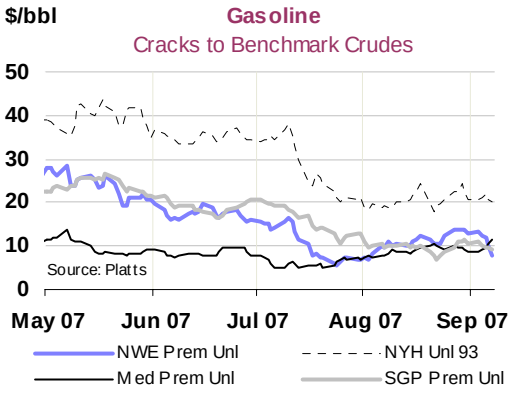


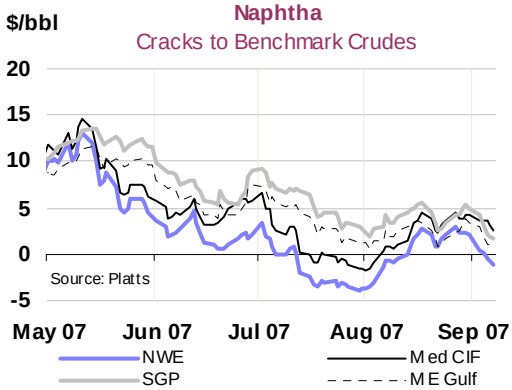


Spot Product Prices

With the end of the driving season in the northern hemisphere, the emphasis is shifting to the heating fuels markets, and on the NYMEX, heating oil is now trading at a premium to gasoline. Nevertheless, gasoline stocks, at least in the US, remain tighter, both in absolute terms and in days of forward cover (the latter at their lowest in four years at 20 days). Refiners' need to concentrate on gasoline output when they would usually hike distillate output will likely keep markets tight, though this will be partly offset by the impending switch to winter-specification gasoline, which is easier to produce.

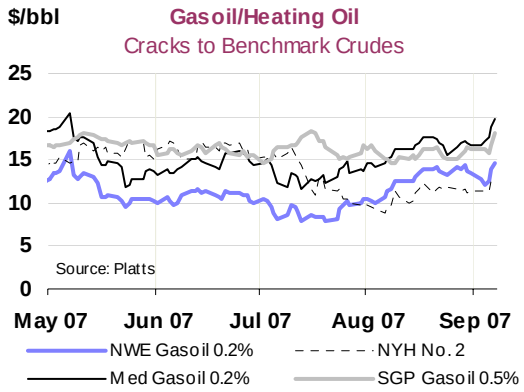
US **gasoline** supplies are tight in all areas east of the Rockies, but particularly so in the Midwest, which has seen more than its fair share of refinery problems this year. The US Environmental Protection Agency (EPA) even granted North Dakota a waiver to import lower-specification Canadian gasoline in order to prevent shortages after some pipeline problems. Meanwhile, in Asia, gasoline took strength from higher-than-average imports from Vietnam and Indonesia for September, and some additional Chinese purchases on the spot market. Naphtha in contrast was especially weak, with cracks dipping towards parity with crude again in early September. Cracker problems in Taiwan kept demand low, while deferred Indian refinery maintenance kept its exports high.

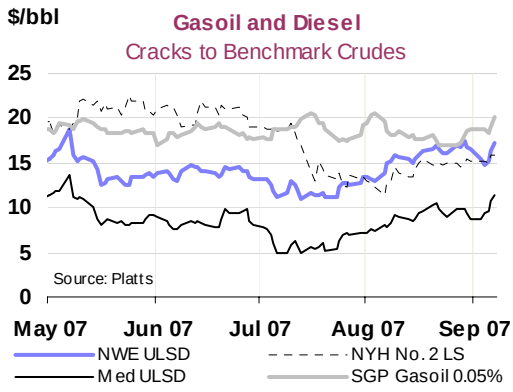




Distillate cracks have by now overtaken gasoline in all markets and made headway especially in Europe, for heating oil, diesel and jet fuel. In Asia, support came from healthy purchases from India and Vietnam, but also exports to Europe and Chile. In the US, total distillate stocks are in line with their five-year average in absolute terms, but at the bottom of the range in terms of forward demand cover, at 31 days.

Fuel oil cracks weakened slightly in August and early September, with peak summer utility demand over and refineries at high utilisation rates. In Asia, reports indicated that independent Chinese 'teapot' refineries imported less straight-run fuel oil in August, due to weak margins. Additional demand from





Japanese utility TEPCO for electricity generation also proved to be lower than anticipated when the company was forced to shut its largest nuclear power station. Additional pressure on Asian cracks in September may come from higher incoming arbitrage volumes from the west.

End-User Product Prices in August

OECD gasoline end-user prices in US dollars ex-tax fell by 5.9% on average in August, excepting Japan, where they rose by 8.0%. Diesel prices mostly fell in Europe, but rose in Japan and the US by 6.7% and 0.3% respectively. In contrast, the ex-tax price of LSFO in US dollars saw some notable rises of 6.1% in Germany, 4.5% in Japan and 3.1% in the UK.

Spot Product Prices

(monthly and weekly averages, $/bbl)

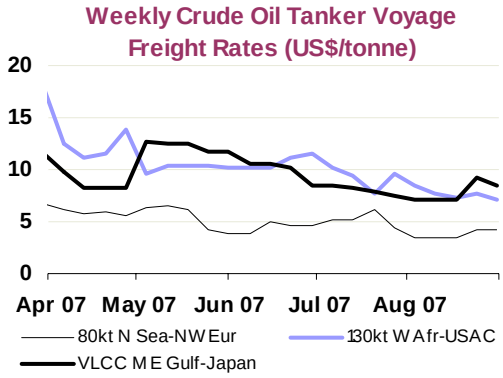
	Jun	Jul	Aug	Aug-Jul		Week Commencing:					Jun	Jul	Aug
				Change	%	06 Aug	13 Aug	20 Aug	27 Aug	03 Sep			
Rotterdam, Barges FOB											**Differential to Brent**		
Premium Unleaded	88.90	87.63	81.66	-5.97	-6.8	80.79	81.19	79.52	84.52	85.89	17.36	10.62	10.92
Naphtha	73.69	75.60	71.27	-4.33	-5.7	69.83	71.61	69.89	73.23	74.41	2.15	-1.41	0.54
Jet/Kerosene	87.24	90.26	87.27	-2.99	-3.3	86.73	87.31	85.42	88.10	90.36	15.70	13.25	16.53
ULSD	85.50	89.12	86.40	-2.72	-3.1	85.77	85.67	84.80	87.81	90.48	13.96	12.11	15.66
Gasoil .2%	82.31	86.13	83.47	-2.66	-3.1	82.37	83.14	82.01	84.80	87.88	10.76	9.12	12.73
LSFO 1%	48.58	54.75	56.55	1.80	3.3	58.10	56.74	53.65	56.40	54.71	-22.96	-22.26	-14.18
HSFO 3.5%	50.91	56.31	54.46	-1.85	-3.3	54.80	53.87	52.30	54.04	56.59	-20.64	-20.70	-16.28
Mediterranean, FOB Cargoes											**Differential to Urals**		
Premium 50 ppm	87.23	86.23	79.56	-6.66	-7.7	78.49	79.71	77.84	81.97	83.44	19.40	12.33	10.32
Naphtha	72.19	75.00	71.05	-3.95	-5.3	69.30	71.41	69.83	73.42	74.64	4.36	1.10	1.80
Jet Aviation fuel	84.76	88.49	85.89	-2.60	-2.9	84.98	85.57	84.22	87.36	89.13	16.94	14.59	16.64
Gasoil .2%	82.45	87.20	85.49	-1.71	-2.0	84.40	85.48	84.11	86.66	89.74	14.62	13.30	16.25
LSFO 1%	54.68	60.61	58.14	-2.47	-4.1	59.73	57.84	55.45	58.00	59.53	-13.15	-13.29	-11.10
HSFO 3.5%	50.75	55.97	54.95	-1.02	-1.8	55.31	54.43	52.36	55.12	57.06	-17.07	-17.93	-14.29
New York Harbour, Barges											**Differential to WTI**		
Super Unleaded	102.39	101.91	92.86	-9.05	-8.9	91.01	93.83	89.74	95.49	96.95	34.95	27.81	20.49
Unleaded	91.52	89.86	83.89	-5.97	-6.6	81.00	85.74	81.52	87.08	86.39	24.09	15.75	11.52
Jet/Kerosene	88.82	91.45	88.83	-2.61	-2.9	86.61	88.53	88.10	91.22	94.40	21.38	17.34	16.47
No. 2 (Heating Oil)	83.64	87.00	83.14	-3.86	-4.4	81.81	83.01	81.84	84.40	87.97	16.20	12.90	10.78
LSFO 1%	54.03	57.13	54.41	-2.72	-4.8	54.77	53.94	52.59	54.64	56.39	-13.40	-16.97	-17.96
No. 6 3%	52.06	57.33	56.16	-1.17	-2.0	56.33	55.44	54.08	56.76	58.11	-15.37	-16.77	-16.21
Singapore, Cargoes											**Differential to Dubai**		
Premium Unleaded	84.79	85.35	77.15	-8.20	-9.6	77.12	76.66	74.76	78.26	80.03	19.00	15.86	9.77
Naphtha	73.12	75.10	71.34	-3.76	-5.0	70.63	71.64	70.08	72.30	72.75	7.33	5.61	3.96
Jet/Kerosene	83.75	87.16	84.28	-2.88	-3.3	84.16	83.51	83.20	84.49	86.70	17.96	17.66	16.89
Gasoil .5%	81.80	85.73	83.00	-2.73	-3.2	81.98	82.04	82.55	83.30	86.68	16.01	16.24	15.62
LSWR Cracked	60.70	62.73	61.08	-1.65	-2.6	59.33	59.47	61.49	62.17	62.15	-5.09	-6.76	-6.30
HSFO 180 CST	55.45	59.55	58.20	-1.35	-2.3	59.01	57.38	56.23	58.11	59.68	-10.34	-9.94	-9.19
HSFO 380 CST 4%	55.58	60.15	58.39	-1.76	-2.9	59.37	57.60	56.31	58.11	59.81	-10.21	-9.34	-8.99

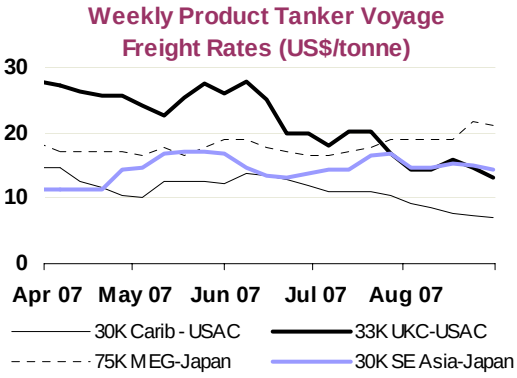
Source: Platts

Freight

Crude tanker rates, already at multi-year lows on certain routes in early August, remained very weak throughout the month. Low oil-in-transit volumes and the resultant vessel surplus continue to keep VLCC rates unseasonably low. An expanding tanker fleet has been a bearish influence this year and while scrapping activity has apparently remained modest, conversions to more profitable dry bulk carriers have risen.

VLCC rates from the Middle East Gulf to Japan languished just above the $7/tonne mark for the first half of August. This reflected weak tanker fundamentals, even by summer standards. A temporary $2/tonne mid-month jump to over $9/tonne resulted from greater chartering activity on the route, coinciding with reports of an upturn in September OPEC sailings, especially on eastbound routes. Rising OECD refinery throughputs from October, after autumn maintenance, also offered potential support for near-term demand for crude transportation. Still, Japan-bound rates faded to finish August at $8.50/tonne. VLCC rates from the Middle East Gulf to the US Gulf were equally weak in August, remaining flat at around $14/tonne. This compares with rates of $25/tonne at the end of August 2006; a busy period of chartering before OPEC cuts were implemented.





Crude tanker rates from West Africa fell to their lowest point for two years, in $/tonne terms, by early September. Suezmax rates to the US Atlantic finished near $7/tonne, down by $2/tonne on the month. Transatlantic VLCC rates fell by even more. Despite greater demand for eastbound voyages, regional vessel demand has otherwise been undermined by recent refinery outages and approaching maintenance. Caspian production maintenance will reduce September BTC (Baku-Tbilisi-Ceyhan) export volumes, potentially adding downside to Mediterranean Suezmax rates in the coming weeks.

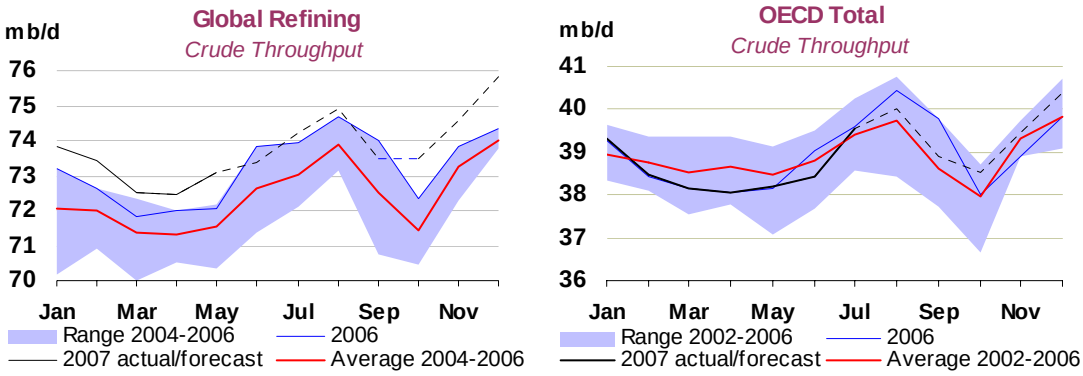
Clean tanker rates broadly fell in August, with the exception of LR1 routes (75,000 tonnes) from the Middle East Gulf to Japan. Rates on this trade rose by $2/tonne on the month to end at over $21/tonne in early September. Support came from firm naphtha demand from North Asian petrochemical plants, plus reports of reduced regional vessel availability following some gasoil arbitrage trade from Asia to Europe. In Western markets, transatlantic 35,000-tonne clean rates to the US drifted from a mid-month peak of $16/tonne to around $13/tonne, despite improving arbitrage economics at the end of August.

REFINING

Summary

- **Global refinery crude throughput in July is estimated at 74.2 mb/d,** 0.8 mb/d higher than in June and 0.3 mb/d higher year-on-year. Higher runs in the OECD (+1.1 mb/d) and the FSU were offset by declining crude runs in Asia. Chinese crude throughput declined by 300 kb/d on the back of planned maintenance work and poor margins, with voluntary run cuts reducing crude runs by around 200 kb/d. Peak summer crude runs in August are estimated to have averaged 74.9 mb/d, up 0.7 mb/d from July.

- **Global crude throughput forecasts for the third and fourth quarters have been reduced by 0.3 mb/d.** Crude runs are now expected to average 74.2 mb/d and 74.6 mb/d respectively. Higher planned maintenance, weaker than expected August throughputs and downward revisions to demand estimates, underpin the reductions. Offsetting these negative influences, we have revised up our Asian crude throughput forecast following a re-assessment of Indonesian and Singaporean crude runs.



- **July OECD refinery crude throughput is estimated at 39.5 mb/d, 1.1 mb/d higher than in June.** Higher crude runs in the US, France and Japan account for the majority of the increase. Renewed refinery reliability problems in the US in August are expected to weigh on OECD crude throughput. Elsewhere higher runs, notably in Japan, should result in OECD crude throughput reaching a summer peak of 40.0 mb/d.

- **Refineries in Europe achieved record-low fuel oil yields in June,** as a result of new upgrading capacity additions in France and Finland. Pacific fuel oil yields remain low relative to historical levels and are likely to fall further in the fourth quarter with the commissioning of LG Caltex's new heavy oil upgrading unit. North American gasoline yields improved, with US yields at the top of the five–year range, suggesting reliability problems eased over the course of the month.

Global Refinery Throughput

Global refinery throughput is estimated to have averaged 74.2 mb/d in July, an increase of 0.8 mb/d from June and 0.3 mb/d higher than July 2006. Higher runs in all three OECD regions, underpinned the increase with North America accounting for 0.6 mb/d, and the Pacific 0.4 mb/d. Non-OECD crude throughput slipped slightly from June levels, despite Russian refineries reaching a post-Soviet record of just over 4.7 mb/d. Lower crude runs in China, following the record runs achieved in June, were partly a result of the start of maintenance at PetroChina's Dalian refinery and Sinopec's Maoming plant. However, the extent of the decline in July crude runs suggests that Chinese refiners were voluntarily curtailing runs by around 200 kb/d during the month due to the high price of crude relative to domestic price levels. Elsewhere the start of maintenance at ExxonMobil's Singapore refinery and several Indian refineries results in a month-on-month decline in Asian crude throughput.

Global Refinery Crude Throughput[1]

million barrels per day

	Apr 07	May 07	Jun 07	Jul 07	Aug 07	Sep 07	Oct 07	Nov 07	Dec 07
OECD Crude Runs									
North America	17.9	18.1	18.4	18.9	*18.9*	*18.4*	*18.1*	*18.5*	*19.0*
Europe	13.3	13.6	13.4	13.6	*13.9*	*13.6*	*13.5*	*13.6*	*13.9*
Pacific	6.9	6.5	6.6	7.0	*7.3*	*6.9*	*6.9*	*7.4*	*7.5*
Total OECD	38.1	38.2	38.4	39.5	*40.0*	*38.9*	*38.5*	*39.5*	*40.4*
NON-OECD Crude Runs									
FSU	5.6	5.6	5.8	*6.0*	*5.8*	*5.6*	*5.7*	*5.8*	*5.9*
Europe	0.7	0.6	0.7	*0.8*	*0.8*	*0.8*	*0.8*	*0.7*	*0.8*
China	6.5	6.6	6.8	6.5	*6.3*	*6.4*	*6.5*	*6.6*	*6.7*
Other Asia	*8.0*	*8.3*	*8.0*	*7.5*	*8.0*	*8.2*	*8.3*	*8.2*	*8.3*
Latin America	*5.5*	*5.4*	*5.4*	*5.4*	*5.6*	*5.4*	*5.5*	*5.5*	*5.5*
Middle East	*6.0*	*6.0*	*6.1*	*6.2*	*6.2*	*6.0*	*5.9*	*5.9*	*5.9*
Africa	*2.1*	*2.3*	*2.1*	*2.4*	*2.3*	*2.2*	*2.4*	*2.4*	*2.4*
Total Non-OECD	*34.4*	*34.9*	*35.0*	*34.7*	*34.9*	*34.6*	*34.9*	*35.1*	*35.4*
Total Crude Runs	*72.4*	*73.1*	*73.4*	*74.2*	*74.9*	*73.5*	*73.5*	*74.6*	*75.8*

1 Crude runs in Italics are estimates

August crude throughput is estimated to have averaged 74.9 mb/d, an increase of 0.7 mb/d from July. Higher OECD crude runs and a rebound in Asian throughput, on the back of lower maintenance result in crude runs reaching their summer peak, despite weaker Chinese runs. Market reports suggest that the independent (or "teapot") refining sector in China significantly reduced its activity levels in August for similar reasons. Chinese fuel oil imports, the majority of which are used by teapot refiners as feedstock, declined to 1.5 million tonnes (mmt) from 3.1 mmt in July because of poor refining economics. It is likely that a similar level of voluntary runs cuts to July were in effect in August at Sinopec and PetroChina refineries, despite pressure by the NDRC for refiners to raise crude runs. Some reports point to product shortages during August, as a result of the low level of crude runs which we estimate were just above 6.3 mb/d, over 0.5 mb/d below the June peak.

September crude runs are forecast to average 73.5 mb/d, a decline of 1.4 mb/d month-on-month. Planned maintenance work in the OECD, Latin America, Africa and the Middle East all contribute to the decline. Updated estimates for planned refinery maintenance lead us to reduce our global third and fourth-quarter crude throughput estimates by an average of 0.2 mb/d. Offsetting some of this downward adjustment we have re-assessed the likely level of crude throughput at refineries in Singapore and Indonesia, which are revised up by just over 0.1 mb/d.

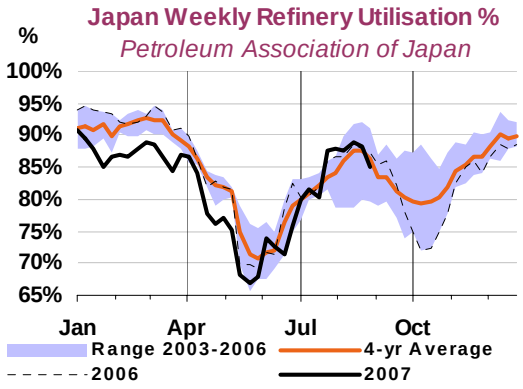
OECD Refinery Throughput

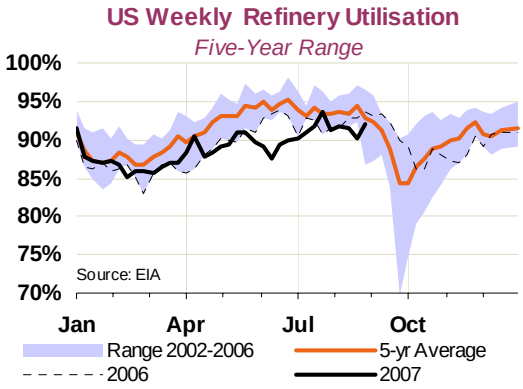
OECD Third and Fourth-Quarter Forecasts

Third-quarter OECD crude throughput is expected to average 39.5 mb/d, a downward revision of 0.3 mb/d from last month's report, reflecting the impact of refinery problems in the US and higher estimates for European and Pacific refinery maintenance. Similarly, August throughput (the summer peak in crude runs) is now expected to be 40.0 mb/d, down from 40.4 mb/d estimated in last month's report. For the fourth quarter we have reduced the assumed utilisation rate of marginal capacity of OECD refineries to reflect the lower demand outlook published this month. Consequently, fourth-quarter crude runs are now forecast to average 39.5 mb/d, an increase of 0.5 mb/d year-on-year.

September OECD crude throughputs are anticipated to decline by 1.1 mb/d as the seasonal maintenance work in all regions begins in earnest. Japanese crude runs started declining in late August as work commenced at two refineries, while in Europe the peak in planned outages appears to be early October, with maintenance at refineries in France, Sweden and the Netherlands. As a result of this work, OECD throughputs are expected to decline to 38.5 mb/d in October, but thereafter runs, (assuming normal weather), increase rapidly to 40.4 mb/d in December.

Weekly data for the US point to crude runs averaging 15.7 mb/d in August, below the 16.2 mb/d peak reached in late July. The mid-month slump in refinery activity was due to a series of operational problems at refineries on the Gulf Coast, perhaps most prominently, the fire at Chevron's Pascagoula refinery which closed one 160 kb/d crude unit, possibly for several months.





Elsewhere, a return of operational problems in the US Midwest, in combination with heavy regional planned maintenance and reports of problems with product pipelines supplying the region, reduced gasoline stocks. As a result of these problems, North Dakota was forced to obtain a waiver from the EPA to import Canadian gasoline, given the tight supply situation. Japanese weekly data point to runs dipping to 4.1 mb/d in late August with the start of maintenance at refineries operated by Shell and Cosmo Oil. Crude runs are expected to dip further over the course of September and into October, but are not expected to reach the level seen in October 2006.

OECD Data for July

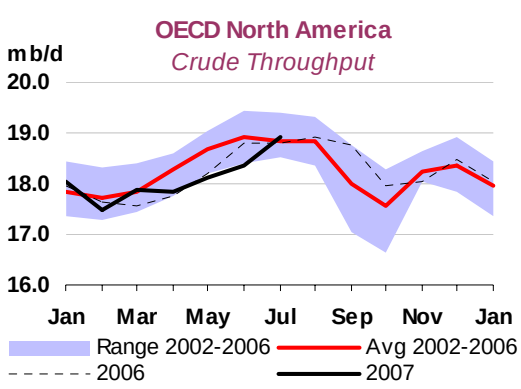
OECD crude throughput in July averaged 39.5 mb/d, 0.4 mb/d below last month's forecast. Crude runs were approximately 0.1 mb/d lower than expected in all regions. Crude throughput was up 1.1 mb/d from June levels, with increases from the US, France and Japan.

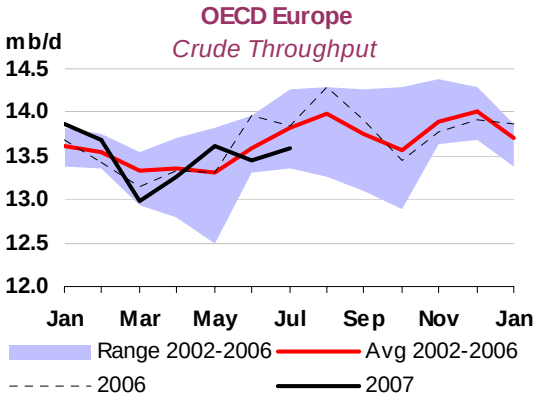
Refinery Crude Throughput and Utilisation in OECD Countries

	million barrels per day						*Change from*		Utilisation rate[2]	
	Feb 07	Mar 07	Apr 07	May 07	Jun 07	Jul 07	*Jun 07*	*Jul 06*	Jul 07	Jul 06
OECD North America										
US[3]	14.43	14.84	15.04	15.37	15.24	15.82	0.58	0.16	90.61	90.09
Canada	1.77	1.81	1.57	1.54	1.86	1.90	0.04	0.02	94.18	93.02
Mexico	1.26	1.24	1.24	1.23	1.26	1.20	-0.06	-0.04	78.19	71.96
Total	17.47	17.89	17.85	18.14	18.36	18.93	0.56	0.14	90.04	89.09
OECD Europe										
France	1.71	1.50	1.59	1.88	1.56	1.78	0.22	0.07	91.06	86.79
Germany	2.31	2.21	2.19	2.15	2.29	2.30	0.01	-0.07	95.20	97.46
Italy	1.93	1.91	1.83	1.88	1.85	1.83	-0.02	-0.05	78.23	80.61
Netherlands	0.97	0.88	1.01	1.04	0.95	1.03	0.08	0.09	84.86	76.81
Spain	1.14	1.17	1.22	1.19	1.16	1.15	0.00	-0.04	90.59	93.79
UK	1.42	1.49	1.60	1.63	1.56	1.55	-0.01	-0.07	81.90	86.00
Other OECD Europe	4.20	3.81	3.83	3.85	4.08	3.94	-0.13	-0.19	84.07	85.74
Total	13.67	12.98	13.27	13.62	13.45	13.58	0.14	-0.26	86.10	86.90
OECD Pacific										
Japan	4.11	4.04	3.88	3.32	3.45	3.92	0.46	0.07	83.79	82.30
Korea	2.51	2.48	2.37	2.43	2.45	2.39	-0.06	-0.04	87.43	94.26
Other OECD Pacific	0.70	0.75	0.70	0.71	0.70	0.71	0.01	0.01	88.66	86.96
Total	7.32	7.27	6.95	6.45	6.61	7.02	0.42	0.05	85.48	86.59
OECD Total	38.46	38.14	38.06	38.21	38.42	39.53	1.12	-0.07	87.83	87.87

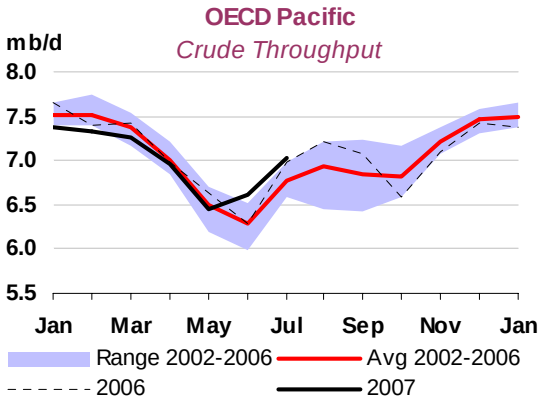
1 Estimate
2 Based on crude throughput and current operable refining capacity
3 US50

North American crude runs were 0.6 mb/d higher in July than in June. Higher US throughput, primarily on the Gulf Coast, was the sole contributor. The completion of planned work at ExxonMobil's Beaumont refinery and improved reliability at refineries elsewhere boosted runs, despite the problems evident in the US Midwest. Pacific crude runs were boosted by the recovery in Japanese throughput, as spring maintenance was completed, and despite crude throughput restrictions faced by some refiners with problems at upgrading units. Korean runs were down marginally as the return to service of a 75 kb/d crude unit at SK Incheon's refinery, was more than offset by maintenance at several refineries.





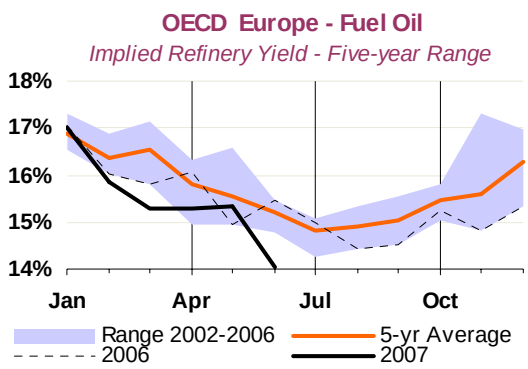
European crude throughput rose by 0.1 mb/d in July but remained below 2006 levels and in the bottom half of the five-year range. Poor hydroskimming margins, (-$4.31/bbl for Urals in July), explain some of the decline. Indications that offline capacity in July is substantially lower than last year, suggest that run cuts in Europe in July were more broad-based than some reports suggested. Consequently, we now estimate that voluntary run cuts were around 250 kb/d during the month. The rebound in hydroskimming margins by the middle of the month prompted hydroskimming refineries in Sweden, and latterly in Germany, to raise rates back towards full capacity.

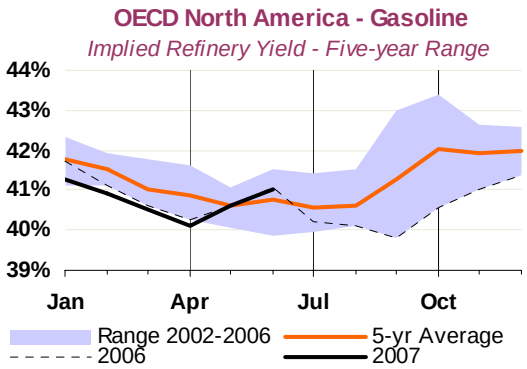


OECD Refinery Yields

June data for OECD refineries indicate that overall yields were in line with the previous year's level. However, fuel oil yields posted a marginal decline on the month, driven by European yields reaching record lows. This decline in fuel oil is linked to the start-up of hydrocracking units in Finland and France, with both countries reporting materially lower fuel oil yields. Pacific fuel oil yields remain at the bottom of the five-year range and are likely to fall further over the balance of the year as LG Caltex has announced the start-up of its 55 kb/d heavy oil upgrading unit at the Yosu refinery.

North American gasoline yields improved for the second month running, and moved back in line with 2006 levels. US gasoline yields recovered to the top end of the range for June, supporting the view that May's reported refinery problems eased over the month. However, with gasoline cracks of $24/bbl, $8bbl above year-ago level, some refinery level constraints clearly remained in place. Unplanned shutdowns at Canadian refineries during the month cut gasoline yields by three percentage points (10% of the gasoline yield), reducing regional averages. The strong level of US gasoline imports during June appears to have supported European gasoline yields which rose above previous year and the five-year average for the first time since October 2006. European jet/kerosene yields saw a corresponding dip, while naphtha yields recovered slightly from the 10-year low reached in May.



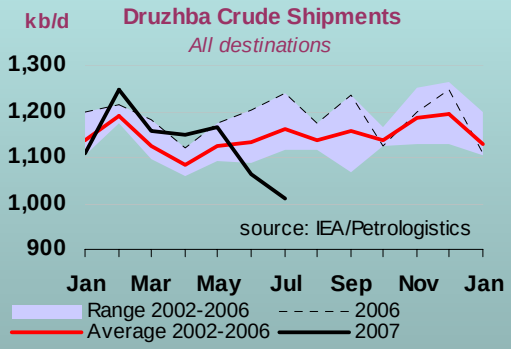


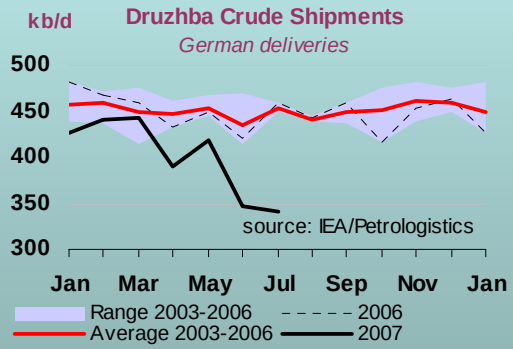
Pacific jet/kerosene yields appear to have reached their seasonal trough in June, albeit above the five-year range and 2006 levels. The corresponding peak in gasoil/diesel yields, linked to the annual Korean tax increase, also seems to have been reached, although this year's the later than usual implementation may yet be reflected in July data. The balance of the year is expected to witness a revival in kerosene yields as refineries prepare for the peak winter heating demand, although the start of SK Energy's new distillate hydrotreater, which allows it to produce an additional 120 kt per month of ultra-low-sulphur diesel, may alter the relative economics in the future.

A Crude Sort of Friendship

Crude runs in OECD Europe have lagged 2006 levels for four of the seven months reported so far in 2007. We routinely point towards factors such as maintenance and unplanned shutdowns as reducing the overall level of refinery activity. However, recent reports indicate that Russian supplies to OECD Europe via the Druzhba pipeline have also seen reduced volumes. This decline is not linked to a lack of demand on the part of the refineries, but rather a move by suppliers to obtain better commercial returns for the crude, by using alternative export routes, in the face of increased Druzhba transit fees.

In the medium term it is likely that the expansion of alternative Russian export routes, (see *FSU Supply Growth Prospects II – Diversifying Export Routes*, in the *Medium-Term Oil Market Report* released in July 2007), and continued investment in Russian refining capacity, will result in increased competition for the Urals crude. As a consequence Russian oil companies, such as Lukoil, are reportedly expecting the differential for Urals supplied to European refiners via the Druzhba pipeline to rise by as much as $3/bbl. However, ahead of the possibility of a tighter Urals crude market in Europe, it would appear that some exporters are attempting to improve their returns average realisations by using alternative export routes and therefore constrain pipeline exports, particularly to German refiners.

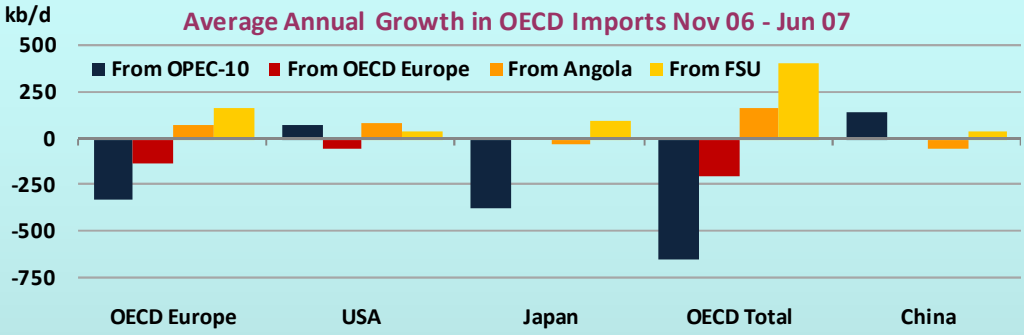




Recent reports indicate that exports have subsequently recovered, although some suggest that revised terms are yet to be agreed for supplies in the fourth quarter and beyond. The scale of the decline in Russian volumes serves as a reminder that pipeline supplies can be variable, particularly when there are alternative export routes for a supplier. As long as refiners can obtain crude by other routes a fair market price should be attainable by refiners and suppliers and a fair economic rent extracted by the pipeline operator. Where there is a lack of alternatives for either party then obtaining a fair market price becomes more difficult and periodic renegotiations are likely to occur.

Trading Places

Flexibility in sourcing crude imports is increasingly important for OECD refiners. Over recent years, the sector has been stretched not only by stricter product specifications and unplanned refining outages, but also by reductions to the availability of established crude supplies. Between November 2006 and June 2007, declining North Sea production and the tightening of OPEC quotas has pushed OECD imports from these suppliers 850 kb/d lower than previous-year levels, on average. Over the same period, OECD refinery throughputs decreased by 180 kb/d compared with year-ago, only fractionally easing the pressure to find suitable alternative barrels.



Since last November, Japan and OECD Europe have respectively imported 375 kb/d and 330 kb/d less OPEC-10 (excluding non-quota Angola and Iraq) crude than the previous year, on average. Drops in incoming Saudi Arabian crude account for over half of these declines. Conversely, US imports from OPEC-10 have grown by 80 kb/d.

Within the US crude slate, Algerian crude imports have doubled in the last 18 months, to over 450 kb/d, supplanting Europe as the main destination for gasoline-rich Saharan Blend. This trend could relate to outages to complex refinery units, intensifying the need to import crudes which more readily yield gasoline. By contrast, US imports from Venezuela and Iraq have declined noticeably since last November, the latter relating to geopolitical disruptions.

Otherwise, OECD refiners have generally sourced recent incremental crude cargoes from rising supplies outside the OPEC quota system, tracing global supply growth trends. OECD imports of FSU crude have posted average annual growth of 400 kb/d over this eight-month period, absorbing much of the coinciding 600 kb/d average FSU supply growth. While almost half of these extra cargoes went to Europe, Japanese imports of FSU grades, at zero for the first half of 2006, have averaged 115 kb/d since November. Angolan exports to the OECD (785 kb/d, almost all to US and Europe) grew by 160 kb/d between November 2006 and June 2007, almost exactly matching supply growth there. Generally speaking, Angolan and Caspian grades are a natural replacement, in terms of crude quality, for North Sea crude, while Urals could be considered a suitable alternative to lighter Middle Eastern grades.

Patchy trade data clouds the picture for non-OECD importers. China import data reveal that growth in imports from OPEC-10 countries has remained strong at around 140 kb/d since last November. A boost in CNPC production in Sudan has pushed Chinese imports of Sudanese crude from a declining trend in 2006, to growth of 180 kb/d on average since last autumn. Conversely, Angolan imports have weakened after firm growth in 2006. Indian crude import growth from OPEC has decreased slightly since last autumn, with tanker data indicating extra barrels instead coming from Angola, Malaysia and Mexico, plus a few cargoes from Azerbaijan.

During a period of lower throughputs, OECD refiners have absorbed greater volumes of re-invigorated non-OPEC supply. Price will ultimately decide whether these new trade patterns endure in the face of higher OPEC supplies. However, without extra OPEC output, any weakening of non-OPEC supply growth will obviously dent growth in these emerging trades. Higher refinery throughputs would then place even more focus on OECD crude stocks.

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

	2004	2005	1Q06	2Q06	3Q06	4Q06	2006	1Q07	2Q07	3Q07	4Q07	2007	1Q08	2Q08	3Q08	4Q08	2008
OECD DEMAND																	
North America	25.4	25.5	25.2	25.1	25.4	25.4	25.3	25.7	25.5	25.7	25.8	25.7	26.0	25.9	26.0	26.1	26.0
Europe	15.5	15.6	15.9	15.2	15.6	15.6	15.6	15.3	14.9	15.5	15.8	15.4	15.7	15.2	15.7	15.9	15.6
Pacific	8.5	8.6	9.2	7.8	7.9	8.7	8.4	8.8	7.8	8.0	8.9	8.4	9.3	8.0	8.1	9.0	8.6
Total OECD	49.4	49.7	50.3	48.1	48.9	49.7	49.2	49.7	48.2	49.1	50.6	49.4	51.0	49.0	49.8	51.0	50.2
NON-OECD DEMAND																	
FSU	3.8	3.8	3.9	3.7	4.0	4.3	4.0	3.8	3.5	3.9	4.5	3.9	3.9	3.6	4.0	4.5	4.0
Europe	0.7	0.7	0.8	0.7	0.7	0.8	0.7	0.8	0.8	0.7	0.8	0.8	0.8	0.8	0.7	0.8	0.8
China	6.4	6.7	7.0	7.3	7.2	7.2	7.2	7.3	7.7	7.6	7.7	7.6	7.7	8.1	8.1	8.1	8.0
Other Asia	8.6	8.8	9.0	9.0	8.7	8.9	8.9	9.2	9.2	8.9	9.1	9.1	9.4	9.4	9.2	9.4	9.3
Latin America	5.0	5.1	5.2	5.3	5.4	5.4	5.3	5.3	5.5	5.6	5.5	5.5	5.5	5.6	5.7	5.7	5.6
Middle East	5.7	6.0	6.2	6.2	6.5	6.3	6.3	6.4	6.6	6.8	6.5	6.6	6.7	6.8	7.1	6.8	6.9
Africa	2.8	2.9	3.0	3.0	2.9	2.9	2.9	3.1	3.1	3.0	3.1	3.1	3.2	3.2	3.1	3.2	3.2
Total Non-OECD	33.0	34.1	34.9	35.2	35.2	35.7	35.3	35.9	36.3	36.6	37.2	36.5	37.2	37.6	37.9	38.6	37.8
Total Demand[1]	82.3	83.7	85.2	83.3	84.1	85.4	84.5	85.6	84.5	85.7	87.8	85.9	88.2	86.6	87.7	89.6	88.0
OECD SUPPLY																	
North America	14.6	14.1	14.2	14.2	14.3	14.3	14.2	14.4	14.4	14.0	14.2	14.2	14.4	14.1	14.0	14.1	14.2
Europe	6.1	5.6	5.5	5.1	4.9	5.2	5.2	5.2	4.9	4.6	4.8	4.9	4.9	4.5	4.4	4.6	4.6
Pacific	0.6	0.6	0.5	0.5	0.7	0.6	0.6	0.6	0.6	0.6	0.7	0.6	0.7	0.8	0.8	0.8	0.8
Total OECD	21.2	20.3	20.2	19.8	19.9	20.1	20.0	20.2	19.9	19.3	19.7	19.8	20.0	19.4	19.1	19.6	19.5
NON-OECD SUPPLY																	
FSU	11.2	11.6	11.8	12.0	12.2	12.4	12.1	12.5	12.5	12.5	12.7	12.6	12.8	13.0	13.1	13.3	13.0
Europe	0.2	0.2	0.2	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	3.5	3.6	3.7	3.7	3.7	3.6	3.7	3.7	3.8	3.8	3.9	3.8	3.9	3.9	3.9	3.9	3.9
Other Asia	2.7	2.7	2.7	2.7	2.7	2.8	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.8	2.8	2.8	2.8
Latin America	4.1	4.3	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.5	4.6	4.4	4.7	4.8	4.8	4.7	4.8
Middle East	1.9	1.8	1.8	1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.6	1.7	1.6	1.6	1.6	1.6	1.6
Africa[2]	3.4	3.7	3.9	3.8	3.9	4.0	3.9	2.6	2.5	2.6	2.6	2.6	2.7	2.7	2.7	2.7	2.7
Total Non-OECD	27.0	27.9	28.4	28.5	28.8	29.0	28.7	27.8	27.7	27.8	28.3	27.9	28.7	28.9	29.0	29.2	28.9
Processing Gains[3]	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0
Other Biofuels[4]	0.1	0.1	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.7	0.7	0.7	0.7	0.7
Total Non-OPEC[5]	50.1	50.2	50.8	50.5	50.8	51.3	50.8	50.3	50.0	49.4	50.4	50.0	51.3	50.9	50.7	51.4	51.1
Non-OPEC excl. Angola[2]	49.1	49.0	49.3	49.2	49.3	49.9	49.4	50.3	50.0	49.4	50.4	50.0	51.3	50.9	50.7	51.4	51.1
OPEC																	
Crude[6]	28.9	29.7	29.9	29.7	30.0	29.2	29.7	30.2	30.2								
NGLs	4.2	4.5	4.6	4.6	4.6	4.7	4.6	4.8	4.8	4.8	5.0	4.9	5.2	5.4	5.6	5.8	5.5
Total OPEC	33.1	34.2	34.5	34.3	34.7	33.9	34.3	35.0	35.0								
OPEC incl. Angola[2]	34.1	35.5	35.9	35.6	36.1	35.3	35.7	35.0	35.0								
Total Supply[7]	83.2	84.4	85.2	84.8	85.4	85.2	85.2	85.2	85.0								
STOCK CHANGES AND MISCELLANEOUS																	
Reported OECD																	
Industry	0.1	0.1	0.0	0.6	1.2	-0.9	0.2	-0.9	0.8								
Government	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0								
Total	0.2	0.2	0.0	0.7	1.2	-0.8	0.3	-0.9	0.8								
Floating Storage/Oil in Transit	0.0	-0.1	0.1	-0.1	0.3	-0.6	-0.1	0.2	-0.1								
Miscellaneous to balance[8]	0.6	0.5	-0.2	0.9	-0.1	1.2	0.5	0.3	-0.2								
Total Stock Ch. & Misc	0.8	0.7	0.0	1.5	1.4	-0.3	0.7	-0.4	0.4								
Memo items:																	
Call on OPEC crude + Stock ch.[9]	28.1	29.0	29.9	28.2	28.7	29.5	29.0	30.6	29.8	31.4	32.4	31.1	31.7	30.3	31.4	32.3	31.4
Adjusted Call on OPEC + Stock ch.[10]	28.7	29.6	29.7	29.0	28.5	30.7	29.5	30.9	29.6	31.9	32.8	31.3	32.1	30.8	31.8	32.8	31.9
"Call" incl. Angola[2]	29.1	30.3	31.3	29.5	30.1	30.9	30.5	30.6	29.8	31.4	32.4	31.1	31.7	30.3	31.4	32.3	31.4
"Adjusted Call" incl. Angola[2]	29.7	30.8	31.1	30.4	30.0	32.1	30.9	30.9	29.6	31.9	32.8	31.3	32.1	30.8	31.8	32.8	31.9

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 With effect from OMR of 13 February 2007, Angolan production will be reclassified within OPEC and excluded from the Non-OPEC and Africa totals, for the period January 2007 onwards. Secondary aggregates allow comparison with previous year totals by including Angola within OPEC retroactively.
3 Net volumetric gains and losses in the refining process (excludes net gain/loss in former USSR, China and non-OECD Europe) and marine transportation losses.
4 Biofuels from sources outside Brazil and US.
5 Non-OPEC supplies include crude oil, condensates, NGL and non-conventional sources of supply such as synthetic crude, ethanol and MTBE. No allowance is made in the non-OPEC forecast for exceptional events which have, at certain times historically, reduced non-OPEC supply by 300-400 kbd on an annual basis.
6 As of the March 2006 OMR, Venezuelan Orinoco heavy crude production is included within Venezuelan crude estimates. Orimulsion fuel remains within the OPEC NGL & non-conventional category, but Orimulsion production reportedly ceased from January 2007.
7 Comprises crude oil, condensates, NGLs, oil from non-conventional sources and other sources of supply.
8 Includes changes in non-reported stocks in OECD and non-OECD areas.
9 Equals the arithmetic difference between total demand minus total non-OPEC supply minus OPEC NGLs.
10 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 plus an extra 350 kb/d allowance for average understatement of non-OPEC supply added for forecast periods.

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

(million barrels per day)

	2004	2005	1Q06	2Q06	3Q06	4Q06	2006	1Q07	2Q07	3Q07	4Q07	2007	1Q08	2Q08	3Q08	4Q08	2008
OECD DEMAND																	
North America	-	-	-	-	-	-	-	-	-	-0.1	-0.1	-	-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	-	0.1	-
Total OECD	-	-	-	-	-	-	-	0.1	0.1	-0.4	-0.2	-0.1	-0.2	-0.1	-0.2	-	-0.1
NON-OECD DEMAND																	
FSU	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Asia	-	-	-	-	-	-	-	-	-	-	-0.1	-	-	-	-0.1	-0.1	-0.1
Latin America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Middle East	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Non-OECD	-	-	-	-	-	-	-	-	0.1	-	-0.1	-	-	0.1	-	-0.1	-
Total Demand	-	-	-	-	-	-	-	0.1	0.2	-0.4	-0.3	-0.1	-0.2	-	-0.3	-0.2	-0.2
OECD SUPPLY																	
North America	-	-	-	-	-	-	-	-	0.1	-0.1	0.1	-	-	-	-	-	-
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total OECD	-	-	-	-	-	-	-	-	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	-	-	-	-	-	-	-	-	-	-0.2	-	-0.1	0.1	-	-	-	-
Processing Gains	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Biofuels	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Non-OPEC	-	-	-	-	-	-	-	-	0.1	-0.2	-	-	0.1	0.1	-	0.1	0.1
Non-OPEC excl. Angola	-	-	-	-	-	-	-	-	0.1	-0.2	-	-	0.1	0.1	-	0.1	0.1
OPEC																	
Crude	-	-	-	-	-	-	-	-	-								
NGLs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total OPEC	-	-	-	-	-	-	-	-	-								
OPEC incl. Angola	-	-	-	-	-	-	-	-	-								
Total Supply	-	-	-	-	-	-	-	-	0.1								
STOCK CHANGES AND MISCELLANEOUS REPORTED OECD																	
Industry	-	-	-	-	-	-	-	-	-								
Government	-	-	-	-	-	-	-	-	-								
Total	-	-	-	-	-	-	-	-	-								
Floating Storage/Oil in Transit	-	-	-	-	-	-	-	-	-								
Miscellaneous to balance	-	-	-	-	-	-	-	-0.1	-0.2								
Total Stock Ch. & Misc	-	-	-	-	-	-	-	-0.1	-0.1								
Memo items:																	
Call on OPEC crude + Stock ch.	-	-	-	-	-	-	-	0.1	0.1	-0.2	-0.3	-0.1	-0.3	-0.1	-0.3	-0.2	-0.2
Adjusted Call on OPEC + Stock ch.	-	-	-	-	-	-	-	-	-0.1	-0.2	-0.3	-0.1	-0.3	-0.1	-0.3	-0.3	-0.3
"Call" incl. Angola[2]	-	-	-	-	-	-	-	0.1	0.1	-0.2	-0.3	-0.1	-0.3	-0.1	-0.3	-0.2	-0.2
"Adjusted Call" incl. Angola	-	-	-	-	-	-	-	-	-0.1	-0.2	-0.3	-0.1	-0.3	-0.1	-0.4	-0.3	-0.3

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

	2005	1Q06	2Q06	3Q06	4Q06	2006	1Q07	2Q07	3Q07	4Q07	2007	1Q08	2Q08	3Q08	4Q08	2008
Demand (mb/d)																
North America	25.49	25.17	25.09	25.43	25.35	25.26	25.65	25.48	25.66	25.83	25.66	26.03	25.85	26.05	26.08	26.00
Europe	15.61	15.89	15.15	15.57	15.64	15.56	15.25	14.94	15.50	15.82	15.38	15.72	15.22	15.65	15.94	15.63
Pacific	8.57	9.24	7.82	7.85	8.71	8.40	8.83	7.80	7.96	8.92	8.38	9.27	7.98	8.06	8.96	8.57
Total OECD	49.67	50.30	48.07	48.85	49.71	49.23	49.73	48.22	49.12	50.57	49.41	51.02	49.05	49.76	50.98	50.20
FSU	3.80	3.91	3.73	3.97	4.30	3.98	3.77	3.51	3.93	4.46	3.92	3.86	3.58	4.01	4.53	4.00
Europe	0.72	0.80	0.75	0.70	0.75	0.75	0.83	0.77	0.71	0.77	0.77	0.85	0.79	0.73	0.79	0.79
China	6.69	6.96	7.29	7.17	7.20	7.16	7.27	7.67	7.64	7.73	7.58	7.75	8.10	8.05	8.15	8.01
Other Asia	8.79	8.95	8.96	8.66	8.90	8.87	9.17	9.22	8.94	9.13	9.11	9.37	9.44	9.16	9.39	9.34
Latin America	5.13	5.15	5.29	5.40	5.38	5.31	5.32	5.49	5.60	5.55	5.49	5.46	5.63	5.74	5.70	5.64
Middle East	5.99	6.16	6.21	6.47	6.27	6.28	6.43	6.58	6.78	6.50	6.57	6.69	6.84	7.10	6.83	6.86
Africa	2.94	2.97	2.97	2.86	2.93	2.93	3.11	3.08	2.98	3.09	3.06	3.22	3.18	3.09	3.20	3.17
Total Non-OECD	34.08	34.91	35.20	35.24	35.74	35.27	35.90	36.31	36.59	37.23	36.51	37.21	37.57	37.90	38.57	37.81
World	83.75	85.21	83.27	84.09	85.45	84.50	85.63	84.54	85.71	87.80	85.92	88.23	86.62	87.66	89.55	88.02
of which:																
US50	*20.80*	*20.49*	*20.60*	*20.86*	*20.73*	*20.67*	*20.88*	*20.74*	*20.98*	*21.06*	*20.92*	*21.19*	*21.13*	*21.32*	*21.25*	*21.22*
Euro4	*8.22*	*8.49*	*7.94*	*8.15*	*8.18*	*8.19*	*7.88*	*7.72*	*8.07*	*8.25*	*7.98*	*8.21*	*7.91*	*8.18*	*8.30*	*8.15*
Japan	*5.31*	*5.89*	*4.72*	*4.75*	*5.29*	*5.16*	*5.39*	*4.61*	*4.76*	*5.43*	*5.05*	*5.74*	*4.73*	*4.80*	*5.41*	*5.17*
Korea	*2.19*	*2.29*	*2.04*	*2.04*	*2.32*	*2.17*	*2.35*	*2.12*	*2.10*	*2.36*	*2.23*	*2.42*	*2.15*	*2.14*	*2.40*	*2.28*
Mexico	*2.05*	*2.05*	*1.98*	*1.96*	*2.00*	*2.00*	*2.05*	*2.07*	*2.05*	*2.07*	*2.06*	*2.09*	*2.10*	*2.09*	*2.12*	*2.10*
Canada	*2.30*	*2.26*	*2.17*	*2.26*	*2.26*	*2.24*	*2.34*	*2.33*	*2.28*	*2.32*	*2.32*	*2.37*	*2.28*	*2.29*	*2.33*	*2.32*
Brazil	*2.19*	*2.18*	*2.20*	*2.28*	*2.30*	*2.24*	*2.25*	*2.28*	*2.36*	*2.36*	*2.31*	*2.31*	*2.34*	*2.42*	*2.42*	*2.37*
India	*2.58*	*2.71*	*2.67*	*2.48*	*2.70*	*2.64*	*2.88*	*2.83*	*2.55*	*2.76*	*2.75*	*2.95*	*2.89*	*2.61*	*2.82*	*2.82*
Annual Change (% per annum)																
North America	0.5	-1.6	-0.8	-0.6	-0.7	-0.9	1.9	1.5	0.9	1.9	1.6	1.5	1.5	1.5	1.0	1.4
Europe	0.8	1.1	-0.7	-0.6	-1.0	-0.3	-4.0	-1.4	-0.5	1.1	-1.2	3.1	1.9	1.0	0.8	1.7
Pacific	0.8	-2.5	-2.7	-2.1	-0.3	-1.9	-4.5	-0.2	1.4	2.4	-0.3	5.0	2.2	1.3	0.5	2.3
Total OECD	0.6	-0.9	-1.1	-0.8	-0.7	-0.9	-1.1	0.3	0.5	1.7	0.4	2.6	1.7	1.3	0.8	1.6
FSU	1.2	2.4	0.6	4.8	10.5	4.6	-3.7	-5.9	-0.9	3.8	-1.5	2.6	2.0	2.1	1.6	2.0
Europe	4.2	3.4	3.4	3.4	3.4	3.4	2.9	2.7	2.6	2.2	2.6	2.3	2.6	2.6	2.6	2.5
China	4.2	4.2	12.1	7.1	4.6	6.9	4.5	5.2	6.6	7.3	5.9	6.5	5.6	5.4	5.4	5.7
Other Asia	2.0	-0.2	-0.8	1.6	2.8	0.8	2.4	2.9	3.2	2.6	2.8	2.2	2.4	2.6	2.8	2.5
Latin America	2.9	3.7	3.2	2.9	4.4	3.6	3.3	3.8	3.6	3.2	3.5	2.7	2.6	2.6	2.7	2.6
Middle East	4.6	4.8	4.2	4.7	5.3	4.8	4.4	5.8	4.8	3.7	4.7	4.1	3.9	4.6	4.9	4.4
Africa	6.1	-1.3	-0.9	-0.1	1.1	-0.3	4.6	3.7	4.3	5.2	4.4	3.6	3.4	3.4	3.6	3.5
Total Non-OECD	3.3	2.4	3.4	3.7	4.6	3.5	2.8	3.2	3.8	4.2	3.5	3.7	3.5	3.6	3.6	3.6
World	1.7	0.4	0.8	1.0	1.4	0.9	0.5	1.5	1.9	2.8	1.7	3.0	2.5	2.3	2.0	2.4
Annual Change (mb/d)																
North America	0.12	-0.41	-0.19	-0.14	-0.19	-0.23	0.48	0.38	0.23	0.48	0.39	0.38	0.38	0.38	0.25	0.35
Europe	0.12	0.17	-0.11	-0.09	-0.15	-0.05	-0.64	-0.21	-0.07	0.17	-0.19	0.47	0.28	0.16	0.12	0.26
Pacific	0.07	-0.24	-0.22	-0.17	-0.03	-0.16	-0.42	-0.02	0.11	0.21	-0.03	0.44	0.17	0.10	0.04	0.19
Total OECD	0.32	-0.47	-0.52	-0.41	-0.37	-0.44	-0.57	0.15	0.27	0.86	0.18	1.29	0.83	0.64	0.41	0.79
FSU	0.05	0.09	0.02	0.18	0.41	0.18	-0.15	-0.22	-0.04	0.16	-0.06	0.10	0.07	0.08	0.07	0.08
Europe	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
China	0.27	0.28	0.79	0.47	0.32	0.46	0.31	0.38	0.47	0.53	0.42	0.48	0.43	0.42	0.42	0.43
Other Asia	0.17	-0.02	-0.07	0.13	0.25	0.07	0.22	0.26	0.27	0.23	0.25	0.21	0.22	0.23	0.26	0.23
Latin America	0.14	0.19	0.16	0.15	0.23	0.18	0.17	0.20	0.20	0.17	0.18	0.14	0.14	0.14	0.15	0.14
Middle East	0.26	0.28	0.25	0.29	0.31	0.29	0.27	0.36	0.31	0.23	0.29	0.26	0.26	0.31	0.32	0.29
Africa	0.17	-0.04	-0.03	0.00	0.03	-0.01	0.14	0.11	0.12	0.15	0.13	0.11	0.11	0.10	0.11	0.11
Total Non-OECD	1.09	0.81	1.16	1.25	1.57	1.20	0.99	1.11	1.35	1.49	1.24	1.32	1.25	1.31	1.34	1.30
World	1.40	0.34	0.64	0.84	1.20	0.76	0.41	1.26	1.62	2.35	1.42	2.61	2.08	1.95	1.76	2.10
Revisions to Oil Demand from Last Month's Report (mb/d)																
North America	0.00	0.00	0.04	0.00	0.00	0.01	-0.01	0.03	-0.11	-0.05	-0.03	-0.06	0.00	-0.10	-0.08	-0.06
Europe	0.02	0.00	0.00	0.00	0.00	0.00	0.10	0.09	-0.14	-0.04	0.00	-0.03	-0.02	-0.10	-0.02	-0.05
Pacific	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	-0.12	-0.08	-0.05	-0.08	-0.06	-0.03	0.05	-0.03
Total OECD	0.02	0.00	0.04	0.00	0.00	0.01	0.10	0.11	-0.37	-0.16	-0.08	-0.17	-0.08	-0.23	-0.05	-0.13
FSU	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	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	-0.01	0.00	0.00	0.00	0.00
China	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.02	0.00	0.01	0.00	0.02	0.03	-0.02	0.01
Other Asia	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	-0.04	-0.08	-0.03	-0.02	0.00	-0.08	-0.12	-0.05
Latin America	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.01	0.01	0.00	0.02	0.00	0.01	0.01
Middle East	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.03	-0.01	-0.01	0.01	-0.01	0.02	0.02	0.03	0.01
Africa	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	0.01	0.01	-0.01	-0.01	0.00	0.01	0.02	-0.01	-0.01	0.00
Total Non-OECD	-0.01	-0.01	-0.02	-0.01	-0.01	-0.01	0.02	0.09	-0.04	-0.09	0.00	-0.02	0.07	-0.04	-0.12	-0.03
World	0.01	-0.01	0.02	-0.01	-0.01	0.00	0.12	0.20	-0.41	-0.25	-0.09	-0.19	-0.02	-0.28	-0.16	-0.16
Revisions to Oil Demand Growth from Last Month's Report (mb/d)																
World	0.01	-0.02	0.02	-0.02	-0.02	-0.01	0.13	0.18	-0.40	-0.24	-0.09	-0.31	-0.22	0.14	0.09	-0.07

Table 3
WORLD OIL PRODUCTION
(million barrels per day)

	2006	2007	2008	1Q07	2Q07	3Q07	4Q07	1Q08	Jun 07	Jul 07	Aug 07
OPEC											
Crude Oil											
Saudi Arabia	8.93			8.34	8.37				8.35	8.40	8.42
Iran	3.89			3.88	3.92				3.90	3.92	3.87
Iraq	1.90			1.89	2.01				1.93	2.19	1.96
UAE	2.62			2.55	2.56				2.59	2.59	2.60
Kuwait	2.21			2.16	2.08				2.07	2.17	2.17
Neutral Zone	0.58			0.55	0.55				0.55	0.55	0.56
Qatar	0.82			0.80	0.80				0.81	0.83	0.83
Angola[b]				1.53	1.58				1.55	1.56	1.62
Nigeria	2.24			2.22	2.07				2.07	2.10	2.15
Libya	1.71			1.69	1.69				1.70	1.70	1.70
Algeria	1.35			1.33	1.36				1.37	1.35	1.35
Venezuela	2.56			2.44	2.37				2.37	2.34	2.36
Indonesia	0.89			0.85	0.84				0.83	0.83	0.84
Total Crude Oil	29.69			30.22	30.19				30.06	30.50	30.41
Total NGLs[1]	4.63	4.85	5.51	4.76	4.80	4.83	5.03	5.21	4.80	4.82	4.83
Total OPEC	34.32			34.99	34.99				34.86	35.32	35.24
OPEC incl. Angola[6]	35.73			34.99	34.99				34.86	35.32	35.24
NON-OPEC[2]											
OECD											
North America	14.25	14.24	14.17	14.36	14.42	14.01	14.19	14.45	14.37	14.24	13.91
United States	7.37	7.40	7.42	7.44	7.56	7.35	7.25	7.48	7.50	7.53	7.50
Mexico	3.68	3.51	3.41	3.57	3.58	3.40	3.51	3.46	3.62	3.57	3.11
Canada	3.19	3.33	3.34	3.35	3.28	3.25	3.43	3.51	3.24	3.13	3.31
Europe	5.18	4.90	4.59	5.22	4.89	4.63	4.85	4.87	4.53	4.85	4.46
UK	1.66	1.64	1.50	1.76	1.70	1.47	1.64	1.65	1.63	1.50	1.37
Norway	2.78	2.52	2.36	2.72	2.46	2.42	2.47	2.49	2.17	2.61	2.35
Others	0.74	0.74	0.72	0.74	0.73	0.74	0.73	0.73	0.73	0.74	0.74
Pacific	0.58	0.64	0.78	0.59	0.63	0.65	0.71	0.73	0.67	0.64	0.63
Australia	0.53	0.57	0.67	0.53	0.56	0.57	0.61	0.63	0.61	0.57	0.55
Others	0.05	0.08	0.11	0.06	0.06	0.08	0.10	0.10	0.06	0.07	0.08
Total OECD	20.01	19.78	19.53	20.17	19.94	19.28	19.75	20.04	19.57	19.73	19.01
NON-OECD											
Former USSR	12.10	12.58	13.05	12.55	12.50	12.53	12.75	12.85	12.51	12.61	12.64
Russia	9.69	9.92	10.10	9.91	9.87	9.95	9.96	9.93	9.91	9.94	9.94
Others	2.40	2.66	2.95	2.63	2.63	2.58	2.79	2.92	2.60	2.67	2.69
Asia	6.39	6.52	6.71	6.45	6.48	6.51	6.66	6.66	6.51	6.34	6.63
China	3.67	3.82	3.92	3.75	3.79	3.83	3.92	3.93	3.83	3.65	3.91
Malaysia	0.75	0.75	0.79	0.74	0.74	0.75	0.77	0.77	0.75	0.75	0.75
India	0.79	0.82	0.81	0.82	0.81	0.82	0.82	0.82	0.82	0.81	0.82
Others	1.17	1.13	1.18	1.14	1.14	1.11	1.15	1.15	1.11	1.14	1.14
Europe	0.15	0.13	0.12	0.14	0.14	0.13	0.13	0.13	0.13	0.13	0.13
Latin America	4.39	4.45	4.75	4.38	4.39	4.45	4.57	4.74	4.41	4.40	4.46
Brazil	2.10	2.20	2.55	2.15	2.14	2.19	2.33	2.52	2.18	2.14	2.20
Argentina	0.77	0.77	0.75	0.77	0.77	0.77	0.76	0.76	0.77	0.77	0.77
Colombia	0.53	0.54	0.55	0.52	0.53	0.55	0.55	0.55	0.53	0.55	0.55
Ecuador	0.54	0.50	0.47	0.50	0.51	0.50	0.48	0.48	0.50	0.50	0.50
Others	0.45	0.44	0.44	0.44	0.44	0.45	0.45	0.44	0.44	0.45	0.45
Middle East[3]	1.74	1.65	1.61	1.67	1.66	1.66	1.63	1.64	1.65	1.67	1.66
Oman	0.75	0.71	0.68	0.72	0.72	0.70	0.69	0.69	0.71	0.71	0.70
Syria	0.42	0.39	0.36	0.40	0.39	0.38	0.38	0.37	0.39	0.39	0.38
Yemen	0.38	0.37	0.38	0.36	0.36	0.38	0.37	0.39	0.36	0.38	0.38
Africa	3.91	2.57	2.69	2.58	2.54	2.57	2.60	2.65	2.54	2.56	2.57
Egypt	0.67	0.63	0.62	0.64	0.63	0.63	0.63	0.63	0.63	0.63	0.63
Angola[6]	1.37										
Gabon	0.23	0.23	0.24	0.23	0.23	0.23	0.23	0.24	0.23	0.23	0.23
Others	1.63	1.71	1.83	1.71	1.68	1.70	1.74	1.79	1.67	1.69	1.71
Total Non-OECD	28.67	27.91	28.93	27.77	27.70	27.84	28.34	28.67	27.74	27.71	28.08
Processing Gains[4]	1.90	1.92	1.95	1.92	1.92	1.92	1.92	1.95	1.92	1.92	1.92
Other Biofuels[5]	0.26	0.40	0.66	0.40	0.40	0.40	0.40	0.66	0.40	0.40	0.40
TOTAL NON-OPEC	50.84	50.02	51.07	50.26	49.96	49.44	50.41	51.32	49.64	49.76	49.41
Non-OPEC excl. Angola[6]	49.43	50.02	51.07	50.26	49.96	49.44	50.41	51.32	49.64	49.76	49.41
TOTAL SUPPLY	85.16			85.24	84.95				84.50	85.08	84.65

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 will reportedly cease from January 2007.
2 Comprises crude oil, condensates, NGLs and oil from non-conventional sources. No allowance is made in the non-OPEC forecast for exceptional events, which have, at certain times historically, reduced non-OPEC supply by 300-400 kbd on an annual basis.
3 Includes small amounts of production from Israel, Jordan and Bahrain.
4 Net volumetric gains and losses in refining (excludes net gain/loss in FSU, China and non-OECD Europe) and marine transportation losses.
5 Comprises Fuel Ethanol and Biodiesel supply from outside Brazil and US.
6 With effect from OMR of 13 February 2007, Angolan production will be reclassified within OPEC and excluded from the Non-OPEC total, for the period January 2007 onwards. Secondary aggregates allow comparison with previous year totals by including Angola within OPEC retroactively

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			
	Mar2007	Apr2007	May2007	Jun2007	Jul2007*	Jul2004	Jul2005	Jul2006	3Q2006	4Q2006	1Q2007	2Q2007
North America												
Crude	462.5	473.3	480.6	490.3	477.5	406.9	433.8	456.4	0.02	-0.25	0.28	0.31
Motor Gasoline	230.0	223.6	230.4	233.5	231.9	240.3	236.5	238.7	0.03	-0.02	-0.14	0.04
Middle Distillate	190.7	192.5	196.4	195.3	201.2	193.3	207.1	209.2	0.26	-0.08	-0.30	0.05
Residual Fuel Oil	47.2	47.0	44.3	44.7	48.3	42.5	46.3	52.4	0.01	-0.03	-0.03	-0.03
Total Products[3]	630.7	630.8	648.9	654.9	672.9	650.6	690.3	686.8	0.60	-0.33	-0.71	0.27
Total[4]	1233.3	1248.2	1274.0	1291.0	1297.0	1207.7	1276.2	1297.0	0.77	-0.76	-0.48	0.63
Europe												
Crude	325.4	337.9	338.5	334.8	343.0	328.0	339.8	351.1	-0.10	0.11	-0.16	0.10
Motor Gasoline	110.2	104.1	102.9	100.1	101.9	110.3	103.8	97.3	0.04	0.11	-0.04	-0.11
Middle Distillate	267.7	276.7	279.7	271.0	269.1	245.7	254.3	265.3	0.16	0.06	-0.12	0.04
Residual Fuel Oil	72.0	70.6	70.5	69.9	69.7	78.4	71.4	74.9	-0.04	0.04	-0.04	-0.02
Total Products[3]	551.7	552.5	552.4	539.9	539.7	537.1	531.4	541.8	0.24	0.15	-0.21	-0.13
Total[4]	950.4	966.5	967.3	951.7	958.7	935.5	942.8	965.4	0.15	0.20	-0.30	0.01
Pacific												
Crude	172.4	168.5	170.5	171.6	178.3	182.7	183.8	176.1	-0.07	-0.02	-0.01	-0.01
Motor Gasoline	24.5	24.0	25.5	24.1	23.0	23.8	24.4	23.5	-0.01	-0.01	0.03	0.00
Middle Distillate	60.9	59.3	63.9	67.9	74.9	62.7	68.1	75.4	0.18	-0.14	-0.14	0.08
Residual Fuel Oil	22.1	22.3	22.5	22.1	24.6	22.3	25.7	25.1	0.01	-0.01	-0.01	0.00
Total Products[3]	171.1	167.3	176.5	182.0	191.1	174.7	186.3	192.6	0.30	-0.30	-0.14	0.12
Total[4]	416.5	409.5	420.3	426.6	443.4	429.4	441.7	440.5	0.25	-0.33	-0.13	0.11
Total OECD												
Crude	960.2	979.7	989.5	996.8	998.8	917.5	957.4	983.6	-0.15	-0.16	0.11	0.40
Motor Gasoline	364.6	351.7	358.8	357.6	356.8	374.4	364.8	359.4	0.06	0.08	-0.15	-0.08
Middle Distillate	519.2	528.5	540.0	534.2	545.2	501.6	529.5	549.9	0.60	-0.15	-0.55	0.16
Residual Fuel Oil	141.3	139.9	137.4	136.7	142.6	143.2	143.4	152.4	-0.02	-0.01	-0.08	-0.05
Total Products[3]	1353.6	1350.5	1377.7	1376.8	1403.7	1362.4	1408.0	1421.2	1.14	-0.47	-1.05	0.25
Total[4]	2600.3	2624.2	2661.5	2669.2	2699.0	2572.6	2660.8	2703.0	1.17	-0.89	-0.92	0.76

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			
	Mar2007	Apr2007	May2007	Jun2007	Jul2007*	Jul2004	Jul2005	Jul2006	3Q2006	4Q2006	1Q2007	2Q2007
North America												
Crude	688.6	689.4	690.3	690.3	690.3	665.7	698.8	687.9	0.00	0.01	0.00	0.02
Products	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	0.00	0.00	0.00	0.00
Europe												
Crude	174.3	174.7	175.0	175.3	175.3	158.0	164.6	174.6	0.02	-0.01	-0.01	0.01
Products	239.9	241.1	239.9	238.9	238.9	207.9	238.4	235.7	-0.01	0.00	0.05	-0.01
Pacific												
Crude	385.1	385.1	385.0	385.0	385.0	386.7	384.2	382.2	0.01	0.03	0.01	0.00
Products	11.8	11.8	11.8	11.8	11.8	11.0	11.3	11.8	0.00	0.00	0.00	0.00
Total OECD												
Crude	1248.0	1249.1	1250.3	1250.6	1250.6	1210.4	1247.6	1244.7	0.03	0.04	0.00	0.03
Products	253.7	254.9	253.7	252.7	252.7	220.9	251.8	249.5	-0.01	0.00	0.05	-0.01
Total[4]	1502.7	1505.0	1505.0	1504.2	1504.2	1432.3	1500.4	1495.2	0.02	0.04	0.05	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 2006		End September 2006		End December 2006		End March 2007		End June 2007 [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	169.7	75	179.2	79	180.1	77	182.5	78	186.4	-
Mexico	42.1	22	47.0	24	42.3	21	40.5	20	43.8	-
United States[4]	1731.6	83	1788.3	87	1722.9	83	1678.8	81	1731.0	-
Total[4]	1965.5	78	2036.5	81	1967.4	77	1923.9	76	1983.3	77
Pacific										
Australia	38.9	42	35.3	37	34.8	37	34.3	37	38.6	-
Japan	627.2	132	649.1	123	630.8	117	615.3	133	618.7	-
Korea	155.4	76	160.5	69	151.8	65	156.1	74	158.3	-
New Zealand	6.8	48	7.0	46	7.1	46	7.7	49	7.8	-
Total	828.3	105	851.9	98	824.6	93	813.4	104	823.4	103
Europe[5]										
Austria	19.7	62	19.0	64	21.9	76	23.8	78	24.3	-
Belgium	30.4	54	30.5	53	30.2	48	28.2	49	28.2	-
Czech Republic	19.5	88	19.3	94	19.7	101	20.2	92	20.5	-
Denmark	20.4	110	21.2	113	18.5	97	18.3	96	17.1	-
Finland	30.5	139	26.8	118	26.6	114	29.5	141	26.3	-
France	188.7	98	187.5	96	192.4	98	177.0	96	185.7	-
Germany	283.1	103	281.9	104	282.8	117	290.5	120	285.6	-
Greece	34.9	84	36.7	76	36.8	79	33.6	87	36.4	-
Hungary	17.6	107	17.4	97	16.5	107	18.0	106	15.9	-
Ireland	12.6	71	13.9	70	12.5	62	12.9	69	11.1	-
Italy	126.0	75	134.1	78	133.1	79	133.9	80	133.0	-
Luxembourg	1.0	17	0.9	15	1.0	16	0.9	15	0.9	-
Netherlands	123.1	119	121.1	119	118.6	135	117.7	135	117.3	-
Norway	21.8	93	29.4	127	35.1	156	20.2	78	24.0	-
Poland	35.7	66	37.3	70	41.5	89	43.9	90	50.1	-
Portugal	24.7	80	23.8	83	24.0	77	23.7	77	24.7	-
Slovak Republic	7.7	90	7.4	95	7.5	101	7.0	83	6.9	-
Spain	129.2	82	133.9	84	134.8	83	129.3	81	130.5	-
Sweden	39.6	116	38.6	104	33.8	94	35.6	99	32.2	-
Switzerland	39.3	143	38.9	135	38.1	150	38.7	173	38.5	-
Turkey	51.6	78	53.7	83	55.5	88	56.8	94	57.4	-
United Kingdom	99.0	56	97.4	54	108.5	60	105.8	59	100.3	-
Total	1356.0	87	1370.5	88	1389.2	92	1365.6	92	1366.8	88
Total OECD	4149.9	85	4259.0	86	4181.2	84	4102.9	85	4173.5	85
DAYS OF IEA Net Imports[6]	-	116	-	118	-	122	-	121	-	121

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 2007 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. 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]*		
2Q2004	3974	1429	2545	81	29	52
3Q2004	4016	1435	2581	80	28	51
4Q2004	3997	1450	2547	79	29	50
1Q2005	4005	1462	2543	82	30	52
2Q2005	4116	1494	2623	84	30	53
3Q2005	4132	1494	2638	83	30	53
4Q2005	4083	1487	2597	81	30	52
1Q2006	4085	1487	2598	85	31	54
2Q2006	4150	1493	2657	85	31	54
3Q2006	4259	1495	2764	86	30	56
4Q2006	4181	1499	2683	84	30	54
1Q2007	4103	1503	2600	85	31	54
2Q2007	4173	1504	2669	85	31	54

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 2Q2007 (when latest forecasts are used).

Table 6

IEA Member Country Destinations of Selected Crude Streams[1]

(million barrels per day)

	2004	2005	2006	3Q06	4Q06	1Q07	2Q07	Apr 07	May 07	Jun 07	Year Earlier Jun 06	Year Earlier change
Saudi Light & Extra Light												
North America	0.55	0.46	0.60	0.62	0.60	0.68	0.73	0.81	0.80	0.57	0.57	0.00
Europe	1.03	0.90	0.78	0.72	0.78	0.72	0.62	0.70	0.55	0.61	0.84	-0.22
Pacific	1.24	1.31	1.32	1.29	1.28	1.17	1.20	1.28	1.10	1.22	1.20	0.02
Saudi Medium												
North America	0.80	0.81	0.64	0.68	0.61	0.47	0.59	0.57	0.50	0.69	0.50	0.19
Europe	0.11	0.16	0.14	0.14	0.10	0.05	0.10	0.06	0.18	0.05	0.15	-0.09
Pacific	0.23	0.26	0.35	0.35	0.32	0.34	0.31	0.36	0.28	0.30	0.35	-0.06
Saudi Heavy												
North America	0.22	0.17	0.21	0.21	0.19	0.15	0.05	0.04	0.09	0.04	0.28	-0.25
Europe	0.23	0.23	0.18	0.21	0.14	0.09	0.16	0.21	0.11	0.17	0.25	-0.08
Pacific	0.15	0.25	0.23	0.22	0.23	0.20	0.18	0.21	0.19	0.13	0.19	-0.06
Iraqi Basrah Light[2]												
North America	0.71	0.60	0.52	0.60	0.46	0.52	0.39	0.31	0.37	0.48	0.72	-0.24
Europe	0.21	0.23	0.32	0.40	0.36	0.29	0.27	0.29	0.20	0.33	0.23	0.10
Pacific	0.12	0.06	0.08	0.10	0.07	0.11	0.18	0.15	0.17	0.21	0.14	0.07
Iraqi Kirkuk												
North America	0.02	-	0.00	0.01	-	-	-	-	-	-	-	-
Europe	0.08	0.05	0.01	0.04	0.01	0.04	-	-	-	-	-	-
Pacific	-	-	-	-	-	-	-	-	-	-	-	-
Iranian Light												
North America	-	-	-	-	-	-	-	-	-	-	-	-
Europe	0.24	0.20	0.26	0.31	0.27	0.31	0.30	0.32	0.37	0.20	0.30	-0.10
Pacific	0.16	0.15	0.13	0.10	0.11	0.12	0.06	0.06	0.04	0.09	0.03	0.06
Iranian Heavy[3]												
North America	-	-	-	-	-	-	-	-	-	-	-	-
Europe	0.57	0.63	0.58	0.67	0.60	0.55	0.60	0.65	0.63	0.52	0.72	-0.21
Pacific	0.65	0.62	0.56	0.51	0.61	0.66	0.63	0.63	0.55	0.71	0.35	0.36
Venezuelan Light & Medium												
North America	0.67	0.82	0.66	0.62	0.57	0.65	0.63	0.66	0.69	0.56	0.59	-0.03
Europe	0.01	0.04	0.11	0.08	0.11	0.09	0.07	0.13	0.04	0.03	0.22	-0.19
Pacific	-	-	-	-	-	-	-	-	-	-	-	-
Venezuelan 22 API and heavier												
North America	0.88	0.72	0.72	0.74	0.72	0.55	0.69	0.72	0.73	0.62	0.73	-0.11
Europe	0.05	0.06	0.06	0.06	0.05	0.06	0.09	0.07	0.12	0.09	0.05	0.03
Pacific	-	-	-	-	-	-	-	-	-	-	-	-
Mexican Maya												
North America	1.36	1.27	1.24	1.30	1.15	1.19	1.18	1.17	1.29	1.07	1.26	-0.19
Europe	0.16	0.17	0.16	0.16	0.15	0.14	0.11	0.11	0.01	0.20	0.21	-0.02
Pacific	0.00	-	-	-	-	-	-	-	-	-	-	-
Mexican Isthmus												
North America	-	0.03	0.04	0.01	0.02	0.02	0.01	-	0.03	0.01	0.01	0.00
Europe	0.01	0.03	0.01	0.00	0.01	0.01	0.06	0.00	0.18	0.01	-	-
Pacific	0.00	-	-	-	-	-	-	-	-	-	-	-
Russian Urals												
North America	0.12	0.13	0.09	0.16	0.05	0.11	0.12	0.21	0.10	0.06	0.24	-0.18
Europe	1.86	1.77	1.68	1.66	1.54	1.85	1.93	2.06	1.73	2.02	1.90	0.12
Pacific	0.01	0.00	0.00	0.01	-	0.00	-	-	-	-	-	-
Nigerian Light[4]												
North America	0.80	0.90	0.79	0.78	0.72	0.96	0.77	0.70	0.84	0.75	0.78	-0.03
Europe	0.28	0.35	0.33	0.39	0.37	0.23	0.27	0.22	0.28	0.32	0.30	0.02
Pacific	0.11	0.05	0.04	0.02	0.03	0.02	0.02	0.01	0.05	-	0.06	-
Nigerian Medium												
North America	0.23	0.17	0.17	0.16	0.17	0.24	0.15	0.17	0.08	0.22	0.23	-0.01
Europe	0.04	0.07	0.10	0.08	0.14	0.06	0.02	0.03	-	0.02	0.13	-0.11
Pacific	0.01	0.01	0.00	0.01	-	0.02	-	-	-	-	-	-

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, Poland and the Slovak Republic.
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)

	2004	2005	2006	3Q2006	4Q2006	1Q2007	2Q2007	Apr-07	May-07	Jun-07	Year Earlier Jun-06	Year Earlier % change
Crude Oil												
North America	8431	8457	8156	8686	7937	8038	8152	8050	8277	8125	8055	1%
Europe	9478	9792	9771	10158	9770	9344	9773	9947	9765	9609	10257	-6%
Pacific	6659	6801	6813	6680	6674	6953	6347	6469	6139	6440	5940	8%
Total OECD	24569	25050	24740	25524	24381	24335	24273	24466	24182	24174	24836	-3%
LPG												
North America	24	18	14	12	28	16	14	14	16	12	10	20%
Europe	225	248	249	210	263	260	246	288	248	201	254	-21%
Pacific	541	527	579	595	497	565	588	581	596	587	549	7%
Total OECD	790	793	842	818	788	841	848	883	861	799	813	-2%
Naphtha												
North America	99	115	62	64	96	33	31	35	34	25	36	-29%
Europe	282	273	312	304	314	271	223	254	223	191	250	-24%
Pacific	769	746	754	810	783	838	812	710	859	866	844	3%
Total OECD	1150	1133	1128	1178	1193	1141	1066	999	1115	1082	1130	-4%
Gasoline[3]												
North America	794	1034	1148	1166	944	916	1362	1248	1440	1394	1279	9%
Europe	137	165	154	122	157	231	216	189	216	244	180	35%
Pacific	105	102	97	74	96	76	83	49	98	100	140	-28%
Total OECD	1035	1301	1399	1363	1197	1223	1661	1486	1755	1737	1599	9%
Jet & Kerosene												
North America	101	173	152	203	130	179	204	221	187	205	139	47%
Europe	293	375	375	398	407	328	352	371	434	250	431	-42%
Pacific	77	66	71	43	76	49	36	29	44	35	38	-9%
Total OECD	471	614	598	644	612	557	592	621	665	489	608	-20%
Gasoil/Diesel												
North America	123	143	172	181	116	130	142	156	122	147	128	15%
Europe	751	845	960	901	937	876	628	669	569	648	817	-21%
Pacific	74	79	81	65	81	83	97	79	95	118	109	8%
Total OECD	947	1067	1213	1147	1134	1089	867	905	786	914	1055	-13%
Heavy Fuel Oil												
North America	453	527	340	309	254	362	323	360	290	321	371	-13%
Europe	397	491	478	419	502	457	421	441	378	444	502	-12%
Pacific	76	85	92	76	65	79	97	95	96	100	107	-6%
Total OECD	926	1102	910	804	821	898	841	896	764	865	980	-12%
Other Products												
North America	872	1024	1106	1298	991	1035	1211	1154	1308	1169	1149	2%
Europe	676	781	898	924	916	841	839	881	814	823	798	3%
Pacific	256	248	243	224	267	256	207	167	237	214	184	16%
Total OECD	1805	2052	2247	2445	2174	2131	2257	2202	2359	2206	2132	4%
Total Products												
North America	2466	3034	2995	3233	2559	2670	3287	3187	3398	3273	3112	5%
Europe	2759	3177	3426	3278	3496	3263	2925	3094	2882	2801	3233	-13%
Pacific	1898	1852	1918	1888	1865	1947	1920	1710	2026	2019	1971	2%
Total OECD	7123	8063	8339	8399	7920	7880	8132	7991	8305	8093	8317	-3%
Total Oil												
North America	10897	11490	11150	11919	10496	10708	11439	11237	11675	11398	11752	-3%
Europe	12237	12969	13197	13436	13266	12607	12698	13040	12647	12409	13490	-8%
Pacific	8558	8654	8731	8568	8539	8900	8267	8179	8165	8460	7911	7%
Total OECD	31692	33113	33079	33923	32301	32215	32405	32457	32487	32267	33153	-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

OIL MARKET REPORT CONTACTS

Editorial Enquiries

Editor — Lawrence Eagles
Head, Oil Industry & Markets Division
(+33) 0*1 40 57 65 90
e-mail: lawrence.eagles@iea.org

Demand — Eduardo Lopez
(+33) 0*1 40 57 65 93
e-mail: eduardo.lopez@iea.org

Supply — David Fyfe
(+33) 0*1 40 57 65 94
e-mail: david.fyfe@iea.org

Prices/OECD Stocks — Julius Walker
(+33) 0*1 40 57 65 22
e-mail: julius.walker@iea.org

Refining — David Martin
(+33) 0*1 40 57 65 95
e-mail: david.martin@iea.org

Demand — Toril Ekeland Bosoni
(+33) 0*1 40 57 66 36
e-mail: toril.bosoni@iea.org

Statistics/Freight/Trade — James Ryder
(+33) 0*1 40 57 66 18
e-mail: james.ryder@iea.org

End-User Prices/Statistical Support — Miklós Bánkuti
(+33) 0*1 40 57 67 76
e-mail: miklos.bankuti@iea.org

Editorial Assistant — Anne Mayne
(+33) 0*1 40 57 65 96
e-mail: anne.mayne@iea.org

Fax: *(+33) 0*1 40 57 65 99/40 57 65 09*

* 0 only within France

Media Enquiries

Press Office — Gwyn Darling
(+33) 0*1 40 57 65 54
e-mail: ieapressoffice@iea.org

Subscription and Delivery Enquiries

Oil Market Report Subscriptions (Attn: Ms. Sandra Coleman)
International Energy Agency
BP 586-75726 PARIS Cedex 15, France

Tel. +33 (0) 1 40 57 65 57
Fax. +33 (0) 1 40 57 65 59
e-mail: sandra.coleman@iea.org

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 Report (MTOMR) Report and Annual Statistical Supplement* (current issue of the statistical supplement dated 10 August 2007), 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 (© 2007 Platts - a division of McGraw-Hill Inc.).

INTERNATIONAL ENERGY AGENCY/AGENCE INTERNATIONALE DE L'ENERGIE

OIL MARKET REPORT

A MONTHLY OIL MARKET AND STOCKS ASSESSMENT

www.oilmarketreport.org

INTERNATIONAL ENERGY AGENCY

AGENCE INTERNATIONALE DE L'ENERGIE

11 October 2007

HIGHLIGHTS

- **WTI crude futures rose above $80/bbl** in September on falling US, European and Japanese crude and product stocks and expectations that tighter conditions will be seen in the fourth quarter. Storm-related shut-ins in the Gulf of Mexico provided additional support early in the month, but from now hurricane risks will gradually ebb.
- **OECD industry stocks** changes largely reflect tighter crude markets as refiners raised throughputs to meet summer driving demand. The July stock build was revised down by 14.8 mb and preliminary data show respective draws of 21.0 mb and 27.4 mb in August and September - implying a counter-seasonal 3Q stock draw of 360 kb/d. End-August forward cover fell below the five-year average to 53.5 days.
- **Global oil demand** remains unchanged at 85.9 mb/d in 2007 (+1.5% over 2006) and 88.0 mb/d in 2008 (+2.4%). Downward OECD revisions in North America and the Pacific offset upward adjustments in the FSU. Economic growth assumptions are trimmed slightly ahead of IMF and OECD assessments of recent financial market volatility.
- **World oil supply increased** by 415 kb/d in September to 85.1 mb/d, as rising output from North America, China and OPEC offset Caspian maintenance. Production through to the year end should be bolstered by higher OPEC supply, the end of seasonal maintenance and ebbing hurricane risks. However, project delays remain a key forecasting risk.
- **Higher Iraqi output helped lift OPEC crude supply** by 245 kb/d in September to 30.7 mb/d, leaving OPEC spare capacity little changed at 2.7 mb/d. OPEC-10 plan to raise supply by 500 kb/d from 1 November. The midpoint of the 'call on OPEC crude and stock change' is lowered by 0.4 mb/d in 3Q07 to 31.2 mb/d, but is seen rising to 32.5 mb/d in 4Q.
- **Global crude refinery throughput** is seen falling to a seasonal low of 73.0 mb/d in October, 1.9 mb/d below the August peak as maintenance takes place in the OECD, China, the Middle East and the FSU. However, global crude runs are projected to rebound to 75.5 mb/d by the end of the quarter.

Next Issue: 13 November 2007

11 October 2007

OMR PUBLICATION DATE CHANGE – DECEMBER 2007 AND PUBLISHING SCHEDULE - 2008

Due to unforeseen circumstances, the *Oil Market Report* originally scheduled for release on Wednesday 12 December 2007 will now be published on **Friday 14 December 2007**.

Please find below the 2008 release dates for the *Oil Market Report*:

Wednesday 16 January
Wednesday 13 February
Tuesday 11 March
Friday 11 April
Tuesday 13 May
Thursday 10 June
Thursday 10 July
Tuesday 12 August
Wednesday 10 September
Friday 10 October
Thursday 13 November
Thursday 11 December

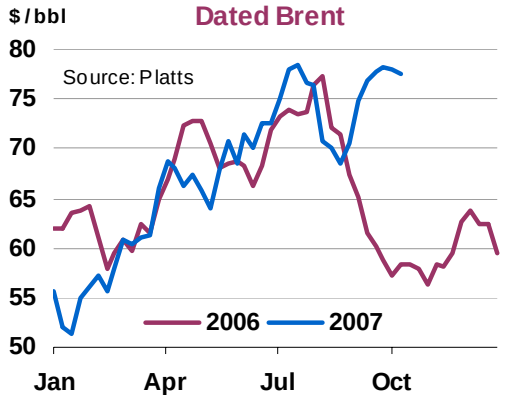
This information is also available at: **oilmarketreport.org/schedule** and **omrpublic.iea.org/schedule.**

CONTENTS

HIGH PRICES, HIGH UNCERTAINTY, LOW STOCKS

History often repeats itself. Comparing the path of crude prices this year with those of 2006 shows a broad upward trend from the start of the year through to the start of the gasoline season, before prices fell back at the beginning of August. Fundamentally, there were similarities underpinning this trend. OECD crude and product stocks followed similar paths and there was the seasonal recurrence of tight pre-summer gasoline supplies. But since August, price trends have diverged sharply. In 2006, prices continued to fall sharply, weakening throughout the rest of the year, while in 2007 they moved to record levels.

Some of the recent rally was due to Hurricane Dean's timely reminder that, after last year's hiatus, storm risks in the Gulf of Mexico remain a threat. Winter is approaching and sharply falling OECD stock levels have also played a part. The threat that housing-market weakness may depress oil demand next year appears to have been pushed to one side.



The apparent sidelining of future demand issues does not mean that the market focuses exclusively on the immediate balance. Expectations can mould physical supply and demand patterns in a way that can influence the oil price. In particular, stockholders will adjust their price at which they will release stocks to the market depending on expectations of future supply, demand or price (see prices section). To this extent, it is not surprising that the market currently has an upward bias. The latest OECD data show stock cover falling below the five-year average and, despite the wide range of demand forecasts, there is a broad consensus that supplies will get tighter this winter. In other words, high prices are a rational result of current market conditions and expected future fundamentals. What is harder to tell is to what extent expected future demand or stock draw is factored into current price levels.

Looking at this from another angle, it is clear that demand *does* matter - after all, supply and demand always have to balance. The question is, at what price? Perhaps a demand response is already being seen. There has certainly been considerable substitution, where possible, away from oil and towards natural gas (that is a price effect, albeit a relative one). In the light of $80/barrel oil, it is also perhaps not surprising that we have seen very large downward revisions to US demand data for July, the second consecutive such move. More recent weekly US demand data are also relatively weak. Even the previously robust transportation sector seems to be affected, with recent gasoline demand growth slowing somewhat. Based on this information, it looks as if 3Q year-on year US oil demand growth may fall slightly this year.

From an analytical perspective, it may be premature to argue that prices are causing US demand (in particular the formerly robust gasoline market) to contract. Income, and therefore GDP growth, will remain the primary determinant of demand, and these are in turn linked to the health of the housing market. Weather effects have played a part elsewhere in the OECD this year, but again price and substitution are also key. Outside the OECD, demand seems robust, but that is partly artificial. With prices subsidised in many key growth regions, a shift in policy (again more likely at $80 oil) could rein in demand as it did in late 2005. But in China and the Middle East, the two key demand growth regions, there seems little chance of a removal of subsidies in the near future.

The crystal ball will clearly remain fogged for some time. Winter has to take its natural course and it will take time to understand the impact of recent economic events. As such final winter demand will, as always remain uncertain. That is why we have stocks – to deal with the unexpected or unforeseen. Those stocks are clearly tighter than they have been for some time, but what is driving market expectations and therefore prices is the lack of confidence that they will be replenished.

DEMAND

Summary

- **Global oil product demand** remains virtually unchanged at 85.9 mb/d in 2007 (+1.5% over 2006) and 88.0 mb/d in 2008 (+2.4%). Downward OECD revisions (in North America and the Pacific) were offset by upward adjustments in non-OECD countries, most notably in the FSU.

- **OECD oil product demand** has been lowered in both 2007 (-72 kb/d) and 2008 (-113 kb/d), given downward revisions to preliminary data for both North America (gasoline and residual fuel oil) and the Pacific (gasoil and 'other products'). In addition, following the publication of revised 2006 annual data, the baseline of US demand was only marginally increased, as this report had already anticipated some 85% of that adjustment.

- **OECD demand is now expected to increase by 0.2% in 2007 to 49.3 mb/d, and by 1.5% in 2008 to 50.1 mb/d.** This outlook continues to be based on prevailing economic forecasts from the IMF and the OECD, slightly adjusted for some countries based on the median from Consensus Economics' surveys, and on normal weather conditions during the coming winter. The forthcoming assessments of these international institutions will shed more light on the consequences of the US subprime crisis.

Global Oil Demand (2006-2008)

(million barrels per day)

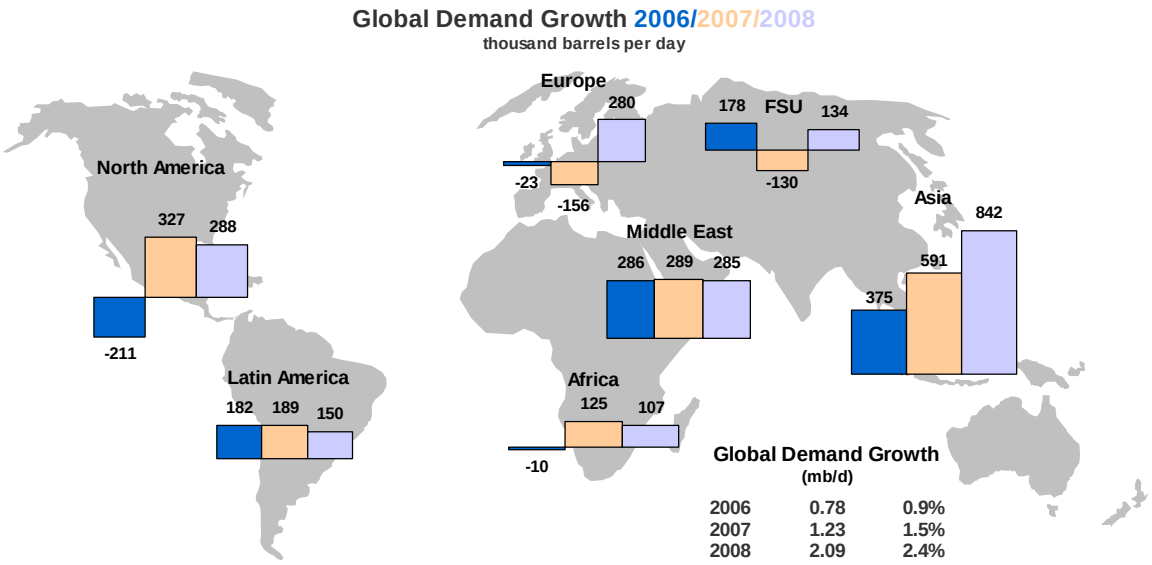
	1Q06	2Q06	3Q06	4Q06	2006	1Q07	2Q07	3Q07	4Q07	2007	1Q08	2Q08	3Q08	4Q08	2008
Africa	3.0	3.0	2.9	2.9	2.9	3.1	3.1	3.0	3.1	3.1	3.2	3.2	3.1	3.2	3.2
Americas	30.4	30.4	30.9	30.7	30.6	31.0	30.9	31.2	31.3	31.1	31.5	31.5	31.6	31.7	31.5
Asia/Pacific	25.2	24.1	23.7	24.8	24.4	25.3	24.7	24.4	25.8	25.0	26.4	25.5	25.2	26.5	25.9
Europe	16.7	15.9	16.3	16.4	16.3	16.1	15.7	16.3	16.6	16.2	16.6	16.0	16.5	16.7	16.4
FSU	4.1	3.9	4.1	4.4	4.1	3.9	3.7	3.9	4.4	4.0	4.1	3.8	4.1	4.6	4.1
Middle East	6.2	6.2	6.5	6.3	6.3	6.4	6.6	6.8	6.5	6.6	6.7	6.8	7.1	6.8	6.9
World	**85.4**	**83.4**	**84.3**	**85.6**	**84.7**	**85.8**	**84.6**	**85.5**	**87.6**	**85.9**	**88.3**	**86.7**	**87.4**	**89.4**	**88.0**
Annual Chg (%)	0.5	0.7	1.1	1.4	0.9	0.4	1.5	1.5	2.4	1.5	3.0	2.5	2.2	2.0	2.4
Annual Chg (mb/d)	0.4	0.6	0.9	1.2	0.8	0.4	1.3	1.2	2.0	1.2	2.6	2.1	1.9	1.8	2.1
Changes from last month's report (mb/d)	0.20	0.11	0.20	0.16	0.17	0.16	0.11	-0.18	-0.15	-0.02	0.11	0.13	-0.22	-0.12	-0.03

- **Non-OECD oil product demand** has been adjusted upwards in both 2007 and 2008 (+55 kb/d and +87 kb/d, respectively), largely due to changes in the FSU baseline. The changes were mostly related to a historical reappraisal of NGL supply in the FSU, which, along with net exports data, constitute the basis of the region's apparent demand calculation. Overall, non-OECD demand is seen reaching 36.6 mb/d in 2007 (+3.2% on an annual basis) and 37.9 mb/d in 2008 (+3.7%). This forecast continues to assume that subprime woes are unlikely to spillover into China and the Middle East, which together account for over half of worldwide oil demand growth.

OECD

According to preliminary data, total OECD inland deliveries (a measure of oil products supplied by refineries, pipelines and terminals) fell by 0.5% in August, compared with the same month in 2006. Continued demand weakness in both the Pacific (-2.2% year-on-year) and Europe (-0.9%) more than offset North America's modest gains (+0.2%).

As in previous months, the continued weakness in OECD Europe demand is largely related to much lower-than-average deliveries of heating oil in Germany and France. In both countries, end-users seem intent on delaying the refilling of their tanks, probably expecting that prices may fall in the next few weeks or that the winter may prove to be mild again. Thus, Europe's heating oil deliveries tumbled by 10.1% on an annual basis in August. By contrast, Europe's fuel oil market came back to life, with demand



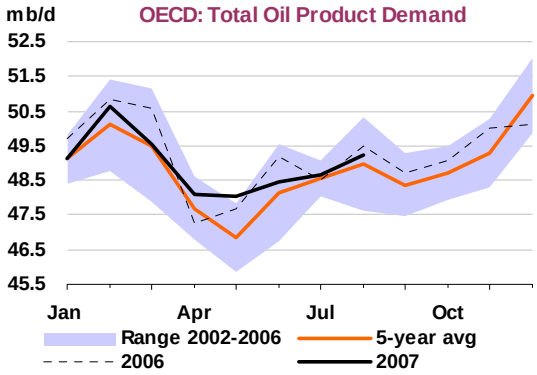
increasing by 4.6%, mostly in Italy. In OECD Pacific, demand was dragged down by weak jet fuel/kerosene (-7.5%), gas/diesel (-7.1%) and 'other' product deliveries (-15.7%), particularly in Japan. Erratic summer weather conditions in July depressed holiday travel and induced stock builds, which were subsequently drawn down in August, thus impacting overall deliveries. In OECD North America, meanwhile, demand rose by a modest 0.2%, underpinned by strong growth in transportation fuels, particularly in Mexico. Regional deliveries of gasoline and gas/diesel increased by 1.0% and 6.8%, respectively.

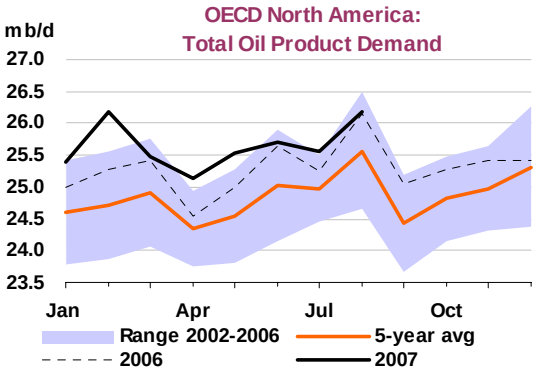
OECD Demand based on Adjusted Preliminary Submissions - August 2007
(million barrels per day)

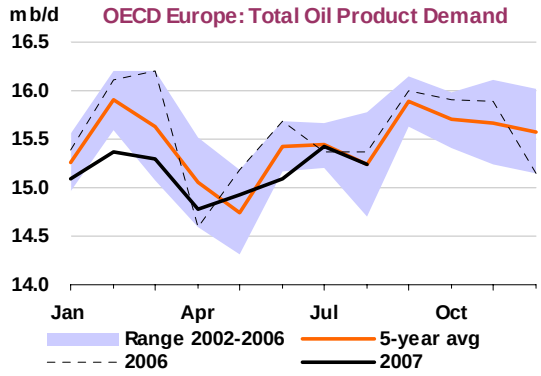
	Gasoline		Jet/Kerosene		Diesel		Other Gasoil		RFO		Other		Total Products	
	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa
OECD North America*	**11.22**	**1.0**	**1.94**	**-2.0**	**4.66**	**19.0**	**0.89**	**-30.5**	**1.39**	**9.0**	**6.09**	**-7.44**	**26.19**	**0.2**
US50	9.63	0.7	1.68	-2.4	4.12	19.4	0.39	-45.7	0.94	21.9	4.68	-10.2	21.44	0.0
Canada	0.77	0.7	0.13	-5.3	0.19	3.1	0.36	-3.8	0.11	-2.3	0.80	6.0	2.36	1.4
Mexico	0.74	5.1	0.07	14.1	0.28	3.3	0.12	3.3	0.24	-18.0	0.54	-1.0	1.99	0.0
OECD Europe	**2.61**	**-1.7**	**1.37**	**-2.2**	**4.06**	**2.0**	**1.80**	**-10.1**	**1.83**	**4.6**	**3.57**	**-0.4**	**15.24**	**-0.9**
Germany	0.51	-3.7	0.20	3.8	0.65	4.2	0.44	-27.4	0.17	0.8	0.56	-9.5	2.54	-7.7
United Kingdom	0.42	-1.3	0.34	-9.4	0.41	0.0	0.15	-2.3	0.08	18.5	0.41	20.7	1.81	2.2
France	0.25	-1.7	0.16	2.4	0.65	4.7	0.27	-10.6	0.10	1.4	0.43	-1.4	1.86	-0.4
Italy	0.30	-5.8	0.10	9.2	0.50	3.3	0.08	-7.3	0.34	29.9	0.34	-2.7	1.65	4.3
Spain	0.17	-5.3	0.13	-2.6	0.50	2.9	0.18	3.9	0.24	-1.2	0.34	-4.7	1.57	-0.7
OECD Pacific	**1.66**	**-1.1**	**0.61**	**-7.5**	**1.19**	**-2.6**	**0.41**	**-18.1**	**0.94**	**7.2**	**3.00**	**-1.7**	**7.80**	**-2.2**
Japan	1.08	-3.2	0.35	-13.0	0.56	-4.5	0.31	-20.4	0.59	21.3	1.72	-5.0	4.61	-3.7
Korea	0.19	6.7	0.13	-0.1	0.28	-5.7	0.10	-10.7	0.33	-9.5	1.06	3.9	2.09	-0.5
Australia	0.33	0.1	0.10	1.3	0.30	4.0	0.00	-12.1	0.02	-3.4	0.20	-0.5	0.96	1.2
OECD Total	**15.48**	**0.3**	**3.91**	**-3.0**	**9.91**	**8.7**	**3.10**	**-18.1**	**4.17**	**6.6**	**12.66**	**-4.2**	**49.23**	**-0.5**

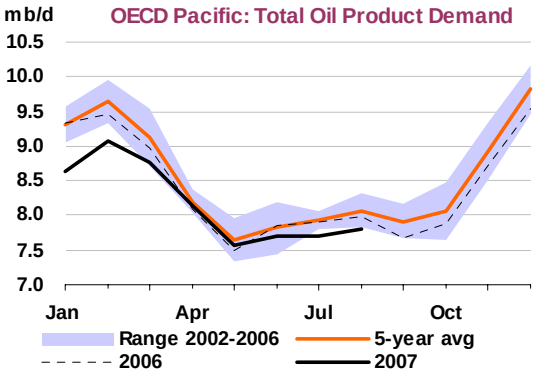
* Including US territories

Overall, OECD demand is forecast to reach 49.3 mb/d in 2007 (+0.2%) and 50.1 mb/d in 2008 (+1.5%), on the premise that temperatures during the forthcoming winter will be in line with the average of the previous ten years and that, pending a thorough assessment, the fallout from the US subprime crisis remains relatively limited in terms of its impact on economic growth. North American demand, which accounts for over half of OECD demand, is poised to increase by +1.1% in 2008, while Europe and the Pacific are both expected to rebound (+1.7% and +2.4%). As noted in previous reports, however, these forecasts are liable to be revised once the potential effects of the ongoing subprime woes are fully appraised by the main international economic institutions (IMF and OECD) and if winter temperatures were to be milder than currently expected.









Total OECD Demand by Product
(million barrels per day)

	2006	2007	3Q06	4Q06	1Q07	2Q07	May 07	Jun 07	Jul 07*	Latest month vs. Jun 07	Latest month vs. Jul 06
LPG & Ethane	4.73	4.77	4.43	4.77	5.23	4.63	4.58	4.46	4.52	0.06	-0.07
Naphtha	3.16	3.25	3.13	3.36	3.38	3.05	3.07	2.96	3.16	0.20	0.07
Motor Gasoline	14.86	14.96	15.24	14.92	14.47	15.09	15.15	15.25	15.47	0.21	0.06
Jet & Kerosene	4.17	4.12	3.97	4.26	4.36	3.90	3.80	3.91	3.96	0.04	-0.02
Gas/Diesel Oil	13.23	13.29	12.91	13.60	13.55	12.63	12.49	12.80	12.65	-0.15	0.28
Residual Fuel Oil	4.03	4.00	3.83	3.84	4.19	3.87	3.89	3.93	3.74	-0.19	-0.12
Other Products	5.07	4.96	5.39	4.98	4.57	5.02	5.04	5.16	5.18	0.01	-0.05
Total Products	**49.25**	**49.34**	**48.90**	**49.72**	**49.75**	**48.19**	**48.03**	**48.48**	**48.67**	**0.19**	**0.16**

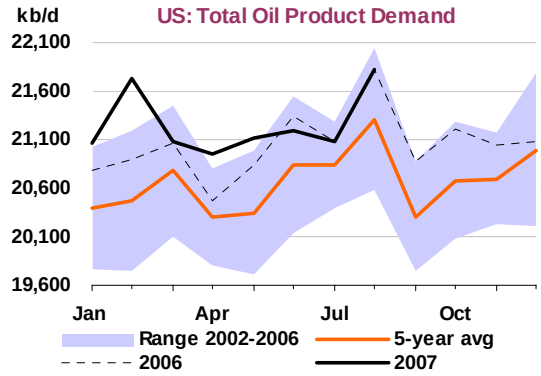
* Latest official OECD submissions (MOS)

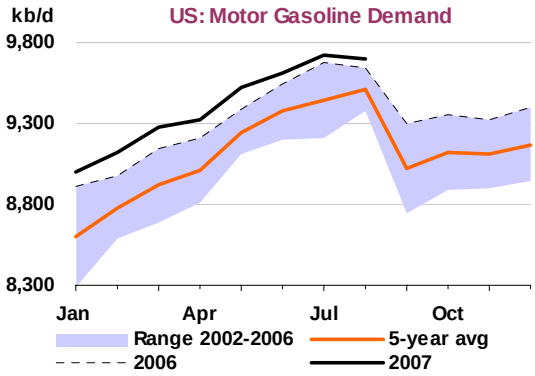
North America

Inland deliveries in the continental **United States** – a proxy of oil product demand – were flat in August versus the same month in 2006, according to adjusted preliminary data. The relative weakness of LPG, naphtha, jet fuel/kerosene and 'other products' was offset by gains in gasoline (+0.7%), gas/diesel (8.3%) and residual fuel oil (+21.9%). It must be noted that these figures take into account revisions to the 2006 baseline, as discussed more extensively in the text box below.

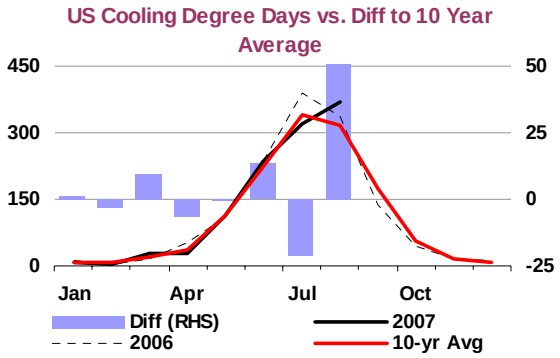
Coupled with revisions to preliminary monthly data, US50 total oil product demand is expected to reach 20.9 mb/d in 2007 (+0.9% over 2006), virtually unchanged from last month's report, and 21.1 mb/d in 2008 (+1.2% versus 2007, slightly lower than the previous forecast). This outlook has not yet made any major adjustment to its US GDP assumptions, as we are waiting for a more precise assessment of the consequences of the subprime crisis, notably from the IMF and the OECD. However, the recent interest rate cut by the Federal Reserve (50 basis points) indicates that US policy makers consider that subprime-induced downside threats to economic growth outweigh inflationary risks.

In addition, this forecast assumes that normal temperatures during the forthcoming winter will induce greater demand for heating oil and some interfuel substitution back from natural gas. However, it should be noted that several meteorologists are predicting yet another warmer-than-average winter in most of the US with the exception of the Pacific Northwest – the culprit this time would be the *La Niña* phenomenon (unusually cold ocean temperatures in the eastern equatorial Pacific Ocean). Nevertheless, these predictions have proven quite unreliable in the past. For example, in the US Northeast – the world's *de facto* largest heating oil market – *La Niña* has typically brought warmer temperatures in October, but this year the month is expected to be cooler than normal.





At first glance, this summer's driving season appears to have been relatively subdued, despite a fair summer overall – the number of cooling-degree days (CDDs) in June was within the ten-year average, while July had 21 fewer days than the average, and August posted 51 more. Gasoline demand increased by roughly 0.6% per year in each of this year's summer months – a slower pace than observed in the recent past (about +1.0% on average in the past few years).



The relatively modest growth in gasoline demand is probably due to a combination of relatively high retail prices and efficiency improvements, although there are also some data uncertainties. Although prices tend to rise every summer, US motorists may be marginally changing their behaviour on the perception that retail prices have reached record highs (even though this is not the case in real terms). There is not much tangible evidence to support this hypothesis, but the sales of larger vehicles (such as SUVs and pick-ups) have apparently stalled – thus suggesting that motorists may be gradually switching to smaller, more efficient cars rather than driving less. Nevertheless, SUVs themselves are also becoming more lighter and efficient. As such, it is too early to fully discern the changes that are taken place in the composition of the US vehicle fleet.

On the data front, it is unclear whether weekly gasoline deliveries data – which serve as the basis of preliminary monthly estimates – systematically track ethanol, which is increasingly becoming a significant component of the overall gasoline pool. Ethanol data are more difficult to capture, as the fuel is usually blended in distribution terminals (as opposed to refineries).

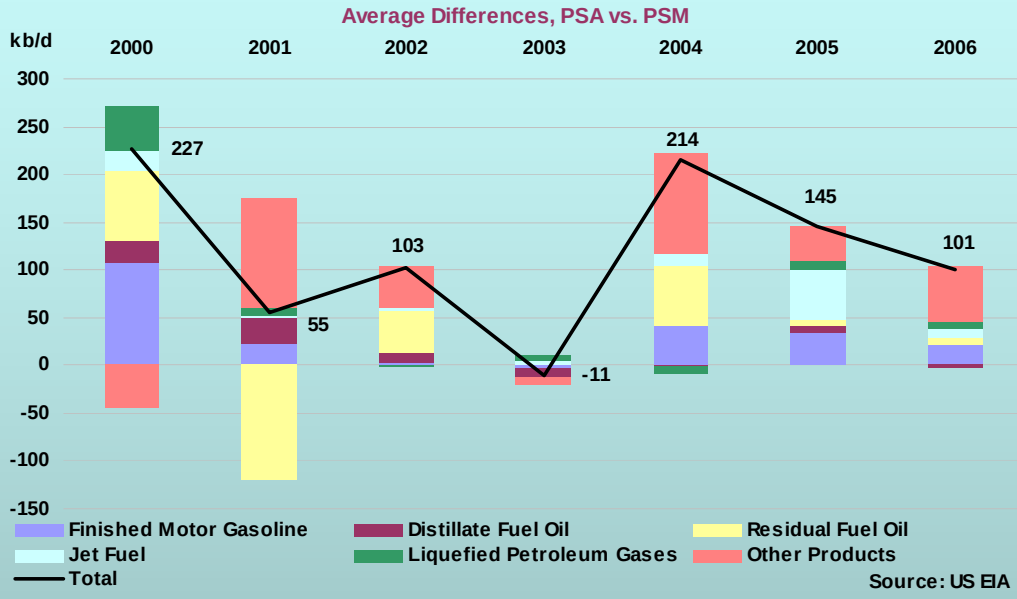
Regarding gasoil, year-on-year comparisons of specific distillates have also become problematic given the switch to low-sulphur specifications (500 ppm). Although this process began more than a year ago (in June 2006, six months earlier than mandated), a significant chunk of what used to be labelled as 'heating oil' (given its high sulphur content) is now classified as 'diesel'. As a result, the 'diesel' category may have

become a less reliable indicator of trucking traffic – and hence of overall economic activity, since trucks carry some two-thirds of the country's goods – as it now includes a portion of demand that is prone to weather and interfuel substitution effects.

Fine-Tuning US Demand

In late September, the US Energy Information Administration released the latest edition of its *Petroleum Supply Annual* (PSA), which includes revisions to preliminary 2006 monthly demand figures. PSA data has historically tended to adjust upwards monthly figures published in the *Petroleum Supply Monthly* (PSM). This year was no exception; total deliveries in 2006 were 101 kb/d higher, thus moderating the year-on-year decline highlighted by monthly data.

As such, US demand contracted by 0.6% in 2006, instead of the previous PSM-based estimate of -1.0%. Although the revisions concern all product categories, they tend to be mainly concentrated in 'other' products and gasoline, followed more distantly by residual fuel oil, jet fuel and LPG. For 2006, the adjustment for jet fuel is minor when compared to 2005, but that of 'other' products was much larger.



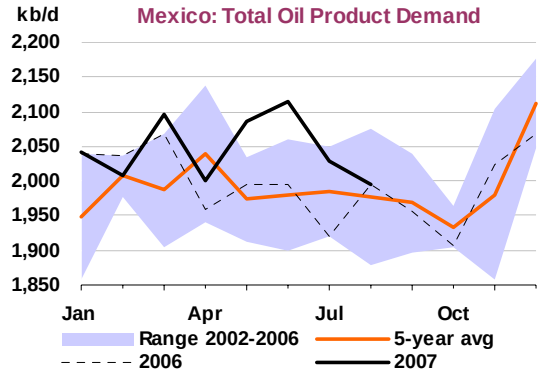
Revisions to demand figures are normal and represent a welcome fine-tuning of preliminary estimates. US data reporting, however, makes it difficult to gauge actual demand growth. The EIA segregates their data sets, since quality improves with time: annual data are generally more accurate than monthly numbers, which in turn are more precise than weekly figures. As such, US annual data tend to come in above monthly levels, but weekly figures (which are themselves rarely revised) from the *Weekly Petroleum Status Report* tend to be adjusted down by PSM data.

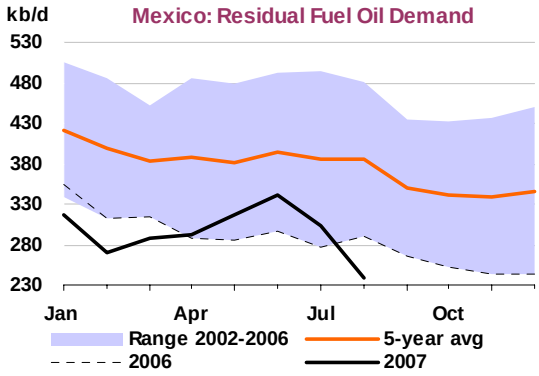
Moreover, current-year data (based on PSM estimates) are not adjusted by the same proportion when PSA revisions for the previous year figures are published. Admittedly, the overall adjustment is relatively small (total demand in 2006 came in 0.5% higher than previously estimated). Nevertheless, year-on-year growth rates by product become somewhat distorted, thus blurring the overall US demand picture and leading to heated debates over some trends implied by weekly and monthly figures (for example, whether gasoline demand is indeed softening and if so to what extent).

Attempting to overcome these problems, since 2005 we have aimed at anticipating both monthly and annual revisions on a product-by-product basis based on past changes. Even though such an extrapolation is necessarily arbitrary and imperfect, it has helped cushion the changes to preliminary US data. Last year, our revision to 2005 demand figures was +36 kb/d (about 25% of PSA's adjustment); this year, our adjustment of 2006 data came in at +16 kb/d (almost 16% of the actual revision). Regarding 2007 figures, we have slightly increased our pre-emptive annual adjustment – applied since the beginning of the year – from +84 kb/d to +94 kb/d. The monthly adjustment, by contrast, is more random, as it is based on the three-month average revisions to weekly data from monthly figures.

Finally, the strength of fuel oil deliveries in August is explained by warm temperatures, which boosted power demand as air-conditioning use rose. This may suggest that the adoption of natural gas – which has favourably competed in price with fuel oil for most of 2007 – has reached a limit, despite continuing low prices. As such, future surges in fuel oil demand will likely be related to peak power loads

Preliminary data suggest that the buoyant growth in **Mexican** oil demand observed during the past five months has come to a sudden halt: deliveries were flat year-on-year in August. However, this lack of growth was largely due to the weakness in fuel oil (-18.0%), which represents about 13% of total demand, and in 'other products' (-15.0%). Transportation fuels, by contrast, continue to post vigorous expansion, with gasoline demand growing by 5.1% on a yearly basis, jet/kerosene by 14.1% and diesel by 3.3%.





Declining Fuel Oil Demand in Mexico?

In Mexico, as noted, falling residual fuel oil demand offset growth in other products in August. The question is whether fuel oil has resumed the slow decline/stagnation pattern observed over the past two years, as natural gas makes further inroads in both industry and households. From that perspective, the surge of the past few months would be an anomaly, explained by unexpected peaks in electricity demand and/or interruptions in natural gas flows. However, there are reasons to remain cautious before heralding the inevitable demise of fuel oil in Mexico.

On the one hand, it remains to be seen whether gas-fired power generation will keep pace with demand; indeed, continued economic expansion no only requires more power *per se*, but also alters consumption patterns as *per capita* income rises (for example, more people are able to purchase air-conditioning units). Admittedly, the prospects for gas-fired power are encouraging. Gas supplies are multiplying – the government has just awarded Repsol the tender to build the country's third LNG plant, in the Pacific state of Michoacán (after Sempra's Baja California terminal and Shell's Altamira in the Gulf of Mexico) – and construction lead-times of gas power plants are relatively short. Still, fuel oil will probably remain the feedstock of choice to meet a significant share of baseload electricity demand (thermal sources represent about 46% of the country's total generation capacity).

On the other hand, on a more anecdotal basis, part of the recent surge in fuel oil demand may have been related to a new factor: the sabotage of pipelines. Over the past few months, a disgruntled Marxist rebel group, the People's Revolutionary Army (EPR), has twice hit Pemex's facilities, severely disrupting gas flows and forcing large end-users to find alternatives to natural gas, such as fuel oil.

Following July's attack in west-central Mexico, the EPR blew up six major pipelines in early September in the southeastern state of Veracruz. Given that Veracruz is a key route for the transportation of natural gas and LPG from Campeche's offshore fields to the country's industrial north and to the capital in central Mexico, the damage was significant. Indeed, natural gas deliveries to as many as 2,500 companies and thousands of residents in eleven states were cut off, leading to considerable disruptions and even complete shutdowns in key industries (at the time of writing, Pemex had restored much of the lost supply).

It is premature to assess whether such attacks will become a persistent feature – although the EPR has vowed to continue its actions – or whether Pemex and the government will be able to improve the security of oil infrastructure (a difficult task, since pipelines run for thousands of kilometres). In the meantime, fuel oil demand growth will probably register a blip in September's figures.

This would indicate that economic growth remains resilient, even though the Mexican economy is closely linked to that of the US, which is now the subject of much debate regarding its short-term outlook. Therefore, Mexico's oil product consumption forecast could be adjusted if the subprime meltdown were to curb US demand for manufacturing imports from its southern neighbour, leading to an economic slowdown in key oil consuming regions in Mexico.

OECD North America Demand by Product
(million barrels per day)

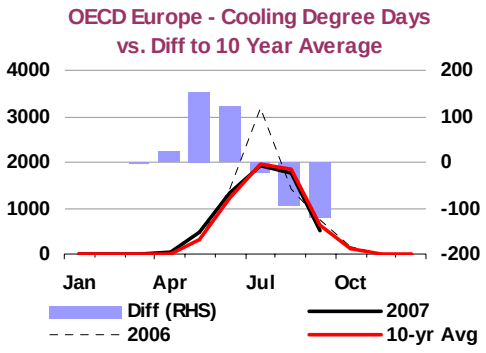
	2006	2007	3Q06	4Q06	1Q07	2Q07	May 07	Jun 07	Jul 07*	Latest month vs. Jun 07	Latest month vs. Jul 06
LPG & Ethane	2.85	2.89	2.69	2.92	3.24	2.76	2.65	2.76	2.74	-0.02	0.01
Naphtha	0.44	0.45	0.46	0.50	0.42	0.45	0.46	0.46	0.46	0.00	0.06
Motor Gasoline	10.72	10.85	10.97	10.78	10.53	10.94	11.01	11.10	11.21	0.11	0.12
Jet & Kerosene	1.91	1.89	1.93	1.88	1.88	1.89	1.86	1.92	1.93	0.02	-0.03
Gas/Diesel Oil	5.17	5.31	5.07	5.28	5.48	5.13	5.10	5.15	4.98	-0.17	0.10
Residual Fuel Oil	1.20	1.27	1.16	1.09	1.38	1.27	1.29	1.31	1.18	-0.13	0.01
Other Products	2.99	2.94	3.19	2.92	2.74	3.02	3.14	3.00	3.06	0.06	0.05
Total Products	**25.28**	**25.61**	**25.48**	**25.37**	**25.67**	**25.46**	**25.52**	**25.70**	**25.56**	**-0.14**	**0.31**

* Latest official OECD submissions (MOS)

Nevertheless, the government seems willing to support energy demand. Indeed, in late September President Felipe Calderón ordered an immediate freeze on gasoline, LPG and power prices, in order to curb inflationary pressures. The move over-rides the fiscal reform approved by Congress early in the month, which among other measures mandates a gradual 5.5% hike in gasoline and diesel prices, to be achieved over the next 18 months. (The fiscal package also included a small tax break for Pemex, aimed at improving its finances, but the state-owned company will have to bear the brunt of the price freeze.)

Europe

Our outlook for European demand remains largely unchanged for 2007 and 2008, at 15.4 mb/d and 15.6 mb/d respectively, despite continued high oil prices, cooler-than-normal weather and small adjustments to our GDP assumptions for several countries. Although preliminary data for August indicate once again lower-than-expected deliveries, official data for July came in higher than anticipated, leading to a net upward revision of 50 kb/d to 3Q07 demand. Annual demand growth has been adjusted to -1.1% for 2007 (from -1.2% previously) but remains unchanged at +1.7% for 2008.

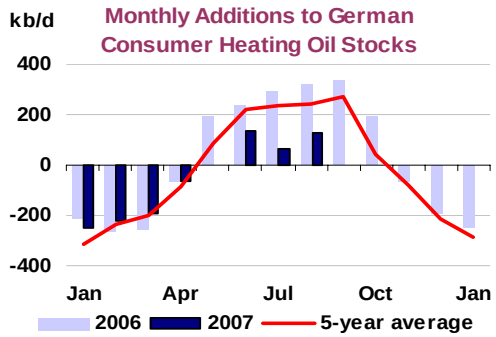


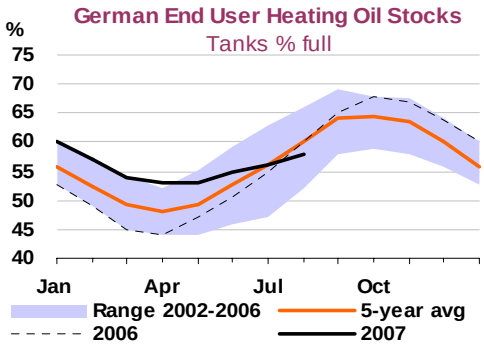
GDP growth assumptions have been slightly lowered for the largest European economies in 2H07 and 2008, based on the median institutional forecasts surveyed by Consensus Economics. As such, Germany's 2008 GDP growth is now seen at 2.2%, compared to 2.4% assumed in last month's report. France's GDP has similarly been adjusted lower to 2.1% from 2.3%, while Italy has been lowered from 1.7% to 1.6% and the UK from 2.7% to 2.0%. However, the income effects have largely been cancelled out by higher 3Q07 demand, partly carried forward into 2008. The extent to which high end-user prices are affecting demand is still uncertain. Indeed, a weak dollar means that European end-user prices were actually lower year-on-year in August in national currency terms.

Official data for **July** were much stronger than preliminary demand indications for several countries. In particular, high temperatures contributed to the 100 kb/d upward revision to **Turkey's** oil demand following a surge in gasoil demand for electricity generation. However, although the number of cooling degree days was equally high in August, the strength of July demand relative to the cooling trend militates against carrying this revision forward. **Spanish** demand has also been revised higher by 49 kb/d for July, growing by a robust 3.6% year-on-year, mostly due to high jet/kerosene and diesel/heating oil demand. Although too late for inclusion in our forecast this month, preliminary data for August (JODI)

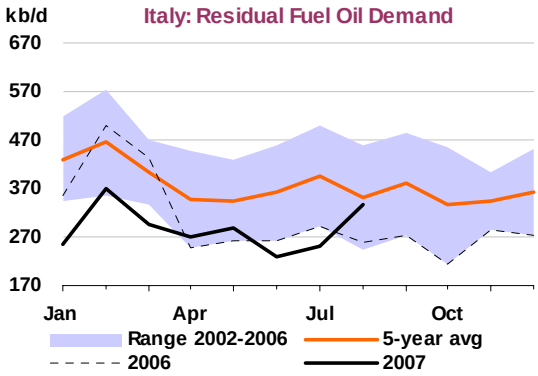
show demand growing by 2.2%, slightly lower than our 2.9% current forecast. Smaller upwards revisions have also been made to the **UK** (+25 kb/d), the **Netherlands** (+20 kb/d) and **Germany** (+18.5 kb/d).

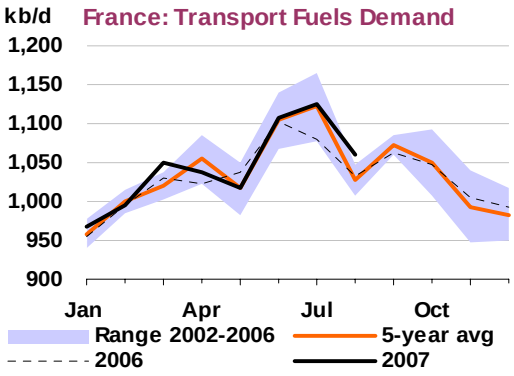
Across Europe, preliminary **August** data indicate a lower demand picture than previously anticipated. Again, the bulk of the shortfall stems from **Germany**, where both heating oil and naphtha continue to lag behind expectations. German households added only 130 kb/d to their domestic heating tanks in August, compared to a five-year average end-user stock build for that month of almost 250 kb/d. To an extent, the lower fill rate is likely to be related to high prices, but we are wary that filling can increase rapidly if colder temperatures materialize. With the year-on-year surplus from last winter now completely eroded (at the end of August, household tank fill stood at 58% of capacity compared to 60% last year), there is the potential for a sharp rebound in German heating demand.





French deliveries continued to be supported by strong demand for diesel and jet kerosene in August. After posting 7.2% annual growth in July, diesel deliveries in August rose by 4.7% above a year-ago, more than offsetting the structural decline in gasoline demand. Similarly, continued growth in French vacation travel bolstered jet/kerosene growth in July by 3.3% and by 2.4% in August. As in Germany, other gasoil demand continues to lag year-ago levels as the effect of last year's mild winter, and subsequent high consumer inventories, linger.





Italian demand was supported by strong residual fuel oil demand in August as higher temperatures boosted electricity demand, related to the increased use of air conditioning. At the same time, hydro-generation was 6.2% lower than last year. Fuel oil is being gradually replaced by natural gas, but there are concerns about potentially tight gas supply in the forthcoming winter; this could foster a spike in fuel oil demand should temperatures prove too cold. Meanwhile, demand for transportation fuels and other products fell in line with seasonal patterns. Both diesel and jet/kerosene posted year-on-year growth, leaving total Italian demand 4.3% higher than last August.

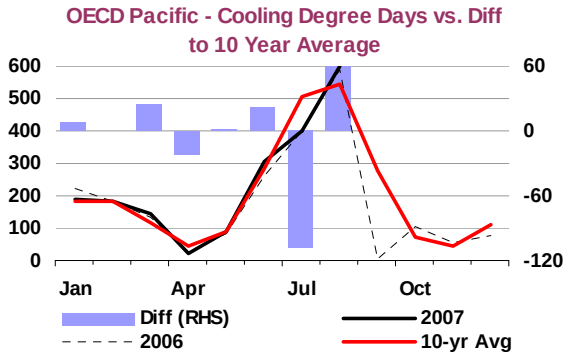
OECD Europe Demand by Product
(million barrels per day)

	2006	2007	3Q06	4Q06	1Q07	2Q07	May 07	Jun 07	Jul 07*	Latest month vs. Jun 07	Latest month vs. Jul 06
LPG & Ethane	0.96	0.95	0.84	0.91	1.01	0.95	1.03	0.82	0.91	0.08	-0.01
Naphtha	1.11	1.12	1.07	1.14	1.21	1.04	1.06	1.01	1.07	0.07	0.01
Motor Gasoline	2.57	2.53	2.66	2.55	2.41	2.61	2.60	2.63	2.66	0.03	-0.03
Jet & Kerosene	1.28	1.29	1.37	1.28	1.23	1.28	1.28	1.34	1.40	0.06	0.07
Gas/Diesel Oil	6.24	6.18	6.15	6.43	6.23	5.75	5.71	5.88	6.03	0.15	0.20
Residual Fuel Oil	1.85	1.77	1.77	1.78	1.83	1.72	1.72	1.73	1.70	-0.03	-0.10
Other Products	1.55	1.54	1.71	1.56	1.34	1.58	1.53	1.69	1.66	-0.03	-0.06
Total Products	**15.56**	**15.39**	**15.57**	**15.64**	**15.25**	**14.93**	**14.93**	**15.09**	**15.43**	**0.34**	**0.07**

* Latest official OECD submissions (MOS)

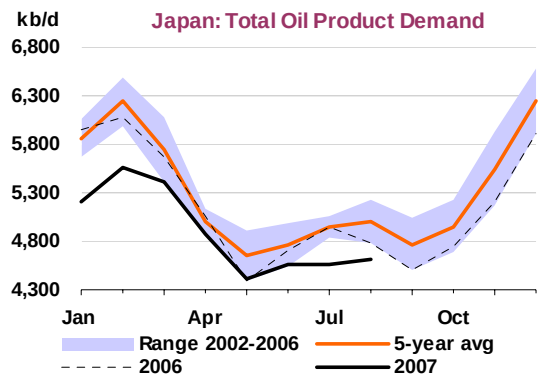
Pacific

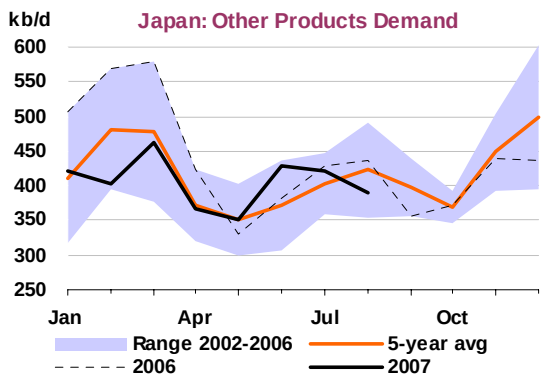
In August, according to preliminary data, oil product demand in the Pacific contracted by 2.2% on a year-on-year basis. Deliveries declined for all product categories bar naphtha (+3.7% year-on-year) and residual fuel oil (+7.2%). Thus, LPG deliveries fell by 3.2%, gasoline by 1.1%, jet fuel/kerosene by 7.5%, gas/diesel by 7.1% and 'other products' by 15.7%. The largest product demand contractions occurred in Japan, and were probably related to secondary stock drawing following July's poor summer weather conditions (which restrained air travel, leisure driving and electricity demand). Nevertheless, Korean and Australian demand continues to be relatively resilient, supported by naphtha in the former and by transportation fuels in the latter.



Given these revisions, we have slightly adjusted downwards our 2007 and 2008 prognosis. OECD Pacific demand is now expected to average 8.3 mb/d in 2007 (-0.8% on a yearly basis), and rebound to 8.5 mb/d (+2.4%) in 2008. However, as with the rest of the OECD, this forecast relies on the premise of normal winter temperatures and on prevailing economic assessments. Moreover, following the release of disappointing 2Q07 GDP figures (-0.3% year-on-year), there are concerns that Japan's recovery, largely driven by exports, may be endangered by a slowing US economy (some observers, though, attribute the slowing to tight domestic fiscal and monetary policies).

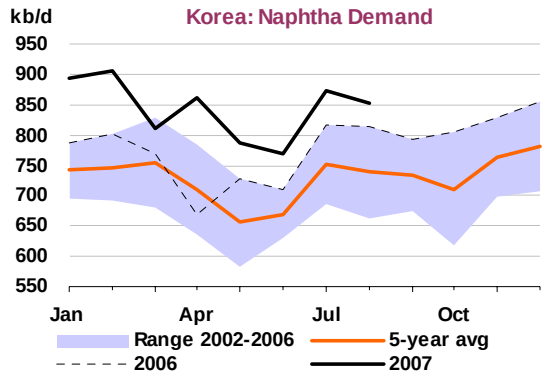
In **Japan**, oil product demand contracted by 3.7% year-on-year in August, according to preliminary data. As last month, all products bar fuel oil for power generation (+21.3%) and naphtha (+2.7%) fell. As this report has often argued, Japan's energy demand decline is largely structural, given demographic factors and efficiency improvements. However, oil demand is also highly sensitive to weather conditions, prices and nuclear outages.

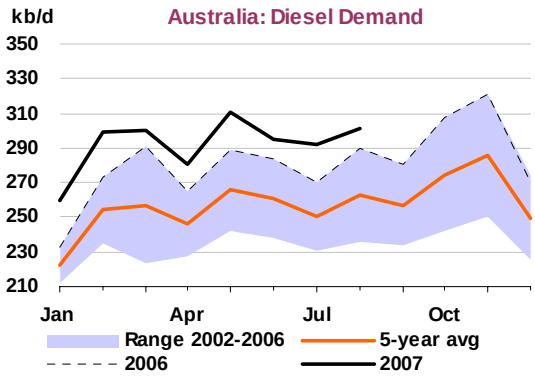




Indeed, poor weather in the middle of the summer hit leisure travel, but August's heat wave and the resulting cooling needs boosted power demand. The latter had to be met by thermal plants (fuelled by direct crude and fuel oil) given that a significant share of the country's nuclear generation capacity is offline following a series of operational problems (another plant, belonging to Hokkaido Electric Power, was shut down in late September). Meanwhile, high retail gasoline prices, which remain at record levels, also tended to discourage holiday travel over the summer. Given this subdued demand picture, product stocks were relatively plentiful by end-July, thus helping to explain why deliveries were so low in August.

In **Korea**, preliminary data indicate that total oil product demand fell slightly in August (-0.5% year-on-year), mostly on weaker-than expected distillates and fuel oil deliveries (-7.0% and -9.5%, respectively). The weakness of gasoil (diesel and other distillates) is probably related to secondary stock draws, following the previous month's build prompted by the 7.5% diesel fuel tax hike. Naphtha deliveries, meanwhile, continue to post strong growth (+4.7%). At this pace, naphtha could well account for half of total Korean oil demand (it currently represents 41%) in only a few years.





Finally, in **Australia**, total oil product demand rose by an estimated 1.2% in August, to some 960 kb/d. Demand continues to be driven by transportation fuels, on the back of strong economic growth. For the past eight months, both gasoline and jet fuel/kerosene have been growing at roughly 2.0% year-on-year on average, while diesel has shot up by about 6.7% on average.

OECD Pacific Demand by Product
(million barrels per day)

	2006	2007	3Q06	4Q06	1Q07	2Q07	May 07	Jun 07	Jul 07*	Latest month vs. Jun 07	Latest month vs. Jul 06
LPG & Ethane	0.92	0.93	0.91	0.94	0.97	0.92	0.90	0.88	0.87	0.00	-0.07
Naphtha	1.60	1.67	1.59	1.72	1.75	1.57	1.55	1.50	1.63	0.13	0.01
Motor Gasoline	1.57	1.57	1.61	1.60	1.53	1.54	1.54	1.52	1.59	0.07	-0.03
Jet & Kerosene	0.98	0.94	0.67	1.10	1.25	0.73	0.66	0.66	0.63	-0.03	-0.06
Gas/Diesel Oil	1.83	1.79	1.69	1.88	1.85	1.75	1.68	1.77	1.65	-0.13	-0.01
Residual Fuel Oil	0.98	0.96	0.89	0.97	0.99	0.89	0.88	0.88	0.86	-0.03	-0.03
Other Products	0.52	0.47	0.49	0.50	0.49	0.41	0.36	0.47	0.46	-0.01	-0.03
Total Products	**8.40**	**8.34**	**7.85**	**8.71**	**8.83**	**7.80**	**7.58**	**7.69**	**7.69**	**0.00**	**-0.22**

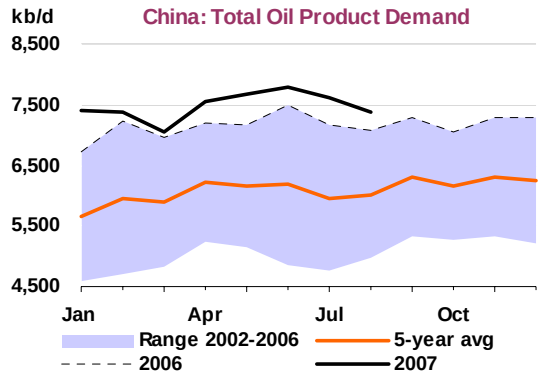
* Latest official OECD submissions (MOS)

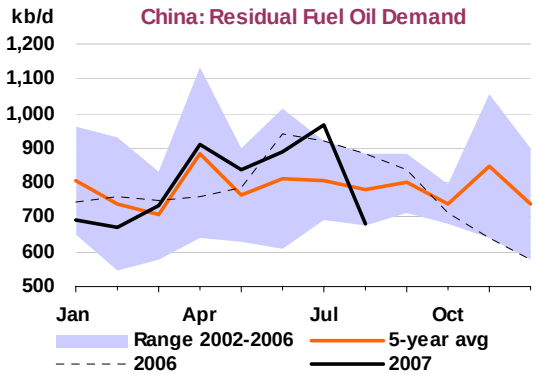
Non-OECD

China

According to preliminary data, China's apparent demand (defined as refinery output plus net oil product imports, adjusted for fuel oil and direct crude burning, smuggling and stock changes) rose by an estimated 4.3% year-on-year in August. The main driver was the sharp rise in gasoline (+11% year-on-year), prompted by the summer holiday season. Several other product categories also registered gains: gas/diesel (+7.5%), naphtha (+10.9%) and 'other products' (+12.1%).

By contrast, residual fuel oil consumption tumbled in August (-22.8% on a yearly basis), resuming a pattern of continued weakness since late 2006, only occasionally interrupted by blips in domestic demand. As noted in previous reports, 'teapot' refineries – which generally use residual fuel oil as a feedstock – are the *de facto* swing producers in China, meeting the gap between demand and state-owned companies' supply by providing off-spec diesel (notably for agricultural machinery and equipment) and heavy products such as asphalt. Teapot output falls when demand recedes, for example during the rainy season (roughly from July to October), when agricultural and construction activities slow down. But it is also sensitive to feedstock prices, particularly of imported fuel oil, which continue to remain high, despite the halving of the fuel oil import tax in early June. As such, net fuel oil imports in August plummeted by almost 50% to some 320 kb/d.





How Resilient is the Chinese Economy?

It is often claimed that the Chinese economy is bound to slow down significantly as it export sector faces weaker demand in both the US subprime-stricken economy and the European Union (which would be also affected by virtue of spillover effects). However, even though exports contribute to about 40% of China's GDP (and 2.5% of global GDP), this pessimistic scenario is far from certain.

On the one hand, the effects of the subprime turmoil are yet to be fully appraised, whether in terms of magnitude and geography. Some sectors of the US credit market are showing signs of revival (notably in commercial paper). Moreover, Europe appears so far largely untouched, despite problems at some banks. Therefore, it may be premature to augur a sharp economic slowdown in OECD countries.

On the other hand, the Chinese government has two major economic tools at its disposal: huge foreign currency reserves – currently standing at some $1.3 trillion – and a very favourable exchange rate policy. The former could help deliver a fiscal stimulus if need be, while the latter will arguably contribute to maintain the export momentum. Current spending ahead of next year's Olympic Games suggests that fiscal policy can be implemented despite China's decentralized political structure. The yuan's depreciation *vis-à-vis* the euro over the past few months (the mirror image of the euro appreciation with respect to the US dollar) has resulted in Europe becoming China's largest export market.

Other observers argue that inflation is actually a bigger threat. Current inflationary pressures, however, are probably temporary. They are mostly related to food prices and arguably due to supply constraints that may ease in the months ahead. Admittedly, wages are also rising, but this is the natural result of productivity gains. Moreover, the government can resort to short-term measures to curb inflation, such as freezing end-user prices in a variety of sectors – ranging from food to energy, as it happened in late September.

In sum, political considerations suggest that the Chinese government will most likely do the utmost to keep the economy growing, through heterodox means if necessary. Guaranteeing social and economic stability ahead of the forthcoming five-yearly Communist Party congress, which will renew the country's leadership until 2012, and of next year's Olympics, which are intended at raising China's global standing, is paramount. Meanwhile, short-term inflationary pressures will arguably militate against lifting caps on key consumer prices. As such, the recurrent rumours of either a price rise or the imminent implementation of a fuel tax (due next March, according to the Chinese Association of Automobile Manufacturers), which would curb the country's galloping demand and tackle the growing environmental problems, should probably not be taken at face value.

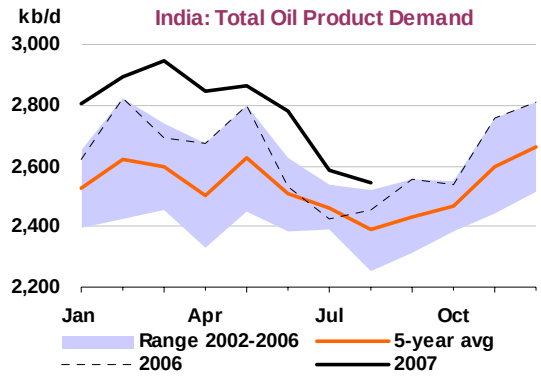
Our forecast of total Chinese oil product demand remains virtually unchanged, despite a minor downward revision to 3Q07 estimates. Demand is seen reaching 7.6 mb/d in 2007 (+5.7% year-on-year) and 8.0 mb/d in 2008 (+5.6%). We are cautiously optimistic that strong economic growth will continue and that fuel price controls and subsidies will remain in place for the foreseeable future.

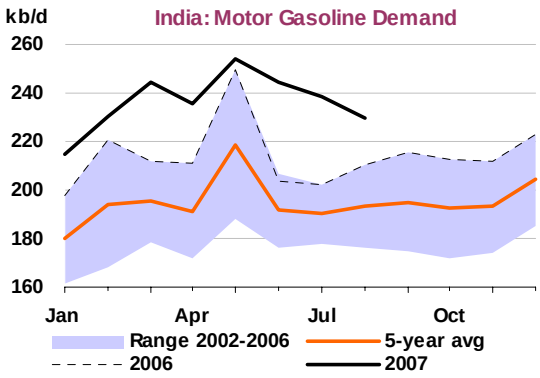
China Demand by Product
(thousand barrels per day)

	Demand			Annual Chg (kb/d)		Annual Chg (%)	
	2005	2006	2007	2006	2007	2006	2007
LPG & Ethane	650	633	623	-17	-11	-2.6	-1.7
Naphtha	707	826	906	119	81	16.8	9.8
Motor Gasoline	1,131	1,170	1,209	39	40	3.4	3.4
Jet & Kerosene	246	280	298	34	18	13.8	6.5
Gas/Diesel Oil	2,239	2,338	2,481	99	143	4.4	6.1
Residual Fuel Oil	778	776	784	-2	8	-0.2	1.1
Other Products	943	1,135	1,264	192	129	20.3	11.3
Total Products	**6,693**	**7,157**	**7,566**	**464**	**408**	**6.9**	**5.7**

Other Non-OECD

In August, according to preliminary data, oil product sales in **India** – a proxy of demand – increased by 3.8% on a yearly basis. Growth remains strong across all product categories bar 'other products' (but, as we have noted in previous reports, preliminary figures for this category have tended to be revised significantly upwards over the past few months). Most notably, gasoline demand continues to roar ahead (+9.2% year-on-year in August). For most of this year, gasoline sales have risen at double-digit rates as a result of buoyant economic growth, which in turn has stimulated the rapid expansion of the country's vehicle fleet. India's oil demand is thus expected to rise by 4.6% in 2007, but should slow down in 2008 (+2.3%) as naphtha continues to decline in favour of natural gas.

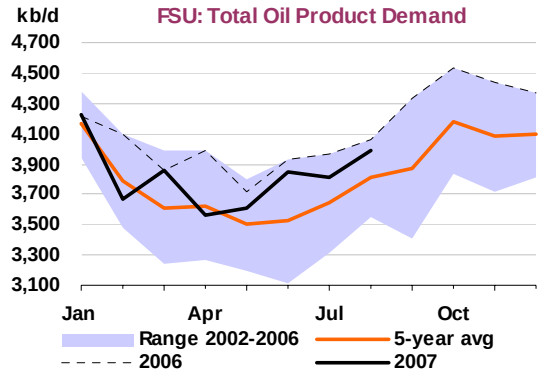


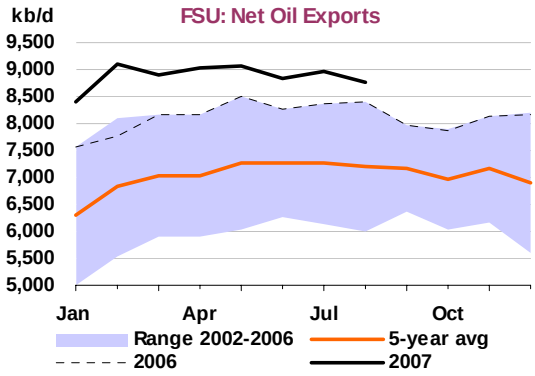


We argued last month that the outlook of India's natural gas market depends upon addressing several key pricing issues. One of them seems to have been solved: the government finally approved with only minor changes the price formula at which Reliance Industries (RIL) will sell gas from its D6 field in the Krishna Godavari basin. The price has been set at $4.20/mmbtu (instead of RIL's proposed $4.33/mmbtu) over five years from the start of commercial production. The slight price difference was intended to appease the government's Communist allies, which were backed by several power and fertiliser companies that sought a much lower price.

This "price discovery" suggests that D6's development will go ahead. More importantly, it will also set the basis of a competitive domestic gas market as prices will be applied uniformly irrespective of the end-user. The previous policy, by contrast, applied differentiated tariffs according to a taxonomy of users that created significant imbalances (it distinguished between power generators, industrial users, fertiliser and petrochemical companies, and households).

FSU apparent demand – defined as domestic crude production minus net exports of crude and oil products – has been significantly revised upwards since 2000 and through to 2008. As detailed in the Supply section of this report, the changes to the baseline stem from the reappraisal of NGL production in Russia. In addition, there were significant upward adjustments to trade data, notably in 3Q07. Overall, FSU total oil product demand was increased by 75 kb/d in 2007, to 4 mb/d, and by 130 kb/d in 2008, to 4.1 mb/d.





In terms of growth rates, though, oil demand is expected to contract by 3.1% this year, which seems counterintuitive given the region's buoyant economic growth. This inconsistency is arguably related to the quality of regional trade data, which is notoriously volatile, as we have pointed out in previous reports. Indeed, trade data may be overestimated, thus depressing apparent demand. Striving to solve the conundrum of FSU demand, we are currently examining other sources of data, as well as alternative methodologies. As such, further revisions may take place in the forthcoming months.

SUPPLY

Summary

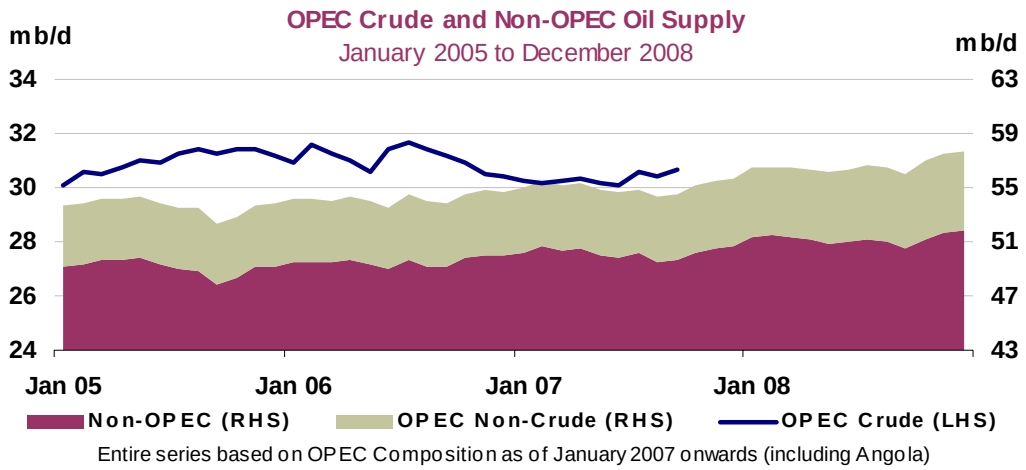
- **World oil supply** increased by 415 kb/d in September, to average 85.1 mb/d. Rising output from North America, China and OPEC, helped to offset a Caspian maintenance-derived decline of 235 kb/d from the FSU. With potentially higher OPEC production in October/November, and the combined impact of lower North Sea maintenance and the end of the Atlantic hurricane season, global supply should continue to rise through end-year, albeit potentially lagging demand growth.

- **Non-OPEC production** is revised higher by 155 kb/d for 2007, to 50.2 mb/d and by a similar amount for 2008, to 51.2 mb/d. Upward revisions centre on Russian NGL production and stronger supply from North America. These offset weaker numbers for the North Sea, Brazil and China. Non-OPEC yearly growth accelerates from 0.4 mb/d in 2H07 to some 1.0 mb/d for 2008. The FSU, Brazil and global biofuels generate most of 2008's growth. Separately, OPEC NGL growth for 2008 is trimmed to a still-sizeable 595 kb/d, on the basis of weaker Iranian prospects.

- **Project delays and cost over-runs** remain a key downside risk for the forecast, affecting around 735 kb/d worth of projects in this issue of the *OMR* alone. Tightness in raw materials and equipment are the main cause, although recently announced changes in the fiscal and regulatory environment for Russia, Kazakhstan, Venezuela, Ecuador and, to a lesser extent, Alaska and Alberta, could impact upon longer-term supply levels beyond 2008.

- **September OPEC crude supply** gained 245 kb/d to reach 30.7 mb/d, largely due to higher Iraqi output. The OPEC-10 are scheduled to add 500 kb/d of supply compared to August, effective 1 November. Individual output allocations for the new 27.3 mb/d target suggest proportionately lower market shares for Indonesia, Iran, Nigeria and Venezuela. Anticipation of potential Iraqi and Angolan supply increases may underpin the reallocation. OPEC effective spare capacity remained close to 2.7 mb/d in September.

- **The 'call on OPEC crude and stock change'** is revised down by some 0.4 mb/d in 3Q07 and by 0.3 mb/d for second-half 2008, based on weaker 3Q demand and higher non-OPEC supply. Nonetheless, the 4Q07 call still averages close to 32.5 mb/d, 1.2 mb/d higher than in 3Q. On an annual basis, the call on OPEC rises by at least 0.4 mb/d in 2008.



All world oil supply figures for September discussed in this report are IEA estimates. Estimates for OPEC countries, Alaska, 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. This totals -410 kb/d for non-OPEC as a whole, with downward adjustments focused in the OECD.

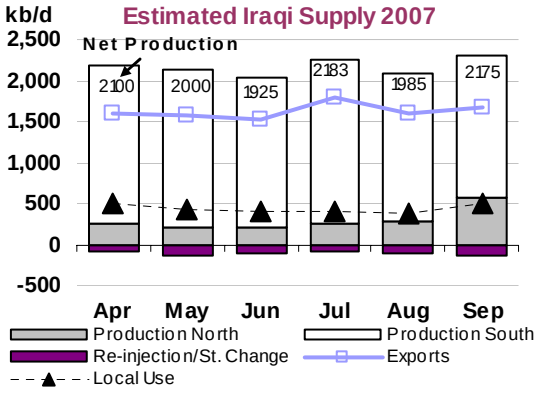
OPEC

September OPEC supply is estimated up by 245 kb/d from August, at 30.66 mb/d. Iraq underpinned the increase, as higher domestic crude use and renewed exports from Ceyhan in Turkey boosted supply by 190 kb/d. Widespread, if modest, increases from other producers were largely offset by a combined 100 kb/d reduction in supply from Nigeria, UAE and Indonesia. All told, September supply came in slightly below preliminary expectations, with continued pipeline outages in northern Iraq, and delays to new field start-up in Angola curbing production growth. All other things being equal, higher volumes are expected from both these producers in October.

Effective OPEC spare capacity (net of Indonesia, Iraq, Nigeria and Venezuela) is largely unchanged at 2.7 mb/d, with 81% of the total held by Saudi Arabia. Installed capacity is expected to rise by 270 kb/d by the end of this year to 34.5 mb/d and by a further 1.3 mb/d in 2008. Recent reports from **Nigeria** that 550 kb/d of currently-shuttered Forcados, Bonny and EA capacity might be re-instated by around the middle of 2008, if realised, could push installed OPEC capacity higher still, perhaps to around 36.3 mb/d by the end of 2008. For now our estimates exclude this slice of idled Nigerian capacity. Shell was reported to have lifted force majeure on Forcados export shipments, having accumulated significant volumes in storage, even though production remains at only a fraction of pre-disruption levels.

At the time of writing **Ecuador's** Oil Minister had announced plans to officially rejoin OPEC, potentially at the organisation's 5 December meeting in Abu Dhabi. Ecuador produces 0.5 mb/d of crude and was previously a member of the group until January 1993.

Higher **Iraqi** oil supply in September was the main reason for higher OPEC output overall, contributing 190 kb/d, or 78%, of the monthly increase. Total crude supply (exports plus domestic use) averaged 2.18 mb/d. Domestic crude use in refineries and power plants rose to nearly 500 kb/d from 385 kb/d in August, despite renewed attacks on the pipeline feeding crude from Kirkuk to the Baiji refinery.



Total Iraqi exports reached 1.68 mb/d, an increase of 75 kb/d compared to August. Southern exports via Basrah and Khor-al-Amaya actually fell by nearly 100 kb/d to 1.5 mb/d, but this was countered by the loading of 4.7 mb onto tankers at Ceyhan in Turkey. A further 2.5 mb was awarded in a second tender but is not thought to have been lifted from Ceyhan until early-October. A third tender of 5 mb was awarded on 8 October with liftings scheduled to be completed by the end of the third week of October. At the time of writing in early October, pipeline flows to Ceyhan were reported to be running at 300 kb/d, after sporadic shipments which averaged 95 kb/d in September. A fourth sales tender was reported to be in preparation.

OPEC Gets Specific Again, Briefly

OPEC-10 production has yet to show significant signs of increasing ahead of the 500 kb/d rise in target output scheduled for 1 November. Although OPEC tanker sailings may be rising in October according to preliminary schedules, once again Iraq and Angola (which are not bound by OPEC-10 production guidelines) are responsible for much of the increase.

In mid-September the OPEC Secretariat published individual allocations corresponding to the 27.253 mb/d output target announced at the 11 September Ministerial meeting. Although now removed from the OPEC website, suggesting some internal debate as to their legitimacy, these were nonetheless the first explicit details on country-specific targets since those agreed in June 2005 alongside the 28.0 mb/d ceiling of the time. Although OPEC members subsequently agreed to cut supply by 1.2 mb/d from November 2006, and by 500 kb/d from February 2007, neither pact specified individual production levels.

OPEC Crude Production[1]

(million barrels per day)

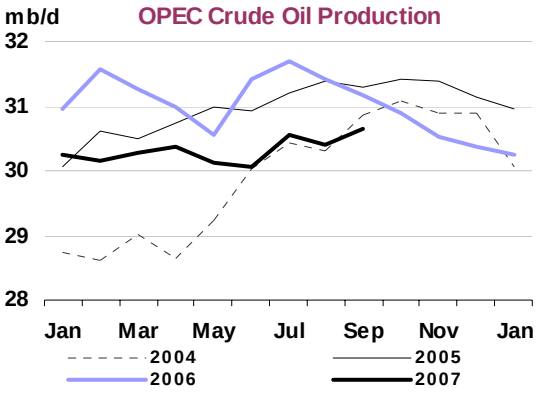
	August 2007 Production	Sept 2007 Production	1 November 2007 Target	Sustainable Production Capacity[2]	Spare Capacity vs Sep 2007 Production	Capacity end-2007	Capacity end-2008
Algeria	1.35	1.37	1.36	1.39	0.01	1.38	1.47
Indonesia	0.84	0.83	0.87	0.87	0.05	0.88	0.88
Iran	3.92	3.92	3.82	3.95	0.03	3.88	3.97
Kuwait[3]	2.45	2.48	2.53	2.64	0.16	2.68	2.83
Libya	1.70	1.72	1.71	1.76	0.04	1.78	1.84
Nigeria[4]	2.15	2.10	2.16	2.47	0.37	2.45	2.39
Qatar	0.83	0.84	0.83	0.90	0.06	0.92	1.00
Saudi Arabia[3]	8.60	8.65	8.94	10.80	2.15	10.91	11.35
UAE	2.59	2.55	2.57	2.75	0.20	2.77	2.89
Venezuela[5]	2.36	2.38	2.47	2.60	0.22	2.62	2.60
Subtotal	**26.78**	**26.83**	**27.25**	**30.12**	**3.30**	**30.26**	**31.22**
Angola[1]	1.65	1.66		1.66	0.00	1.79	2.15
Iraq	1.99	2.18		2.40	0.23	2.40	2.40
Total	**30.41**	**30.66**		**34.18**	**3.52**	**34.45**	**35.77**
(excluding Indonesia, Iraq, Nigeria, Venezuela					*2.66)*		

1 Angola joins OPEC effective 1 January 2007.
2 Capacity levels can be reached within 30 days and sustained for 90 days.
3 Includes half of Neutral Zone Production.
4 Nigeria excludes some 545 kb/d of shut-in capacity.
5 Includes Orinoco extra-heavy oil assumed at 500 kb/d in September.

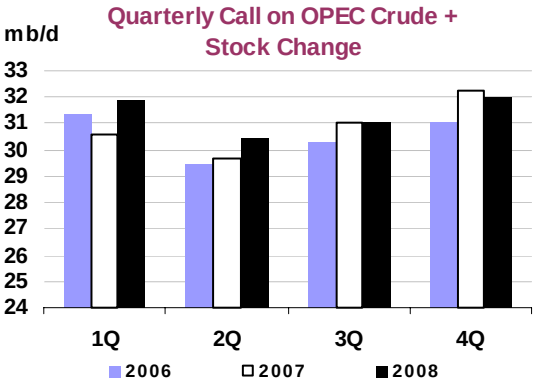
Reportedly, August 2007 was used as the baseline for the latest aggregate production level, whereas September 2006, just after the peak of recent OPEC-10 output, was used as a starting point for the new individual targets. Subject to their validity, the allocations award greater market share to Algeria, Kuwait, Libya, Qatar, Saudi Arabia and the UAE at the expense of Indonesia, Iran, Nigeria and Venezuela. This is not surprising given the relative changes in production that have occurred in the past couple of years. Iran and Venezuela appear to have been affected to the greatest extent by the new targets. Iran's 3.82 mb/d is 100 kb/d below recent near-capacity production levels, while Venezuela experiences the sharpest drop in allowable production, from 3.2 mb/d to 2.5 mb/d. The organisation has long deferred the politically difficult task of reallocating production limits, but may have seen 2008's impending inclusion of Angola in the management mechanism requiring the issue to be addressed sooner rather than later.

Angolan crude output in September was largely unchanged from August at 1.65 mb/d, as further delays hit the Greater Plutonia project. This was reported to have finally begun producing on 1 October, at initial rates close to 80 kb/d, and is expected to build eventually to rates in excess of 200 kb/d. Plutonia supplies are reflected in Angola's October and November export programme, which are seen hitting 1.73 mb/d and 1.8 mb/d respectively. A Sonangol executive was reported in early October citing 2.5 mb/d as an acceptable production target for the country, with output due to reach 2 mb/d and remain close to that level through to 2008.

Abu Dhabi state producer ADNOC announced in late September that average monthly **UAE** crude supply had been cut by 40 kb/d due to a leak at a gas compression unit. Maintenance work at the offshore Upper and Lower Zakum and Umm Shaif oilfields is likely to curb UAE production by a more sizeable 600 kb/d for the bulk of November. This represents around half of the fields' capacity and term customers have correspondingly been informed of a cut in November supplies. The emirate has reportedly been selling extra volumes ahead of November and may also have extra crude available during maintenance at the Ruwais refinery scheduled for the December to February period.



Entire series based on OPEC Composition as of January 2007 onwards (including Angola)



Entire series based on OPEC Composition as of January 2007 onwards (including Angola)

Iranian state producer NIOC signalled in early October that the country's crude capacity goal is now 4.9 mb/d by 2014, after earlier pronouncements had suggested 5.2 mb/d by 2011. Our assumption in July's *MTOMR* was that after levelling off around 4.0 mb/d, Iranian capacity could potentially slip to 3.8 mb/d by 2012 in the absence of foreign investment which is currently limited by geopolitical factors and by an economically unattractive investment model. Current Iranian supply is estimated at 3.9 mb/d although briefly published OPEC output allocations for November showed a lower Iranian level of 3.8 mb/d (see above). In this month's report, start-up for NGL and condensate output from phases 6-8 of the South Pars gas project has been pushed back from late 2007 to mid-2008. This affects an ultimate 140 kb/d of liquids output, but curbs Iranian and OPEC NGL supply by a more modest 10 kb/d in 2007 and 75 kb/d in 2008.

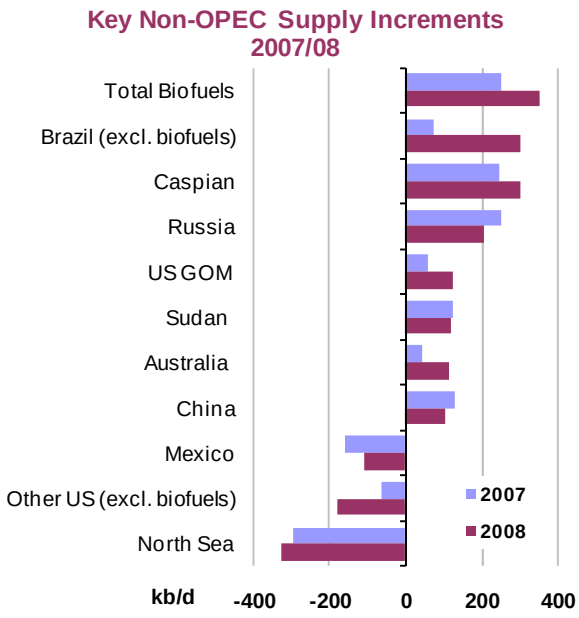
Non-OPEC Overview

Non-OPEC annual supply estimates for 2000-2008 are revised up by as much as 150 kb/d with the inclusion of an extra tranche of NGL supply from Russia. Also, lower-than-expected hurricane outages for the Mexican and US areas of the Gulf of Mexico (GOM) contribute to a 230 kb/d upgrade to 3Q07 estimates of North American supply, also modestly boosting 2008 projections. In all, non-OPEC supply now stands at 50.2 mb/d for 2007 (a net increase of 0.6 mb/d from 2006), rising by 1.0 mb/d to 51.2 mb/d next year. Growth averages 0.4 mb/d year-on-year in the second half of 2007, but accelerates to nearly 1.0 mb/d for the bulk of 2008. The FSU, deepwater Brazil, biofuels, offshore Australasia, US GOM, Canadian oil sands, Sudan and China drive next year's growth, offsetting sharp decline from much of the remainder of the OECD production base.

While our projections since July for both the *OMR* and *MTOMR* have included a downward adjustment to account for a proliferation of unscheduled field outages, new project over-runs continue to act as a drag on the forecast. In updating the analysis for this month's report, delays to new field start-ups of between one month and three years have been factored in for certain projects in Brazil, the UK, Norway, and the US GOM (as well as for Algeria, Angola, Iran and the UAE within the OPEC fold). In total, some 735 kb/d of global production slips to a greater or lesser extent. We continue to resist the temptation to 'slip' every new project. Instead, we try to take a realistic, project-specific view based on company guidance, augmented by evidence of progress on the ground, delays in the provision of equipment and associated infrastructure or

fiscal/regulatory changes which may impact upon project economics. Moreover, the past few months have shown that project slippage can be over-ridden by upward adjustments if production remains unaffected by unscheduled stoppages, which were the main rationale for the adjustment factors introduced in July. Forecasts remain dynamic, and are naturally prone to adjustment as progressively more information on individual fields becomes available.

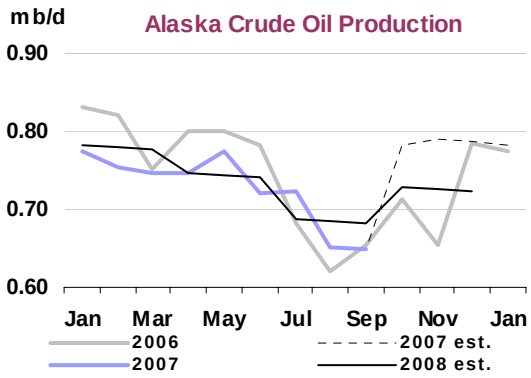
This month also sees a number of developments on the fiscal/regulatory front which may influence supply levels, if not in 2007/2008, then for the time horizon of the *MTOMR*. Russia, Venezuela, Ecuador and Kazakhstan all announced moves which further boost state control over the upstream sector. In the case of Alaska and Alberta, proposals seek to raise the state's share of revenue from hydrocarbon production in light of higher oil prices. Mexico meanwhile, has eased the crippling tax burden on state-producer Pemex.

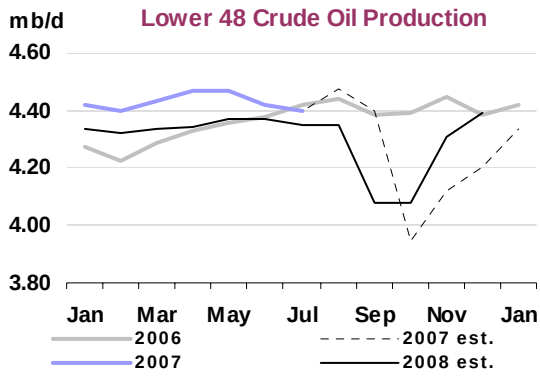


OECD

North America

US – September Alaska actual, others estimated: Changes to total US oil supply for 2007 and 2008 are minimal, with downward revisions for the US GOM from revised 2006 monthly data (-75 kb/d) being largely offset by upward adjustments to 3Q07 after much lower than assumed September hurricane outages. US crude supply slips to 5.09 mb/d in 2007 and to 5.04 mb/d in 2008, while NGL output is held broadly steady at 1.75 mb/d. Gulf of Mexico crude bucks the declining trend, rising by 60 kb/d in 2007 and by 125 kb/d in 2008, reaching 1.48 mb/d. Growth in refinery additives and oxygenates (including ethanol) amounts to 80 kb/d in 2007 and 35 kb/d in 2008, taking total output next year to 615 kb/d.





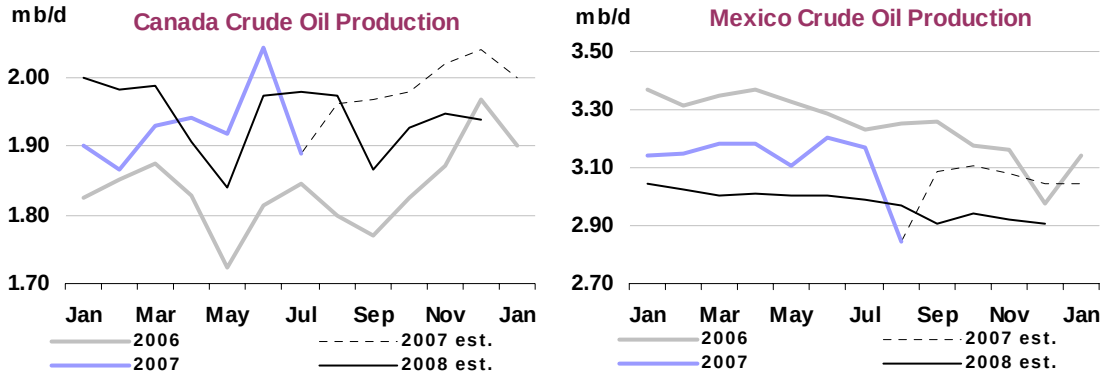
September proved another sluggish month for Alaskan output, with crude stalled at less than 650 kb/d on processing unit outages. North Slope production has struggled to recover after last year's pipeline outages. State authorities announced details of new oil and gas tax legislation which would boost the tax on net company profits to 25% from a current 22.5%, while granting 20% credits for capital expenditure and further credits for exploration.

Production shut-ins in September in the GOM proved much less than the assumed rolling five-year average. Tropical depression 10 caused an estimated loss to September output of 2.8 mb with peak precautionary closures of 815 kb/d on 21 September. The closures averaged 95 kb/d for the month, markedly below the assumed 380 kb/d. Assumed losses for the remainder of the hurricane season in

October and November amount to 345 kb/d and 185 kb/d respectively although, to date, October has seen little sign of major disruptions. The relatively benign September weather temporarily offsets an otherwise-downward adjustment to US GOM oil supply. Final US monthly data for the GOM in 2006 came in 75 kb/d lower than preliminary estimates and the lower baseline overall carries through to 2008, reducing next year's GOM total by 25 kb/d. Notwithstanding, GOM supply shows continued year-on-year growth, with imminent field start-ups including Genghis Khan, Atlantis and Neptune.

Canada – July actual: Growth in Canadian oil supply in 2007 amounts to 180 kb/d, with 150 kb/d coming from conventional supply (Albertan bitumen and offshore Newfoundland output), and some 55kb/d from upgraded heavy oil. Total oil supply reaches 3.37 mb/d in 2007 (of which 1.96 mb/d is conventional crude), with a levelling off in 2008 (despite continued oil sands growth) to 3.36 mb/d. Supply estimates are actually revised up by 45 kb/d for 2007 and 25 kb/d for 2008, as earlier double-counting within the field reliability factor is removed and also based on higher baseline Albertan conventional crude output.

Further proposed changes to the Canadian upstream fiscal environment emerged in September. The Newfoundland government, having earlier set a 4.9% stake and royalties as preconditions for approving the offshore Hebron-Ben Nevis development, now envisages taking up to a 10% stake in future offshore projects. The province also seeks to take over the Federal government's 8.5% stake in the existing 180 kb/d Hibernia field. Meanwhile, Albertan authorities propose raising the fiscal take on oil sands projects from 47% to 64%, on conventional oil projects from 44% to 49% and on natural gas projects from 58% to 63%.

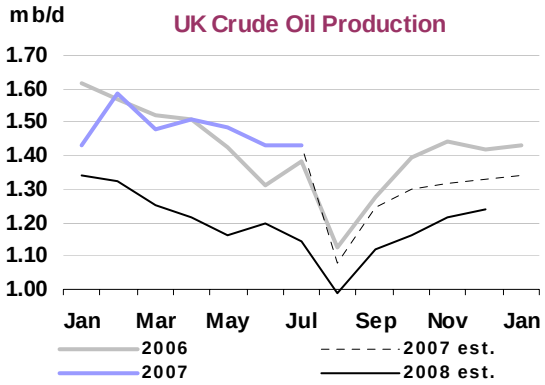


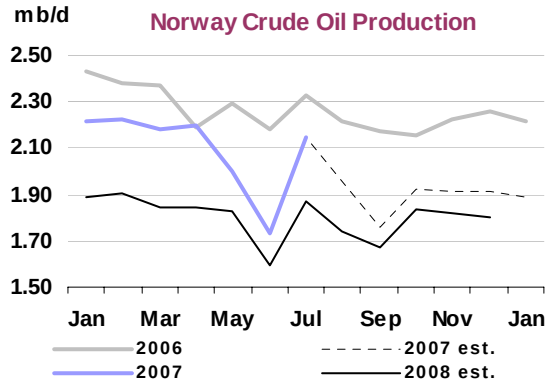
Mexico – August actual: August crude production losses due to Hurricane Dean proved to be less than originally estimated, although NGL supply for the month came in 30 kb/d lower than expected. Crude losses for the month are revised down from 425 kb/d to closer to 300 kb/d. There were also reports that production from the offshore Ku-Maloob-Zaap complex reached over 600 kb/d at one point in September. This report retains an earlier forecast of KMZ averaging 515 kb/d in the fourth quarter of 2007 and some 550 kb/d in 2008, but if preliminary September production highs are sustained, there is scope for upward revision to our forecast.

Mexican crude output is projected to fall by 4-5% in both 2007 and 2008, averaging 3.1 mb/d and 3.0 mb/d respectively. However, state producer Pemex may obtain some relief from the decision by both houses of congress to approve a tax reform bill which will cut its tax obligations from 79% to 74% in 2008 and 71.5% by 2012. This is seen giving the company an extra $2.7 billion for investment in 2008, although as noted in the demand section, this may be partly offset by an effective freeze on domestic product prices.

North Sea

UK – July actual: Aggregate UK production data for July (field-by-field data runs through June) came in higher than expected, effectively cancelling out that month's downward field reliability adjustment of 160 kb/d. However, increments from a series of small new gas/condensate fields appear to be lower in net terms than earlier assessments suggested, and Forties system production has been scaled back by some 50 kb/d from 4Q07 onwards as a result. While build-up from the Buzzard field helps to stem prevailing UK offshore production decline this year (output stabilises at 1.6 mb/d), renewed decline sets in from 2008, when offshore production falls to 1.43 mb/d. Additionally, NGL and onshore crude supply amount to 235 kb/d and 20 kb/d respectively for the UK in 2008.

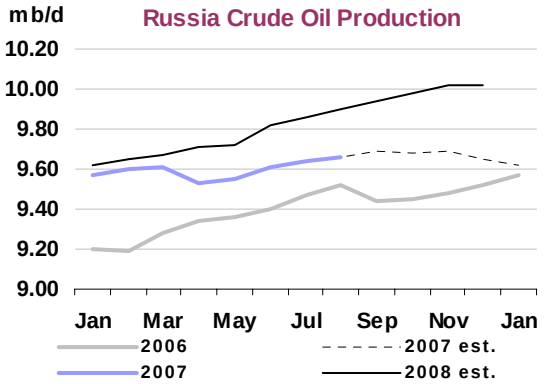


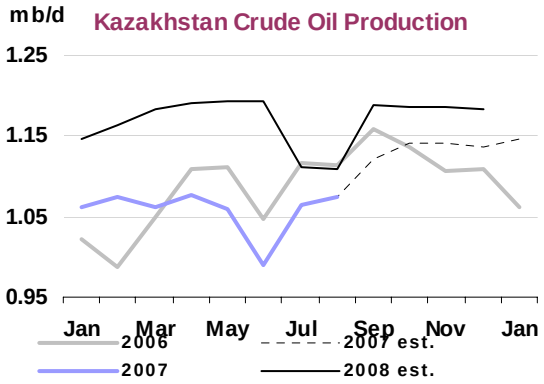


Norway – July actual, August provisional: Total Norwegian supply estimates for 2007 and 2008 are unchanged at 2.5 mb/d and 2.4 mb/d respectively, being slightly below latest government projections, which envisage 2.5 mb/d in both 2008 and 2009. Start-up of the Volve, Alvheim and Vilje projects is pushed back in our forecast from 3Q to 4Q07. However, a partial offset comes from earlier start-up at the Ormen Lange project, which began operations in September compared to our earlier assumption of December. Ormen Lange is seen producing around 20 kb/d of gas liquids in 2008.

Former Soviet Union (FSU)

Russia – August actual, September provisional: Russian output projections are revised up by 170 kb/d for 2007 and by 200 kb/d for 2008, largely due to improved capture of NGL output *(see below)*. Russian crude production is forecast to increase by some 0.2 mb/d in both 2007 and 2008, averaging 9.6 mb/d and 9.8 mb/d respectively. In addition, NGL supply averages 470 kb/d in both years. Higher Rosneft crude supply also contributes to the upward revision, amid signs that the company is scaling up target production levels after the recent take-over of former Yukos production assets. Year-round production from Sakhalin 2 production facilities was officially deferred from 2007 to 2008, although the *OMR* forecast had already assumed a 2008 start-up for winter production.





Extending Russian Gas Liquids Coverage

Data transparency can be clouded by the differing ways in which national administrations report data. Some estimates of crude oil production include only crude oil, some group together crude and condensate and some also incorporate field output of LPG and other gas liquids. Inevitably, our own and other analysts' databases include inconsistencies in the way that gas liquids are captured, reflecting the various ways that NGL are reported in national data. As a general rule however, we try to include both condensate and NGL in the 'NGL' category, leaving crude as a discrete entry on its own.

For some time we have been aware of potentially understating Russian natural gas liquids (NGL) supply, although a lack of clarity about what was or was not included in official production statistics made any adjustment difficult. We have now added an estimate of annual Russian gas processing plant supply to an existing assessment of condensate production. Monthly Gazprom liquids output data are assumed to consist predominantly of gas condensate. In arriving at Russian total monthly oil supply therefore, Gazprom's portion of production is allocated condensate quality and converted from tonnes into barrels at 8.5 barrels/tonne. All other monthly production data was, and still is, allocated as crude oil.

Changes to Russian NGL Production Assessment
(thousand barrels per day)

Year	Original condensate & total NGL assessment	New condensate assessment	New NGL assessment	New Total Russian Gas Liquids	Net change
2000	232	195	50	245	13
2001	237	218	50	268	31
2002	246	246	65	311	65
2003	257	257	88	344	88
2004	278	278	135	414	135
2005	298	298	145	443	145
2006	304	302	148	450	146
2007	306	307	160	467	161
2008	299	303	170	473	174

Recently, the IEA's annual non-OECD *Green Book* statistics for Russia began incorporating an NGL component. Using this, and market intelligence on gas processing operations from a number of sources, we have boosted Russian NGL supply reported in the *OMR* to include both field condensates and NGL (ethane through pentanes-plus) from gas processing units for the period 2000-2008. Both components are listed under the 'NGL' category in *OMR* databases. On a net basis, the adjustments add over 60 kb/d to Russian oil supply in 2002, nearly 150 kb/d for 2005/2006, 160 kb/d for 2007 and 175 kb/d for 2008. This also feeds through into implied demand.

Kazakhstan – August actual: Total Kazakh oil production averages 1.36 mb/d in 2007 and 1.46 mb/d in 2008 (including around 0.3 mb/d of gas liquids from the northern onshore Karachaganak project). The bulk of 2008 growth comes from the Chevron-operated Tengiz field, where production is seen reaching 400 kb/d in late-2008 from current output of 280 kb/d. Company statements recently have suggested output attaining 500 kb/d in 2008. The *OMR* retains a more conservative view until uncertainties over transport infrastructure *(see below)* and a lawsuit relating to sulphur storage at the oilfield are resolved.

The Kazkah parliament in September approved legislation allowing the government to annul oil and gas development projects on economic or national security grounds. This was initially seen by some as a prelude to renegotiation of terms for the long-delayed Kashagan project (see page 26 of report dated 12 September 2007). However, in recent days the Kazakh President has said that progress on Kashagan can recommence without root and branch contract renegotiation. Nonetheless, observers see the Kazakhs likely to apply financial penalties to operator Eni arising from repeated delays at Kashagan. One piece of potentially positive news for the troubled Kashagan project emerged when shareholders of the associated CPC pipeline agreed to Transneft calls for higher pipeline tariffs and debt restructuring, which could open the way for Russian approval for plans to double CPC capacity to 1.4 mb/d.

Preliminary data show total **FSU net oil exports** of 8.77 mb/d in August, 180 kb/d lower than July, which themselves were revised up by 60 kb/d, to 8.95 mb/d. Month-on-month decreases in August were centred on products, which fell by 200 kb/d compared to July. An increase in Russian export duties from 1 August

prompted decreases of 80 kb/d and 50 kb/d in crude exports from Black Sea and Baltic ports respectively, the former also possibly exacerbated by delays in transit through the Turkish Straits. However, an offsetting 80 kb/d surge in crude exports through the BTC pipeline left total seaborne crude exports down by only 60 kb/d. Higher product export taxes curbed product cargoes by 50 kb/d and 60 kb/d for fuel oil and gasoil respectively.

FSU Net Exports of Crude & Petroleum Products
(million barrels per day)

	2005	2006	3Q2006	4Q2006	1Q2007	2Q2007	Jun 07	Jul 07	Aug 07	Latest month vs. Jul 07	Latest month vs. Aug 06
Crude											
Black Sea	2.27	2.22	2.27	2.08	2.30	2.23	2.07	2.11	2.03	-0.08	-0.33
Baltic	1.59	1.55	1.49	1.43	1.58	1.60	1.45	1.56	1.52	-0.05	0.10
Arctic/FarEast	0.19	0.15	0.20	0.19	0.29	0.30	0.30	0.41	0.40	-0.01	0.16
BTC	0.00	0.00	0.22	0.38	0.43	0.58	0.64	0.64	0.72	0.08	0.45
Crude Seaborne	4.05	4.07	4.18	4.08	4.60	4.70	4.47	4.73	4.67	-0.06	0.38
Druzhba Pipeline	1.15	1.20	1.23	1.19	1.17	1.13	1.06	1.01	1.08	0.07	-0.09
Other Routes	0.25	0.38	0.38	0.45	0.47	0.46	0.44	0.43	0.44	0.01	0.07
Total Crude Exports	5.45	5.64	5.80	5.71	6.23	6.29	5.97	6.17	6.19	0.02	0.35
Of Which: Transneft	4.12	4.22	4.30	4.06	4.33	4.31	4.01	4.12	4.05	-0.06	-0.20
Products											
Fuel oil	0.93	0.95	0.94	0.95	1.04	1.15	1.17	1.11	1.07	-0.05	0.07
Gasoil	0.87	0.95	0.94	0.91	0.94	0.88	1.00	1.07	1.00	-0.06	0.05
Other Products	0.58	0.61	0.63	0.54	0.59	0.69	0.71	0.63	0.55	-0.09	-0.11
Total Product	2.38	2.51	2.50	2.40	2.57	2.73	2.88	2.81	2.62	-0.20	0.01
Total Exports	7.83	8.16	8.30	8.11	8.80	9.02	8.86	8.98	8.81	-0.17	0.37
Imports	0.02	0.04	0.05	0.04	0.02	0.04	0.04	0.03	0.03	0.00	-0.01
Net Exports	7.81	8.12	8.25	8.07	8.78	8.98	8.82	8.95	8.77	-0.18	0.38

Sources: Petro-Logistics, IEA estimates
Note: Transneft data has been revised to exclude Russian CPC volumes.

Lower Caspian production in September, due to field maintenance, is likely to reduce BTC and CPC cargoes by over 300 kb/d, although most of this should be back in October. Loading schedules suggest that an offsetting rise in Transneft exports in September could leave total FSU net exports down 250 kb/d from August levels, albeit potentially rebounding in October.

Revisions to Other Non-OPEC Estimates

Production estimates for **Azerbaijan** are trimmed by 10 kb/d for 2007, centred on weaker-than-expected August and October supplies from the ACG fields. Recovery after July storm outages affecting offshore **Chinese** production was slower than expected, with August output coming in 165 kb/d below initial estimates, although September is expected to have seen a supply rebound. **Brazilian** output is revised down for the 3Q07-1Q08 period, with operational problems continuing to affect Campos Basin supply. Brazilian crude output is nonetheless expected to rise sharply by 0.3 mb/d in 2008, after a rise of 90 kb/d in 2007. **Sudanese** production is trimmed by 50 kb/d for the August-October 2007 period to reflect the impact of summer flooding on production. However, Sudanese production from existing fields is seen rising by 120 kb/d in both 2007 and 2008, reaching 575 kb/d next year, on the basis of recently-completed pipeline capacity.

Revisions to Non-OPEC Oil Supply
(million barrels per day)

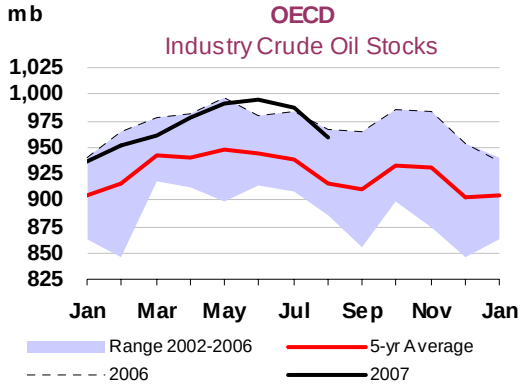
	Last Month's OMR				This Month's OMR				This Month vs. Last Month			
	2007	2008	07 v 06	08 v 07	2007	2008	07 v 06	08 v 07	2007	2008	07 v 06	08 v 07
North America	14.24	14.17	0.00	-0.07	14.31	14.19	0.10	-0.13	0.07	0.02	0.10	-0.05
Europe	4.90	4.59	-0.29	-0.31	4.88	4.54	-0.30	-0.34	-0.02	-0.04	-0.02	-0.03
Pacific	0.64	0.78	0.06	0.13	0.64	0.79	0.06	0.14	0.00	0.01	0.00	0.01
Total OECD	**19.78**	**19.53**	**-0.23**	**-0.25**	**19.83**	**19.51**	**-0.14**	**-0.32**	**0.05**	**-0.02**	**0.09**	**-0.07**
Former USSR	12.58	13.05	0.48	0.47	12.74	13.25	0.50	0.51	0.16	0.20	0.01	0.04
Europe	0.13	0.12	-0.01	-0.01	0.13	0.12	-0.01	-0.01	0.00	0.00	0.00	0.00
China	3.82	3.92	0.15	0.10	3.81	3.91	0.13	0.11	-0.02	-0.01	-0.02	0.01
Other Asia	2.70	2.79	-0.01	0.09	2.70	2.79	-0.01	0.09	0.00	0.00	0.00	0.00
Latin America	4.45	4.75	0.05	0.31	4.43	4.74	0.03	0.31	-0.02	-0.01	-0.02	0.01
Middle East	1.65	1.61	-0.08	-0.05	1.65	1.61	-0.08	-0.05	0.00	0.00	0.00	0.00
Africa*	2.57	2.69	0.08	0.12	2.55	2.68	0.06	0.13	-0.02	0.00	-0.02	0.01
Total Non-OECD*	**27.91**	**28.93**	**0.65**	**1.02**	**28.01**	**29.10**	**0.61**	**1.08**	**0.10**	**0.17**	**-0.04**	**0.06**
Processing Gains	1.92	1.95	0.02	0.03	1.92	1.95	0.02	0.03	0.00	0.00	0.00	0.00
Other Biofuels	0.40	0.66	0.15	0.25	0.40	0.66	0.15	0.25	0.00	0.00	0.00	0.00
Total Non-OPEC*	**50.01**	**51.07**	**0.59**	**1.05**	**50.17**	**51.22**	**0.64**	**1.05**	**0.16**	**0.15**	**0.05**	**-0.01**

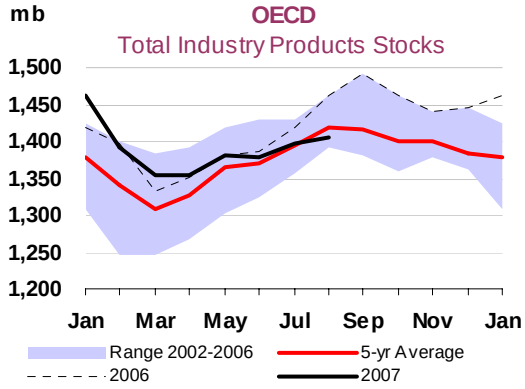
OMR = Oil Market Report
* adjusted to exclude Angola

OECD STOCKS

Summary

- **Total OECD industry stocks fell 21.0 mb in August**, as increases in products and 'other oils' failed to offset a 29.2 mb crude draw, compounding a downward revision to end-July data of 14.8 mb, again mostly in crude. As a result, forward stock cover fell below the five-year average to 53.5 days at the end of August, despite downward adjustments to third and fourth-quarter demand.





- **Crude inventories fell in all three regions** and are now below the bottom of the five-year range in the OECD Pacific. Product stocks remain tighter, especially gasoline, which stays at the bottom of its five-year range in all three regions. European middle distillate stock cover has also fallen beneath the five-year low, a sharp reversal from the first quarter when stocks were bloated by mild winter conditions.

- **Preliminary September data for the US, Japan and the EU-16 show a further 27.4 mb draw**, driven by falling crude stocks. This indicates a third-quarter stock draw of 33.3 mb or 360 kb/d, which contrasts with the average 280 kb/d 3Q stock *build* of the past five years.

OECD Inventory Position at End-August and Revisions to Preliminary Data

Total OECD industry stocks fell 21.0 mb in August, to 2,663 mb, and are 70.4 mb lower than at the end of August last year. Crude inventories fell by 29.2 mb, which was partially offset by increases in total products and 'other oils' of 6.7 mb and 1.5 mb respectively. Total product stocks are now 56.5 mb lower year-on-year, with OECD gasoline's gap to year-ago levels widening to 18.0 mb – the bottom of the five-year range in all three regions.

Preliminary Industry Stock Change in August 2007 and Second Quarter 2007

	August (preliminary) *(million barrels)*				August (preliminary) *(million barrels per day)*				Second Quarter 2007 *(million barrels per day)*			
	N. Am	Europe	Pacific	Total	N. Am	Europe	Pacific	Total	N. Am	Europe	Pacific	Total
Crude Oil	**-15.6**	**-4.3**	**-9.4**	**-29.2**	**-0.50**	**-0.14**	**-0.30**	**-0.94**	**0.31**	**0.09**	**-0.02**	**0.38**
Gasoline	-12.1	-2.8	1.0	-13.9	-0.39	-0.09	0.03	-0.45	0.04	-0.08	0.00	-0.05
Distillates	5.5	-0.2	6.6	11.8	0.18	-0.01	0.21	0.38	0.05	0.05	0.07	0.17
Fuel Oil	-1.3	1.3	0.0	0.0	-0.04	0.04	0.00	0.00	-0.03	-0.03	0.00	-0.05
Other Products	9.2	0.8	-1.3	8.7	0.30	0.02	-0.04	0.28	0.20	-0.04	0.05	0.21
Total Products	**1.4**	**-1.0**	**6.3**	**6.7**	**0.05**	**-0.03**	**0.20**	**0.22**	**0.27**	**-0.10**	**0.12**	**0.28**
Other Oils[1]	1.0	-0.9	1.4	1.5	0.03	-0.03	0.04	0.05	0.07	0.02	0.00	0.09
Total Oil	**-13.2**	**-6.1**	**-1.7**	**-21.0**	**-0.43**	**-0.20**	**-0.06**	**-0.68**	**0.65**	**0.01**	**0.10**	**0.76**

1 Other oils includes NGLs, feedstocks and other hydrocarbons.

Year-on-Year OECD Industry Stock Comparisons for August 2007

	(million barrels)					*(Days of Forward Demand)*			
	North America	Europe	Pacific	Total		North America	Europe	Pacific	Total
Crude Oil	**0.3**	**0.2**	**-8.3**	**-7.8**	**Total Oil**	**-1.7**	**-1.6**	**-3.2**	**-2.0**
Total Products	-25.5	-25.3	-5.7	-56.5	*Versus 2005*	1.0	-0.8	-1.8	-0.1
Other Oils[1]	-6.6	-1.0	1.5	-6.2	*Versus 2004*	2.9	-1.0	1.6	1.4
Total Oil	**-31.9**	**-26.1**	**-12.5**	**-70.4**	**Total Products**	**-1.2**	**-1.6**	**-1.5**	**-1.4**
Versus 2005	47.3	-7.4	-4.2	35.7	*Versus 2005*	-0.2	-0.5	0.6	-0.2
Versus 2004	74.5	-14.4	16.5	76.6	*Versus 2004*	0.3	-1.6	1.6	-0.1

1 Other oils includes NGLs, feedstocks and other hydrocarbons.

July stock data were revised down by 14.8 mb, due to a downward shift of 10.9 mb for crude. Europe made up most of the change, as stocks there were revised down by 14.7 mb. In North America and the Pacific, crude downward revisions were mostly offset by slight increases in product stocks.

Revisions versus 12 September 2007 Oil Market Report

(million barrels)

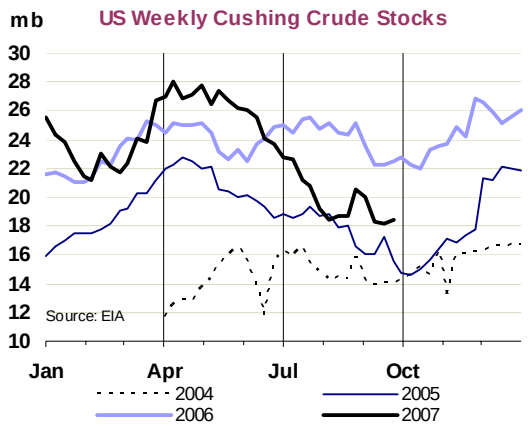
	North America		*Europe*		*Pacific*		*OECD*	
	Jun 07	Jul 07	Jun 07	Jul 07	Jun 07	Jul 07	Jun 07	Jul 07
Crude Oil	**0.4**	**-3.7**	**-1.4**	**-4.7**	**-1.0**	**-2.5**	**-2.0**	**-10.9**
Gasoline	0.0	1.4	2.6	0.6	0.0	-0.5	2.6	1.5
Distillates	0.0	3.1	0.9	-8.3	-0.2	0.2	0.8	-5.0
Residual Fuel Oil	0.0	0.4	-0.3	-0.7	-0.1	-0.3	-0.3	-0.6
Other Products	0.0	-3.8	-0.3	1.6	0.1	0.6	-0.3	-1.7
Total Products	**0.0**	**1.1**	**3.0**	**-6.8**	**-0.2**	**0.0**	**2.8**	**-5.8**
Other Oils[1]	0.5	6.0	-1.4	-3.2	-0.1	-1.0	-1.0	1.8
Total Oil	**0.9**	**3.4**	**0.2**	**-14.7**	**-1.2**	**-3.6**	**-0.1**	**-14.8**

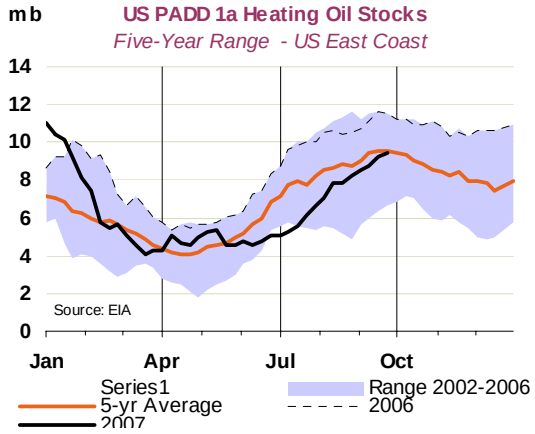
1 Other oils includes NGLs, feedstocks and other hydrocarbons.

OECD Industry Stock Changes in August 2007

OECD North America

Total North American stocks fell by 13.2 mb in August, with a crude draw of 15.6 mb only slightly offset by increases of 1.4 mb in products and 1.0 mb in 'other oils'. Most of the crude draw took place in the US, where stocks fell by 12.9 mb, while in Mexico, they drew by 2.7 mb. August was the peak of the driving season and hence also saw high refinery throughputs to meet demand. But in the case of Mexico, crude stocks likely also suffered from production shut-ins when Hurricane Dean hit offshore crude installations in the Gulf.





Preliminary weekly data for the US in September showed a further crude draw of 7.9 mb on lower imports, and stocks at WTI delivery point, Cushing, Oklahoma, decreasing by a further 2.1 mb. Although total US crude stocks remain close to the top of the five-year range, inventories at Cushing have now

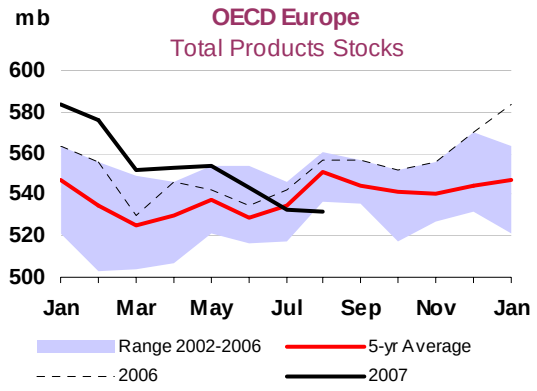
fallen by one-third since a recent peak in mid-May. Rising autumn refinery maintenance may see crude stocks rise again, though partial shut-ins at Canada's two oil sands upgraders – some output of which flows south to Cushing – may offset this.

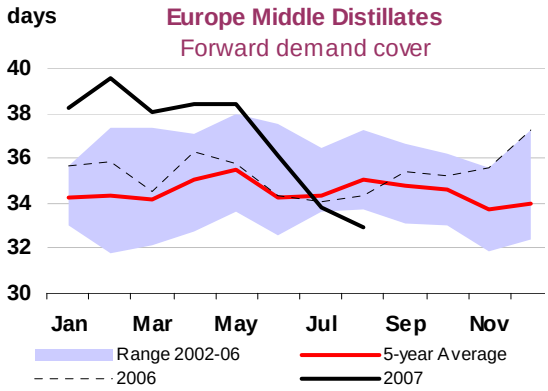
North American product inventories rose by 1.4 mb in August, all of which took place in Mexico. However, the relatively flat total number does not reflect the fact that while the region's gasoline stocks fell by 12.1 mb (and residual fuel by 1.3 mb), 'other products' and middle distillates built by 9.2 mb and 5.5 mb respectively. As in the other two OECD regions, North American gasoline inventories remain at the bottom of their five-year range.

Weekly US data for September showed total product stocks rising again by 6.8 mb as demand entered the autumn shoulder season. Distillate stocks rose by 3.7 mb, fuel oil by 1.0 mb and gasoline by 0.2 mb. While forward demand cover of gasoline stocks has improved by one day to 21 days on lower seasonal demand (and marginally higher stocks), it is more difficult to judge whether US heating oil stocks are sufficient to meet winter demand. Due to off-road diesel's recent switch into the 'diesel' sub-category of distillates, it is difficult to make year-on-year comparisons. But heating oil stocks in the crucial PADD 1a, New England, have increased in line with their five-year average, regardless of the diesel reclassification. On the other hand, as the EIA pointed out, stocks of propane, also used for winter heating, are at their lowest pre-winter level since 1996.

OECD Europe

Total European industry stocks fell by 6.1 mb in August, as a 4.3 mb crude draw added to declines in total products and 'other oils' of 1.0 mb and 0.9 mb respectively. Crude draws took place in Norway (-4.7 mb), France (-2.3 mb), Italy (-1.5 mb) and other Europe (-1.8 mb), while inventories increased in the UK (+2.6 mb), the Netherlands (+2.2 mb) and Germany (+1.5 mb). Preliminary September Euroilstock data for the EU-16 show a further 5.5 mb crude draw.





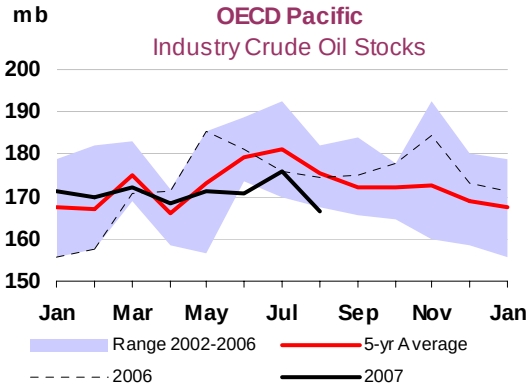
Product inventories in Europe fell by 1.0 mb in August, as draws in gasoline and distillates of 2.8 mb and 0.2 mb were only partly offset by increases in fuel oil and 'other products' of 1.3 mb and 0.8 mb respectively. Total product stocks in Europe have now fallen below their five-year range, having declined by around 50 mb in total since January. An unseasonable draw in middle distillate stocks, albeit from an unusually bloated level following last year's mild winter, is driving this decline. In terms of forward demand cover, the drawdown is even more pronounced, falling by 5.6 days from May to 32.9 days at end-August, below the lower end of the five-year range.

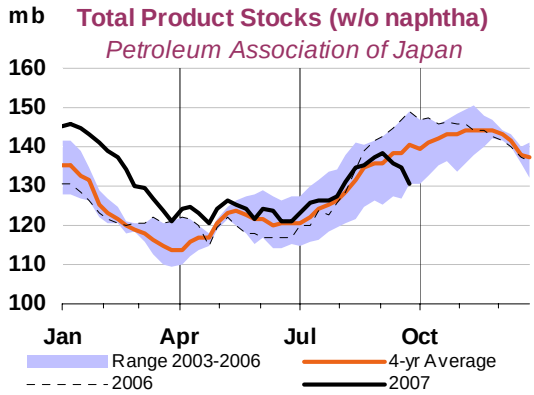
This development reflects higher exports, as refinery yields and production remained stable, and demand was well below average in the first half of the year (though we expect a rebound year-on-year in the second half). OECD data show that Greece exported more gasoil into the Mediterranean, and outflows from the Netherlands increased to Nigeria, Argentina, Brazil and Syria. While fuel oil stocks have also fallen 12.1 mb from a January high to around 70 mb, gasoline and 'other products' stocks are little

changed, and all remain at the bottom of the range. Preliminary September data from Euroilstock show that total product stocks in the EU-16 fell another 6.8 mb, of which 5.3 mb was middle distillates.

OECD Pacific

Total Pacific industry inventories fell by the least of all three regions in August – by only 1.7 mb in total, but may have seen a larger fall in September. A strong crude draw of 9.4 mb was partly offset by increases in product stocks and 'other oils' of 6.3 mb and 1.4 mb respectively. The crude draws were almost evenly split between Japan and Korea. Total Pacific crude stocks have now fallen to 166.4 mb, which is 8.3 mb lower than last year and just below their five-year range. Moreover, preliminary data for September from the Petroleum Association of Japan (PAJ) show a further crude draw of 8.9 mb despite a downtick in refinery throughputs.



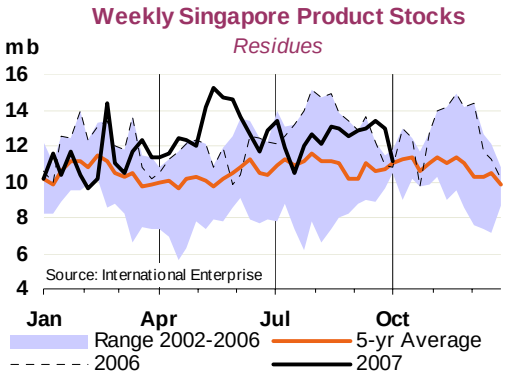


Product stocks in the OECD Pacific rose by 6.3 mb in August, buoyed by a seasonally normal 6.6 mb increase in distillates. A lesser 1.0 mb gasoline build was offset by a 1.3 mb draw in 'other products', while fuel oil stocks were flat. Unlike crude developments, product stocks diverged strongly, with a 10.3 mb build in Japan partly offset by a 4.0 mb draw in Korea. Japanese middle distillates increased by 8.4 mb, reflecting in large part the seasonal rebuild of heating fuel kerosene stocks ahead of winter. Gasoline and 'other products' also rose, by 1.4 mb and 0.6 mb respectively, while fuel oil was basically flat. In Korea, the product draw stemmed from 'other products' and middle distillates each falling nearly 2 mb.

Preliminary PAJ data for September showed Japanese product inventories falling 5.1 mb to the bottom of their four-year range, as refinery throughputs fell. Fuel oil drew by 2.7 mb, in part on stronger demand from electricity utilities to compensate for less nuclear power. Gasoil stocks were also down by 2.1 mb, while gasoline and jet fuel fell by 0.6 and 0.3 mb respectively. Naphtha and kerosene built by 1.3 mb and 0.5 mb.

Recent Developments in Singapore Stocks

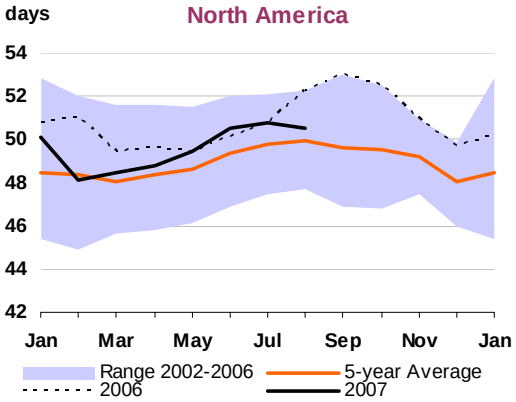
Product stocks in Singapore, as surveyed by International Enterprise, remained relatively unchanged in September, falling by only 200 kb. Stock levels in all three categories were almost exactly in line with five-year averages. Fuel oil stocks notably fell by 710 kb, reflecting a slightly tighter market, which supported regional prices. Lower Iranian exports due to demand for electricity generation are reportedly causing Singapore-bound cargoes to be diverted, as more fuel oil is drawn into the Middle East, both on stronger utility demand in Gulf states and a thirsty bunker market in Fujairah. Meanwhile, light and middle distillates increased by 350 kb and 160 kb respectively.

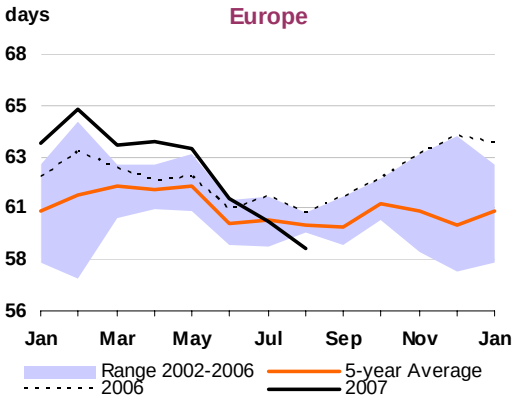


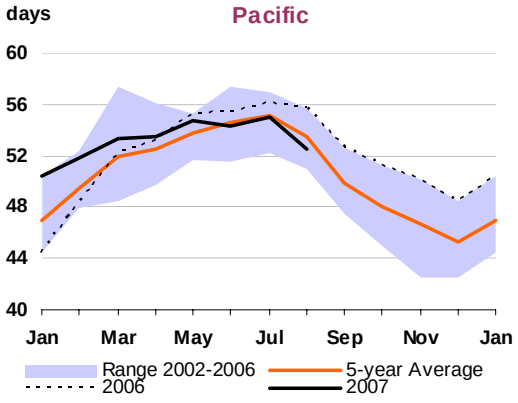
Regional OECD End-of-Month Industry Stocks

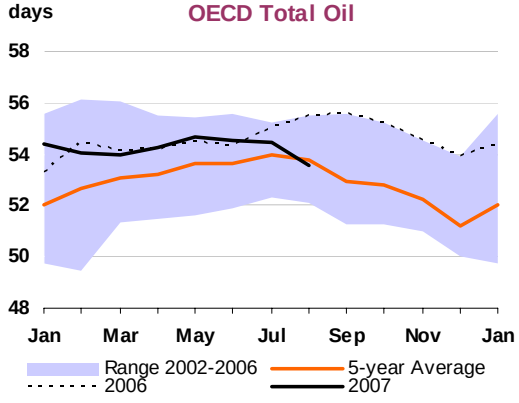
(in days of forward demand and millions barrels of total oil)

Days[1]

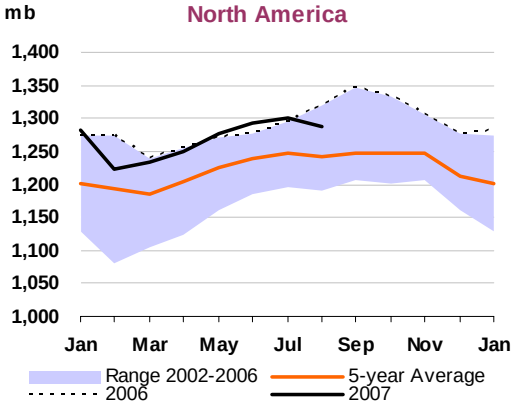


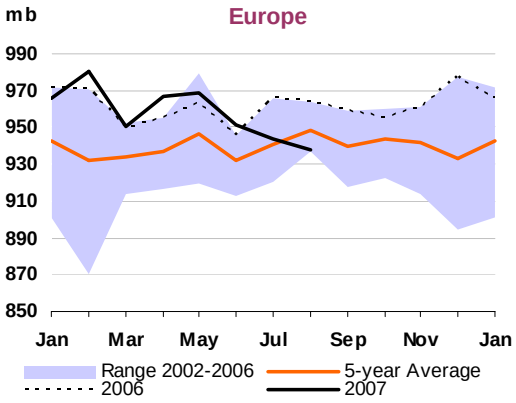


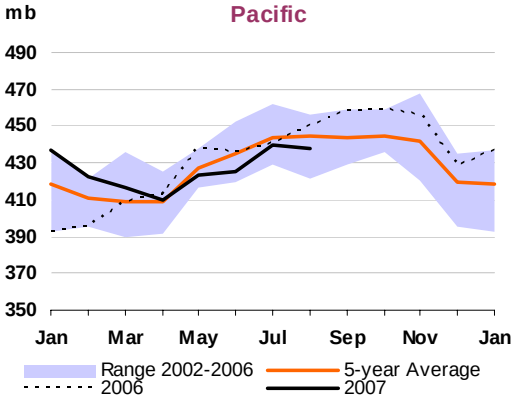


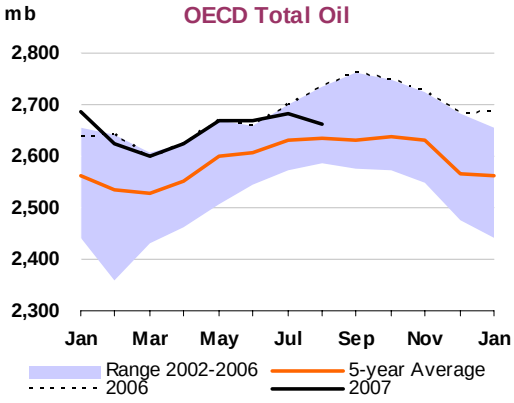


Million Barrels









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

PRICES

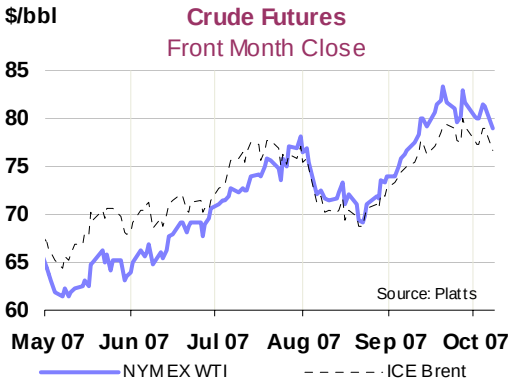
Summary

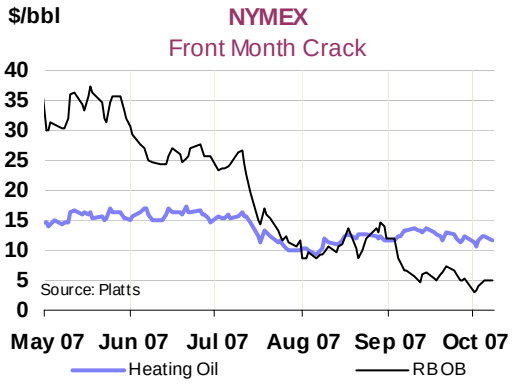
- **WTI crude futures rose to record highs above $80/bbl in September** on Gulf of Mexico storm-related shut-ins and expectations that supplies will tighten further in the fourth quarter. Impending winter demand, amid crude and product stock draws in the US, Europe and Japan contributed to upward pressure. This was amplified by a lack of confidence that the falling inventories will be replaced. Crude benchmarks WTI and Dubai received further support from regional factors, while Brent suffered from weak refining margins.

- **September refining margins fell in most regions and remain weak**, as increasing product prices failed to keep up with crude gains. US margins suffered due to narrowing gasoline and gasoil crack spreads on the Gulf and West Coasts respectively, leaving cracking margins substantially lower than just a few months ago. In Europe, Brent's relative strength versus Urals caused north and south margins to diverge. Singapore margins remain depressed.

- **Product prices rose but lagged behind crude**. Distillate crack spreads now hold their usual seasonal premium to gasoline and naphtha as the market focuses on winter heating fuels. However, forecasters currently see the *la Niña* weather phenomenon increasing the possibility of warmer-than-average winter temperatures in the US and Japan. The Asian high-sulphur fuel oil market tightened on lower Iranian exports, which diverted other eastbound cargoes. Gasoline cracks were flat.

- **VLCC freight rates to Japan rose above $9/tonne** in late September due to a temporary tightening of Middle East Gulf fundamentals. Freight rates may see additional support in the coming weeks from increased OPEC production, an end to refinery maintenance and higher fourth-quarter demand. Clean tanker rates were soft in September as vessel availability ran ahead of demand during the autumn shoulder season.





Overview

Front-month WTI crude futures first rose above $80/bbl in mid-September, breaking records in nominal terms on storm worries, an expected tight crude balance going forward, more refinery problems and increased geopolitical tension. WTI and Brent futures both remain backwardated and front-month WTI retains a $2.50/bbl premium over its North Sea counterpart.

Various hurricanes and tropical storms threatened Gulf of Mexico oil installations, especially in late August/early September and a major preventative mid-September shut-in of US GoM crude and gas production caused WTI to peak at $83.90/bbl (Brent followed some days later, peaking at $81.05/bbl).

While this and other shut-ins have only been brief, and virtually no damage has been reported, the storms have been a reminder that last year's hurricane-free season was unusual and that weather can be a major determinant of oil prices. However, while the hurricane season is only formally over at the end of November, recent forecasts do not expect much more threatening storm activity. The first cold snap of the year in the US Northeast caused attention to shift to winter heating needs. While we hold little faith in long-term temperature projections, a consensus is emerging that the US (and Japan) could see warmer-than-average winters, in the former case due to a prevailing *la Niña* condition.

Looking ahead, the prospect of a tight crude balance until at least the end of the year is another factor supportive of current high oil prices. OPEC's announcement at its 11 September meeting that it would hike output by 500 kb/d from 1 November did little to stem the upward rise in oil prices. While the increase showed OPEC was attentive to market concerns, even demand forecasts at the low end of the spectrum project a higher call on OPEC this winter. The implied 4Q stock draw would come in addition to a provisional estimate of a 360 kb/d draw in the third quarter. Crude tightness is underpinned by worries that stocks will not be replenished, and re-emerged geopolitical tensions. Mexican pipeline blasts hardly affected exports, but there was some apprehension that they could eventually be added to ongoing issues in Nigeria, Iran and Iraq.

Spot Crude Oil Prices and Differentials

(monthly and weekly averages, $/bbl)

	Jul	Aug	Sep	Sep-Aug Avg Change	%	Week Commencing: 10 Sep	17 Sep	24 Sep	01 Oct	08 Oct
Crudes										
Dated Brent	77.01	70.73	76.87	6.14	8.7	76.78	77.68	78.29	77.97	77.52
Brent (Asia) Mth1 adjusted	75.99	71.33	76.59	5.26	7.4	76.20	77.54	78.54	78.08	77.35
WTI (Cushing) Mth1 adjusted	74.10	72.36	79.98	7.62	10.5	78.95	82.33	81.83	80.62	79.64
Urals (Mediterranean)	73.90	69.24	73.78	4.53	6.5	73.35	74.65	75.36	74.80	74.59
Dubai Mth1 adjusted	69.49	67.38	73.36	5.98	8.9	72.95	74.64	75.76	73.58	73.36
Tapis (Dated)	79.64	76.32	82.16	5.84	7.7	81.12	83.25	84.63	83.75	82.86
Differential to Dated Brent										
WTI (Cushing) Mth1 adjusted	-2.90	1.63	3.11	1.48		2.17	4.65	3.53	2.65	2.13
Urals (Mediterranean)	-3.11	-1.49	-3.09	-1.60		-3.43	-3.02	-2.93	-3.17	-2.93
Dubai Mth1 adjusted - Dated Brent	-7.51	-3.35	-3.51	-0.16		-3.83	-3.03	-2.54	-4.39	-4.16
Tapis (Dated)	2.63	5.58	5.29	-0.30		4.34	5.58	6.34	5.78	5.34
Prompt Month Differential										
Forward Cash Brent Mth1-Mth2 adj.	0.36	-0.14	0.22	0.36		0.45	-0.05	0.01	0.29	0.21
Forward WTI Cushing Mth1-Mth2 adj	-0.06	0.29	1.35	1.06		1.23	1.49	1.60	0.87	0.69

Source: Platts

Recent unrest in Burma and latterly also in Pakistan also raise concerns. The Burma unrest has a particular significance for oil demand as it appeared to be prompted by a raising of domestic fuel and other consumer goods prices. This follows disturbances in Indonesia in 2005 when subsidies were reduced, and protests in Iran when rationing was introduced. As such, there could be considerable reluctance to pass on higher prices to consumers in countries with large subsidies.

In contrast, product markets were relatively calm and on the whole, product prices failed to keep up with crude, despite relatively low OECD product stock levels. Demand dips seasonally in the autumn and there are some (as yet not clear cut) indications that consumption is beginning to react to high prices. Going forward, these factors remain key downside risks to demand, as does the possibility of another unseasonably warm winter.

Falling Crude Stocks – It's All Down to Perceptions

The shift of the crude oil forward curve from contango to backwardation has led some market participants to project that supplies will be easier to come by over the coming months. Stockholders, faced with lower future prices, would appear to be better off selling their stocks on a spot basis and buying them back more cheaply further forward. But taken at face value, that argument would suggest that the emergence of backwardation would prompt a fire sale from storage, either leading to the depletion of all but working stocks, or by depressing the spot market so much a contango would be reinstated. That does not happen, so academics try to explain this difference as a 'convenience' yield. Perhaps a more intuitive way of viewing the concept of convenience yields is from a trader's perspective.

The forward discount in the market offers the trader a return from selling spot and buying forward. A stockholder therefore has to look at the risk/reward ratio for various trading options. The options are broadly:

- Receive a guaranteed return by selling the stock now;
- Sell spot and buy forward;
- Hold on to physical stocks.

In the first case, the trader exits all oil market pricing risk, but has no physical supply in the present or future – possible for a speculative trader, but not perhaps for a refiner. In the second case, the trader swaps timing, supply security and quality risks for the return provided by the backwardation. In the final choice, the trader estimates that the risks outlined in the second case outweigh the return from the lower forward price or projects that the backwardation will widen.

It is clear therefore that the case for automatic stock liquidation when a market enters backwardation is not clear-cut. It is even less so when a tighter market is expected (as is arguably the case through the end of this year). This exercise also highlights why the size of the backwardation acts as a barometer for perceived future market tightness and risk. Ultimately though, if supplies are inflexible and cannot rise to meet demand, stocks have to be drawn or prices have to rise to the point where demand abates.

In the current market, we have seen OECD crude stocks fall by an estimated 58 mb since the end of June since futures moved into backwardation. Despite remaining near the upper edge of their five-year range, this is still a clear downward trend. While crude stocks remain highest in the US, relatively speaking, it is the low (and) falling crude stocks at WTI delivery point Cushing that are dictating prices and forward price structures. Stocks in Japan and Europe are also much lower – particularly when the preliminary September draw is included, underscoring the backwardated market structure.

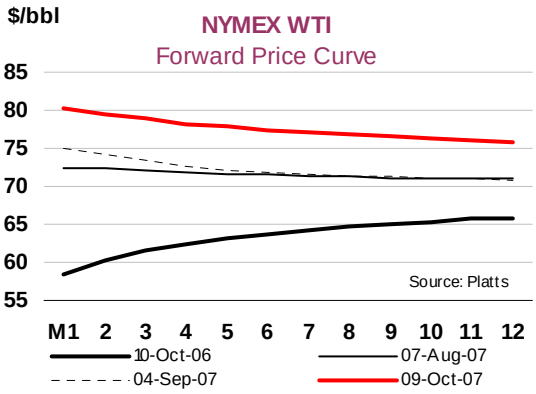
Ultimately, there are clear financial incentives to liquidate stocks when a backwardated market structure evolves. Nevertheless, expectations of a tight future supply/demand balance may limit the extent to which backwardation encourages actual stock draw. Absent incremental supply via stocks, market rebalancing may therefore only come from a price-induced curb on demand.

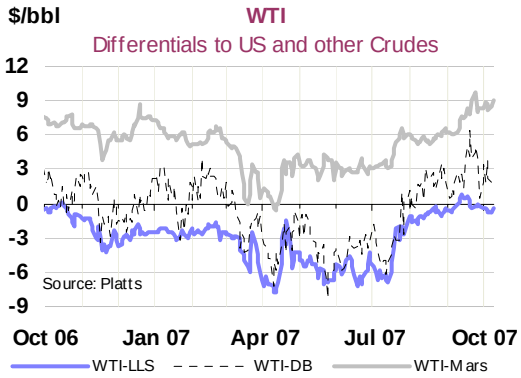
Spot Crude Oil Prices

Spot crude prices rose in line with futures but benchmarks remain somewhat out of kilter. Due to falling Cushing crude stocks, **WTI** has once again returned to more normal market relationships with other light sweet crudes. However, there remains concern that pricing relationships could still become distorted if regional bottlenecks once more emerge (see '*WTI: Contango to Backwardation*' in report dated 10 August 2007). Some traders are blaming the prevailing backwardation in WTI futures as causing a backlog of unsold cargoes on the US Gulf Coast market, though it seems more logical to infer that this stems from current autumn maintenance, and cargoes delayed by storms. However, it may perhaps be fair to argue that the widening premium of WTI over GoM crudes such as Mars and Maya reflects a temporary surfeit of supply to the region.

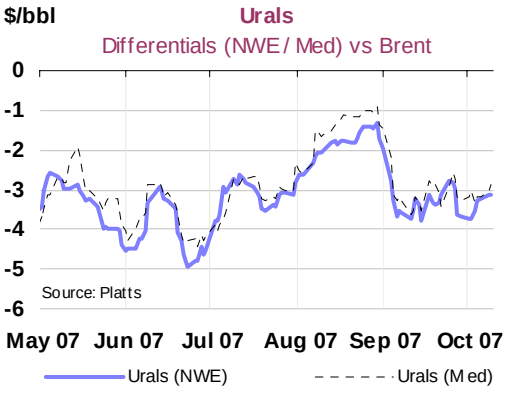
In the **North Sea**, Dated Brent weakened versus other light sweets, reflecting lower refining margins in Europe and US Gulf Coast. Azeri Light strengthened on a combination of maintenance and a brief outage on the BTC pipeline, which reduced its flow into the Mediterranean. However, Brent widened its premium against Urals on higher Russian exports in September ahead of a hike in export duty and an increased flow of Iraqi Kirkuk barrels into the Mediterranean. Of two 5 mb tenders announced for

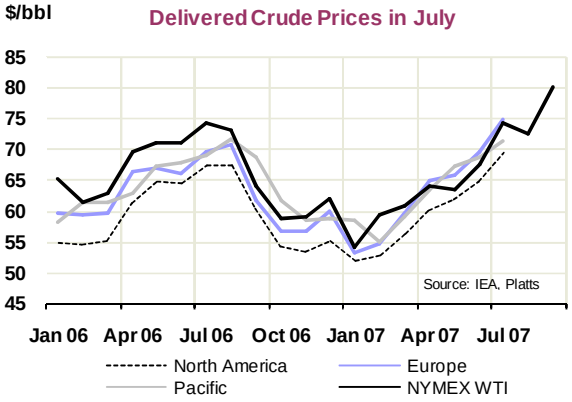
September, only 4.6 mb were actually lifted in September, with further cargoes delayed until early October. A third tender, for October delivery, has just been announced.





The **Asian market** for Middle Eastern crude was influenced by Shell's purchase of an unprecedented 400+ 25 kb cargoes ('partials') on the Dubai/Oman market, thus inflating the lesser-quality Dubai to a small premium over Oman and potentially raising the price of Middle Eastern Gulf crude to Asia. Asian refiners will generally be expecting higher allocations of Saudi and other Gulf term volumes for November, when OPEC has said it will raise output, but the availability of November volumes of Abu Dhabi crude are of greater concern, as the

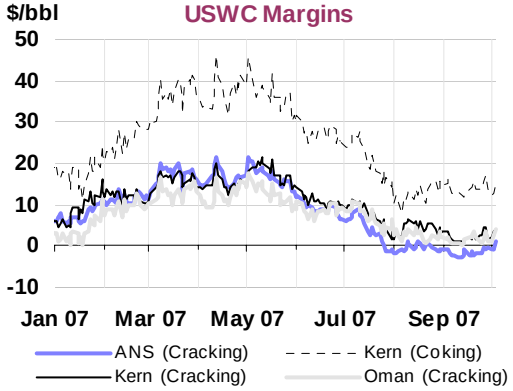


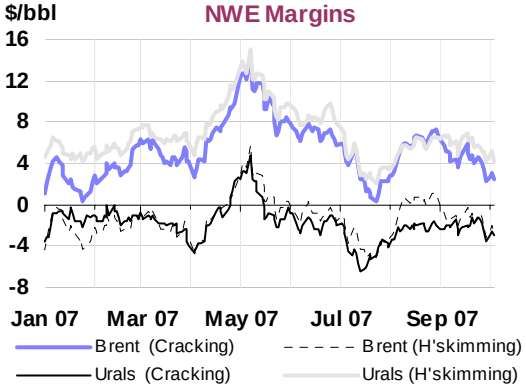


emirate is planning maintenance on its Umm Shaif, Lower and Upper Zakum fields in November. Asian refiners bought around 1.1 mb/d of West African crude for October loading, down slightly from September's 1.3 mb/d. Regional light sweet Tapis remained at a relatively steady premium to similar Atlantic Basin grades.

Refining Margins

Refining margins mostly fell in September and remain quite low. **US** cracking margins in particular are now substantially lower than just a few months ago. The most recent weekly data even showed Brent





cracking on the US Gulf and ANS cracking on the West Coast respectively dipping below zero. In the US as elsewhere, it appears to be crude strength rather than relative weakness in products driving the change. In contrast to the other regions surveyed, gasoil cracks dipped on the US West Coast, while gasoline spreads to crude weakened substantially on the US Gulf Coast.

In **Europe**, refining margins were mixed, with Brent and Urals margins diverging in Northwest Europe and Mediterranean spreads rising overall. Depressed Urals, due to an influx of medium sour barrels, obviously helped, as did the stronger gasoil market in the south. **Singapore** margins remain depressed, with fuel oil cracks dipping on average in September, despite an uptick late in the month (and in early October). As a result, Korean SK reported in mid-September that it was planning to trim refinery throughputs in November/December.

Selected Refining Margins in Major Refining Centres

($/bbl)

		Monthly Average			Change	Average for week ending:				
		Jul 07	Aug 07	Sep 07	Sep 07-Aug 07	05 Sep	12 Sep	19 Sep	26 Sep	03 Oct
NW Europe	Brent (Cracking)	2.98	5.74	4.48	-1.26	5.85	4.20	5.01	4.33	2.79
	Urals (Cracking)	4.07	5.62	5.89	0.27	6.56	5.63	6.37	5.68	4.65
	Brent (Hydroskimming)	-3.50	-0.03	-1.33	-1.30	-0.59	-1.44	-1.00	-1.17	-2.54
	Urals (Hydroskimming)	-4.31	-1.83	-1.57	0.26	-1.38	-1.75	-1.33	-1.42	-2.10
Mediterranean	Es Sider (Cracking)	3.06	4.09	4.69	0.60	4.88	4.38	5.19	4.81	3.05
	Urals (Cracking)	3.80	4.87	5.64	0.77	5.62	5.11	5.97	6.10	4.25
	Es Sider (Hydroskimming)	-3.38	-1.62	-1.55	0.07	-1.58	-1.32	-1.20	-1.56	-2.81
	Urals (Hydroskimming)	-4.39	-2.29	-2.06	0.24	-2.18	-2.18	-2.09	-1.51	-2.90
US Gulf Coast	Bonny (Cracking)	2.56	3.34	3.17	-0.17	4.71	2.82	3.80	2.73	0.34
	Brent (Cracking)	1.11	3.61	2.88	-0.72	4.46	2.09	3.47	3.11	-0.18
	LLS (Cracking)	4.97	5.64	4.32	-1.32	6.86	4.36	4.94	2.60	1.57
	Mars (Cracking)	4.08	3.21	2.39	-0.82	4.04	1.30	2.64	2.29	1.55
	Mars (Coking)	10.91	9.46	9.48	0.01	11.16	8.26	9.82	9.42	7.86
	Maya (Coking)	13.56	12.19	12.60	0.41	14.90	12.36	12.86	11.55	9.15
US West Coast	ANS (Cracking)	3.97	-0.41	-1.75	-1.33	-0.92	-2.70	-1.85	-1.56	-0.34
	Kern (Cracking)	7.56	4.41	2.21	-2.20	3.11	1.26	1.70	2.72	3.18
	Oman (Cracking)	7.01	2.61	1.54	-1.06	2.01	0.65	1.76	1.76	2.45
	Kern (Coking)	21.00	12.83	13.93	1.11	14.81	12.80	13.25	14.45	14.18
Singapore	Dubai (Hydroskimming)	-0.63	-1.16	-2.57	-1.41	-1.37	-2.28	-2.35	-3.22	-2.72
	Tapis (Hydroskimming)	-5.38	-5.56	-6.59	-1.03	-5.88	-6.19	-5.57	-7.38	-8.22
	Dubai (Hydrocracking)	3.58	2.28	1.71	-0.57	2.34	1.91	2.14	1.24	1.52
	Tapis (Hydrocracking)	-2.58	-3.24	-3.25	-0.01	-3.42	-3.23	-2.09	-3.52	-4.42
China	Cabinda (Hydroskimming)	-6.08	-3.79	-6.24	-2.45	-4.43	-5.07	-6.09	-7.23	-8.11
	Daqing (Hydroskimming)	-8.50	-7.88	-8.18	-0.29	-6.68	-7.41	-7.56	-9.42	-11.22
	Dubai (Hydroskimming)	-1.02	-1.51	-2.87	-1.36	-1.72	-2.56	-2.58	-3.56	-3.08
	Daqing (Hydrocracking)	-3.60	-4.16	-3.12	1.04	-2.70	-3.18	-2.43	-3.33	-5.44
	Dubai (Hydrocracking)	3.13	1.88	1.42	-0.46	1.97	1.60	1.92	0.95	1.17

For the purposes of this report, refining margins are calculated for various complexity configurations, each optimized 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.

Spot Product Prices

Product prices increased, but with falling refining margins, markets overall remain crude-driven. Winter's approach has meant an increasing focus on **heating fuel and distillates** in general, though current weather forecasts for the US and Japan indicate warmer-than-average temperatures ahead. US heating oil stocks in the crucial Northeast are in line with their five-year average, though year-on-year comparisons are difficult to make since the phase-out of high-sulphur off-road diesel this summer. European middle distillate inventories at the end of August were unusually low in terms of forward cover at only 33 days. Strong demand for transportation fuels was noted during the month, which, coupled with lower Russian exports into NWE (after the now complete halt to exports through Tallinn), triggered a backwardation in ICE Gasoil.

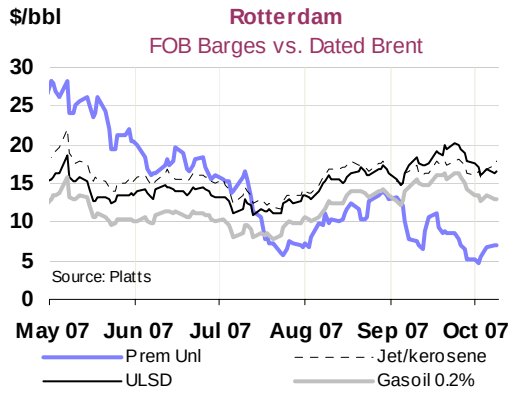
Spot Product Prices

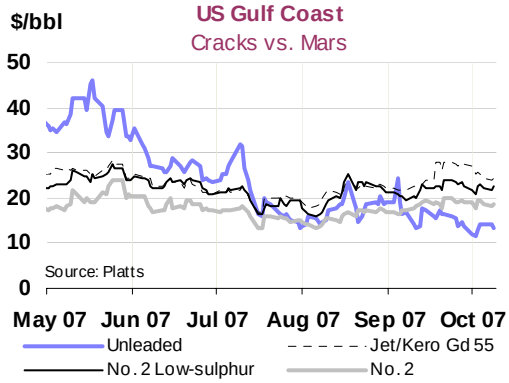
(monthly and weekly averages, $/bbl)

	Jul	Aug	Sep	Sep-Aug		Week Commencing:					Jul	Aug	Sep
				Change	%	10 Sep	17 Sep	24 Sep	01 Oct	08 Oct			
Rotterdam, Barges FOB											**Differential to Brent**		
Premium Unleaded	87.63	81.66	85.74	4.08	5.0	84.85	86.97	85.26	83.58	84.52	10.62	10.92	8.87
Naphtha	75.60	71.27	76.77	5.50	7.7	75.22	78.16	79.30	78.53	79.35	-1.41	0.54	-0.10
Jet/Kerosene	90.26	87.27	93.68	6.41	7.3	93.29	95.30	95.75	94.27	95.16	13.25	16.53	16.81
ULSD	89.12	86.40	94.83	8.43	9.8	94.46	96.83	97.53	94.68	93.96	12.11	15.66	17.96
Gasoil .2%	86.13	83.47	91.77	8.30	9.9	91.73	93.69	93.78	91.13	90.55	9.12	12.73	14.90
LSFO 1%	54.75	56.55	56.65	0.10	0.2	54.59	57.62	59.69	62.08	64.19	-22.26	-14.18	-20.22
HSFO 3.5%	56.31	54.46	58.03	3.57	6.6	57.21	58.89	59.42	59.80	59.80	-20.70	-16.28	-18.84
Mediterranean, FOB Cargoes											**Differential to Urals**		
Premium 50 ppm	86.23	79.56	83.65	4.09	5.1	81.80	85.05	84.31	81.28	82.16	12.33	10.32	9.88
Naphtha	75.00	71.05	76.99	5.94	8.4	75.33	78.46	79.53	78.57	79.32	1.10	1.80	3.21
Jet Aviation fuel	88.49	85.89	92.57	6.68	7.8	92.42	94.56	94.18	93.03	93.88	14.59	16.64	18.79
Gasoil .2%	87.20	85.49	93.60	8.11	9.5	93.82	95.74	95.10	92.11	91.84	13.30	16.25	19.82
LSFO 1%	60.61	58.14	60.92	2.78	4.8	60.98	61.49	61.68	62.15	63.05	-13.29	-11.10	-12.86
HSFO 3.5%	55.97	54.95	58.49	3.54	6.4	57.72	59.00	60.19	59.81	60.26	-17.93	-14.29	-15.28
New York Harbour, Barges											**Differential to WTI**		
Super Unleaded	101.91	92.86	99.57	6.71	7.2	101.10	102.55	97.14	94.13	94.06	27.81	20.49	19.58
Unleaded	89.86	83.89	87.92	4.03	4.8	86.80	89.80	88.38	86.88	86.73	15.75	11.52	7.93
Jet/Kerosene	91.45	88.83	97.70	8.87	10.0	97.84	99.55	98.37	95.60	94.73	17.34	16.47	17.72
No. 2 (Heating Oil)	87.00	83.14	91.46	8.32	10.0	91.63	93.41	92.13	91.03	90.35	12.90	10.78	11.47
LSFO 1%	57.13	54.41	57.60	3.19	5.9	57.07	58.31	58.40	57.44	57.28	-16.97	-17.96	-22.38
No. 6 3%	57.33	56.16	58.08	1.93	3.4	57.36	57.83	59.03	59.47	60.53	-16.77	-16.21	-21.90
Singapore, Cargoes											**Differential to Dubai**		
Premium Unleaded	85.35	77.15	82.51	5.35	6.9	80.90	84.38	84.71	82.94	83.90	15.86	9.77	9.14
Naphtha	75.10	71.34	75.28	3.94	5.5	73.84	77.21	77.30	77.01	77.81	5.61	3.96	1.92
Jet/Kerosene	87.16	84.28	90.44	6.17	7.3	90.70	92.29	92.08	91.32	91.90	17.66	16.89	17.08
Gasoil .5%	85.73	83.00	90.72	7.72	9.3	91.42	92.43	92.34	91.01	91.77	16.24	15.62	17.36
LSWR Cracked	62.73	61.08	61.47	0.39	0.6	62.23	61.08	60.41	59.64	60.35	-6.76	-6.30	-11.89
HSFO 180 CST	59.55	58.20	60.99	2.79	4.8	60.16	61.65	62.45	62.54	63.42	-9.94	-9.19	-12.38
HSFO 380 CST 4%	60.15	58.39	60.95	2.56	4.4	60.02	61.54	62.45	62.81	63.84	-9.34	-8.99	-12.41

Source: Platts

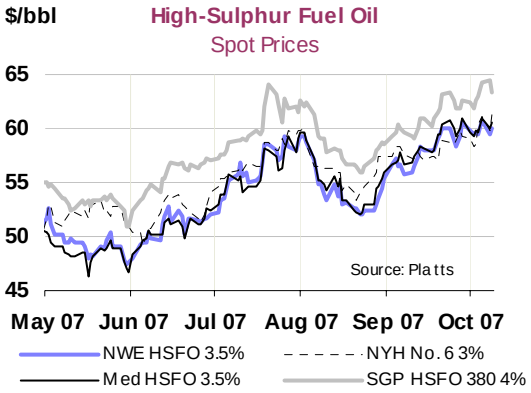
European demand is expected to remain strong, with German consumer heating oil stocks below average (58% of capacity) and further distortions possible ahead of the 1 January 2008 switch to 0.1% gasoil (for heating and off-road diesel) in Europe and a switch to 10 ppm diesel in the UK from December. In Asia, additional Indonesian buying ahead of Ramadan supported prices.

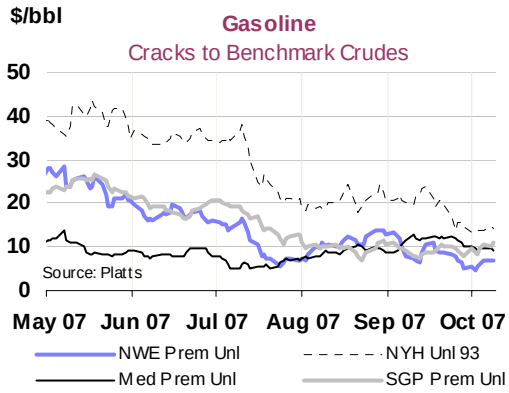




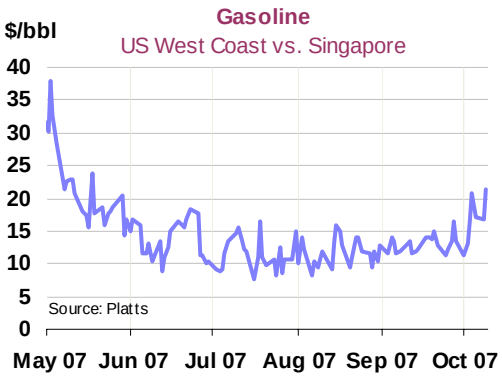
High-sulphur **fuel oil** discounts to crude have narrowed, especially in Asia, where substantially lower September/October exports from Iran have led to eastbound cargoes being redirected to regional ports. Power shortages in several Middle Eastern countries in the summer have highlighted growing electricity demand, and UAE port Fujairah has pulled in bunker cargoes. Unusually, even India was heard sending a cargo to the Middle East. Fuel oil exports totalling 2.5 million tonnes were originally reportedly fixed to arrive in Asia in October and while some of this may have subsequently been diverted to other regions, this is still

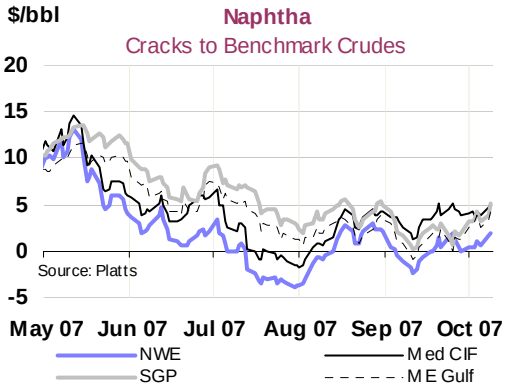
likely to represent the highest shipment volumes in several months. Japan meanwhile also saw fuel oil stocks decline, as it sought barrels for direct burning, after September saw a further nuclear power station shut down.





Gasoline cracks were flat or slightly lower in September and early October, despite low stocks, with the weakness reflecting seasonally lower demand. There was however a brief respite in the trend following an unexpected shut-in at Indonesia's Dumai refinery, leading to an increase in its gasoline (and diesel) purchases for October delivery. Asia may also look to send more barrels to the US West Coast as price spreads have widened. Meanwhile, naphtha cracks have also recovered somewhat again, especially in Singapore on growing petrochemical demand.





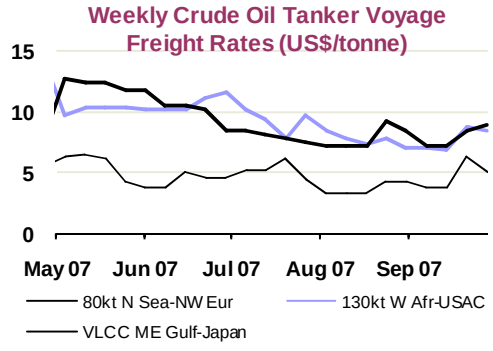
End-User Product Prices in September

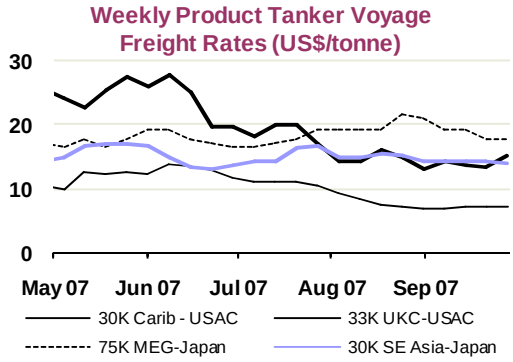
OECD end-user prices overall rose 12.2% above last year's September level in US dollars and remain 2.6% above August. As a result of the US dollar depreciation, Europeans saw retail prices rise only 5.7% as opposed to a 14.7% increase when valued in US dollar terms. Gasoline and diesel prices are on average 7.9% higher year-on-year in the US, while in the rest of the OECD, these prices averaged an increase of 3.9% (year-on-year) in national currency terms as opposed to the 11.7% rise in US dollar terms. With winter approaching, OECD heating oil prices are only 2.0% higher on average in national currency terms than a year ago, while the average price for LSFO rose 9.6% on the year. Overall, year-to-date, OECD retail prices in national currency terms have been on average 3.4% lower than last year.

Freight

Freight rates remained low in September compared to previous years, although a moderate mid-month firming indicated a temporary tightening of regional vessel fundamentals. A November rise in OPEC output alongside an end to autumn refinery maintenance and higher fourth-quarter oil demand could lead to a more sustained rise in crude tanker demand in the coming weeks. Clean tanker rates were soft in September as vessel availability ran ahead of demand during the autumn shoulder season.

VLCC rates from the Middle East Gulf to Japan remained near 2007 lows of $7/tonne in early September. Tanker demand has been limited by constraints on OPEC exports this year, while deliveries of new vessels have increased tanker supply. Another bearish note for ship owners this month has been the rise in bunker prices, representing a squeeze on earnings. In the second half of September, the booking horizon for long-haul arrivals entered the post-refinery maintenance season and VLCC rates to Japan rose to around $9/tonne. Double-hulled vessels, especially favoured by Japanese charterers, became increasingly scarce. Although rates faded in early October, OPEC's pledge to raise production by 500 kb/d from 1 November should support long-haul crude trade and, ultimately, freight rates. VLCC rates from Middle East Gulf to US rose from a mid-September trough of under $13/tonne to end the month around $15/tonne.





Demand for Atlantic Basin crude transportation rose in September, as Asian buying of West African cargoes rebounded after a quiet August, and North Sea production maintenance wound down. Suezmaxes trading from West Africa to the US Atlantic Coast, at a multi-year low of under $7/tonne in mid-September, finished the month at $8.50/tonne. Aframax trading from North Sea to Europe rose from under $4/tonne in mid-September to over $6/tonne the following week before easing slightly. Higher flows of Russian crude through Black Sea and Baltic ports partially offset lower Mediterranean tanker demand resulting from maintenance-driven reductions to Caspian exports via Ceyhan.

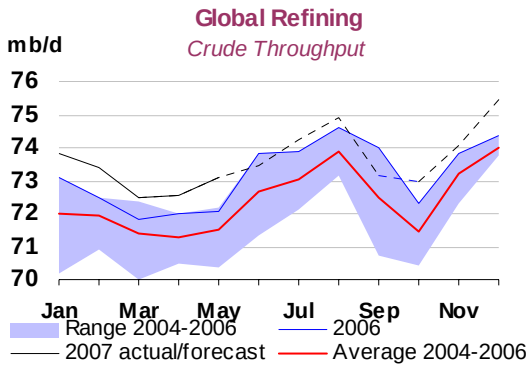
Clean tanker rates remained rather soft in September. Maintenance in Eastern and Western refining centres limited product flows relative to vessel availability. Middle East Gulf to Japan rates for 75,000-tonne cargoes fell from $21/tonne at the end of August to under $18/tonne at end-September. A reported rise in transatlantic gasoline flows to the US could explain a $2/tonne firming in late September, pushing 33,000-tonne rates on this route over $15/tonne.

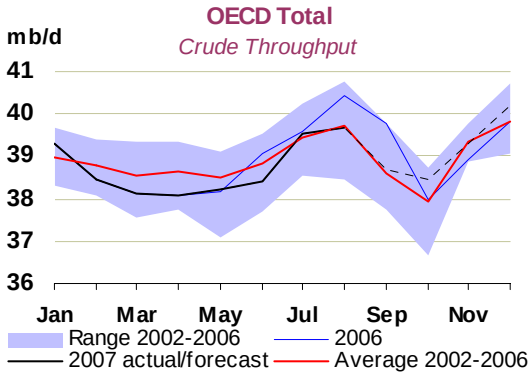
REFINING

Summary

- **Global refinery crude throughput is forecast to average 73.0 mb/d in October,** its seasonal low point. The decline of 1.9 mb/d from the August peak of 74.9 mb/d is due to refinery maintenance lowering throughputs in the OECD, China, the Middle East and the FSU. Global crude runs are however projected to rebound to 75.5 mb/d by the end of the quarter.

- **September OECD throughput is estimated to have averaged 38.7 mb/d**, sharply lower than the August summer peak throughput of 39.7 mb/d. Heavy maintenance in Europe and the US, operational problems in some US regions and the protracted recovery by refineries affected by Hurricane Humberto have all contributed to this drop in runs. Crude throughput is forecast to fall to 38.5 mb/d in October, but should increase in November and December, as seasonal maintenance winds down, although operational issues remain a potential drag on the outlook.





- **European light product yields increased as a result of recent upgrading capacity additions.** However, operational problems at Neste's newly installed hydrocracker may subsequently increase fuel oil yields in Europe. Pacific fuel oil yields fell in July to 15.6%, below the five-year range and could fall by a further two percentage points if the recently-completed heavy oil upgrading unit in Korea works as anticipated.

- **OECD Pacific product markets should see lower net fuel oil exports** as a result of upgrading investment by Japanese and Korean refiners over the course of 2008. Correspondingly higher distillate production will boost net exports of diesel from the region as refiners continue to invest in raising production of ultra-low sulphur and sulphur-free light products at the expense of fuel oil.

Global Refinery Throughput

Global refinery throughput is projected to reach its seasonal low point in October, as maintenance work and ongoing disruption to US refineries curtail crude throughput. Crude runs are expected to average 73.0 mb/d during the month, slightly below September's 73.2 mb/d. The month-on-month decline in OECD throughput is offset by gains in China and Latin America with the completion of planned maintenance work. Crude throughputs are forecast to rise during November and December, driven by increases in the OECD, the FSU and China. The latter increase is also expected to be underpinned by the start-up of new crude distillation capacity at PetroChina's Dushanzi refinery towards the end of the year.

The seasonal rise in heating-related demand for gasoil and kerosene is expected to drive much of the increase, with European refiners also having to adjust to the introduction of tighter sulphur specifications (0.1% sulphur instead of 0.2%) for gasoil as of January 1, 2008. The specification changes effectively require lower-sulphur

gasoil to be supplied by refineries during the fourth quarter. This may in turn limit imports of Russian gasoil (typically 0.2% sulphur) to Europe, unless sufficient quantities of ultra-low-sulphur gasoil material are available for blending. Furthermore the planned change in UK diesel sulphur limits in early December to 10 parts-per-million sulphur (ppm), from 50 ppm, may also tighten distillate markets towards the end of the year. In the Pacific, higher fourth-quarter crude throughput (+0.2 mb/d) compared to a year ago reflects the absence of run cuts, due to lower product stock levels and an assumed stronger margin environment, although renewed signs of weak demand for kerosene may yet again see crude throughput reduced to stabilise stocks levels.

Global Refinery Crude Throughput[1]

million barrels per day

	Apr 07	May 07	Jun 07	Jul 07	Aug 07	Sep 07	Oct 07	Nov 07	Dec 07
OECD Crude Runs									
North America	17.9	18.1	18.4	18.9	*18.8*	*18.3*	*18.1*	*18.4*	*18.8*
Europe	13.3	13.6	13.4	13.6	*13.8*	*13.5*	*13.3*	*13.6*	*13.9*
Pacific	6.9	6.5	6.6	7.0	*7.2*	*6.9*	*7.1*	*7.3*	*7.5*
Total OECD	38.1	38.2	38.4	39.5	*39.7*	*38.7*	*38.5*	*39.3*	*40.2*
NON-OECD Crude Runs									
FSU	5.6	5.6	5.8	*6.0*	*5.8*	*5.6*	*5.5*	*5.8*	*6.0*
Europe	0.7	0.6	0.7	*0.7*	*0.8*	*0.8*	*0.8*	*0.8*	*0.8*
China	6.5	6.6	6.8	6.5	*6.5*	*6.2*	*6.4*	*6.5*	*6.6*
Other Asia	*8.0*	*8.3*	*8.0*	*7.8*	*8.1*	*8.3*	*8.2*	*8.0*	*8.2*
Latin America	*5.6*	*5.4*	*5.5*	*5.4*	*5.4*	*5.3*	*5.4*	*5.4*	*5.4*
Middle East	*6.0*	*6.0*	*6.1*	*6.2*	*6.3*	*6.0*	*5.9*	*5.9*	*5.9*
Africa	*2.1*	*2.3*	*2.1*	*2.2*	*2.3*	*2.3*	*2.4*	*2.4*	*2.4*
Total Non-OECD	*34.5*	*34.9*	*35.0*	*34.7*	*35.2*	*34.5*	*34.5*	*34.7*	*35.3*
Total Crude Runs	*72.6*	*73.1*	*73.5*	*74.3*	*74.9*	*73.2*	*73.0*	*74.0*	*75.5*

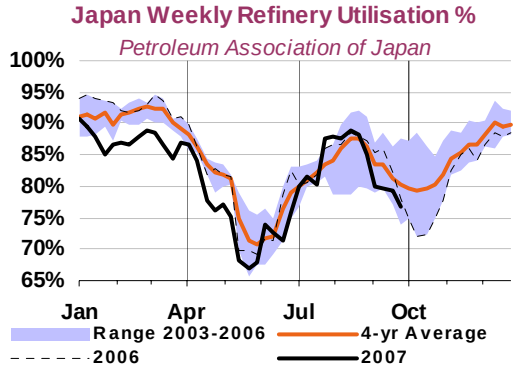
1 Crude runs in Italics are estimates. Forecast crude throughput is based on current IEA demand forecasts.

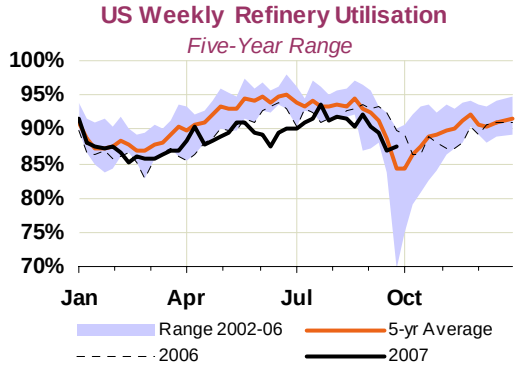
August global crude throughput is revised up 0.1 mb/d to 74.9 mb/d, on the back of higher than expected Latin American and Chinese crude throughput, the latter being a result of lower than forecast run cuts. This was offset by lower OECD crude throughput in August (see below). Global crude throughput in September has been revised down to 73.2 mb/d (-0.3 mb/d) due to higher than anticipated maintenance work and unplanned refinery outages in North America, the FSU and China.

OECD Refinery Throughput

OECD - August Actual and Fourth-Quarter Forecast

Lower-than-expected throughput in August and September (for the US and Japan) has reduced our estimate of third-quarter OECD crude throughput to an average of 39.3 mb/d, a downward revision of 0.2 mb/d from last month's report. September throughput is estimated at 38.7 mb/d, a decline of 1.0 mb/d from August with the impact of continued refinery problems in the US Midwest and Gulf Coast remaining an important drag on overall OECD refinery activity levels.





US Gulf Coast throughput was also curtailed by extended shutdowns following Hurricane Humberto at three refineries totalling 0.8 mb/d. Elsewhere in North America the disruption to crude supplies in Mexico following a pipeline explosion is estimated to have cut crude runs at the Tula and Salamanca refineries by an average of 95 kb/d in September. Weekly data for the US point to crude runs averaging 15.3 mb/d in September, reaching their lowest level since March and well below the summer peak seen in late July. In addition to the problems already highlighted on the Gulf Coast there was heavy maintenance in the Midwest, and the continued partial outage at BP's Whiting refinery.

The seasonal increase in refinery maintenance in October will continue to constrain throughput in North America and Europe. Runs are expected to increase on the US Gulf Coast and decline on the US West Coast, where heavier maintenance downtime is forecast. Elsewhere, the acceleration of work originally planned for 2008 at Harvest Energy's north Atlantic refinery in Canada has lowered our estimates for October and November crude runs. In Europe, several refiners are expected to undertake shutdowns with work scheduled in the Netherlands, Norway, Portugal, Spain and Sweden. OECD Pacific crude throughput should recover slightly in October, as lower maintenance in Japan and Korea raises activity levels ahead of peak winter demand. Furthermore, fourth quarter utilisation rates have been reduced to reflect the slight downward adjustment to the OECD demand forecast, published this month. Consequently, fourth-quarter crude runs are now estimated to average 39.3 mb/d, an increase of 0.4 mb/d year-on-year.

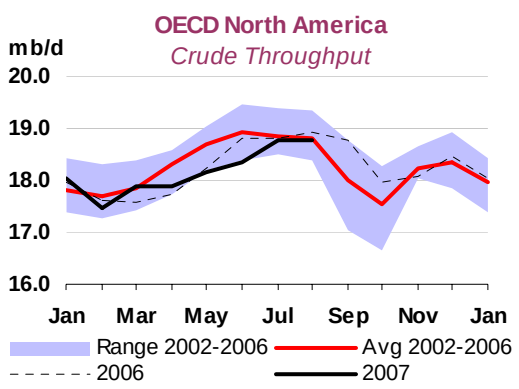
OECD Data for August

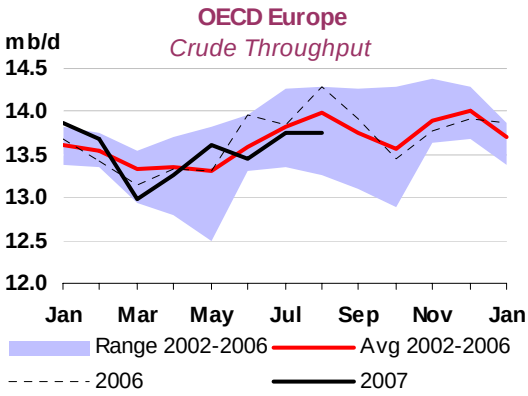
OECD August crude throughput averaged 39.7 mb/d, 0.3 mb/d lower than forecast last month. Crude runs were approximately 0.1 mb/d lower than expected in all regions. Crude throughput was up 0.2 mb/d from July, with Japan accounting for most of the increase with North American and European crude runs flat. Compared to August 2006, OECD crude runs declined by 0.7 mb/d, largely as a result of the 0.5 mb/d year-on-year drop in European crude runs, stemming from, *inter alia*, run cuts at ConocoPhillip's Wilhelmshaven refinery in Germany.

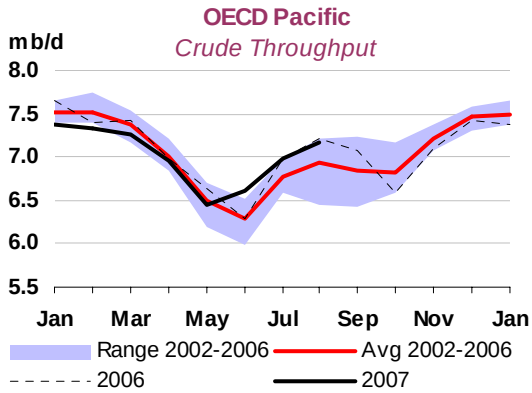
Refinery Crude Throughput and Utilisation in OECD Countries

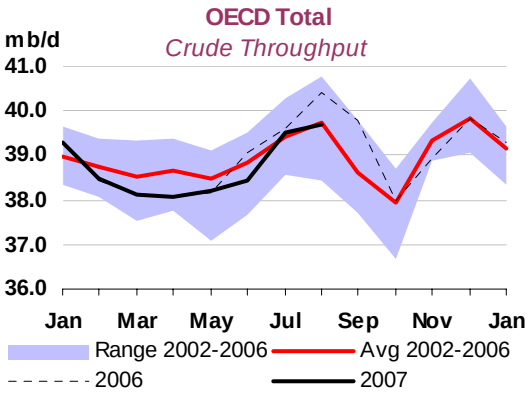
	million barrels per day						*Change from*		Utilisation rate[2]	
	Mar 07	Apr 07	May 07	Jun 07	Jul 07	Aug 07	*Jul 07*	*Aug 06*	Aug 07	Aug 06
OECD North America										
US[3]	14.84	15.04	15.37	15.24	15.66	15.72	0.06	-0.07	90.02	90.82
Canada	1.81	1.59	1.54	1.86	1.90	1.90	0.00	0.00	94.18	94.25
Mexico	1.24	1.24	1.23	1.26	1.20	1.14	-0.06	-0.08	74.26	71.96
Total	17.89	17.87	18.14	18.36	18.77	18.76	0.00	-0.15	89.26	89.69
OECD Europe										
France	1.50	1.59	1.88	1.56	1.79	1.71	-0.08	-0.09	87.56	91.26
Germany	2.21	2.19	2.15	2.29	2.31	2.13	-0.17	-0.29	88.30	99.88
Italy	1.91	1.83	1.88	1.85	1.89	1.85	-0.04	-0.08	79.24	83.15
Netherlands	0.88	1.01	1.04	0.95	1.02	1.05	0.03	0.07	86.80	80.49
Spain	1.17	1.22	1.19	1.16	1.15	1.18	0.03	-0.07	92.44	97.73
UK	1.49	1.60	1.63	1.56	1.55	1.67	0.12	-0.01	88.27	89.31
Other OECD Europe	3.81	3.83	3.85	4.09	4.05	4.16	0.11	-0.06	88.63	87.41
Total	12.98	13.27	13.62	13.46	13.75	13.75	0.00	-0.53	87.18	89.68
OECD Pacific										
Japan	4.04	3.88	3.32	3.45	3.86	4.12	0.26	0.03	88.15	87.53
Korea	2.48	2.37	2.43	2.45	2.39	2.31	-0.08	-0.10	84.56	93.47
Other OECD Pacific	0.75	0.70	0.71	0.70	0.72	0.73	0.00	0.01	90.18	89.24
Total	7.27	6.95	6.45	6.61	6.97	7.16	0.19	-0.05	87.15	89.60
OECD Total	38.14	38.08	38.21	38.43	39.50	39.68	0.18	-0.74	88.15	89.67

1 Estimate
2 Based on crude throughput and current operable refining capacity
3 US50



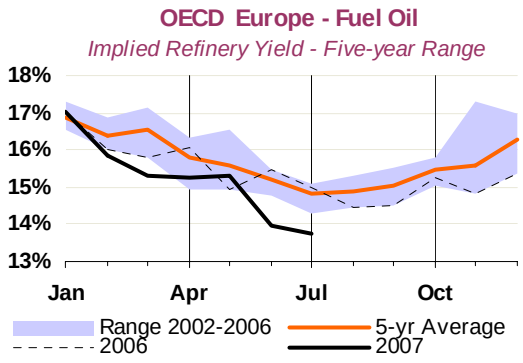


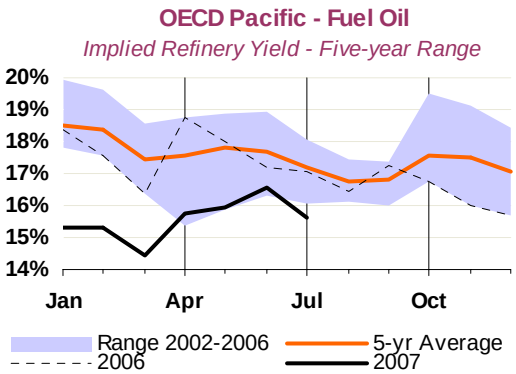




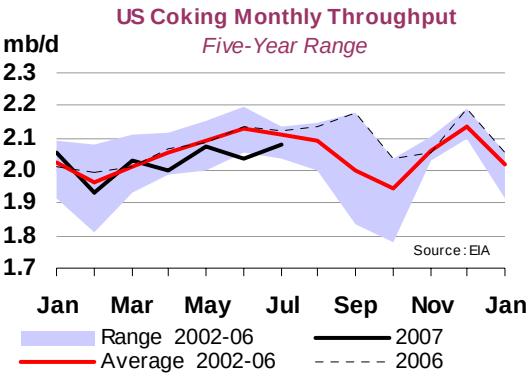
OECD Refinery Yields

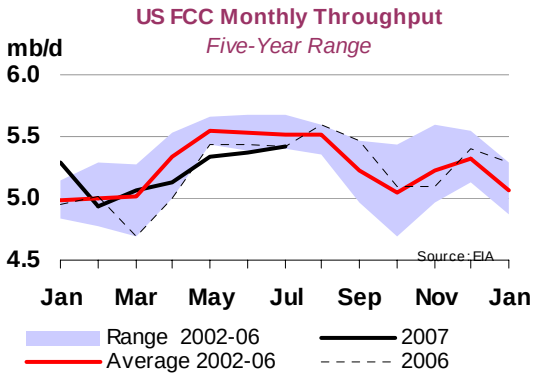
OECD refineries continue to reduce fuel oil yields, driven by investment in upgrading capacity. European refiners reduced fuel oil yields to below 13.7% of production in July from 15.3% in previous months, with the start-up of new hydrocracking capacity at Porvoo in Finland and Gonfreville in France. Corresponding increases in diesel/gasoil yields were also seen. However, ongoing operational problems at Neste's Porvoo refinery suggest that fuel oil yields may increase again in the subsequent months, before the unit is in a stable mode of operation (currently assumed to be late in the fourth quarter, following remedial work).





Pacific fuel oil yields are expected to decline from their existing low levels with the start of new upgrading equipment in South Korea, which could reduce yields by a further two percentage points from the current level of 15% effectively cutting regional fuel oil production by up to 15% of current levels. There would be a corresponding increase in the yield of distillate and other products



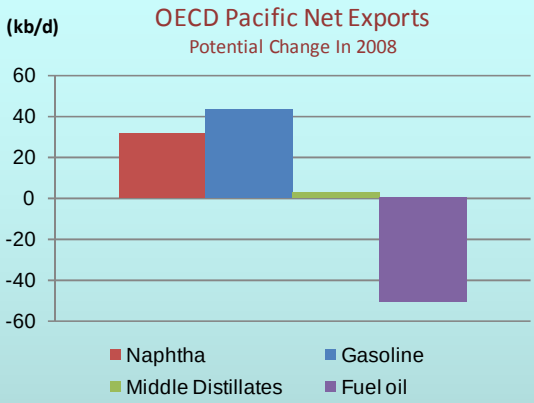


North American distillate yields increased to the top of the five-year range in July and are expected to continue to remain strong over the balance of the year. North American gasoline yields dipped in July as throughput gains in FCC and coking capacity lagged the increase in crude runs. Furthermore alkylate premiums on the Gulf Coast rose to their highest level since August 2006, suggesting that problems with catalytic cracking units (and possibly reformers) were once again undermining gasoline output levels.

OECD Pacific Product Balances – 2008 Outlook

In the first of a series of more in-depth looks at regional forecasts from our recently completed medium-term global product supply model, this month we consider prospects for the Pacific in 2008.

The OECD Pacific should see higher distillate and lower fuel oil net exports in 2008. Refinery investment is dominated by new upgrading and hydrotreating capacity and this is expected to boost the production of ultra-low sulphur distillate and gasoline at the expense of fuel oil. The growth in product supply of these grades next year is therefore expected to outpace the region's modest demand growth.



In recent years OECD Pacific countries have all introduced more stringent transport fuel standards and refinery investments reflect the growing need for ultra-low sulphur fuels. In Australia and Korea even more stringent sulphur limits are expected to be introduced by the beginning of 2009 with premium gasoline and diesel moving to effectively sulphur-free levels

Korean upgrading investment through the end of 2008 is geared toward increasing low-sulphur diesel production and fuel oil conversion. The Ulsan refinery has recently added an 80 kb/d diesel hydrotreater, while the Yosu refinery has just started the 155 kb/d vacuum distillation unit with a 55 kb/d residue hydrocracker, both of which are expected to raise distillate production.

Japanese refinery investments in 2007 and 2008 are designed to increase ultra-low-sulphur gasoline production. Until the end of 2008, the main refinery additions in Japan include a 14 kb/d gasoline hydrotreating unit in 2007 and an 18 kb/d fluid catalytic cracker which should start in 2Q08. The start-up of a 60 kb/d condensate splitter in late 2007 or early 2008 at Kashima will raise condensate processing capacity, with the heavy naphtha fed into a 20 kb/d reformer to boost supplies of high-octane blending material.

Overall, the OECD Pacific should see higher distillate exports from Japan and Korea in 2008, largely offset by rising imports into Australia and New Zealand. The region has long been a net exporter of diesel and kerosene, and refinery investments will continue this trend. Similarly, the need to import marginal barrels of gasoline and naphtha to meet demand is also set to continue. Gasoline consumption has stabilised since reaching a high of 1.6 mb/d 2004, while naphtha demand has continued to grow, due to increased petrochemical use. Mainly as a result of the lack of gasoline demand growth and investments in upgrading units and condensate splitting capacity, the OECD Pacific is expected to reduce imports of gasoline and naphtha by 44 kb/d and 32 kb/d in 2008 compared to 2007. As a result of upgrading additions, the region is expected to decrease fuel oil exports by 50 kb/d in 2008.

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

	2004	2005	1Q06	2Q06	3Q06	4Q06	2006	1Q07	2Q07	3Q07	4Q07	2007	1Q08	2Q08	3Q08	4Q08	2008
OECD DEMAND																	
North America	25.4	25.5	25.2	25.1	25.5	25.4	25.3	25.7	25.5	25.6	25.8	25.6	26.0	25.8	25.8	26.0	25.9
Europe	15.5	15.6	15.9	15.2	15.6	15.6	15.6	15.3	14.9	15.5	15.8	15.4	15.7	15.2	15.7	15.9	15.6
Pacific	8.5	8.6	9.2	7.8	7.9	8.7	8.4	8.8	7.8	7.8	8.9	8.3	9.3	8.0	8.0	9.0	8.5
Total OECD	49.4	49.7	50.4	48.0	48.9	49.7	49.3	49.7	48.2	49.0	50.5	49.3	51.0	49.0	49.5	50.9	50.1
NON-OECD DEMAND																	
FSU	3.9	3.9	4.1	3.9	4.1	4.4	4.1	3.9	3.7	3.9	4.4	4.0	4.1	3.8	4.1	4.6	4.1
Europe	0.7	0.7	0.8	0.7	0.7	0.8	0.7	0.8	0.8	0.7	0.8	0.8	0.8	0.8	0.7	0.8	0.8
China	6.4	6.7	7.0	7.3	7.2	7.2	7.2	7.3	7.7	7.6	7.7	7.6	7.7	8.1	8.0	8.1	8.0
Other Asia	8.6	8.8	9.0	9.0	8.7	8.9	8.9	9.2	9.2	9.0	9.1	9.1	9.4	9.4	9.2	9.4	9.3
Latin America	5.0	5.1	5.2	5.3	5.4	5.4	5.3	5.3	5.5	5.6	5.5	5.5	5.5	5.6	5.8	5.7	5.6
Middle East	5.7	6.0	6.2	6.2	6.5	6.3	6.3	6.4	6.6	6.8	6.5	6.6	6.7	6.8	7.1	6.8	6.9
Africa	2.8	2.9	3.0	3.0	2.9	2.9	2.9	3.1	3.1	3.0	3.1	3.1	3.2	3.2	3.1	3.2	3.2
Total Non-OECD	33.1	34.2	35.1	35.3	35.4	35.9	35.4	36.0	36.5	36.6	37.2	36.6	37.4	37.7	37.9	38.6	37.9
Total Demand[1]	82.5	83.9	85.4	83.4	84.3	85.6	84.7	85.8	84.6	85.5	87.6	85.9	88.3	86.7	87.4	89.4	88.0
OECD SUPPLY																	
North America	14.6	14.1	14.2	14.2	14.2	14.2	14.2	14.4	14.4	14.2	14.2	14.3	14.5	14.1	14.0	14.1	14.2
Europe	6.1	5.6	5.5	5.1	4.9	5.2	5.2	5.2	4.9	4.6	4.8	4.9	4.8	4.5	4.3	4.6	4.5
Pacific	0.6	0.6	0.5	0.5	0.7	0.6	0.6	0.6	0.6	0.7	0.7	0.6	0.7	0.8	0.8	0.8	0.8
Total OECD	21.2	20.3	20.2	19.9	19.8	20.0	20.0	20.2	20.0	19.5	19.7	19.8	20.0	19.4	19.1	19.6	19.5
NON-OECD SUPPLY																	
FSU	11.4	11.8	11.9	12.2	12.4	12.5	12.2	12.7	12.7	12.7	12.9	12.7	13.0	13.2	13.3	13.5	13.2
Europe	0.2	0.2	0.2	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	3.5	3.6	3.7	3.7	3.7	3.6	3.7	3.7	3.8	3.8	3.9	3.8	3.9	3.9	3.9	3.9	3.9
Other Asia	2.7	2.7	2.7	2.7	2.7	2.8	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.8	2.8	2.8	2.8
Latin America	4.1	4.3	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.5	4.4	4.7	4.8	4.8	4.7	4.7
Middle East	1.9	1.8	1.8	1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.6	1.7	1.6	1.6	1.6	1.6	1.6
Africa[2]	3.4	3.7	3.9	3.8	3.9	4.0	3.9	2.6	2.5	2.5	2.6	2.6	2.7	2.7	2.7	2.7	2.7
Total Non-OECD	27.1	28.0	28.5	28.7	28.9	29.2	28.8	27.9	27.9	27.9	28.4	28.0	28.8	29.0	29.1	29.4	29.1
Processing Gains[3]	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0
Other Biofuels[4]	0.1	0.1	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.7	0.7	0.7	0.7	0.7
Total Non-OPEC[5]	50.3	50.4	50.9	50.7	50.8	51.4	50.9	50.4	50.1	49.7	50.4	50.2	51.4	51.0	50.9	51.6	51.2
Non-OPEC excl. Angola[2]	49.3	49.1	49.5	49.3	49.4	50.0	49.5	50.4	50.1	49.7	50.4	50.2	51.4	51.0	50.9	51.6	51.2
OPEC																	
Crude[6]	28.9	29.7	29.9	29.7	30.0	29.2	29.7	30.2	30.2	30.5							
NGLs	4.2	4.5	4.6	4.6	4.6	4.7	4.6	4.8	4.8	4.8	5.0	4.8	5.1	5.3	5.5	5.8	5.4
Total OPEC	33.1	34.2	34.5	34.3	34.7	33.9	34.3	35.0	35.0	35.4							
OPEC incl. Angola[2]	34.1	35.5	35.9	35.6	36.1	35.3	35.7	35.0	35.0	35.4							
Total Supply[7]	83.3	84.6	85.4	84.9	85.5	85.3	85.3	85.4	85.1	85.1							
STOCK CHANGES AND MISCELLANEOUS																	
Reported OECD																	
Industry	0.1	0.1	0.0	0.7	1.1	-0.9	0.2	-0.9	0.8								
Government	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0								
Total	0.2	0.2	0.0	0.7	1.2	-0.8	0.3	-0.9	0.8								
Floating Storage/Oil in Transit	0.0	-0.1	0.1	-0.1	0.3	-0.6	-0.1	0.2	-0.1								
Miscellaneous to balance[8]	0.6	0.5	-0.2	0.9	-0.3	1.1	0.4	0.3	-0.2								
Total Stock Ch. & Misc	0.8	0.7	0.0	1.6	1.2	-0.3	0.6	-0.4	0.5	-0.5							
Memo items:																	
Call on OPEC crude + Stock ch.[9]	28.1	29.0	29.9	28.1	28.8	29.6	29.1	30.6	29.7	31.0	32.2	30.9	31.8	30.5	31.0	32.0	31.3
Adjusted Call on OPEC + Stock ch.[10]	28.7	29.6	29.7	29.0	28.6	30.7	29.5	30.9	29.5	31.4	32.7	31.1	32.3	30.9	31.5	32.4	31.8
"Call" incl. Angola[2]	29.1	30.3	31.3	29.5	30.3	31.0	30.5	30.6	29.7	31.0	32.2	30.9	31.8	30.5	31.0	32.0	31.3
"Adjusted Call" incl. Angola[2]	29.7	30.8	31.1	30.4	30.0	32.1	30.9	30.9	29.5	31.4	32.7	31.1	32.3	30.9	31.5	32.4	31.8

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 With effect from OMR of 13 February 2007, Angolan production will be reclassified within OPEC and excluded from the Non-OPEC and Africa totals, for the period January 2007 onwards. Secondary aggregates allow comparison with previous year totals by including Angola within OPEC retroactively.
3 Net volumetric gains and losses in the refining process (excludes net gain/loss in former USSR, China and non-OECD Europe) and marine transportation losses.
4 Biofuels from sources outside Brazil and US.
5 Non-OPEC supplies include crude oil, condensates, NGL and non-conventional sources of supply such as synthetic crude, ethanol and MTBE. No allowance is made in the non-OPEC forecast for exceptional events which have, at certain times historically, reduced non-OPEC supply by 300-400 kbd on an annual basis.
6 As of the March 2006 OMR, Venezuelan Orinoco heavy crude production is included within Venezuelan crude estimates. Orimulsion fuel remains within the OPEC NGL & non-conventional category, but Orimulsion production reportedly ceased from January 2007.
7 Comprises crude oil, condensates, NGLs, oil from non-conventional sources and other sources of supply.
8 Includes changes in non-reported stocks in OECD and non-OECD areas.
9 Equals the arithmetic difference between total demand minus total non-OPEC supply minus OPEC NGLs.
10 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 plus an extra 350 kb/d allowance for average understatement of non-OPEC supply added for forecast periods.

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

(million barrels per day)

	2004	2005	1Q06	2Q06	3Q06	4Q06	2006	1Q07	2Q07	3Q07	4Q07	2007	1Q08	2Q08	3Q08	4Q08	2008
OECD DEMAND																	
North America	-	-	0.1	-	0.1	-	-	-	-	-0.1	-0.1	-	-0.1	-	-0.2	-0.1	-0.1
Europe	-	-	-	-	-	-	-	-	-	0.1	-	-	-	-	0.1	-	-
Pacific	-	-	-	-	-	-	-	-	-	-0.1	-	-	-	-	-0.1	-	-
Total OECD	-	-	0.1	-	0.1	-	-	-	-	-0.2	-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	0.2	0.2	-	-	0.1	0.2	0.2	-	0.1	0.1
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-0.1	-	-	-	-	-0.1	-	-
Other Asia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Latin America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Middle East	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Non-OECD	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-	-	0.1	0.2	0.2	-	-	0.1
Total Demand	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.1	-0.2	-0.2	-	0.1	0.1	-0.2	-0.1	-
OECD SUPPLY																	
North America	-	-	-	-	-0.1	-0.1	-	-	-	0.2	-	0.1	-	-	-	-	-
Europe	-	-	-	-	-	-	-	-	-	-	-0.1	-	-0.1	-	-	-	-
Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total OECD	-	-	-	-	-0.1	-0.1	-	-	-	0.2	-0.1	0.1	-0.1	-	-	-	-
NON-OECD SUPPLY																	
FSU	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-0.1	-	-	-	-	-	-	-
Other Asia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Latin America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Middle East	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Non-OECD	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	-	0.1	0.1	0.1	0.2	0.2	0.2	0.2
Processing Gains	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Biofuels	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Non-OPEC	0.1	0.1	0.2	0.2	-	0.1	0.1	0.2	0.2	0.3	-	0.2	0.1	0.2	0.2	0.2	0.2
Non-OPEC excl. Angola	0.1	0.1	0.2	0.2	-	0.1	0.1	0.2	0.2	0.3	-	0.2	0.1	0.2	0.2	0.2	0.2
OPEC																	
Crude	-	-	-	-	-	-	-	-	-								
NGLs	-	-	-	-	-	-	-	-	-	-	-	-	-0.1	-0.1	-0.1	-	-0.1
Total OPEC	-	-	-	-	-	-	-	-	-								
OPEC incl. Angola	-	-	-	-	-	-	-	-	-								
Total Supply	0.1	0.1	0.2	0.2	-	0.1	0.1	0.2	0.2								
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								
Total Stock Ch. & Misc	-	-	-	0.1	-0.2	-0.1	-0.1	-	0.1								
Memo items:																	
Call on OPEC crude + Stock ch.	-	-	-	-0.1	0.2	0.1	0.1	-	-0.1	-0.4	-0.1	-0.2	0.1	0.1	-0.3	-0.3	-0.1
Adjusted Call on OPEC + Stock ch.	-	-	-	-	-	-	-	-	-	-0.5	-0.1	-0.2	0.1	0.1	-0.4	-0.3	-0.1
"Call" incl. Angola[2]	-	-	-	-0.1	0.2	0.1	0.1	-	-0.1	-0.4	-0.1	-0.2	0.1	0.1	-0.3	-0.3	-0.1
"Adjusted Call" incl. Angola	-	-	-	-	-	-	-	-	-	-0.5	-0.1	-0.2	0.1	0.1	-0.4	-0.3	-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

	2005	1Q06	2Q06	3Q06	4Q06	2006	1Q07	2Q07	3Q07	4Q07	2007	1Q08	2Q08	3Q08	4Q08	2008
Demand (mb/d)																
North America	25.49	25.22	25.06	25.48	25.37	25.28	25.67	25.46	25.57	25.75	25.61	25.98	25.83	25.83	25.96	25.90
Europe	15.61	15.89	15.15	15.57	15.64	15.56	15.25	14.93	15.55	15.81	15.39	15.72	15.22	15.72	15.93	15.65
Pacific	8.57	9.24	7.82	7.85	8.71	8.40	8.83	7.80	7.84	8.90	8.34	9.27	7.97	7.98	8.96	8.54
Total OECD	49.67	50.36	48.03	48.90	49.72	49.25	49.75	48.19	48.95	50.46	49.34	50.97	49.01	49.53	50.85	50.09
FSU	3.95	4.06	3.87	4.12	4.45	4.12	3.93	3.67	3.94	4.44	3.99	4.07	3.80	4.05	4.59	4.13
Europe	0.72	0.80	0.75	0.70	0.75	0.75	0.83	0.77	0.71	0.77	0.77	0.85	0.79	0.73	0.79	0.79
China	6.69	6.96	7.29	7.17	7.20	7.16	7.27	7.67	7.58	7.73	7.57	7.74	8.09	8.00	8.14	7.99
Other Asia	8.79	8.95	8.96	8.66	8.90	8.87	9.16	9.21	8.96	9.12	9.11	9.35	9.42	9.18	9.36	9.33
Latin America	5.13	5.15	5.29	5.40	5.38	5.31	5.32	5.49	5.61	5.55	5.50	5.47	5.64	5.76	5.70	5.65
Middle East	5.99	6.16	6.21	6.47	6.27	6.28	6.42	6.57	6.80	6.49	6.57	6.68	6.82	7.11	6.81	6.85
Africa	2.94	2.97	2.97	2.86	2.93	2.93	3.10	3.07	2.98	3.08	3.06	3.21	3.18	3.08	3.19	3.17
Total Non-OECD	34.22	35.05	35.35	35.38	35.89	35.42	36.04	36.45	36.58	37.18	36.57	37.37	37.73	37.91	38.58	37.90
World	83.89	85.41	83.38	84.29	85.61	84.67	85.79	84.65	85.53	87.64	85.91	88.34	86.75	87.44	89.43	87.99
of which:																
US50	*20.80*	*20.54*	*20.55*	*20.91*	*20.75*	*20.69*	*20.90*	*20.74*	*20.85*	*20.98*	*20.87*	*21.15*	*21.08*	*21.08*	*21.14*	*21.11*
Euro4	*8.22*	*8.49*	*7.94*	*8.15*	*8.18*	*8.19*	*7.88*	*7.72*	*8.05*	*8.24*	*7.98*	*8.20*	*7.91*	*8.17*	*8.29*	*8.14*
Japan	*5.31*	*5.89*	*4.72*	*4.75*	*5.29*	*5.16*	*5.39*	*4.61*	*4.65*	*5.40*	*5.01*	*5.73*	*4.73*	*4.73*	*5.41*	*5.15*
Korea	*2.19*	*2.29*	*2.04*	*2.04*	*2.32*	*2.17*	*2.35*	*2.12*	*2.10*	*2.36*	*2.23*	*2.42*	*2.15*	*2.14*	*2.40*	*2.28*
Mexico	*2.05*	*2.05*	*1.98*	*1.96*	*2.00*	*2.00*	*2.05*	*2.07*	*2.02*	*2.07*	*2.05*	*2.09*	*2.10*	*2.06*	*2.12*	*2.09*
Canada	*2.30*	*2.26*	*2.20*	*2.26*	*2.26*	*2.24*	*2.34*	*2.30*	*2.35*	*2.33*	*2.33*	*2.36*	*2.30*	*2.34*	*2.32*	*2.33*
Brazil	*2.19*	*2.18*	*2.20*	*2.28*	*2.30*	*2.24*	*2.25*	*2.28*	*2.36*	*2.36*	*2.31*	*2.31*	*2.34*	*2.42*	*2.42*	*2.37*
India	*2.58*	*2.71*	*2.67*	*2.48*	*2.70*	*2.64*	*2.88*	*2.83*	*2.58*	*2.76*	*2.76*	*2.95*	*2.89*	*2.64*	*2.81*	*2.82*
Annual Change (% per annum)																
North America	0.5	-1.4	-0.9	-0.4	-0.7	-0.8	1.8	1.6	0.4	1.5	1.3	1.2	1.5	1.0	0.8	1.1
Europe	0.8	1.1	-0.7	-0.6	-1.0	-0.3	-4.0	-1.5	-0.1	1.1	-1.1	3.1	1.9	1.1	0.8	1.7
Pacific	0.8	-2.5	-2.7	-2.1	-0.3	-1.9	-4.5	-0.2	-0.2	2.1	-0.8	5.0	2.2	1.8	0.7	2.4
Total OECD	0.6	-0.8	-1.1	-0.7	-0.7	-0.8	-1.2	0.3	0.1	1.5	0.2	2.5	1.7	1.2	0.8	1.5
FSU	1.4	2.4	0.5	4.7	10.2	4.5	-3.2	-5.3	-4.4	-0.1	-3.1	3.6	3.5	3.0	3.4	3.4
Europe	4.2	3.4	3.4	3.4	3.4	3.4	2.9	2.7	2.6	2.2	2.6	2.3	2.6	2.6	2.6	2.6
China	4.2	4.2	12.1	7.1	4.6	6.9	4.5	5.2	5.7	7.3	5.7	6.4	5.4	5.5	5.2	5.6
Other Asia	2.0	-0.2	-0.8	1.6	2.8	0.8	2.3	2.8	3.4	2.5	2.8	2.1	2.3	2.4	2.6	2.4
Latin America	2.9	3.7	3.2	2.9	4.4	3.6	3.4	3.8	3.9	3.2	3.6	2.8	2.7	2.7	2.8	2.7
Middle East	4.6	4.8	4.2	4.7	5.3	4.8	4.3	5.7	5.0	3.4	4.6	4.0	3.8	4.6	4.9	4.3
Africa	6.1	-1.3	-0.9	-0.1	1.1	-0.3	4.4	3.5	4.1	5.0	4.3	3.6	3.4	3.4	3.6	3.5
Total Non-OECD	3.3	2.4	3.4	3.7	4.6	3.5	2.8	3.1	3.4	3.6	3.2	3.7	3.5	3.7	3.8	3.7
World	1.7	0.5	0.7	1.1	1.4	0.9	0.4	1.5	1.5	2.4	1.5	3.0	2.5	2.2	2.0	2.4
Annual Change (mb/d)																
North America	0.12	-0.35	-0.23	-0.09	-0.17	-0.21	0.44	0.39	0.09	0.38	0.33	0.31	0.37	0.26	0.21	0.29
Europe	0.12	0.17	-0.11	-0.09	-0.15	-0.05	-0.64	-0.22	-0.02	0.17	-0.18	0.47	0.28	0.18	0.12	0.26
Pacific	0.07	-0.24	-0.22	-0.17	-0.03	-0.16	-0.42	-0.02	-0.02	0.19	-0.06	0.44	0.17	0.14	0.06	0.20
Total OECD	0.32	-0.42	-0.55	-0.36	-0.35	-0.42	-0.61	0.16	0.05	0.74	0.09	1.22	0.82	0.57	0.39	0.75
FSU	0.06	0.09	0.02	0.18	0.41	0.18	-0.13	-0.20	-0.18	0.00	-0.13	0.14	0.13	0.12	0.15	0.13
Europe	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
China	0.27	0.28	0.79	0.47	0.32	0.46	0.31	0.38	0.41	0.53	0.41	0.46	0.42	0.41	0.40	0.42
Other Asia	0.17	-0.02	-0.07	0.13	0.25	0.07	0.21	0.25	0.30	0.22	0.25	0.19	0.21	0.22	0.24	0.22
Latin America	0.14	0.19	0.16	0.15	0.23	0.18	0.17	0.20	0.21	0.17	0.19	0.15	0.15	0.15	0.15	0.15
Middle East	0.26	0.28	0.25	0.29	0.31	0.29	0.27	0.35	0.32	0.21	0.29	0.26	0.25	0.31	0.32	0.29
Africa	0.17	-0.04	-0.03	0.00	0.03	-0.01	0.13	0.10	0.12	0.15	0.12	0.11	0.11	0.10	0.11	0.11
Total Non-OECD	1.10	0.81	1.15	1.25	1.57	1.20	0.99	1.11	1.19	1.30	1.15	1.33	1.28	1.34	1.40	1.33
World	1.41	0.39	0.60	0.90	1.22	0.78	0.38	1.27	1.24	2.03	1.23	2.55	2.10	1.91	1.79	2.09
Revisions to Oil Demand from Last Month's Report (mb/d)																
North America	0.00	0.05	-0.03	0.05	0.01	0.02	0.02	-0.02	-0.09	-0.08	-0.04	-0.05	-0.03	-0.22	-0.12	-0.10
Europe	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	0.05	-0.01	0.01	0.00	0.00	0.07	-0.01	0.01
Pacific	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.12	-0.02	-0.04	0.00	0.00	-0.08	0.00	-0.02
Total OECD	0.00	0.05	-0.03	0.05	0.01	0.02	0.02	-0.03	-0.17	-0.11	-0.07	-0.06	-0.03	-0.23	-0.13	-0.11
FSU	0.15	0.14	0.14	0.15	0.15	0.15	0.16	0.16	0.00	-0.02	0.08	0.20	0.21	0.04	0.06	0.13
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
China	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.06	0.00	-0.01	-0.01	-0.02	-0.06	-0.01	-0.03
Other Asia	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	-0.01	0.02	-0.01	0.00	-0.02	-0.02	0.01	-0.03	-0.01
Latin America	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.01	0.02	0.01	0.01
Middle East	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	-0.01	0.01	-0.02	-0.01	-0.01	-0.02	0.01	-0.02	-0.01
Africa	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	-0.01	-0.01	-0.01	-0.01	0.00	-0.01	0.00	0.00	0.00
Total Non-OECD	0.15	0.14	0.14	0.15	0.15	0.15	0.14	0.14	-0.01	-0.05	0.05	0.16	0.17	0.02	0.00	0.09
World	0.15	0.20	0.11	0.20	0.16	0.17	0.16	0.11	-0.18	-0.15	-0.02	0.11	0.13	-0.22	-0.12	-0.03
Revisions to Oil Demand Growth from Last Month's Report (mb/d)																
World	0.01	0.05	-0.04	0.05	0.02	0.02	-0.04	0.00	-0.37	-0.32	-0.18	-0.05	0.02	-0.04	0.03	-0.01

Table 3
WORLD OIL PRODUCTION
(million barrels per day)

	2006	2007	2008	2Q07	3Q07	4Q07	1Q08	2Q08	Jul 07	Aug 07	Sep 07
OPEC											
Crude Oil											
Saudi Arabia	8.93			8.37	8.39				8.48	8.32	8.37
Iran	3.89			3.92	3.92				3.92	3.92	3.92
Iraq	1.90			2.01	2.11				2.19	1.99	2.18
UAE	2.62			2.54	2.57				2.58	2.59	2.55
Kuwait	2.21			2.08	2.18				2.17	2.17	2.20
Neutral Zone	0.58			0.55	0.55				0.55	0.56	0.56
Qatar	0.82			0.80	0.83				0.83	0.83	0.84
Angola[6]				1.58	1.62				1.56	1.64	1.65
Nigeria	2.24			2.07	2.12				2.10	2.15	2.10
Libya	1.71			1.69	1.70				1.70	1.70	1.72
Algeria	1.35			1.36	1.36				1.35	1.35	1.37
Venezuela	2.56			2.37	2.36				2.34	2.36	2.38
Indonesia	0.89			0.84	0.83				0.83	0.84	0.83
Total Crude Oil	29.69			30.18	30.54				30.57	30.41	30.65
Total NGLs[1]	4.63	4.84	5.44	4.80	4.83	4.98	5.10	5.28	4.82	4.83	4.83
Total OPEC	34.32			34.98	35.37				35.39	35.23	35.48
OPEC incl. Angola[6]	35.73			34.98	35.37				35.39	35.23	35.48
NON-OPEC[2]											
OECD											
North America	14.21	14.31	14.19	14.45	14.23	14.21	14.46	14.14	14.31	14.08	14.32
United States	7.34	7.42	7.41	7.56	7.46	7.22	7.46	7.49	7.50	7.47	7.39
Mexico	3.68	3.52	3.41	3.58	3.43	3.51	3.46	3.44	3.57	3.22	3.51
Canada	3.19	3.37	3.36	3.31	3.35	3.48	3.54	3.22	3.24	3.39	3.41
Europe	5.18	4.88	4.54	4.89	4.64	4.77	4.78	4.48	4.97	4.49	4.46
UK	1.66	1.63	1.45	1.70	1.47	1.59	1.59	1.44	1.63	1.31	1.48
Norway	2.78	2.51	2.36	2.46	2.43	2.44	2.46	2.30	2.61	2.43	2.24
Others	0.74	0.74	0.73	0.73	0.74	0.74	0.74	0.73	0.73	0.75	0.74
Pacific	0.58	0.64	0.79	0.63	0.66	0.70	0.73	0.76	0.65	0.64	0.68
Australia	0.53	0.57	0.68	0.56	0.58	0.60	0.64	0.66	0.58	0.56	0.59
Others	0.05	0.07	0.11	0.06	0.08	0.10	0.10	0.10	0.07	0.08	0.09
Total OECD	19.97	19.83	19.51	19.97	19.53	19.68	19.98	19.39	19.92	19.21	19.45
NON-OECD											
Former USSR	12.24	12.74	13.25	12.65	12.69	12.91	13.04	13.17	12.77	12.76	12.53
Russia	9.84	10.09	10.30	10.03	10.12	10.14	10.12	10.22	10.10	10.11	10.16
Others	2.40	2.65	2.95	2.63	2.56	2.77	2.92	2.95	2.67	2.65	2.37
Asia	6.39	6.50	6.70	6.48	6.44	6.65	6.65	6.67	6.34	6.45	6.55
China	3.67	3.81	3.91	3.79	3.77	3.92	3.92	3.90	3.65	3.75	3.92
Malaysia	0.75	0.75	0.79	0.74	0.75	0.77	0.77	0.79	0.75	0.74	0.76
India	0.79	0.82	0.81	0.81	0.82	0.82	0.82	0.82	0.81	0.82	0.82
Others	1.17	1.13	1.18	1.14	1.11	1.15	1.14	1.16	1.13	1.13	1.05
Europe	0.15	0.13	0.12	0.14	0.13	0.13	0.13	0.12	0.13	0.13	0.13
Latin America	4.39	4.43	4.74	4.39	4.41	4.53	4.71	4.76	4.38	4.38	4.46
Brazil	2.10	2.19	2.55	2.14	2.17	2.31	2.50	2.56	2.16	2.14	2.22
Argentina	0.77	0.76	0.74	0.77	0.75	0.75	0.75	0.74	0.74	0.76	0.75
Colombia	0.53	0.53	0.55	0.53	0.54	0.55	0.55	0.55	0.53	0.55	0.55
Ecuador	0.54	0.50	0.47	0.51	0.50	0.48	0.48	0.47	0.50	0.50	0.49
Others	0.45	0.44	0.44	0.44	0.45	0.45	0.44	0.44	0.45	0.45	0.45
Middle East[3]	1.74	1.65	1.61	1.66	1.66	1.63	1.64	1.62	1.67	1.66	1.65
Oman	0.75	0.71	0.68	0.72	0.70	0.69	0.69	0.69	0.71	0.70	0.70
Syria	0.42	0.39	0.36	0.39	0.38	0.38	0.37	0.36	0.39	0.38	0.38
Yemen	0.38	0.37	0.38	0.36	0.38	0.37	0.39	0.38	0.38	0.38	0.38
Africa	3.91	2.56	2.68	2.54	2.53	2.58	2.65	2.68	2.55	2.51	2.51
Egypt	0.67	0.63	0.62	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63
Angola[6]	1.37										
Gabon	0.23	0.23	0.24	0.23	0.23	0.23	0.24	0.24	0.23	0.23	0.23
Others	1.63	1.69	1.82	1.67	1.66	1.71	1.79	1.82	1.69	1.65	1.65
Total Non-OECD	28.81	28.02	29.10	27.85	27.86	28.42	28.82	29.02	27.84	27.90	27.83
Processing Gains[4]	1.90	1.92	1.95	1.92	1.92	1.92	1.95	1.95	1.92	1.92	1.92
Other Biofuels[5]	0.26	0.40	0.66	0.40	0.40	0.40	0.66	0.66	0.40	0.40	0.40
TOTAL NON-OPEC	50.95	50.17	51.22	50.14	49.71	50.42	51.40	51.02	50.09	49.44	49.61
Non-OPEC excl. Angola[6]	49.54	50.17	51.22	50.14	49.71	50.42	51.40	51.02	50.09	49.44	49.61
TOTAL SUPPLY	85.27			85.12	85.08				85.47	84.67	85.09

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 reportedly ceased from January 2007.
2 Comprises crude oil, condensates, NGLs and oil from non-conventional sources. No allowance is made in the non-OPEC forecast for exceptional events, which have, at certain times historically, reduced non-OPEC supply by 300-400 kbd on an annual basis.
3 Includes small amounts of production from Israel, Jordan and Bahrain.
4 Net volumetric gains and losses in refining (excludes net gain/loss in FSU, China and non-OECD Europe) and marine transportation losses.
5 Comprises Fuel Ethanol and Biodiesel supply from outside Brazil and US.
6 With effect from OMR of 13 February 2007, Angolan production will be reclassified within OPEC and excluded from the Non-OPEC total, for the period January 2007 onwards. Secondary aggregates allow comparison with previous year totals by including Angola within OPEC retroactively

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			
	Apr2007	May2007	Jun2007	Jul2007	Aug2007*	Aug2004	Aug2005	Aug2006	3Q2006	4Q2006	1Q2007	2Q2007
North America												
Crude	472.2	481.1	490.7	473.8	458.2	390.5	419.5	457.9	0.01	-0.22	0.28	0.31
Motor Gasoline	225.0	230.4	233.5	233.3	221.2	237.9	219.9	237.6	0.04	-0.05	-0.14	0.04
Middle Distillate	193.4	197.4	195.3	204.3	209.8	203.9	211.4	217.2	0.26	-0.08	-0.29	0.05
Residual Fuel Oil	46.9	44.3	44.7	48.7	47.4	44.6	40.7	52.2	0.01	-0.03	-0.03	-0.03
Total Products[3]	633.0	650.5	654.9	674.0	675.4	665.7	667.7	700.9	0.60	-0.36	-0.71	0.27
Total[4]	1249.4	1276.6	1292.0	1300.4	1287.2	1212.7	1239.9	1319.1	0.75	-0.76	-0.48	0.65
Europe												
Crude	337.9	339.0	333.4	338.3	334.0	327.9	337.3	333.8	-0.10	0.11	-0.16	0.09
Motor Gasoline	104.1	102.8	102.7	102.6	99.8	114.0	103.8	101.1	0.04	0.11	-0.04	-0.08
Middle Distillate	276.7	280.3	272.0	260.8	260.6	260.8	257.2	273.3	0.16	0.06	-0.12	0.05
Residual Fuel Oil	70.6	71.0	69.6	69.0	70.3	77.6	73.3	76.9	-0.04	0.04	-0.04	-0.03
Total Products[3]	552.6	553.4	542.9	532.9	531.9	556.3	536.6	557.2	0.24	0.15	-0.21	-0.10
Total[4]	966.6	968.9	951.8	944.0	937.9	952.3	945.2	963.9	0.15	0.20	-0.30	0.01
Pacific												
Crude	168.5	171.2	170.7	175.8	166.4	167.5	181.9	174.7	-0.07	-0.02	-0.01	-0.02
Motor Gasoline	24.0	25.6	24.1	22.5	23.4	23.3	22.9	23.7	-0.01	-0.01	0.03	0.00
Middle Distillate	59.3	64.7	67.7	75.1	81.7	69.6	73.8	80.7	0.18	-0.14	-0.14	0.07
Residual Fuel Oil	22.3	22.6	22.1	24.4	24.4	23.3	23.5	24.6	0.01	-0.01	-0.01	0.00
Total Products[3]	167.3	178.1	181.8	191.1	197.4	182.2	187.9	203.1	0.30	-0.30	-0.14	0.12
Total[4]	409.5	422.9	425.3	439.8	438.1	421.6	442.3	450.6	0.25	-0.33	-0.13	0.10
Total OECD												
Crude	978.5	991.4	994.8	987.9	958.7	886.0	938.7	966.4	-0.16	-0.13	0.11	0.38
Motor Gasoline	353.1	358.8	360.3	358.3	344.4	375.1	346.5	362.4	0.07	0.05	-0.15	-0.05
Middle Distillate	529.4	542.4	534.9	540.2	552.0	534.3	542.5	571.1	0.60	-0.15	-0.55	0.17
Residual Fuel Oil	139.9	138.0	136.4	142.0	142.1	145.5	137.5	153.7	-0.02	-0.01	-0.08	-0.05
Total Products[3]	1352.8	1381.9	1379.6	1398.0	1404.7	1404.2	1392.3	1461.2	1.14	-0.50	-1.05	0.28
Total[4]	2625.5	2668.4	2669.1	2684.2	2663.2	2586.6	2627.5	2733.6	1.14	-0.89	-0.91	0.76

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			
	Apr2007	May2007	Jun2007	Jul2007	Aug2007*	Aug2004	Aug2005	Aug2006	3Q2006	4Q2006	1Q2007	2Q2007
North America												
Crude	689.4	690.3	690.3	690.3	690.3	669.0	700.7	687.8	0.00	0.01	0.00	0.02
Products	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	0.00	0.00	0.00	0.00
Europe												
Crude	174.7	175.0	175.3	177.0	177.0	158.1	165.6	174.6	0.02	-0.01	-0.01	0.01
Products	241.1	239.9	238.9	248.1	248.1	208.2	239.3	237.3	-0.01	0.00	0.05	-0.01
Pacific												
Crude	385.1	385.0	385.0	385.0	385.0	386.7	383.5	381.5	0.01	0.03	0.01	0.00
Products	11.8	11.8	11.8	11.8	11.8	11.0	11.5	11.8	0.00	0.00	0.00	0.00
Total OECD												
Crude	1249.1	1250.3	1250.6	1252.2	1252.2	1213.7	1249.9	1243.9	0.03	0.04	0.00	0.03
Products	254.9	253.7	252.7	261.9	261.9	221.2	252.7	251.1	-0.01	0.00	0.05	-0.01
Total[4]	1505.0	1505.0	1504.2	1515.1	1515.1	1435.9	1503.6	1496.0	0.02	0.04	0.05	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 2006		End September 2006		End December 2006		End March 2007		End June 2007 [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	171.6	76	179.2	79	180.1	77	182.5	79	187.3	-
Mexico	42.1	22	47.0	24	42.3	21	40.5	20	43.8	-
United States[4]	1730.7	83	1787.0	86	1721.5	83	1678.8	81	1731.0	-
Total[4]	1966.5	77	2035.3	80	1966.0	77	1923.9	76	1984.2	78
Pacific										
Australia	38.9	42	35.3	37	34.8	37	34.3	37	38.3	-
Japan	627.2	132	649.1	123	630.8	117	615.3	133	617.9	-
Korea	155.4	76	160.5	69	151.8	65	156.1	74	158.3	-
New Zealand	6.8	48	7.0	46	7.1	46	7.7	49	7.7	-
Total	828.3	105	851.9	98	824.6	93	813.4	104	822.2	105
Europe[5]										
Austria	19.7	62	19.0	64	21.9	76	23.8	78	21.5	-
Belgium	30.4	54	30.5	53	30.2	48	28.2	51	28.7	-
Czech Republic	19.5	88	19.3	94	19.7	101	20.2	92	20.5	-
Denmark	20.4	110	21.2	113	18.5	97	18.3	96	17.1	-
Finland	30.5	139	26.8	118	26.6	114	29.5	141	26.3	-
France	188.7	98	187.5	96	192.4	98	177.0	96	185.7	-
Germany	283.1	103	281.9	104	282.8	117	290.5	120	285.6	-
Greece	34.9	84	36.7	76	36.8	79	33.6	85	35.6	-
Hungary	17.7	108	17.5	98	16.6	108	18.1	107	16.0	-
Ireland	12.6	71	13.9	70	12.5	62	12.9	69	11.1	-
Italy	126.0	75	134.1	78	133.1	79	133.9	80	133.0	-
Luxembourg	1.0	17	0.9	15	1.0	16	0.9	15	0.9	-
Netherlands	123.1	119	121.1	119	118.6	137	117.7	135	120.6	-
Norway	21.8	93	29.4	127	35.1	156	20.2	78	23.5	-
Poland	35.7	66	37.3	70	41.5	89	43.9	90	50.1	-
Portugal	24.7	80	23.8	83	24.0	77	23.7	78	24.7	-
Slovak Republic	7.7	90	7.4	95	7.5	101	7.0	83	6.9	-
Spain	129.2	82	133.9	84	134.8	83	129.3	81	130.5	-
Sweden	39.6	116	38.6	104	33.8	94	35.6	99	32.1	-
Switzerland	39.3	143	38.9	135	38.1	150	38.7	173	38.5	-
Turkey	51.6	78	53.7	83	55.5	88	56.8	94	57.4	-
United Kingdom	99.0	56	97.4	54	108.5	60	105.8	59	100.8	-
Total	1356.1	87	1370.7	88	1389.3	92	1365.7	92	1366.9	88
Total OECD	4151.0	85	4257.8	86	4179.9	84	4103.0	86	4173.3	85
DAYS OF IEA Net Imports[6]	-	116	-	118	-	122	-	121	-	121

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 2007 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. 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]*		
2Q2004	3974	1429	2546	81	29	52
3Q2004	4016	1435	2581	80	28	51
4Q2004	3998	1450	2547	79	29	50
1Q2005	4005	1462	2543	82	30	52
2Q2005	4117	1494	2623	84	30	53
3Q2005	4132	1494	2638	83	30	53
4Q2005	4083	1487	2597	81	30	52
1Q2006	4085	1487	2598	85	31	54
2Q2006	4151	1493	2658	85	31	54
3Q2006	4258	1495	2763	86	30	56
4Q2006	4180	1499	2681	84	30	54
1Q2007	4103	1503	2600	86	31	54
2Q2007	4173	1504	2669	85	31	55

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 2Q2007 (when latest forecasts are used).

Table 6

IEA Member Country Destinations of Selected Crude Streams[1]

(million barrels per day)

	2004	2005	2006	3Q06	4Q06	1Q07	2Q07	May 07	Jun 07	Jul 07	Year Earlier Jul 06	Year Earlier change
Saudi Light & Extra Light												
North America	0.55	0.46	0.60	0.62	0.60	0.68	0.73	0.80	0.57	0.70	0.62	0.08
Europe	1.03	0.90	0.78	0.72	0.78	0.72	0.64	0.55	0.68	0.69	0.75	-0.06
Pacific	1.24	1.31	1.32	1.29	1.28	1.17	1.20	1.10	1.22	1.26	1.28	-0.02
Saudi Medium												
North America	0.80	0.81	0.64	0.68	0.61	0.47	0.59	0.50	0.69	0.57	0.68	-0.10
Europe	0.11	0.16	0.14	0.14	0.10	0.05	0.10	0.18	0.05	0.01	0.13	-0.12
Pacific	0.23	0.26	0.35	0.35	0.32	0.34	0.31	0.28	0.30	0.22	0.36	-0.14
Saudi Heavy												
North America	0.22	0.17	0.21	0.21	0.19	0.15	0.05	0.09	0.04	0.04	0.18	-0.15
Europe	0.23	0.23	0.18	0.21	0.14	0.09	0.16	0.11	0.17	0.15	0.22	-0.07
Pacific	0.15	0.25	0.23	0.22	0.23	0.20	0.18	0.19	0.13	0.20	0.20	0.00
Iraqi Basrah Light[2]												
North America	0.71	0.60	0.52	0.60	0.46	0.52	0.39	0.37	0.48	0.57	0.60	-0.03
Europe	0.21	0.23	0.32	0.40	0.36	0.29	0.28	0.20	0.36	0.44	0.37	0.07
Pacific	0.12	0.06	0.08	0.10	0.07	0.11	0.18	0.17	0.21	0.08	0.03	0.05
Iraqi Kirkuk												
North America	0.02	-	0.00	0.01	-	-	-	-	-	-	-	-
Europe	0.08	0.05	0.01	0.04	0.01	0.04	-	-	-	0.04	0.06	-0.03
Pacific	-	-	-	-	-	-	-	-	-	-	-	-
Iranian Light												
North America	-	-	-	-	-	-	-	-	-	-	-	-
Europe	0.24	0.20	0.26	0.31	0.27	0.31	0.31	0.37	0.24	0.29	0.40	-0.11
Pacific	0.16	0.15	0.13	0.10	0.11	0.12	0.06	0.04	0.09	0.07	0.08	-0.01
Iranian Heavy[3]												
North America	-	-	-	-	-	-	-	-	-	-	-	-
Europe	0.57	0.63	0.58	0.67	0.60	0.55	0.62	0.63	0.58	0.56	0.76	-0.20
Pacific	0.65	0.62	0.56	0.51	0.61	0.66	0.63	0.55	0.71	0.64	0.52	0.12
Venezuelan Light & Medium												
North America	0.67	0.82	0.66	0.62	0.57	0.65	0.68	0.72	0.66	0.73	0.65	0.08
Europe	0.01	0.04	0.11	0.08	0.11	0.09	0.07	0.04	0.03	0.15	0.06	0.10
Pacific	-	-	-	-	-	-	-	-	-	-	-	-
Venezuelan 22 API and heavier												
North America	0.88	0.72	0.72	0.74	0.72	0.55	0.70	0.73	0.66	0.76	0.70	0.06
Europe	0.05	0.06	0.06	0.06	0.05	0.06	0.09	0.12	0.09	0.06	0.05	0.01
Pacific	-	-	-	-	-	-	-	-	-	-	-	-
Mexican Maya												
North America	1.36	1.27	1.24	1.30	1.15	1.19	1.18	1.29	1.09	1.34	1.33	0.01
Europe	0.16	0.17	0.16	0.16	0.15	0.14	0.11	0.01	0.20	0.19	0.17	0.02
Pacific	0.00	-	-	-	-	-	-	-	-	-	-	-
Mexican Isthmus												
North America	-	0.03	0.04	0.01	0.02	0.02	0.01	0.03	0.01	0.01	0.01	0.00
Europe	0.01	0.03	0.01	0.00	0.01	0.01	0.06	0.18	0.01	-	-	-
Pacific	0.00	-	-	-	-	-	-	-	-	-	-	-
Russian Urals												
North America	0.12	0.13	0.09	0.16	0.05	0.11	0.12	0.10	0.06	0.02	0.10	-0.08
Europe	1.86	1.77	1.68	1.66	1.54	1.85	1.97	1.73	2.13	2.07	1.62	0.45
Pacific	0.01	0.00	0.00	0.01	-	0.00	-	-	-	-	0.03	-
Nigerian Light[4]												
North America	0.80	0.90	0.79	0.78	0.72	0.96	0.77	0.84	0.75	0.75	0.84	-0.08
Europe	0.28	0.35	0.33	0.39	0.37	0.23	0.27	0.28	0.32	0.22	0.44	-0.22
Pacific	0.11	0.05	0.04	0.02	0.03	0.02	0.02	0.05	-	-	0.03	-
Nigerian Medium												
North America	0.23	0.17	0.17	0.16	0.17	0.24	0.15	0.08	0.22	0.14	0.22	-0.07
Europe	0.04	0.07	0.10	0.08	0.14	0.06	0.02	-	0.02	0.17	0.05	0.12
Pacific	0.01	0.01	0.00	0.01	-	0.02	-	-	-	-	-	-

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, Poland and the Slovak Republic.
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)

	2004	2005	2006	3Q2006	4Q2006	1Q2007	2Q2007	May-07	Jun-07	Jul-07	Year Earlier Jul-06	Year Earlier % change
Crude Oil												
North America	8431	8457	8156	8686	7937	8038	8151	8275	8125	8025	7763	3%
Europe	9478	9792	9771	10158	9770	9344	9760	9765	9568	9600	10286	-7%
Pacific	6659	6801	6813	6680	6674	6953	6340	6139	6419	6816	6624	3%
Total OECD	24569	25050	24740	25524	24381	24335	24252	24180	24112	24442	25388	-4%
LPG												
North America	24	18	14	12	28	16	14	16	12	18	16	9%
Europe	225	248	249	210	263	260	245	248	198	266	206	29%
Pacific	541	527	579	595	497	565	588	596	587	501	548	-8%
Total OECD	790	793	842	818	788	841	847	861	797	785	770	2%
Naphtha												
North America	99	115	62	64	96	33	31	34	25	54	47	16%
Europe	282	273	312	304	314	271	222	223	191	263	246	7%
Pacific	769	746	754	810	783	838	812	859	866	678	830	-18%
Total OECD	1150	1133	1128	1178	1193	1141	1066	1115	1082	995	1123	-11%
Gasoline[3]												
North America	794	1034	1144	1166	944	916	1362	1440	1394	1275	1120	14%
Europe	137	165	154	122	157	260	219	216	251	184	177	4%
Pacific	105	102	97	74	96	76	83	98	100	46	93	-50%
Total OECD	1035	1301	1395	1363	1197	1252	1663	1755	1745	1505	1391	8%
Jet & Kerosene												
North America	101	173	152	203	130	179	204	187	205	230	175	32%
Europe	293	375	375	398	407	328	349	434	241	370	331	12%
Pacific	77	66	71	43	76	49	35	44	31	35	43	-19%
Total OECD	471	614	598	644	612	557	588	665	477	634	549	15%
Gasoil/Diesel												
North America	123	143	172	181	116	130	142	122	147	181	159	14%
Europe	751	845	960	901	937	876	625	569	640	730	956	-24%
Pacific	74	79	81	65	81	83	97	95	117	87	64	36%
Total OECD	947	1067	1213	1147	1134	1090	864	786	904	997	1178	-15%
Heavy Fuel Oil												
North America	453	527	340	309	254	362	323	290	321	332	317	5%
Europe	397	491	478	419	502	457	420	378	441	381	486	-22%
Pacific	76	85	92	76	65	79	97	96	100	87	91	-5%
Total OECD	926	1102	910	804	821	898	840	764	862	800	894	-11%
Other Products												
North America	872	1024	1106	1298	991	1035	1210	1305	1169	1130	1279	-12%
Europe	676	781	898	924	916	841	838	814	818	857	948	-10%
Pacific	256	248	243	224	267	256	207	237	214	264	269	-2%
Total OECD	1805	2052	2247	2445	2174	2131	2254	2356	2202	2251	2497	-10%
Total Products												
North America	2466	3034	2991	3233	2559	2670	3286	3395	3273	3219	3113	3%
Europe	2759	3177	3426	3278	3496	3292	2918	2882	2781	3050	3351	-9%
Pacific	1898	1852	1918	1888	1865	1947	1918	2026	2015	1698	1938	-12%
Total OECD	7123	8063	8335	8399	7920	7909	8123	8302	8068	7967	8402	-5%
Total Oil												
North America	10897	11490	11147	11919	10496	10708	11438	11670	11398	11244	11590	-3%
Europe	12237	12969	13197	13436	13266	12636	12678	12647	12349	12650	13637	-7%
Pacific	8558	8654	8731	8568	8539	8900	8258	8165	8434	8514	8562	-1%
Total OECD	31692	33113	33075	33923	32301	32245	32374	32482	32180	32409	33790	-4%

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

OIL MARKET REPORT CONTACTS

Editorial Enquiries

Editor — Lawrence Eagles
Head, Oil Industry & Markets Division
(+33) 0*1 40 57 65 90
e-mail: lawrence.eagles@iea.org

Demand — Eduardo Lopez
(+33) 0*1 40 57 65 93
e-mail: eduardo.lopez@iea.org

Supply — David Fyfe
(+33) 0*1 40 57 65 94
e-mail: david.fyfe@iea.org

Prices/OECD Stocks — Julius Walker
(+33) 0*1 40 57 65 22
e-mail: julius.walker@iea.org

Refining — David Martin
(+33) 0*1 40 57 65 95
e-mail: david.martin@iea.org

Demand — Toril Ekeland Bosoni
(+33) 0*1 40 57 66 36
e-mail: toril.bosoni@iea.org

Statistics/Freight/Trade — James Ryder
(+33) 0*1 40 57 66 18
e-mail: james.ryder@iea.org

End-User Prices/Statistical Support — Miklós Bánkuti
(+33) 0*1 40 57 67 76
e-mail: miklos.bankuti@iea.org

Editorial Assistant — Anne Mayne
(+33) 0*1 40 57 65 96
e-mail: anne.mayne@iea.org

Fax: *(+33) 0*1 40 57 65 99/40 57 65 09*

* 0 only within France

Media Enquiries

Press Office — Gwyn Darling
(+33) 0*1 40 57 65 54
e-mail: ieapressoffice@iea.org

Subscription and Delivery Enquiries

Oil Market Report Subscriptions (Attn: Ms. Sandra Coleman)
International Energy Agency
BP 586-75726 PARIS Cedex 15, France

Tel. +33 (0) 1 40 57 65 57
Fax. +33 (0) 1 40 57 65 59
e-mail: sandra.coleman@iea.org

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 Report (MTOMR) Report and Annual Statistical Supplement* (current issue of the statistical supplement dated 10 August 2007), 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 (© 2007 Platts - a division of McGraw-Hill Inc.).

INTERNATIONAL ENERGY AGENCY/AGENCE INTERNATIONALE DE L'ENERGIE

OIL MARKET REPORT

A MONTHLY OIL MARKET AND STOCKS ASSESSMENT

www.oilmarketreport.org

INTERNATIONAL ENERGY AGENCY

AGENCE INTERNATIONALE DE L'ENERGIE

13 November 2007

HIGHLIGHTS

- **WTI hit a new record** above $98/bbl in early November, driven by lower crude stocks, constrained supplies and new geopolitical tensions. There are, however, strong indications that high prices are depressing demand, which, together with signs of higher output from Saudi Arabia, Iraq and Nigeria, have capped further price gains.

- **OECD industry stocks fell** by 29.5 mb in September, with Japanese crude stocks falling to their lowest level in at least 20 years. Total OECD forward inventory cover fell to 52.8 days, remaining close to the five-year average. Preliminary data for October suggest a further 21 mb draw in crude and product stocks in the US, Japan and EU-16.

- **Global demand for 4Q07** is revised down by 0.5 mb/d given high prices, weaker-than-expected data from the US and FSU, and delays to European heating oil restocking. Coupled with lower GDP growth, these revisions extend to the 2008 forecast, which has been adjusted down by 0.3 mb/d. World demand now averages 85.7 mb/d in 2007 (+1.2% over 2006) and 87.7 mb/d in 2008 (+2.3%).

- **World oil supply** saw a monthly gain of 1.4 mb/d in October, as non-OPEC outages receded and OPEC volumes increased. Recovery in China and Azerbaijan plus rising Russian output boosted non-OPEC supplies. Continued outages in the OECD see non-OPEC supply levelling off in November before resuming growth in December.

- **October OPEC crude supply** increased by 410 kb/d to 31.2 mb/d. Half the rise came from Angola and Iraq, where supplies could increase further in November. Signs of higher November supply from Saudi Arabia, Nigeria and others may be offset by UAE field maintenance. OPEC October spare capacity slipped to 2.46 mb/d.

- **Global refinery crude runs** are seen at 73.5 mb/d in 4Q, revised lower by 0.7 mb/d, on the back of weaker demand, increased offline capacity and higher planned maintenance in some regions. Refinery outages and product specification changes have severely tightened European distillate markets.

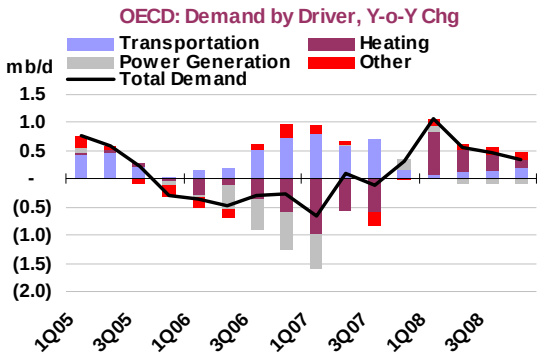
Next Issue: 14 December 2007

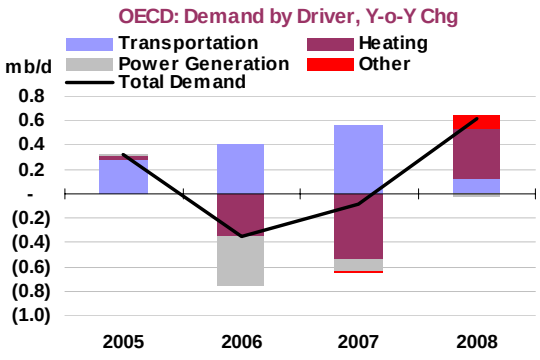
CONTENTS

$100 OIL – A TURNING POINT?

Does $100/bbl crude oil mark a significant turning point in the oil market? Psychologically, it is certainly significant. At this level, oil prices would be close to their 1980 'oil-crisis' highs in inflation-adjusted terms. Media attention is raising awareness of high prices, while consumers, feeling their pockets squeezed, have even resorted to protests in some OECD countries. Government officials have signalled their concern and are highlighting the need to conserve oil. China has raised domestic wholesale prices, while India, Malaysia and Chinese Taipei are looking at the need to reduce price subsidies. But will $100/barrel oil have a significant influence on the path of oil demand growth?

From a practical standpoint, hitting a round number may not confer any specific damage, but the cumulative $70 rise in price since 2002 is, we believe, having a cumulative effect. While short-term price effects are generally measured relative to sustained annual price increases, the recent dramatic price rise is having a 'short-term' shock effect, at the same time as consumers appear to be adapting behaviour to deal with steady annual price increases. In *Forecasting OECD Demand*, we look at the components of OECD demand growth next year. Superficially, our 2008 OECD demand growth of 610 kb/d looks strong relative to the flat demand structure of the past three years. However, breaking OECD product demand down by driver highlights that the majority of our forecast growth is due to the assumption of a return to 'normal' weather – i.e. a rebound in heating fuel demand. Indeed, transportation demand growth in the OECD is minimal, reflecting the effect of high prices, and stands in stark contrast to the steady growth seen in the past two years.





As with all forecasts, there are risks. Weather-related demand could clearly move either side of 'normal'. Balancing that, our transport demand projections may be too low. While there are clear signs that the rise in prices since the second quarter this year has pressured gasoline and diesel demand growth in the OECD, it is too soon to believe that significant structural changes have taken place (such as a more fuel-efficient car fleet) to make this lower level of demand permanent. Therefore, higher prices have affected OECD end-user behaviour, but this change in behaviour may not be permanent.

But the mature economies are only supporting actors in our global demand growth projections. The bulk of 2008 demand growth remains within non-OECD countries, where regional growth patterns are expected to be similar to the past two years. The only outlier is the FSU, where preliminary 2007 data show a demand contraction – an outcome that goes against the trend of strong economic growth, but could also reflect efficiency improvements or data quality issues. Overall, the assumption of strong economic growth in key non-OECD countries continues to drive accelerating oil demand growth.

High prices may affect non-OECD forecasts – particularly if the $100 benchmark results in a reduction of subsidies in the coming months – but the effects on market balances may not be that large. Evidence of falling product stocks in China suggests that apparent demand calculations in recent months have been artificially depressed, meaning that the recent rise in domestic prices could allow demand to rebound.

The underlying path of economic growth is also far stronger than the price effect, so it is unlikely that these higher prices will materially alter the demand path in China. In the other key growth area, the Middle East, rising oil revenues mean that subsidies can be more easily financed and are unlikely to be removed. Together, these two regions in 2007 account for some two-thirds of global oil demand growth. Elsewhere, price impacts following the removal of subsidies could be more significant - but as always, oil demand will remain subservient to the main driving force: economic growth. Risks to oil demand growth are therefore concentrated more in the potential for spillover economic weakness from the housing sector and the fall-out from the subprime crisis than in high oil prices.

Whether high oil prices will put pressure upon economic growth is a much harder question to answer. Oil prices are but one of many factors determining the path of economic growth. However, its importance is increasing. In the US for example, the share of household expenditures on transportation fuels has seemingly risen to their highest level since the mid 1980s. And it is a reasonable assumption that if high oil prices are affecting behaviour, then high prices are having an economic impact – hitting consumer spending and eating into corporate profitability at the margin. The effect may not be large, but it could be more significant if other areas of economic weakness emerge.

As to whether $100/barrel is sustainable; it is something that is hard to answer in the short term. There are certainly a number of factors that could push prices lower: mild weather, higher OPEC supply, improved refinery operability and weaker economic growth. However, these would have to push against a tightening global market balance.

The findings of the July *Medium-Term Oil Market Report* and the latest *World Energy Outlook* suggest that the strong latent demand growth from developing countries is likely to meet supply-side constraints over the medium term. In other words, there would have to be a particularly strong downturn in the economic cycle to overwhelm the ongoing upswing in the commodity cycle. Ultimately, whether $100 oil proves a turning point in consumer and government thinking towards energy efficiency is more significant than its direct impact on oil demand growth.

DEMAND

Summary

- **Global oil product demand** has been revised down by roughly 160 kb/d in 2007 and 300 kb/d in 2008. The changes were related to OECD revisions (in North America and Europe), notably in 4Q07, given high-price effects on gasoline demand and 'other products' in the US, and delayed heating oil tank-filling in Europe. These changes were further compounded by adjustments in the FSU. World demand is now expected to average 85.7 mb/d in 2007 (+1.2% over 2006) and 87.7 mb/d in 2008 (+2.3%).

- **OECD oil product demand** has been lowered in both 2007 and 2008 (-110 kb/d and -250 kb/d, respectively). Stronger-than-expected September demand in the Pacific, driven by Japan's power generation needs as a result of a heat wave, failed to offset a weaker outlook for both North America and Europe. Data revisions and the reassessment of economic conditions, prices and interfuel substitution in favour of natural gas weighed down on the oil demand forecasts for both areas. The IMF's economic outlook for the US and several key European countries turned out to be weaker than anticipated, particularly in 2008. Despite strong 3Q07 GDP growth, the downside risks for the US economy are significant, as evidenced by recent economic data and by the Federal Reserve's second interest rate cut since September. Moreover, the effects of this year's price rise are seemingly already contributing to slowing down transportation fuels demand, notably in the US. Finally, the prospects for natural gas substitution, particularly in Europe and the US, have been slightly reassessed. Overall, OECD demand is now expected to decline to 49.2 mb/d in 2007 (-0.2% year-on-year), but it is nonetheless seen increasing to 49.8 mb/d in 2008 (+1.2%).

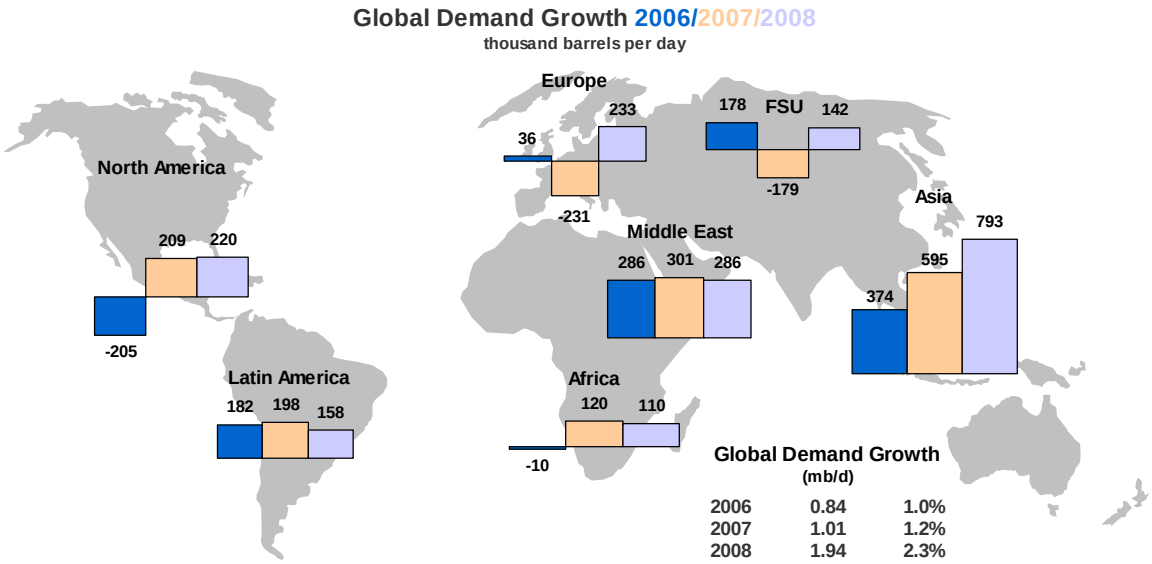
Global Oil Demand (2006-2008)

(million barrels per day)

	1Q06	2Q06	3Q06	4Q06	2006	1Q07	2Q07	3Q07	4Q07	2007	1Q08	2Q08	3Q08	4Q08	2008
Africa	3.0	3.0	2.9	2.9	2.9	3.1	3.1	3.0	3.1	3.1	3.2	3.2	3.1	3.2	3.2
Americas	30.4	30.4	30.9	30.7	30.6	31.0	30.9	31.1	31.0	31.0	31.4	31.3	31.5	31.4	31.4
Asia/Pacific	25.2	24.1	23.7	24.8	24.4	25.3	24.7	24.4	25.8	25.0	26.3	25.4	25.1	26.5	25.8
Europe	16.8	16.0	16.3	16.5	16.4	16.1	15.7	16.2	16.5	16.1	16.5	16.0	16.4	16.6	16.4
FSU	4.1	3.9	4.1	4.4	4.1	3.9	3.7	3.9	4.3	3.9	4.1	3.8	4.0	4.4	4.1
Middle East	6.2	6.2	6.5	6.3	6.3	6.4	6.6	6.8	6.5	6.6	6.7	6.8	7.1	6.8	6.9
World	**85.5**	**83.5**	**84.3**	**85.7**	**84.7**	**85.8**	**84.7**	**85.3**	**87.1**	**85.7**	**88.2**	**86.5**	**87.2**	**88.9**	**87.7**
Annual Chg (%)	0.5	0.8	1.1	1.5	1.0	0.4	1.5	1.2	1.7	1.2	2.8	2.1	2.1	2.0	2.3
Annual Chg (mb/d)	0.5	0.7	0.9	1.3	0.8	0.4	1.2	1.0	1.5	1.0	2.4	1.8	1.8	1.8	1.9
Changes from last month's report (mb/d)	0.06	0.07	0.05	0.07	0.06	0.04	0.02	-0.19	-0.50	-0.16	-0.14	-0.26	-0.29	-0.52	-0.30

- **Non-OECD oil product demand** has been adjusted downwards in both 2007 and 2008 by roughly 50 kb/d on average, largely due to changes in FSU estimates. Both supply and net exports, which serve as the basis for the region's apparent demand calculation, were revised. Overall, non-OECD demand is seen averaging 36.5 mb/d in 2007 (+3.1% on an annual basis) and 37.9 mb/d in 2008 (+3.6%). This forecast assumes that China and the Middle East, which together account for over half of worldwide oil demand growth, will remain both largely untouched by the US subprime woes and to a large extent insulated from international oil prices, given the prevalence of subsidies on end-user prices.

- **The high cost of oil product subsidies** across much of the developing world, particularly in Asia, is becoming a very sensitive issue as international oil prices continue to rise to near-record levels. But despite the growing financial burden that subsidies imply, it seems unlikely at this point that the largest Asian countries will reduce or even abolish subsidies, given concerns that such a move could prompt a consumer backlash. China's 9% adjustment to wholesale transportation fuel prices (which translates into an 8% increase in retail prices) attempts to address the financial pressures on both state-owned oil companies and 'teapot' refineries and to tackle oil product shortages. Chinese demand, meanwhile, is expected to remain strong, driven by continued economic growth.



OECD

According to preliminary data, total OECD inland deliveries (a measure of oil products supplied by refineries, pipelines and terminals) grew by 0.1% in September on a yearly basis. The strong rebound in oil product demand observed in the Pacific (+7.3% year-on-year) offset demand weakness in both Europe (-1.9%) and North America (-0.8%).

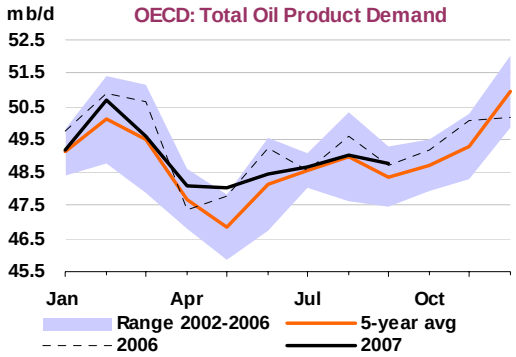
OECD Demand based on Adjusted Preliminary Submissions - September 2007
(million barrels per day)

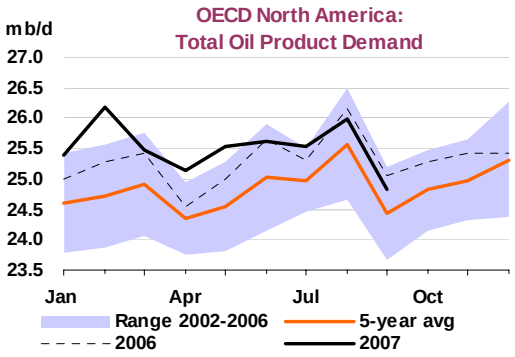
	Gasoline		Jet/Kerosene		Diesel		Other Gasoil		RFO		Other		Total Products	
	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa
OECD North America*	**10.73**	**0.3**	**1.84**	**-0.9**	**4.10**	**7.3**	**1.03**	**-21.5**	**0.99**	**-3.3**	**6.14**	**-2.99**	**24.83**	**-0.8**
US50	9.24	0.1	1.62	-0.9	3.59	6.6	0.55	-28.8	0.54	1.0	4.81	-3.9	20.36	-1.0
Canada	0.71	1.2	0.12	-6.3	0.20	3.4	0.33	-3.3	0.12	-7.7	0.74	4.1	2.22	0.6
Mexico	0.71	1.7	0.06	10.6	0.27	0.3	0.12	0.3	0.23	-11.4	0.53	-4.3	1.92	-1.8
OECD Europe	**2.55**	**-3.1**	**1.41**	**2.7**	**4.39**	**2.7**	**1.94**	**-18.3**	**1.74**	**-1.8**	**3.67**	**2.7**	**15.69**	**-1.9**
Germany	0.50	-6.9	0.21	4.2	0.70	4.6	0.44	-43.2	0.16	3.8	0.61	4.1	2.62	-10.4
United Kingdom	0.44	4.2	0.38	5.4	0.43	0.3	0.16	-10.5	0.08	14.8	0.37	3.5	1.85	2.4
France	0.22	-8.7	0.16	2.6	0.64	-3.4	0.31	-17.2	0.11	-1.6	0.40	-10.5	1.84	-7.7
Italy	0.30	-5.3	0.10	8.2	0.60	6.3	0.08	-33.0	0.29	4.3	0.37	-3.4	1.74	-0.7
Spain	0.16	-2.6	0.14	6.4	0.55	7.4	0.21	3.0	0.22	-5.2	0.37	5.0	1.65	3.3
OECD Pacific	**1.64**	**6.9**	**0.86**	**27.9**	**1.24**	**1.8**	**0.49**	**0.7**	**0.96**	**4.8**	**3.04**	**7.0**	**8.22**	**7.3**
Japan	1.07	7.7	0.57	39.7	0.62	3.9	0.37	-3.7	0.60	25.4	1.86	14.2	5.10	13.3
Korea	0.18	7.6	0.16	17.3	0.27	-5.9	0.12	17.2	0.33	-19.3	0.96	-3.9	2.03	-3.9
Australia	0.34	4.7	0.10	1.5	0.30	5.7	0.00	6.2	0.02	-8.5	0.19	2.5	0.95	3.9
OECD Total	**14.92**	**0.4**	**4.11**	**5.3**	**9.73**	**4.5**	**3.46**	**-17.1**	**3.68**	**-0.6**	**12.84**	**0.8**	**48.75**	**0.1**

* Including US territories

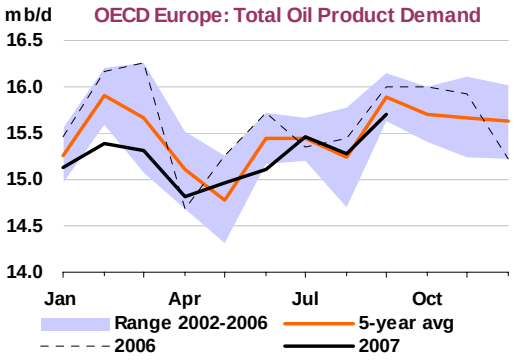
As detailed below, the strong rebound in OECD Pacific demand was mostly driven by Japan, which struggled to meet soaring electricity demand amid ongoing nuclear outages. Thus, the deliveries of oil products that can be used in power generation soared in the region: residual fuel oil surged by 4.8% on an annual basis and 'other products' (which include direct crude) by 7.0%.

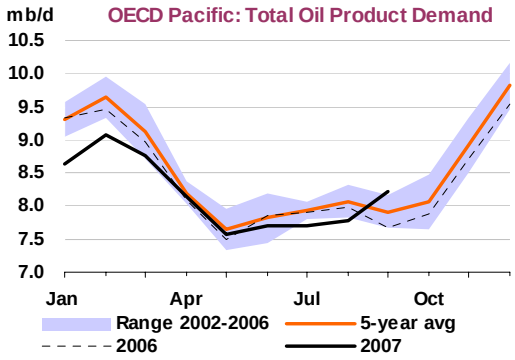
Meanwhile, the weakness in OECD Europe demand continued to be related to stubbornly lower-than-average deliveries of heating oil in Germany and France. In both countries, end-users once again delayed the refilling of their tanks. Consequently, Europe's September heating oil deliveries tumbled by 18.3% year-on-year. In OECD North America, meanwhile, demand contracted by 0.8% as a result of weak deliveries across all products bar LPG, gasoline and diesel, notably in the United States.





OECD demand in both 2007 and 2008 has been adjusted down, as a result of data revisions and a reassessment of economic conditions, prices and interfuel substitution in favour of natural gas. Although this report had attempted to pre-empt the revisions to the IMF economic outlook (based on median forecasts from Consensus Economics), the Fund's assessment of several key OECD countries turned out to be weaker, thus weighing on demand. The effects of this year's price rise, which may prevail during the winter months and which is already contributing to slow down transportation fuels demand, notably in the US, have also been reappraised. Finally, the prospects for natural gas substitution, particularly in Europe and the US, have been slightly reassessed. As such, OECD demand is forecast to reach 49.2 mb/d in 2007 (-0.2%) and 49.8 mb/d in 2008 (+1.2%). Moreover, seeking to improve transparency and market understanding, we are presenting in detail the assumptions behind our OECD demand forecast (see *Forecasting OECD Demand* below).





Total OECD Demand by Product

(million barrels per day)

	2006	2007	3Q06	4Q06	1Q07	2Q07	Jun 07	Jul 07	Aug 07*	Latest month vs. Jul 07	Latest month vs. Aug 06
LPG & Ethane	4.75	4.83	4.47	4.80	5.25	4.64	4.44	4.51	4.40	-0.11	-0.15
Naphtha	3.17	3.23	3.14	3.37	3.38	3.06	2.97	3.17	3.17	0.00	-0.01
Motor Gasoline	14.86	14.94	15.24	14.92	14.47	15.09	15.26	15.47	15.55	0.08	0.11
Jet & Kerosene	4.16	4.13	3.96	4.24	4.35	3.89	3.90	3.96	4.00	0.04	-0.03
Gas/Diesel Oil	13.25	13.20	12.92	13.61	13.54	12.61	12.78	12.63	12.81	0.18	-0.10
Residual Fuel Oil	4.04	3.97	3.82	3.88	4.21	3.88	3.93	3.75	3.87	0.12	-0.02
Other Products	5.08	4.94	5.41	4.99	4.58	5.02	5.16	5.19	5.25	0.06	-0.33
Total Products	**49.32**	**49.23**	**48.95**	**49.80**	**49.77**	**48.20**	**48.44**	**48.68**	**49.05**	**0.36**	**-0.52**

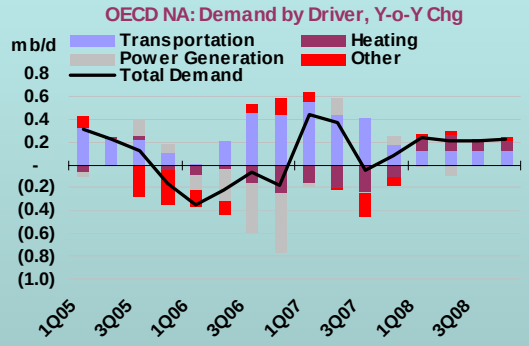
* Latest official OECD submissions (MOS)

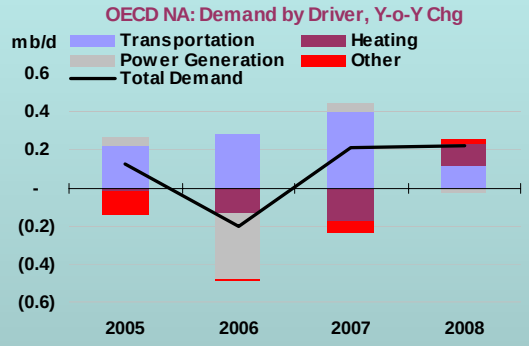
Forecasting OECD Demand

There is a lively debate regarding short-term forecasting of OECD demand. Indeed, oil product consumption in the region is driven by several key factors that interact in complex ways. As a result, the OECD 2008 demand outlook varies significantly across forecasters, and this has a significant impact with respect to the prognosis of next year's global demand (by contrast, the assessment of non-OECD demand is broadly shared by most observers).

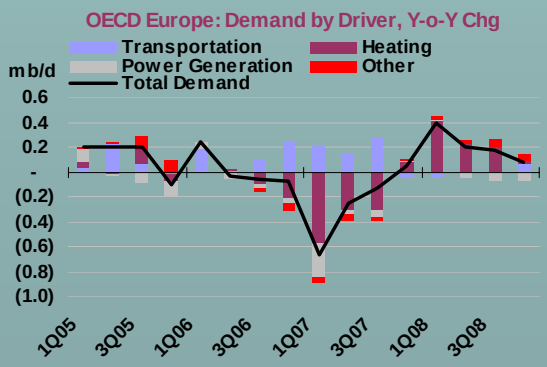
This report's OECD forecast has tended to be on the high side of the scale, prompting some analysts to suggest that it is unsubstantiated. Seeking to clarify the basis of our outlook, we have broken down the main drivers that influence demand growth. This segmentation provides some insights on how oil demand in the OECD has evolved and sets the basis for our prognosis. It is useful to consider the regions, before looking at aggregate figures. All charts below refer to year-on-year demand growth, in mb/d.

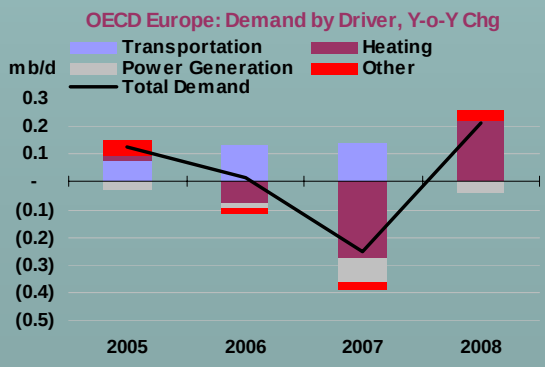
In **North America**, despite strong transportation demand, total oil demand fell in 2006 because of 1) strong interfuel substitution (IFS) away from oil in power generation (arguably because of both competitive natural gas prices and recovery from the devastating hurricanes of late 2005) and 2) mild weather, which reduced heating needs. In 2007, actual data suggest that some of the IFS will be reversed, but continued mild weather early in the year will further weigh down on heating needs; as such, growth will exclusively be driven by transportation. For 2008, this report makes two key assumptions: first, that the combination of a moderate economic slowdown and high retail prices will significantly curb transportation growth; second, that the forthcoming winter will be normal, thus bringing back some of the lost demand for heating fuels. Overall, demand is expected to increase by about 220 kb/d in 2008 (+0.9% on a yearly basis).





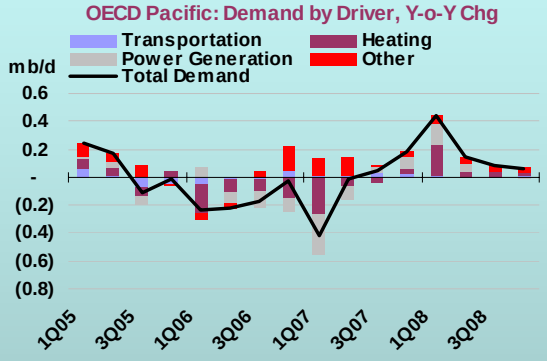
In **Europe**, IFS away from oil in power generation and limited heating needs because of mild weather kept demand flat in 2006. In 2007, preliminary data indicate that IFS will continue, reflecting the structural penetration of natural gas. The mild weather effect will also prevail (evidenced by German consumers' reluctance to fill their heating oil tanks, although this is also arguably related to price expectations). In 2008, this report assumes normal weather and hence a rebound in heating needs. Crucially, transportation demand is kept essentially unchanged to account for price effects and some economic slowdown in the largest European countries. This forecast may be overstating the weather rebound, but it should be noted that it may also be understating transportation requirements. Overall, demand is seen increasing by roughly 210 kb/d in 2008 (+1.4%).

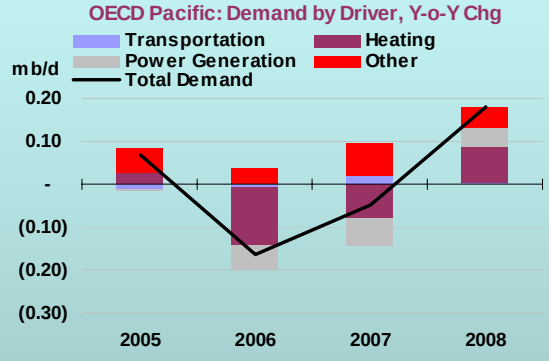




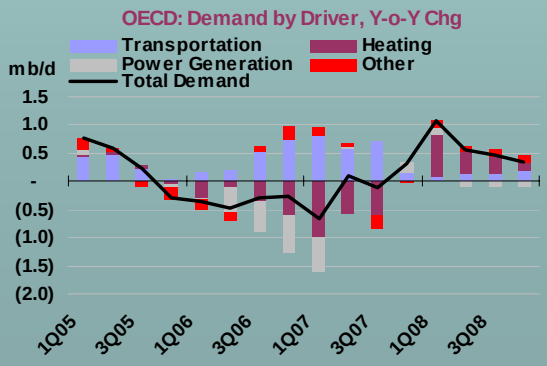
Forecasting OECD Demand (continued)

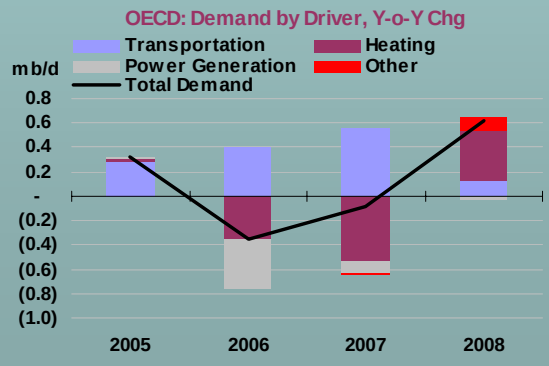
Finally, in the **Pacific**, two-thirds of the sharp fall in 2006 demand were entirely due to mild weather conditions, which depressed heating fuels use, while the rest was due to IFS away from oil in power generation. Both factors will continue to weigh down on 2007 demand, according to preliminary submissions, although the nuclear outages that have crippled Japan's utilities over the year (particularly in the third quarter) have led to partial reversal of IFS in favour of oil products (mostly residual and direct crude) for power generation on the back of very strong electricity demand. In 2008, IFS back into oil is expected to accelerate significantly, since most of the nuclear plants that have been idled will remain offline at least until the third quarter. In addition, as with the rest of the OECD, this report assumes that winter temperatures will be normal, bringing back heating demand. As for transportation growth, it is seen to remain marginal, as Japan's structural decline will largely offset growth elsewhere. Overall, demand should rise by some 180 kb/d in 2008 (+2.2%).





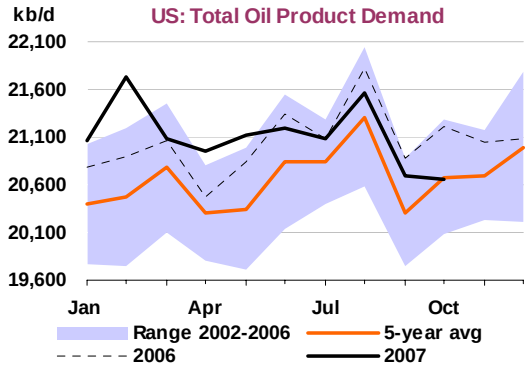
In sum, the fall in **OECD demand** in both 2006 and 2007 is primarily due to mild weather conditions, and IFS, despite strong demand for transportation fuels. The first factor curbed demand for heating fuels, while the second reduced the use of oil products in power generation. In 2008, roughly two-thirds (67%) of the OECD's 610-kb/d expected demand increase will be related to normal weather conditions, while 20% will be due to transportation needs (a very conservative assumption) and 13% will be traced to IFS in favour of oil.

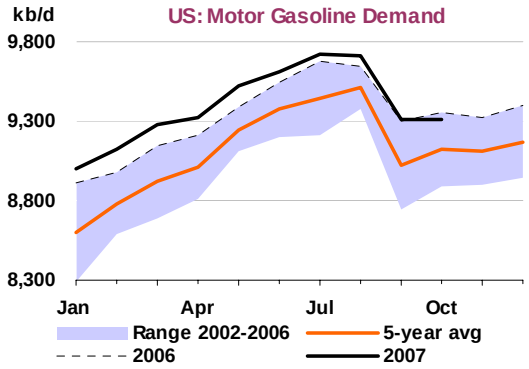




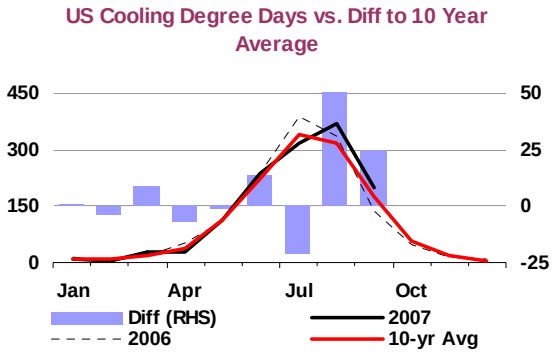
North America

Inland deliveries in the continental **United States** – a proxy of oil product demand – fell by 1.0% year-on-year in September, according to adjusted preliminary data. More significantly, this trend appeared to be more pronounced in October (-2.7%), according to weekly data (prone to revisions, though, as monthly figures are released). In both months, deliveries of naphtha, gasoline, distillates (diesel and other gasoil), residual fuel oil and 'other products' were weaker than previously expected. Overall, this has led to a 300 kb/d downward revision in the 4Q07 forecast.



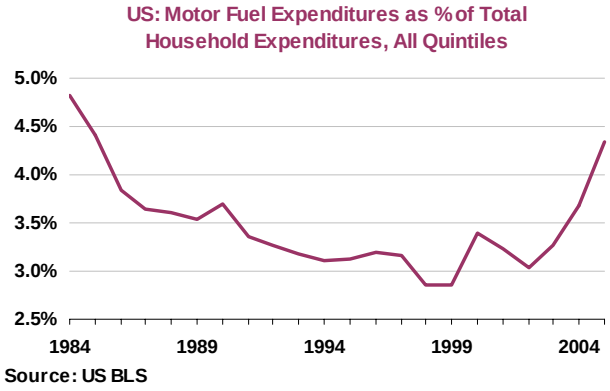


This weakness is arguably related to both economic conditions and the effects of high oil prices. Tellingly, gasoline growth slowed down sharply in September (to +0.1% year-on-year), despite relatively warm weather (the number of cooling-degree days in that month was 25 higher than the 10-year average), before contracting in October (-0.5%) for the first time since late 2005. If confirmed by monthly data, this may suggest that US motorists are finally starting to adjust their behaviour to perceived worsening conditions – given the continued uncertainties regarding the economic outlook and the sharp rise in oil prices.



The questions regarding the health of the US economy have indeed become pressing, not the least because of contradictory data. On the one hand, over the past few weeks several major banks have announced massive losses as a result of subprime turmoil, leading to renewed stock exchange volatility, a further slide of the dollar vis-à-vis other currencies and concerns about the soundness of the country's financial system. On the other hand, preliminary data indicate that nominal GDP rose by almost 4% on a yearly basis in 3Q07. Nevertheless, US policy makers continue to believe that the risks to economic growth far outweigh inflationary risks (some observers attribute the strong GDP growth in the second and third quarters to a temporary rise in military spending). Thus, the Federal Reserve slashed its federal funds rate by 25 basis points in late October – following September's 50-basis-points cut.

Most recent economic data – stalling permits and housing starts, falling home prices, the levelling out of new durable goods orders, the pick-up in business inventories, lower consumer confidence and poor third-quarter corporate earnings, to name only a few – seem to confirm that economic activity is indeed slowing down. In other words, both consumer spending and private investment could be already contracting. More worryingly, however, inflationary pressures may be building up, fuelled by rising oil prices and the falling dollar (although the latter is supporting the rise in US exports). Eventually, the retail prices of transportation fuels – which currently lag behind crude prices – will also rise.

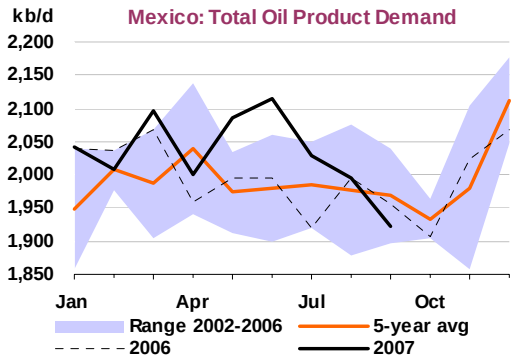


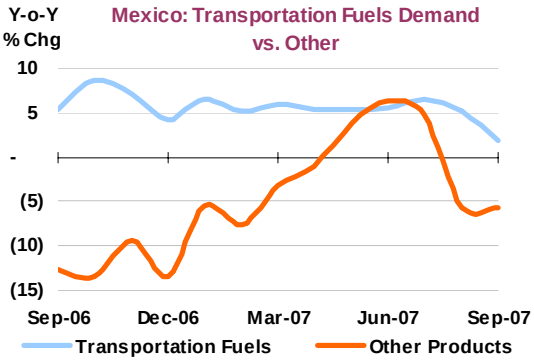
Source: US BLS

Will the US economic woes herald a sharp contraction in oil demand? Much will depend on whether the country escapes recession and whether oil prices remain at their current levels in the medium term. The housing slowdown will probably induce a marked demand decline in related energy-intensive industries (lumber, construction and shipping).

Meanwhile, the resilience of household demand – epitomised by gasoline – will arguably be related to the weight of fuel expenses relative to average household spending, which is probably approaching levels last seen in the early 1980s (according to the latest Consumer Expenditure Survey from the US Bureau of Labor Statistics (BLS), this share averaged about 4.5% in 2005). However, the country's suburban sprawl and the relatively limited availability of public transportation outside big cities will probably limit the reduction of non-discretionary driving. On the basis of these considerations, US50 total oil product demand is expected to reach 20.8 mb/d in 2007 (+0.4% over 2006), and 20.9 mb/d in 2008 (+0.8% versus 2007).

Preliminary data for September suggest that the stalling trend in **Mexican** oil demand observed in August continued: deliveries fell by 1.8% year-on-year. This weakness was partly due to lower fuel oil demand (-11.4%), as well to a marked slowdown in the pace of gasoline and diesel growth. Indeed, gasoline deliveries expanded by only 1.7% on a yearly basis (compared with an average of about 6% over the past two years), while diesel deliveries grew by a paltry 0.3%. This may indicate that Mexico's manufacturing industry, which is highly dependent on the health of the US economy, could be slowing down. Nevertheless, such conclusion may be premature, since other sectors, such the airline industry, are showing greater resilience: jet fuel/kerosene demand rose by 10.6% in September.





OECD North America Demand by Product
(million barrels per day)

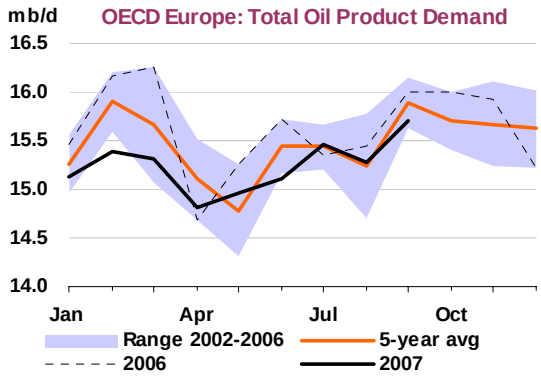
	2006	2007	3Q06	4Q06	1Q07	2Q07	Jun 07	Jul 07	Aug 07*	Latest month vs. Jul 07	Latest month vs. Aug 06
LPG & Ethane	2.85	2.95	2.72	2.92	3.24	2.75	2.72	2.71	2.69	-0.02	-0.04
Naphtha	0.44	0.43	0.46	0.50	0.42	0.45	0.46	0.46	0.40	-0.06	-0.06
Motor Gasoline	10.72	10.83	10.97	10.78	10.53	10.94	11.10	11.21	11.22	0.01	0.11
Jet & Kerosene	1.91	1.89	1.93	1.88	1.88	1.89	1.92	1.93	2.00	0.07	0.03
Gas/Diesel Oil	5.17	5.26	5.07	5.28	5.48	5.13	5.15	4.98	5.26	0.28	0.06
Residual Fuel Oil	1.20	1.24	1.16	1.09	1.38	1.26	1.30	1.18	1.26	0.07	-0.02
Other Products	2.99	2.90	3.19	2.92	2.74	3.02	2.98	3.06	3.16	0.10	-0.22
Total Products	**25.29**	**25.50**	**25.50**	**25.37**	**25.67**	**25.43**	**25.63**	**25.53**	**25.99**	**0.46**	**-0.15**

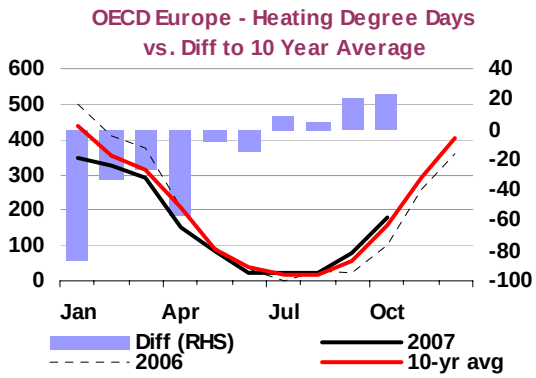
* Latest official OECD submissions (MOS)

Europe

Continued weakness in heating oil deliveries in main consuming countries, slightly lower GDP assumptions and persistent high fuel prices led again to a downward adjustment to our assessment of oil consumption in OECD Europe. Demand in 3Q07 is now seen at 15.5 mb/d for the region as a whole, a contraction of 0.8% from the same quarter last year and 76 kb/d lower than in last month's report. As a result, total demand is expected to average 15.4 mb/d in 2007 (-1.6% versus 2006), but it should rebound to 15.6 mb/d in 2008 (+1.4%).

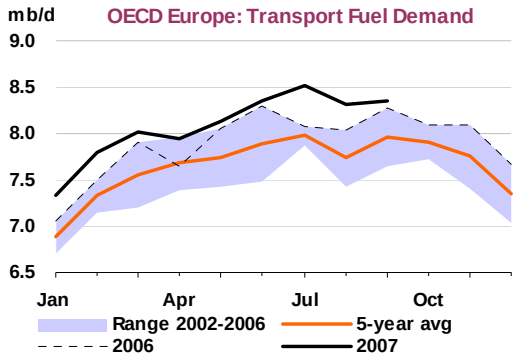
In September, total oil product demand in OECD Europe reached 15.7 mb/d, an increase of 2.3% (+423 kb/d) from August, but 1.9%, or 300 kb/d, lower than in the same month last year. Preliminary data for main consuming countries came in weaker than expected again, leading to a downward adjustment from our previous forecast of close to 300 kb/d for the month. Deliveries in **France**, **Germany** and

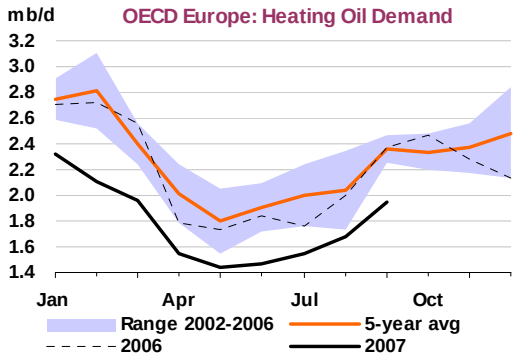




Switzerland were surprisingly low. The main weakness continued to be concentrated in heating oil, which for Europe as a whole has been cut by 288 kb/d for the month.

Our demand assessment for August remains largely unchanged following the submission of official monthly data. Lower estimates for **Italy** and the **UK** were offset by upward revisions in **France**, **Germany** and **Spain**. Revisions to **Turkey** in 2006 raised the baseline by 52 kb/d, limiting to an extent the downwards revisions to demand overall. The inclusion of the latest IMF world economic outlook did not significantly change our demand forecast for OECD Europe, as most of the changes had already been pre-empted with the inclusion of the median forecasts from Consensus Economics last month. There were only minor downward revisions to the prognosis in a few countries.

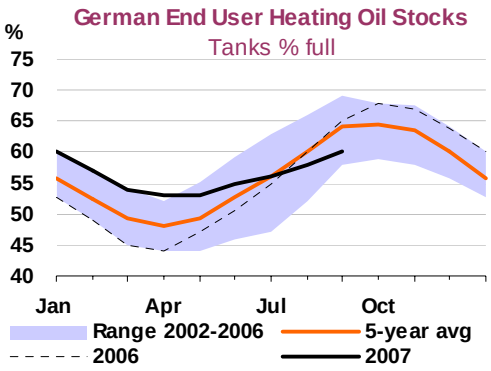


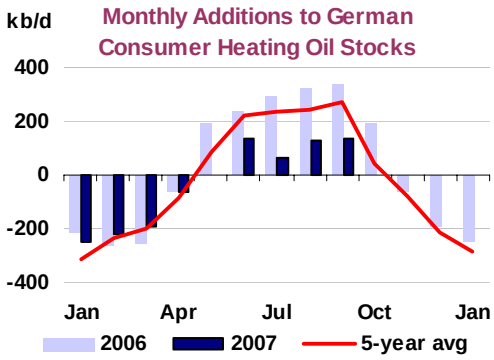


Demand for transportation fuels, including gasoline, diesel and jet kerosene, has been surprisingly robust given high prices, although consumers are becoming increasingly concerned as prices continue to rise. Although the weak dollar has partly shielded European consumers from the effects of the sharp rise in international oil prices, end-user prices for transport diesel reached record highs in October (in Euro terms) in both **France** and **Germany**. As a result, there have been some end-user protests. In France, fishermen went on strike in early November to protest against the rising cost of diesel and called for government subsidies. Similarly, taxi drivers, farmers, road transport firms and private ambulance companies have also requested lower fuel taxes or direct government handouts. Nevertheless, transportation fuels demand continues to show some annual growth. In 2007, transportation fuels demand is expected to be 1.8% higher than in 2006, with growth in all main consuming countries bar the UK (France: +0.5%; Germany: +1.5%; Spain: +3.5%; Italy: +0.3%; Turkey: +6.8%; Ireland: +6.7%; and the UK: -0.4%).

As has been previously noted, the weakness of European demand in 2007 is concentrated in heating oil (-12.3% year-on-year), and to a lesser extent in residual fuel oil (-4.6%), which is structurally declining across most of the continent. Heating oil demand continues to lag levels of a year ago and is poised to be some 12% lower in 2007, compared with last year (Germany: -31.2%; France: -9.3%: Italy: -13.4%; and Switzerland: -26.6%). As discussed extensively in previous reports, this is mostly due to a tax increase from

January 2007 in Germany, which induced higher-than-normal stock building in 2006, and to an exceptionally warm 2006/2007 winter, which depressed demand and has resulted in lower stock filling during all of this year. Although **German** consumer stocks had already fallen below levels of a year ago by the end of August, September's filling rate was also lower than normal, most likely as a result of high prices. End-users added only 2% of capacity to tanks in September (a monthly increase of 134 kb/d), thus reaching 60% of capacity (compared with 65% last year). This is 140 kb/d lower than the five-year average filling rate and the lowest addition to storage for September since 1995. As a result, stocks are now at 121 mb, or 10 mb





less than in the same month last year. Looking ahead to October and November (the start of the heating season), demand for heating oil will have to pick up as consumers have less opportunity to draw down inventories (assuming, of course, normal weather conditions). Consumers normally draw stocks from November until March, before starting to fill their tanks again in April. This pattern, however, is becoming increasingly sensitive to actual prices – and price expectations – and is thus becoming less predictable than in previous years. In France, the government recently doubled the *prime de la cuve* (financial aid for heating oil purchases for low-income families). The measure is expected to cost Euro 70 million (Euro 150 per household) and limit some of the demand impact of high prices.

OECD Europe Demand by Product
(million barrels per day)

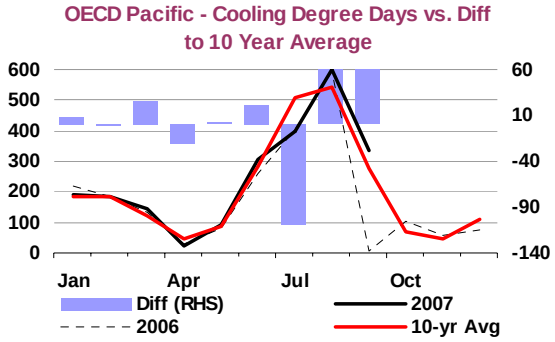
	2006	2007	3Q06	4Q06	1Q07	2Q07	Jun 07	Jul 07	Aug 07*	Latest month vs. Jul 07	Latest month vs. Aug 06
LPG & Ethane	0.98	0.96	0.85	0.94	1.03	0.97	0.85	0.93	0.82	-0.11	-0.07
Naphtha	1.12	1.12	1.08	1.14	1.21	1.04	1.01	1.08	1.11	0.03	0.00
Motor Gasoline	2.57	2.53	2.66	2.55	2.41	2.61	2.63	2.66	2.67	0.00	0.01
Jet & Kerosene	1.27	1.29	1.36	1.26	1.22	1.27	1.33	1.39	1.39	0.00	0.00
Gas/Diesel Oil	6.25	6.15	6.16	6.44	6.21	5.74	5.86	6.00	5.94	-0.06	-0.06
Residual Fuel Oil	1.86	1.78	1.77	1.81	1.84	1.73	1.74	1.71	1.70	-0.02	-0.04
Other Products	1.57	1.55	1.73	1.57	1.35	1.59	1.71	1.68	1.65	-0.02	-0.03
Total Products	**15.62**	**15.37**	**15.60**	**15.72**	**15.28**	**14.96**	**15.12**	**15.46**	**15.27**	**-0.18**	**-0.18**

* Latest official OECD submissions (MOS)

Residual fuel oil demand, meanwhile, has also been revised down in 3Q07, notably in **Italy**, which until this year was Europe's largest fuel oil consumer (surpassed by the Netherlands in 2007 due to bunker demand). Final Italian data for August point to a lower power demand than previously expected, leading to an adjustment of -109 kb/d for that month (fuel oil demand declined by 11.9% on a yearly basis). Regarding September, inland delivery data for fuel oil were very weak, but given that these data are prone to revisions we have followed the submitted JODI demand data which showed a small increase year-on-year. Nevertheless, the 2008 residual fuel oil forecast has been lowered by an average 30 kb/d to reflect ongoing fuel oil substitution in power generation. Italian fuel oil demand is now seen contracting by 8.9% in 2008, compared with an 11.7% decline in 2007.

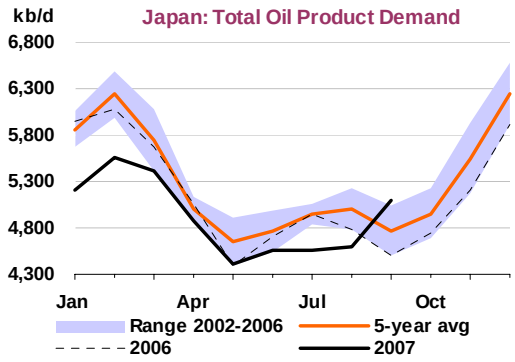
Pacific

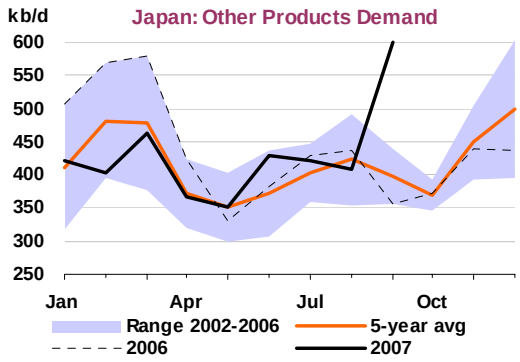
Preliminary data show that oil product demand in the Pacific jumped by 7.3% on a year-on-year basis in September. Deliveries for all product categories bar LPG were higher than in the previous year. Interestingly, the rebound was particularly strong in Japan, which accounts for almost two-thirds of the region's total oil product demand. Japan's underlying consumption was strong, boosted by power demand amid nuclear shortages and very high temperatures – there 60 cooling-degree days less in September compared with the 10-year average, similar to August (+59) but much more than July (-109) and to a lesser extent June (+22). In addition, there was probably a consumer-level inventory rebuild following the summer's relatively poor weather conditions, which had depressed demand.



Given these new data, the 2007 and 2008 forecasts for the region have been slightly revised. OECD Pacific demand is seen somewhat stronger, averaging 8.4 mb/d in 2007 (-0.6% on a yearly basis). It is expected to rebound in 2008 (but slightly less than previously anticipated) to 8.5 mb/d (+2.2%), on the assumption that normal winter temperatures will bring back some of the demand for heating fuels (kerosene, heating gasoil, fuel oil and direct crude) that was lost in the previous winter.

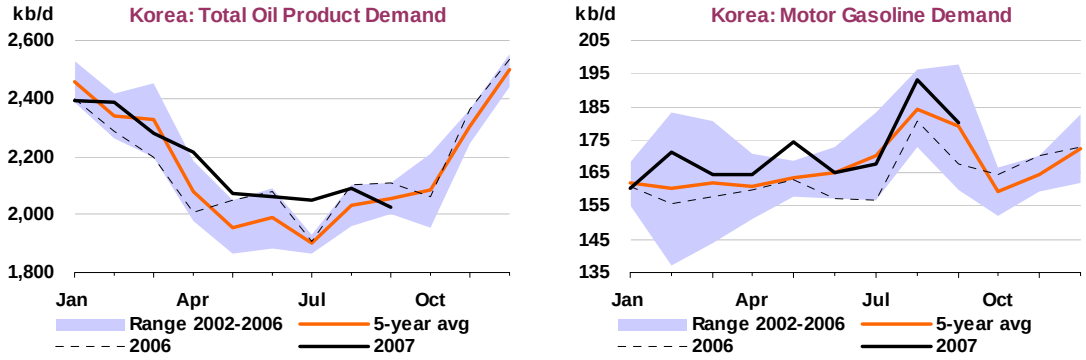
According to preliminary data, oil product demand in **Japan** rose by an unprecedented 13.3% year-on-year in September. The jump was very much related to the high temperatures that prevailed in late August and during much of September, which sharply boosted electricity demand. Since several large nuclear plants have been idled for most of this year – including the world's largest, Tepco's Kashiwazaki-Kariwa plant, damaged by an earthquake in July – many utilities were forced to turn to thermal power. It should be noted that prior to the series of operational problems (expected to last at least until mid-2008), nuclear power represented almost 30% of the country's electricity generation. As such, demand for naphtha, fuel oil and direct crude rose sharply in September (+5.9%, +25.4% and +68.0%, respectively). In addition, transportation fuels also surged, as motorists took the roads to take advantage of warm weather; gasoline, in particular, rose by 7.7% on an annual basis, while diesel increased by a respectable 3.9%.





Although we had anticipated greater demand for power-generation fuels since the outage of Kashiwazaki-Kariwa, the heat wave of August and September exceeded all expectations. Indeed, the surge in electricity demand for air conditioning was so dramatic that the largest utility (Tepco, which accounts for roughly 25% of Japan's generating capacity) had to reduce supplies to its largest industrial customers in order to avert a massive blackout in the Tokyo metropolitan area. In order to meet electricity needs, in September the company was obliged to boost its consumption of fuel oil by 140%, of direct crude (included in 'other products') by 212% and of naphtha (rarely used, but currently much cheaper than LPG) by 2,787%. In addition, Tepco's demand for LNG and coal also increased significantly (14% and 20%, respectively).

In **Korea**, preliminary data indicate that total oil product demand contracted by 3.9% year-on-year in September. The fall was related to feeble diesel and fuel oil deliveries (-5.9% and -19.3%, respectively). Diesel's weakness (the second month in a row) continued to be arguably related to stock draws – deliveries had jumped by 33% in July, in anticipation of the 7.5% diesel tax hike. Nevertheless, demand for other transportation fuels remained strong, with gasoline jumping by 7.6% and jet fuel/kerosene by 17.3%.



Meanwhile, the relatively subdued demand for fuel oil is partly due to LNG substitution for power generation, as gas is currently cheaper than residual in Asian markets. (The resumption of deliveries to North Korea following the nuclear weapons agreement has contributed to tighten the fuel oil market). However, there are reports that a major utility – Korea Electric East-West Power Corporation (KEWPCO) – is buying fuel oil cargos in anticipation of winter demand. Finally, growth in naphtha deliveries – the largest component of total Korean demand – slowed down slightly to +3.2%.

OECD Pacific Demand by Product
(million barrels per day)

	2006	2007	3Q06	4Q06	1Q07	2Q07	Jun 07	Jul 07	Aug 07*	Latest month vs. Jul 07	Latest month vs. Aug 06
LPG & Ethane	0.92	0.92	0.91	0.94	0.97	0.92	0.88	0.87	0.90	0.02	-0.04
Naphtha	1.60	1.68	1.59	1.72	1.75	1.57	1.50	1.63	1.66	0.03	0.06
Motor Gasoline	1.57	1.58	1.61	1.60	1.53	1.54	1.52	1.59	1.66	0.07	-0.01
Jet & Kerosene	0.98	0.95	0.67	1.10	1.25	0.73	0.66	0.63	0.60	-0.03	-0.06
Gas/Diesel Oil	1.83	1.79	1.69	1.88	1.85	1.75	1.77	1.66	1.61	-0.05	-0.11
Residual Fuel Oil	0.98	0.95	0.89	0.97	0.99	0.89	0.88	0.86	0.92	0.06	0.04
Other Products	0.52	0.48	0.49	0.50	0.49	0.41	0.47	0.46	0.44	-0.02	-0.07
Total Products	**8.40**	**8.35**	**7.85**	**8.71**	**8.83**	**7.80**	**7.69**	**7.70**	**7.79**	**0.09**	**-0.19**

* Latest official OECD submissions (MOS)

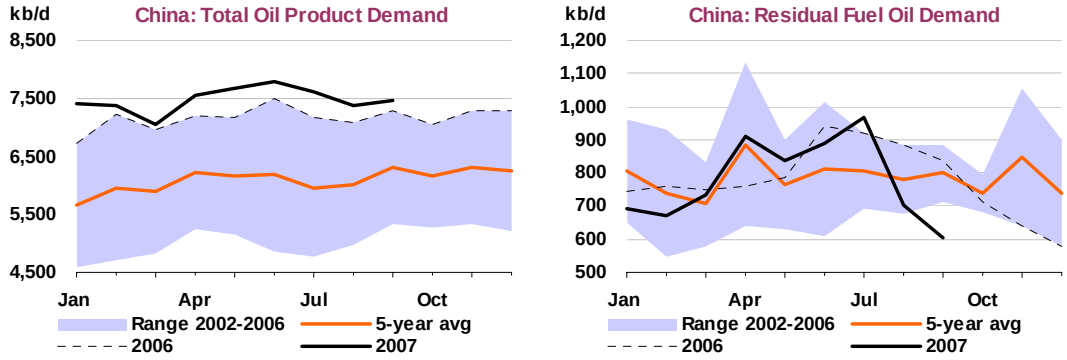
As in other oil importing countries, the rise in international prices has become a contentious political issue (South Korea is the world's fifth largest crude oil importer). Opposition lawmakers have reportedly lobbied the government to lower domestic sales taxes on oil products, while President Roh Moo-hyun has ordered to review the living standards of low-income earners and eventually to draw up measures to help them. The Finance Ministry, however, opposes any changes to the tax regime. Korea's tax system is structured in such a way that the effect of international oil price rises on local retail prices is delayed, thus providing a temporary buffer – but if the import price continues to rise, local retail prices may eventually spike and hence moderate oil demand growth.

Non-OECD

China

According to preliminary data, China's apparent demand (defined as refinery output plus net oil product imports, adjusted for fuel oil and direct crude burning, smuggling and stock changes) rose by an estimated 2.7% year-on-year in September. Although all product categories bar residual fuel oil registered gains, the relatively modest increase in total demand was mostly related to the drawdown of domestic product stocks and the relative 'weakness' of gasoline demand (which grew by 'only' +4.9% year-on-year) and to the continued fall in fuel oil demand for the second month in a row (-27.7% on a yearly basis).

The softening of gasoline demand is seasonal, as it follows the end of the summer holiday season. By contrast, the tumbling residual fuel oil consumption, as noted in previous reports, is very much due to high oil prices. Indeed, the price of fuel oil, both domestic and imported, has risen so much that the output of 'teapot' refineries – which generally use fuel oil as a feedstock – has seemingly virtually dried up. In September, net fuel oil imports plummeted by almost 30% to some 230 kb/d (compared with August, when imports had in turn dropped by some 50% vis-à-vis July).



Unsurprisingly, this situation is very much related to capped domestic retail prices. According to some estimates, when international crude oil prices rise above some $65/bbl, Chinese refiners find it financially unattractive to manufacture oil products for the domestic market. During previous oil price surges (as in 2006), output from teapots – which are the *de facto* swing producers in China – tends to contract significantly, only recovering either when international oil prices recede or in case of strong, seasonal domestic demand for specific products such as off-spec. diesel or asphalt. Meanwhile, state-owned companies resist supplying the domestic market until product shortages prompt the government to force them to boost output regardless of financial considerations. The NOCs have been previously compensated for their losses with generous government handouts (partly funded by the windfall tax on crude introduced in March 2006).

But this time, as oil prices surpassed $90/bbl, the supply crunch spread beyond the south-eastern coast (past shortages had been largely limited to Guangdong province). During October, inland service stations across the country – and crucially, even in the capital, Beijing – were forced to ration diesel (and in some, 90 and 93 RON gasoline as well). Although state-owned Sinopec and PetroChina vowed to increase supplies (either through higher imports or increased output), local traders suggested that the NOCs were quietly resisting the government's pressure to meet domestic demand. Seeking to find a compromise, on 31 October the government announced a 9% surprise increase in gasoline, diesel oil and jet fuel/kerosene 'guidance' (wholesale) prices from 1 November.

Our forecast of total Chinese oil product demand has been adjusted down slightly as a result of the fuel oil-driven revisions to 3Q07 estimates. Demand is seen reaching 7.5 mb/d in 2007 (+5.4% year-on-year) and 8.0 mb/d in 2008 (+5.6%). This forecast assumes that the recent rise in transportation fuel prices will have a negligible effect on consumption.

China Demand by Product
(thousand barrels per day)

	Demand			Annual Chg (kb/d)		Annual Chg (%)	
	2005	2006	2007	2006	2007	2006	2007
LPG & Ethane	650	633	621	-17	-13	-2.6	-2.0
Naphtha	707	826	909	119	83	16.8	10.1
Motor Gasoline	1,131	1,170	1,209	39	39	3.4	3.4
Jet & Kerosene	246	280	298	34	18	13.8	6.4
Gas/Diesel Oil	2,239	2,338	2,477	99	139	4.4	6.0
Residual Fuel Oil	778	776	765	-2	-11	-0.2	-1.4
Other Products	943	1,135	1,266	192	131	20.3	11.6
Total Products	**6,693**	**7,157**	**7,544**	**464**	**387**	**6.9**	**5.4**

A Careful Balancing Act

The Chinese government, torn between the imperative of curbing inflationary pressures and the need to assuage both the refiners' financial predicament and consumers' squeeze, tried to square the circle by unexpectedly increasing transportation fuel prices in late October.

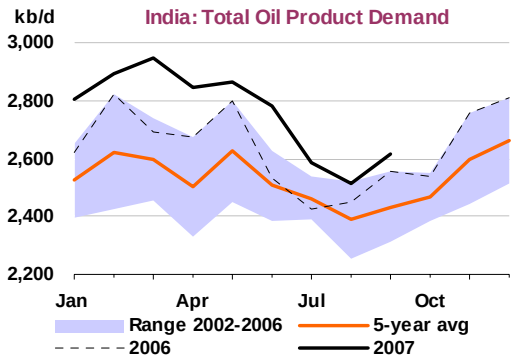
However, at Rmb 500/tonne (about $9.40/bbl), the wholesale increase of roughly 9% – the first since May 2006 – is probably too limited to significantly improve refining margins under current crude market conditions (oil prices have surged by almost 35% over the past year). Nevertheless, the rise will provide the government with more political leverage vis-à-vis the state-owned companies, which will find it difficult to continue resisting calls to supply the domestic market (imports will probably rise first, as refinery runs cannot be immediately increased). In addition, the government is probably hoping that the rise will also tempt some teapot refineries to resume production and hence contribute to stabilise the market.

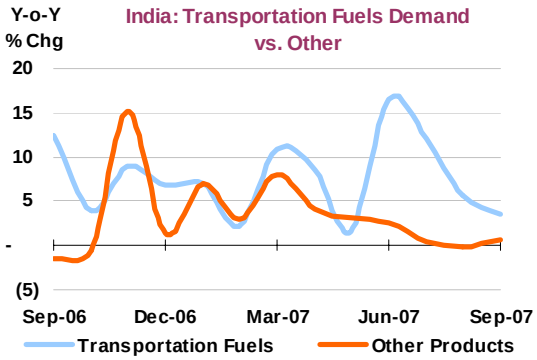
On the demand side, the rise in retail prices (capped at 8% above wholesale prices) is likely to be easily absorbed by consumers, mostly because China's underlying economic growth remains strong. Manufacturing companies – which account for the bulk of diesel demand – are prospering on the back of booming exports will arguably maintain their consumption levels. As for private Chinese drivers (who sustain gasoline demand), most belong to the flourishing middle-classes, which have seen their purchasing power steadily expand.

Moreover, at about $0.70/litre, gasoline and diesel prices remain well below international levels. In addition, the government will reportedly provide direct subsidies to the worst-hit end-users, ranging from fishermen and farmers to urban taxi drivers. Nevertheless, the price hike may have some inflationary impact, but at this point this is difficult to evaluate – however, the NDRC has reportedly ordered local governments to prevent price increases in most goods and services. But it can be argued that the move could create expectations that future price adjustments are likely, especially if international oil prices continue to rise – if so, oil product hoarding and hence shortages could well continue over the next few months.

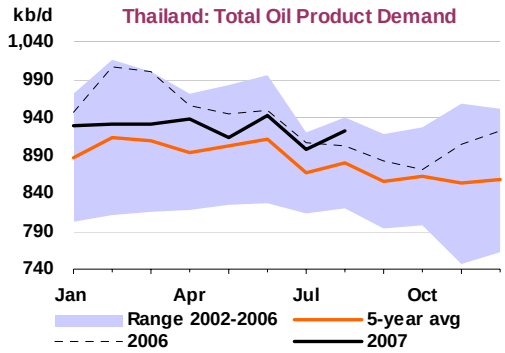
Other Non-OECD

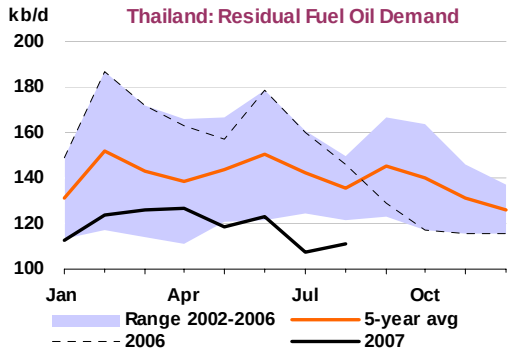
In September, preliminary data indicate that oil product sales in **India** – a proxy of demand – increased by 2.2% on a yearly basis. Growth remained strong across all product categories, with the exception of fuel oil (-3.0% year-on-year) and 'other products' (-11.3%, although preliminary figures for this category have tended to be revised upwards over the past few months). It is worth noting that demand for transportation fuels continues unabated, with gasoline, gasoil and jet fuel/kerosene sales rising by 8.0%, 2.8% and 2.7%, respectively. Our forecast of India's oil demand thus remains largely unchanged. Total consumption is expected to rise by 4.5% in 2007 to almost 2.8 mb/d, and slow down slightly to +2.3% in 2008 as natural gas continues to displace naphtha.





In early October, the government announced the beginning of country-wide mandated sales of 5% ethanol-blended gasoline (E5). The ethanol content is set to be raised to 10% by October 2008 (refiners, though, can already sell E10 if they wish to). Although E5 was introduced in India in 2004, it was only sold in the nine sugar-producing states and three union territories; elsewhere, the adoption of E5 was



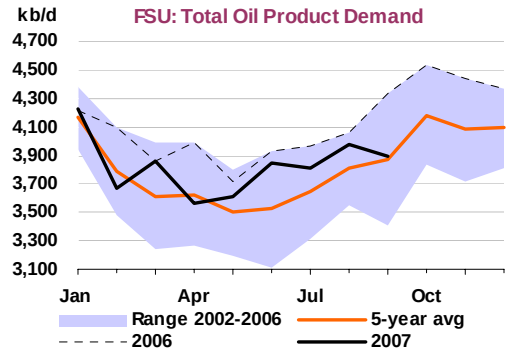


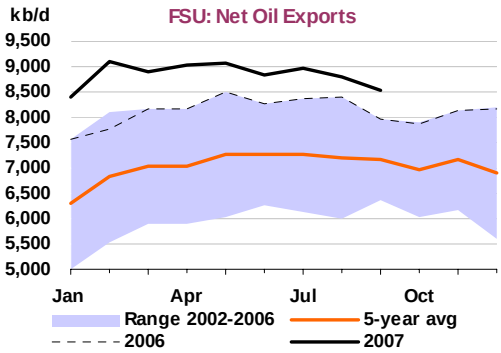
delayed by infrastructure bottlenecks and, more importantly, by pricing issues, as refiners and sugar producers failed to agree on the blendstock's price. To overcome the latter obstacle, the government established a uniform ex-refinery ethanol price of Rupee 21.50/litre (about 54 cents), which will be valid over the next three years. As for infrastructure, some observers argue that it will be quickly built, since the industry was waiting for the government to mandate blending before proceeding. On the basis of 5% blending, India's ethanol demand is estimated at some 550 million litres/year.

According to preliminary data, oil product demand in **Thailand** grew by 2.3% year-on-year in August. Although total consumption has seemingly trended well below last year's levels, the cause is to be found in much lower residual fuel oil demand. Indeed, all other product categories have registered relatively strong growth, particularly LPG (+9.6% year-on-year per month on average since the beginning of the year, on the back of high subsidies) and jet fuel/kerosene (+10.2% on average, as Bangkok's airport consolidates its position as a major Asian hub). Even gasoline and gasoil, which had tumbled following the abrupt retail price increases of two years ago (when subsidies for both products were removed), have posted average monthly growth rates of +2.8% and +1.7% since early 2007, despite continuously rising prices.

Meanwhile, the fall in residual fuel oil demand is related to the rapid penetration of natural gas in power generation. The Electricity Generating Authority has been behind this interfuel substitution, given that gas is both cheaper and cleaner. Thailand has thus joined a number of Asian countries, such as Japan, China or India, that have actively encouraged the use of natural gas for environmental and financial reasons.

FSU apparent demand – defined as domestic crude production minus net exports of crude and oil products – has been revised downwards by about 50 kb/d in both 2007 and 2008. The changes were related to adjustments of both supply and trade estimates for 3Q07 and 4Q07. Overall, FSU total oil product demand is expected to average 3.9 mb/d in 2007 (-4.3% year-on-year) and 4.1 mb/d in 2008 (+3.6%).





As noted in previous reports, the contraction of apparent oil demand in 2007 is largely due to the volatility of regional trade data – although it could also be related to efficiency gains in industry and the power sector. We are still prospecting for alternative data sources that would allow a better estimate of apparent demand. Intuitively, the region's demand should be more in line with strong economic growth, particularly in Russia, where fuel oil demand is reportedly growing rapidly as the country attempts to free more natural gas for exporting.

Coping With Rising International Oil Prices

As in China, rising international oil prices are creating a dilemma for the Indian government, namely whether to maintain administered end-user prices or cave in to the increasingly loud complains of loss-making refiners, both public and private. According to recent estimates, state-owned marketing companies – Indian Oil, Hindustan Petroleum, Bharat Petroleum and IBP – could lose around Rupee 550 billion ($13.8 billion) in the current fiscal year (ending March 2008) as a result of the gap between international and domestic oil prices (India imports some three-quarters of its crude requirements).

India's state-owned companies, though, are partially compensated through the issuance of government oil bonds worth some $6 billion, which cover about two-fifths of the losses. This is not the case for the private sector. As a result, the three largest operators – Shell India, Reliance Industries and Essar Oil – have become increasingly disgruntled. The companies argue that, by discriminating in favour of the NOCs, the policy of capping the retail price of gasoline, diesel, kerosene and cooking gas contradicts the stated goals of fostering competition and economic efficiency. The current policy, instituted in 2005 with the aim of curbing inflation, reversed the market liberalisation that had gradually been implemented over the previous decade.

More worryingly, the three majors have warned that the private retail network is close to collapsing. On the one hand, they themselves have either closed retail outlets or frozen their expansion plans. On the other, they note that some 2,000 dealers, which collectively invested some Rupee 50 billion ($1.3 billion) when the market was liberalised, risk losing their investment since they are unable to profitably compete against the NOCs. The market share of private retailers has fallen from 15% in early 2006 to about 4% today. It remains to be seen, however, whether the Indian government will adjust retail prices. Furthermore, the political window of opportunity is limited, with looming elections in key states in December and nation-wide parliamentary elections in 2009.

But neither China nor India are the only countries facing the subsidy versus market conundrum. Across the developing world, the prevalence of capped retail prices well below international levels is leading to similar problems, as illustrated by the following examples: fuel shortages (Argentina, Bolivia), fiscal imbalances (Malaysia, Chinese Taipei, Indonesia), falling downstream profitability (Vietnam, Maldives) or a combination thereof. By contrast, countries that decided to totally or partially remove fuel subsidies over the past few years saw oil demand fall sharply (such as Thailand in 2005/2006). Yet the sudden adjustment or even total removal of subsidies may lead to a consumer backlash (as in Iran and Burma), in addition to unwelcome inflationary pressures.

Nevertheless, as international oil prices continue to rise, the governments of several other Asian countries – Indonesia, Malaysia and Chinese Taipei – are also quietly debating whether to adjust their administered regimes to let retail prices rise and reduce their fiscal burden (for example, by limiting sales of subsidised fuel to private cars, as it has been recently suggested in Indonesia).

In the end, should current high oil prices last, most developing countries would likely be affected and economic growth would probably recede. Arguably, only the biggest oil producing countries are in a position to absorb the huge cost of maintaining subsidies thanks to mounting oil export revenues. According to the IMF, oil and gas producers in the Middle East and Central Asia, where oil products are heavily subsidised, are expected to earn a combined $750 billion in 2007, roughly four times as much as early in the decade.

SUPPLY

Summary

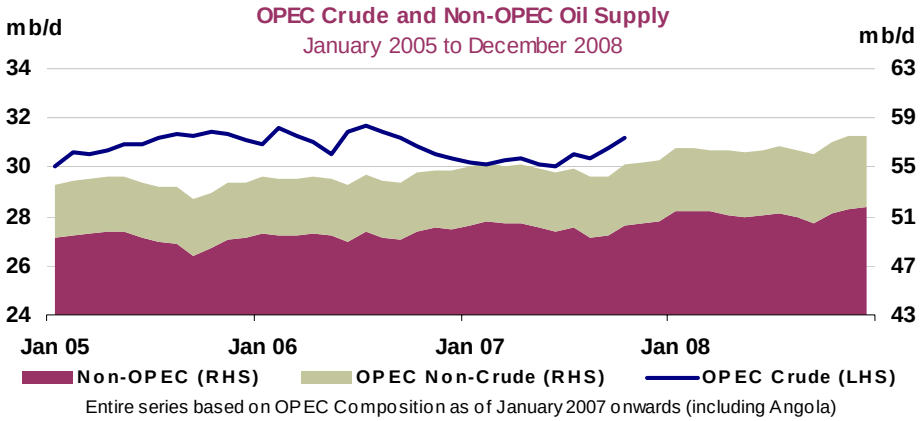
- **World oil supply** gained 1.4 mb/d in October versus September, as non-OPEC outages receded and OPEC began to raise output. OPEC crude supply increased by 410 kb/d, half of which derived from Angola and Iraq. Non-OPEC gains centred on an assumed rebound from China and Azerbaijan after September outages, and an observed rise of 65 kb/d from Russia. Continued outages in the OECD see non-OPEC supply levelling off in November before renewed growth in December.

- **The non-OPEC production forecast** is trimmed by 35 kb/d for 2007 to 50.1 mb/d, but is largely unchanged at 51.2 mb/d for 2008. Growth should recover after a mid-year lull, with 2Q and 3Q07 totals revised down by 55 kb/d and 85 kb/d respectively, following the receipt of more comprehensive data from North America (2Q) and the FSU, China and Latin America (3Q). The FSU, China, North America and biofuels drive non-OPEC growth in 2007, with the FSU, Brazil, Australasia and biofuels key for 2008.

- **High oil prices** remain a mixed blessing as regards the short-term upstream operating environment. Partly, they reflect real barriers to investment, with project delays due to infrastructure bottlenecks and a tendency for host governments to revise upstream operating terms. For the longer term, exploration activity shows signs of recovery, and significant new discoveries are beginning to materialise, although it is too early to say to what extent these will offset declines in baseload supply.

- **October OPEC crude supply** increased by 410 kb/d to 31.2 mb/d, with half of the rise from Angola and Iraq. Both these producers should also see higher supplies in November. OPEC-10 production averaged 27.15 mb/d, a gain of 195 kb/d for the month. Signs of higher November supply from Saudi Arabia, Nigeria and others may be counteracted by UAE offshore field maintenance. OPEC effective spare capacity slipped to 2.46 mb/d.

- **The midpoint 'call on OPEC crude and stock change'** is revised down by 0.2 mb/d for 2007 and by 0.4 mb/d for 2008. The call averages close to 32.0 mb/d for 4Q07, while the trend for 2008 shows an annual gain of up to 0.5 mb/d, and an average call for the year centred on 31.2 mb/d. Weaker prognoses for late year OECD and FSU demand underpin this month's revisions to the call.



All world oil supply figures for October discussed in this report are IEA estimates. Estimates for OPEC countries, Alaska, Kazakhstan, Russia and Vietnam 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. This totals –410 kb/d for non-OPEC as a whole, with downward adjustments focused in the OECD.

OPEC

OPEC crude supply increased by 410 kb/d in October and averaged 31.2 mb/d for the month. Half of the rise came from Angola and Iraq, amid new field start-ups and resurgent northern pipeline exports respectively. Both of these producers should also see higher supplies in November, potentially rising by a combined 150 kb/d. Saudi Arabian supply estimates are revised up for September, and the Kingdom is thought to have boosted supply by another 100 kb/d in October, to nearly 8.9 mb/d. Venezuela, Kuwait, Qatar, Nigeria, Algeria and Libya each nudged supply higher in October, giving a collective increment of 95 kb/d. 4Q OPEC NGL supply should also increase based on new supplies from Qatar and Saudi Arabia.

OPEC-10 production averaged 27.15 mb/d, a gain of 195 kb/d versus September, ahead of the agreed 1 November increase of 500 kb/d. Signs of higher November supply from Saudi Arabia, Nigeria and others may be counteracted by UAE offshore field maintenance, with preliminary tanker tracking data suggesting only modest aggregate increases in supply in the early part of November. Unexceptional VLCC rates and other early sailings indicators argue against supplies rising by the full 500 kb/d pledged for November. OPEC effective spare capacity slipped to 2.46 mb/d in October.

OPEC Crude Production[1]
(million barrels per day)

	Sep 2007 Production	Oct 2007 Production	1 November 2007 Target	Sustainable Production Capacity[2]	Spare Capacity vs Oct 2007 Production	Capacity end-2007	Capacity end-2008
Algeria	1.37	1.38	1.36	1.39	0.01	1.38	1.47
Indonesia	0.83	0.83	0.87	0.88	0.06	0.88	0.88
Iran	3.92	3.92	3.82	3.95	0.03	3.88	3.97
Kuwait[3]	2.47	2.49	2.53	2.64	0.15	2.68	2.83
Libya	1.72	1.72	1.71	1.76	0.04	1.78	1.84
Nigeria[4]	2.18	2.19	2.16	2.47	0.28	2.45	2.39
Qatar	0.80	0.82	0.83	0.90	0.08	0.90	0.98
Saudi Arabia[3]	8.75	8.85	8.94	10.80	1.95	10.91	11.35
UAE	2.55	2.55	2.57	2.75	0.21	2.77	2.89
Venezuela[5]	2.38	2.41	2.47	2.60	0.19	2.62	2.60
Subtotal	**26.96**	**27.15**	**27.25**	**30.13**	**2.98**	**30.24**	**31.19**
Angola[1]	1.63	1.73		1.73	0.00	1.79	2.15
Iraq	2.18	2.30		2.40	0.11	2.40	2.40
Total	**30.76**	**31.17**		**34.26**	**3.09**	**34.43**	**35.74**
(excluding Indonesia, Iraq, Nigeria, Venezuela					*2.46)*		

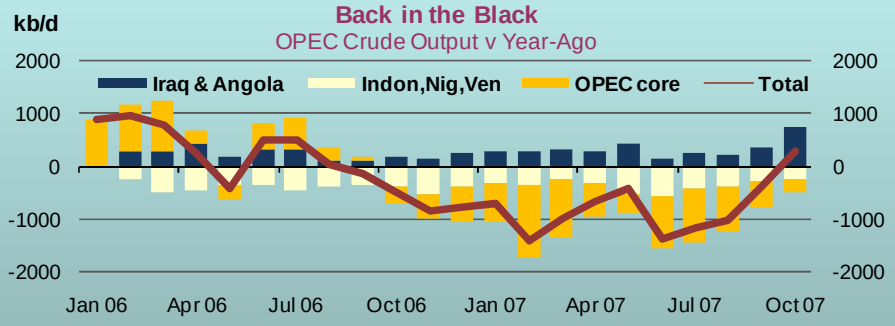
1 Angola joins OPEC effective 1 January 2007.
2 Capacity levels can be reached within 30 days and sustained for 90 days.
3 Includes half of Neutral Zone Production.
4 Nigeria excludes some 545 kb/d of shut-in capacity.
5 Includes Orinoco extra-heavy oil assumed at 520 kb/d in October.

Ecuador has now formally applied to rejoin OPEC and the country's re-entry will be decided upon during the OPEC Heads of State Summit in Riyadh on 17-18 November. Ecuador's Oil Minister has said it will press for a quota of 530 kb/d, above current production levels, which are closer to 500 kb/d. If readmitted, Ecuador will come in below Indonesia and Qatar the organisation's smallest producer. Ecuador's previous membership of OPEC was suspended in late 1992.

Representatives of China, the US, EU and IEA all recently expressed concerns over the economic dangers of rising crude prices and a need for more crude to replenish winter stockpiles. Nonetheless, OPEC's public line remains that recent price increases have been driven by geopolitical concerns and speculative activity. OPEC's Secretary General in early November called for tighter regulation in oil markets to reduce speculative investment. Although Oil Ministers will participate in the Riyadh Summit in November, public pronouncements suggest a formal review of production may have to wait until the next Ministerial meeting in Abu Dhabi on 5 December. Ecuador's oil minister suggested OPEC should target prices that will safeguard oil's market position, blunting expectations of Ecuador taking a more hawkish line on re-entry.

Back in the Black

October was the first month since August 2006 when collective OPEC-12 production exceeded levels of a year ago. While superficially suggesting a policy shift of sorts, in reality core OPEC producers remain reluctant to produce at volumes that would arrest the recent slide in OECD inventory cover towards five-year averages. The dual risks of rising supplies from elsewhere and another milder-than-normal northern hemisphere winter may still be deterring sustained increases from producers. Physical capacity limits may also increasingly be a constraint. October's supply rebound was largely driven by rising output from Angola and Iraq - exempt from voluntary production restraint measures – rather than by concerted increases across the OPEC-10. These two, plus a potentially temporary recovery in Nigerian volumes also look likely to be key drivers of OPEC increases in November.



Whether more comfortable industry stock cover re-emerges by winter's end depends on two key factors. Seasonal demand will of course be crucial. From a supply perspective, output from Indonesia and Venezuela on the one hand, and Nigeria on the other, is still struggling in the face of an unattractive investment environment and rebel attacks respectively. Angolan supply may level off after breaching 2 mb/d and a continuation of Iraq's nascent recovery cannot be taken for granted. The other piece of the winter supply puzzle becomes the realisation of core Middle East Gulf countries' short-term capacity expansion plans, and their management of that capacity in determining appropriate supply levels.

Angolan October crude output is estimated up by some 100 kb/d, at 1.73 mb/d, with a further 100 kb/d of gas liquids giving total supply of 1.84 mb/d. The newly started Greater Plutonia field was reportedly producing 100 kb/d at the end of October and should attain 200 kb/d in the first half of 2008. ExxonMobil also announced start-up at the Marimba field in offshore Block 15. However, we see this project largely sustaining capacity at the existing 250 kb/d Kizomba A project, rather than adding significant extra barrels. December is likely to see initial production from the Mondo field, part of the Kizomba C project, which should ultimately produce 200 kb/d in late 2008. Angolan capacity could hit 2.15 mb/d by that time. Last month state producer Sonangol was reported as claiming that Angola would seek an OPEC production target of 2.5 mb/d when it joins the quota system, likely to occur some time in 2008.

UAE crude supply is thought to have stabilised at 2.55 mb/d, initially recovering from an earlier leak at a gas compression unit, but late October then saw offshore production rates slow as maintenance began. Maintenance work at the Upper and Lower Zakum and Umm Shaif oilfields will curb UAE November

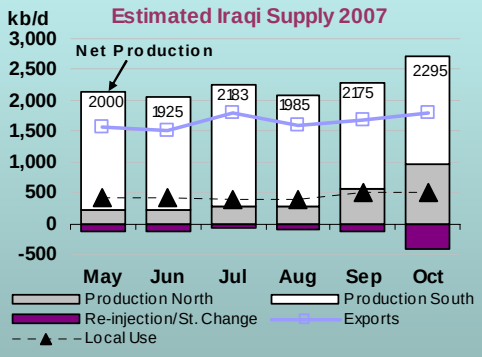
production by 600 kb/d, raising questions over OPEC-10 plans to enact in full their 500 kb/d increase scheduled from 1 November, at least on a wellhead production basis. However, rising UAE output ahead of November may mean the impact on November sales can cushioned by volumes out of storage.

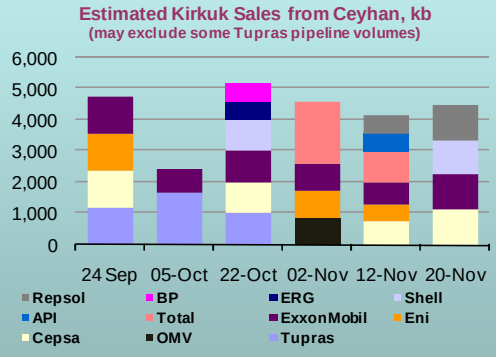
Nigerian September supply levels are revised up to 2.18 mb/d on the basis of higher tanker sailings data. October supply is held largely unchanged, despite reports of higher Forcados output (with Shell lifting *force majeure* on Forcados exports in early October). Attacks on the Mystras FPSO shuttered 50 kb/d of production at the offshore Okono-Okpoho field and workers were also kidnapped from the shuttered EA field, likely delaying until later in 2008 the 115 kb/d facility's reactivation. Over 0.5 mb/d of Nigerian production remains shut-in due to attacks on production facilities and pipelines, with signs that MEND rebels may again be stepping up attacks on oil installations, ending the new government's grace period.

Our estimate of **Saudi Arabian** supply in September is revised up by 100 kb/d to 8.75 mb/d, on higher exports. The upward trend continued in October, with supply rising to 8.85 mb/d. While exports likely rose by more than 100 kb/d (early indications suggest spot tanker sailings were up by 250 kb/d), a partial offset came from the start of maintenance at the Rabigh refinery, which continues into November. Saudi Arabia's November target was reported around 8.94 mb/d, but supplies may rise above that level if an attempt is made to offset reduced supplies from UAE and elsewhere. Aramco announced that Asian term customers will receive full volumes for November and December lifting, compared with 10% cuts in place in October. Broader regional tanker movements also suggest higher November supplies. Moreover, prices to US and Asian destinations have been cut for December, again indicative of rising availability.

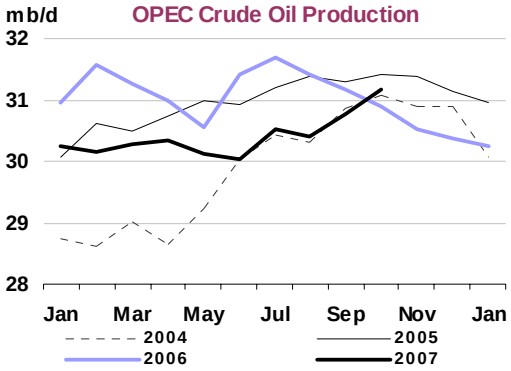
Will Iraqi Northern Exports Stabilise at Higher Levels?

Iraqi October oil supply reached 2.3 mb/d, its highest level since April 2004. We have long identified securing offtake as a key short-term driver of Iraqi production levels. Sharply higher production from northern fields was facilitated in part by sustained refinery crude use (total Iraqi domestic crude use is estimated close to September's 0.5 mb/d, despite renewed attacks on the crude line feeding the Baiji refinery). More importantly, crude exports from storage at Ceyhan in Turkey averaged 258 kb/d, to which can be added some 12 kb/d of cross-border flows to Syria. Pipeline flows north from fields around Kirkuk to Ceyhan (which this report excludes from monthly supply until lifted by tanker or piped to Turkish refiner Tupras) were even higher, at an estimated 395 kb/d, a post-war record. This was despite the threat of attacks on the pipeline from PKK insurgents. Southern exports from Basrah and Khor al-Amaya remained close to 1.5 mb/d.

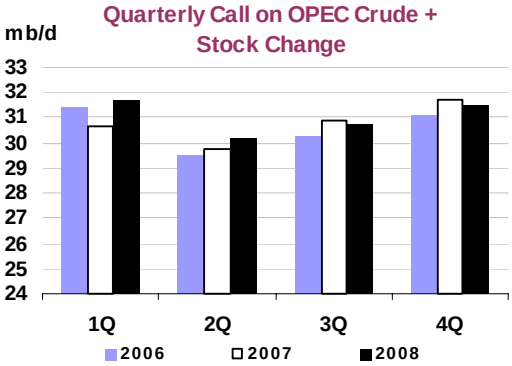




There is official confidence that security on the northern export pipeline has improved to the extent that SOMO hopes to award 300 kb/d worth of term export deals for a three-month period around mid-November. Since September, state marketer SOMO has been able to award tenders worth 26 mb of crude, with an estimated 4.7 mb lifted in September and 8.0 mb in October. ExxonMobil and Cepsa have been regular lifters over the past two months, and further unreported volumes may also have accrued to Turkish refiner Tupras. The impending award of a further 6 mb tender would take potential Ceyhan exports for November to a recently unprecedented 19 mb, or 630 kb/d. In reality, substantial volumes will likely slip into December, for logistical and tanker availability reasons.



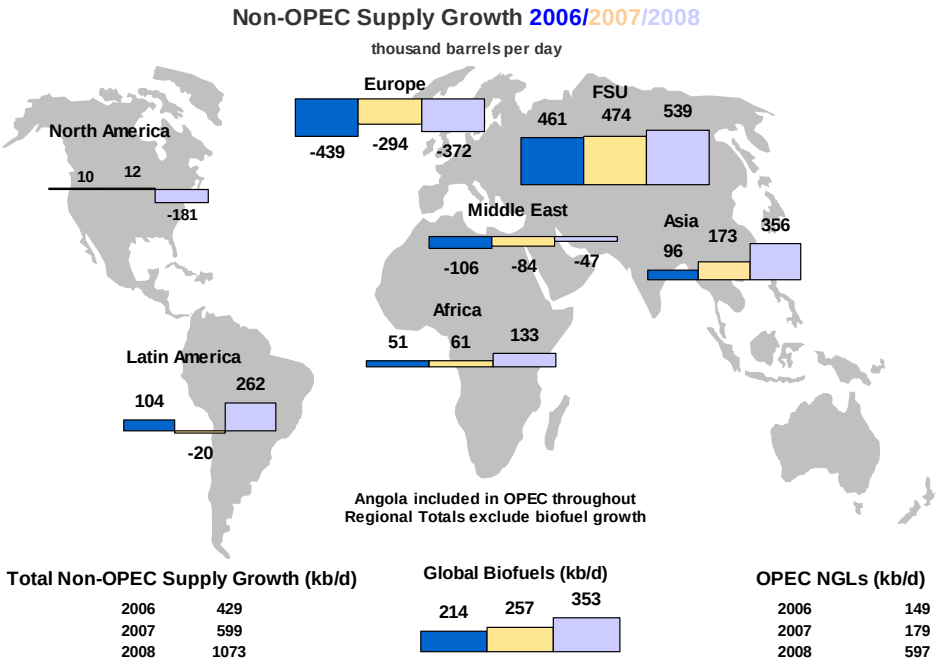
Entire series based on OPEC Composition as of January 2007 onwards (including Angola)



Entire series based on OPEC Composition as of January 2007 onwards (including Angola)

Non-OPEC Overview

This month sees a modest downward adjustment to non-OPEC output for 2007, but a largely unchanged forecast for 2008. Adjustments this year focus on August and September production, with lower output from the USA (August), Canada and Brazil (September onwards), China (September), and Russia (September). However, preliminary October indicators show a rebound in supply from all these producers and, combined with upgrades to forecast supply from Australasia, Russia and Mexico, the 2008 total comes in at 51.2 mb/d, 1.1 mb/d above the expected 2007 total. Oil growth next year will be heavily centred on the FSU, Australasia and Brazil. Within a declining North American total, deepwater Gulf of Mexico and Albertan oil sands provide bright spots among otherwise declining baseload supplies. And global biofuels (including Brazil and the US) generate 33% of next year's non-OPEC supply growth, adding 355 kb/d to reach 1.5 mb/d of output. Mexico and the North Sea continue to show sharp declines overall, despite some new field offsets. OPEC NGL growth looks like enjoying a 2008/2009 spike.



Forecast uncertainties remain manifold. The sheer proliferation of projects approaching completion suggests sharp increases in non-OPEC supply, but brings forth its own problems. With capacity expansions being weighted towards offshore projects, tightness in the availability of service crews and equipment for subsea installation may be taking over from drilling capacity shortages as a key source of project delays. Recent outages for existing production infrastructure in Canada, Alaska, Mexico, the North Sea and Brazil highlight

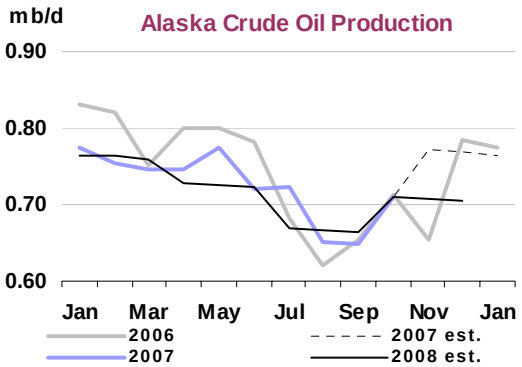
the value of our field reliability adjustments in minimising subsequent forecast adjustments. For the longer term, fiscal changes being discussed now by host governments will help dictate the pace of new project developments for the next decade. And we should not overlook an apparent and overdue uptick in international exploration activity which can, on occasion, yield dramatic results.

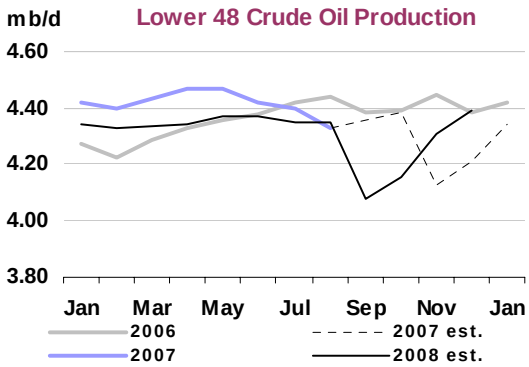
OECD

North America

US – October Alaska actual, others estimated: Overall, US oil production for 2007 and 2008 remains close to last month's forecast at 7.44 mb/d and 7.41 mb/d respectively (with crude at 5.1 mb/d this year and 5.0 mb/d next). Latest available aggregate data reduce August and September supplies by 130 kb/d and 25 kb/d respectively, but the absence of hurricane-related outages in the GOM in October boosts last month's total by 340 kb/d. The US production forecast includes a five-year rolling average hurricane adjustment for 3Q and 4Q (focused on September/October) based on actual production outages. The inclusion in our current adjustment of the atypically disrupted years 2004 and 2005 leaves November/December supply projections prone to upward adjustment of 150 kb/d on average if weather conditions prove benign this month (the Atlantic hurricane season traditionally closes at the end of November).

October saw some new GOM production facilities enter service ahead of our earlier expectations, namely Atlantis (capacity 200 kb/d likely in 2008) and Genghis Khan (20 kb/d). However, there were counteracting reports of delayed start-up for the Neptune and Tahiti fields, with our original estimate of a 2008 start at Neptune, rather than 2007, being borne out.

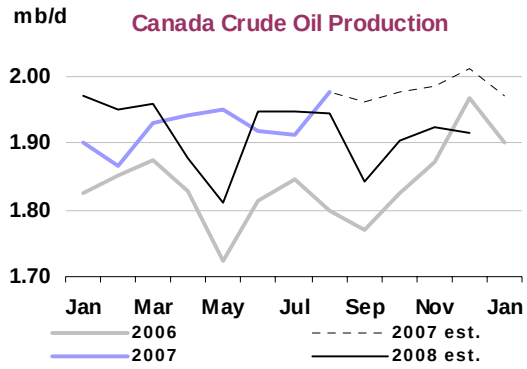


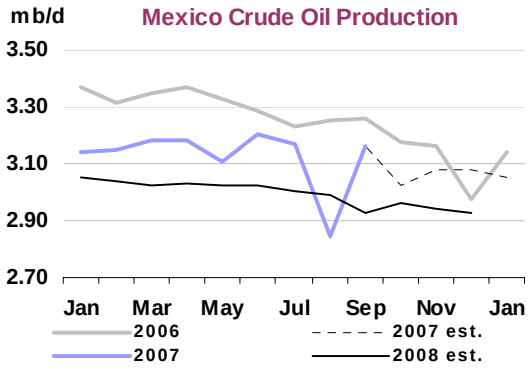


October Alaskan production again suffered unplanned outages, with Prudhoe Bay crude averaging below 300 kb/d after operations were disrupted by a fire. However, supply had recovered by early November. Recent performance from the West Sak and Alpine fields lies below our earlier assumptions, leading to a 15 kb/d downward adjustment to the Alaskan crude forecast, to 730 kb/d for 2007 and 715 kb/d for 2008. Alaskan lawmakers are reviewing alternative proposals to either raise the state's net profits tax from 22.5% to 25%, or to leave the base rate unchanged but impose a windfall tax at high oil price levels.

Canada – Newfoundland September actual, others August actual: After a gain of some 165 kb/d expected for 2007, Canadian oil production is expected to level off around 3.35 mb/d in 2008 (with conventional crude oil supply contributing 1.95 mb/d in 2007 and 1.92 mb/d in 2008). Government data showed lower Albertan conventional production in June-August, and result in downward adjustments of 25-30 kb/d to the Canadian forecast overall. Conventional output is also expected to be hardest hit when Alberta's new fiscal regime enters service in 2009. Meanwhile, amendments to the oil sands fiscal regime have been reported as less onerous than originally proposed. Price-dependent royalties prior to cost recovery will range from the current 1% to 9%, with post-payout rates ranging from the present 25% to a new higher rate of 40%.

Offshore Newfoundland, the Terra Nova field suffered more problems in October, this time with a generator outage. The field has seen disrupted supply during 12 of the last 22 months, illustrating the rationale for our inclusion of a field reliability adjustment for forecast production from several OECD countries.

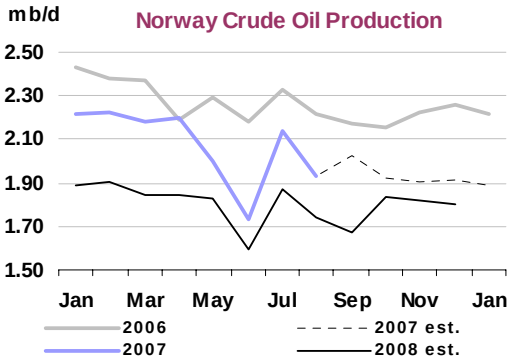


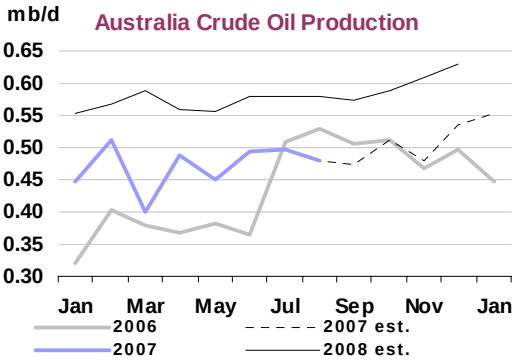


Mexico – September actual: September crude production rebounded after the impact of Hurricane Dean in August to average 3.16 mb/d, some 70 kb/d higher than our forecast, although this was partly offset by lower-than-expected NGL output. However, the upstream sector was hit by weather disruptions again in October. Firstly, storms in the fourth week of October led to the death of 21 workers when adjacent drilling installations collided in heavy seas. Then late in the month, high winds prevented export liftings and forced the shut-in of an estimated 2-3 mb of production, although production was being restored in early November. We have trimmed our October crude production estimate by over 80 kb/d, subject to revision when official production data are available.

North Sea

Norway – August actual: While August Norwegian crude production came in 35 kb/d lower than earlier estimates, preliminary September data suggest crude output of 2.0 mb/d, around 270 kb/d higher than this report's forecast. We have trimmed our maintenance and unscheduled field outage adjustments for September 2007 accordingly, but will retain higher curbs for 2008 until field-specific data for September become available next month. North Sea storms in the first week of November briefly caused the precautionary shut-in of between 300 kb/d and 500 kb/d of production at the Ekofisk, Valhall, Grane, Oseberg and Visund fields. We have assumed a cut to November supply from these fields amounting to 100 kb/d, although this amount is netted off our previous field reliability adjustment, and therefore represents a transfer within the Norwegian total rather than a cut in the forecast *per se*. In all, expected Norwegian crude supply is largely unchanged, at 2.0 mb/d for 2007 and 1.8 mb/d for 2008.





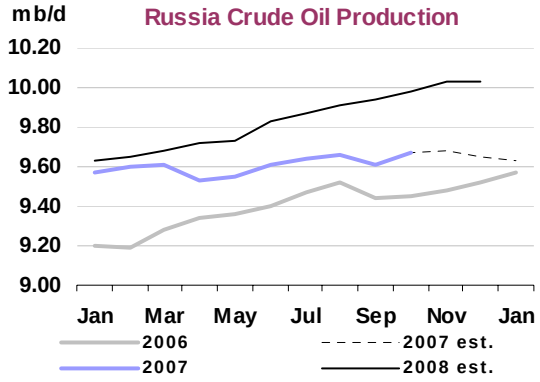
Pacific

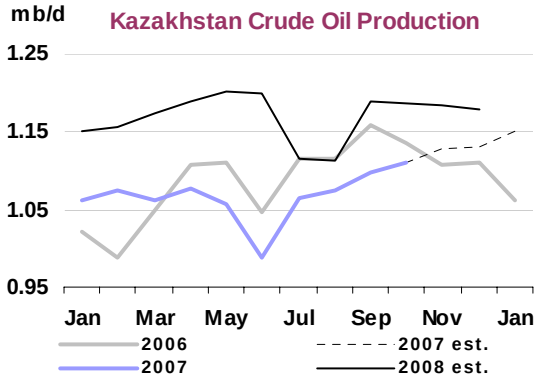
Australia – August actual: Australian production is expected to see resumed growth for the first time since 2000 in 2007/2008. Crude output gains 45 kb/d this year to reach 480 kb/d, and rises by another 100 kb/d on average in 2008. Early October saw the start-up of 43.6°API crude production at the Puffin

field in the northern offshore Bonaparte Basin. We had earlier assumed a gradual build to peak, but it now appears capacity 30 kb/d production will be attained quickly. BHP Billiton also announced that the 80 kb/d Stybarrow field will enter service before the end of 2007, in advance of our forecast February 2008 start-up. Some 25 kb/d has been added to this report's Australian forecast as a result.

Former Soviet Union (FSU)

Russia – September actual, October provisional: Total Russian oil output remains on track to grow by 2.5% in 2007, with a further 2.2% increase assumed for 2008. Production averages 10.1 mb/d this year and 10.3 mb/d next, with corresponding volumes for crude of 9.6 mb/d and 9.8 mb/d respectively. Russian output had dipped in September, partly due to maintenance work at the Chayvo field in the Sakhalin 1 complex, which saw production dip to 175 kb/d. However, a 60 kb/d rebound here in October was also reflected in total Russian supply. Production from Russia's largest operator, Rosneft, continues to run ahead of our own, and indeed the company's expectations. Output is now close to 2.3 mb/d and the company has upgraded production guidance for 2007 from an original 1.8 mb/d to 2.0 mb/d. While acquisitions have driven much of Rosneft's recent growth, there are reports that improved reservoir management techniques employed by former Yukos subsidiary Yuganskneftegaz are also being employed more widely across Rosneft's other producing assets.





Kazakhstan – October actual: Assumed maintenance downtime at the Karachaganak field appears to have been focussed more on October than our assumption of September. Total Kazakh oil output for September is revised up by 45 kb/d to 1.35 mb/d (of which 1.1 mb/d is crude oil), while flat October production represents a 90 kb/d downward adjustment from last month's forecast. Growth of 100 kb/d in Kazakh supply in 2008 to 1.46 mb/d derives largely from improved recovery at the Tengiz field.

Kazakhstan's President Nursultan Nazarbayev suggested in October that the country's 2010 and 2015 production targets had been revised down as a result of delays at the Kashagan project. Output around 1.6 mb/d is now expected for 2010, marginally higher than the 1.56 mb/d forecast in July's *MTOMR*. Government sources have admitted that 2010 may be an ambitious target data for Kashagan start-up. State oil company Kazmunaigaz is to see its equity stake in Kashagan increased from a current 8.3% to 17-18%, with other shareholders seeing a proportional cut in their stakes.

Preliminary data show total **FSU net oil exports** of 8.55 mb/d in September, down 240 kb/d from the August total of 8.79 mb/d. As expected, September crude exports were dented by maintenance at the Azeri field which prompted a 300 kb/d drop in exports via the BTC pipeline. Other notable reductions were seen in fuel oil and gasoil exports, down 120 kb/d and 80 kb/d respectively. Total September product exports of 2.52 mb/d were 280 kb/d lower than August and at their lowest point since January. These lower outflows were partially offset by higher seaborne crude exports in September from Black Sea and Baltic ports (up 110 kb/d and 160 kb/d respectively) and an extra 100 kb/d via the Druzhba pipeline.

Higher BTC pipeline flows were likely in October after Caspian production maintenance wound down. However, Russian Baltic oil exports were temporarily constrained by maintenance on the pipeline to Primorsk in late October and will likely be so again in late November. Furthermore, Russian export duties increased from 1 October to over $250/t for crude and around $190/t for light products. So net FSU exports probably rose only modestly in October, likely trending down again in November and December.

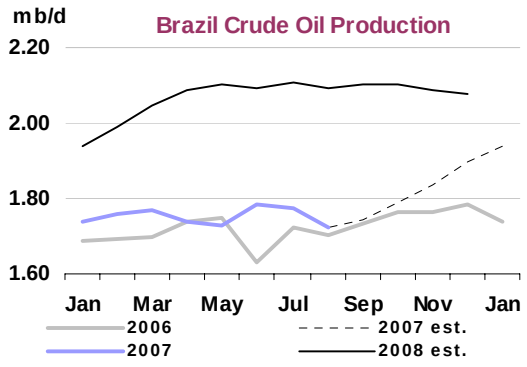
FSU Net Exports of Crude & Petroleum Products
(million barrels per day)

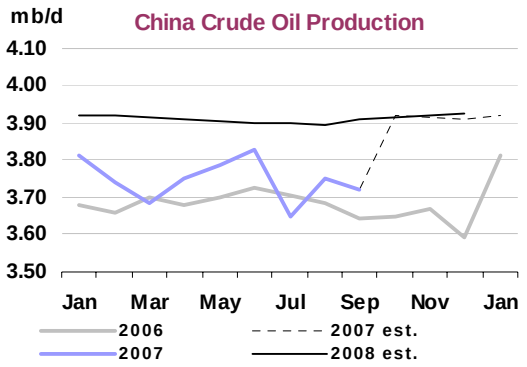
	2005	2006	4Q2006	1Q2007	2Q2007	3Q2007	Jul 07	Aug 07	Sep 07	Latest month vs. Aug 07	Latest month vs. Sep 06
Crude											
Black Sea	2.27	2.22	2.08	2.30	2.23	2.09	2.11	2.02	2.13	0.11	-0.02
Baltic	1.59	1.55	1.43	1.58	1.60	1.58	1.56	1.51	1.66	0.16	0.20
Arctic/FarEast	0.19	0.15	0.19	0.29	0.30	0.36	0.41	0.38	0.28	-0.10	0.09
BTC	0.00	0.00	0.38	0.43	0.58	0.57	0.64	0.68	0.38	-0.30	0.16
Crude Seaborne	4.05	4.07	4.08	4.60	4.70	4.59	4.73	4.59	4.45	-0.14	0.43
Druzhba Pipeline	1.15	1.20	1.19	1.17	1.13	1.08	1.01	1.08	1.17	0.10	-0.06
Other Routes	0.25	0.38	0.45	0.47	0.46	0.42	0.43	0.37	0.45	0.07	0.03
Total Crude Exports	5.45	5.64	5.71	6.23	6.29	6.09	6.17	6.04	6.07	0.03	0.40
Of Which: Transneft	4.12	4.22	4.06	4.33	4.31	4.20	4.12	4.05	4.44	0.39	0.21
Products											
Fuel oil	0.93	0.95	0.95	1.04	1.15	1.14	1.11	1.20	1.09	-0.12	0.21
Gasoil	0.87	0.95	0.91	0.94	0.88	1.01	1.07	1.01	0.94	-0.08	-0.01
Other Products	0.58	0.61	0.54	0.59	0.69	0.57	0.63	0.58	0.49	-0.09	-0.03
Total Product	2.38	2.51	2.40	2.57	2.73	2.71	2.81	2.80	2.52	-0.28	0.17
Total Exports	7.83	8.16	8.11	8.80	9.02	8.80	8.98	8.84	8.59	-0.25	0.57
Imports	0.02	0.04	0.04	0.02	0.04	0.04	0.03	0.05	0.04	-0.01	-0.02
Net Exports	7.81	8.12	8.07	8.78	8.98	8.77	8.95	8.79	8.55	-0.24	0.59

Sources: Petro-Logistics, IEA estimates
Note: Transneft data has been revised to exclude Russian CPC volumes.

Other Non-OECD

Brazil - August actual: Brazilian crude production is trimmed by 25-30 kb/d for both 2007 and 2008, now averaging 1.8 mb/d and 2.1 mb/d respectively. Adjusted timings and production profiles for the Roncador, Golfinho and Espadarte fields underpin the slightly lower outlook, with state producer Petrobras admitting that infrastructure bottlenecks are leading to delays of six months to one year for certain projects. However, Petrobras was able to announce in mid-October that the 30 kb/d Piranema field had started up, a month ahead of this report's assumed date. Piranema is lighter than much of Brazil's deepwater production, at 44°API. The company also announced the discovery of significant new deepwater reserves in the Santos Basin (see below).

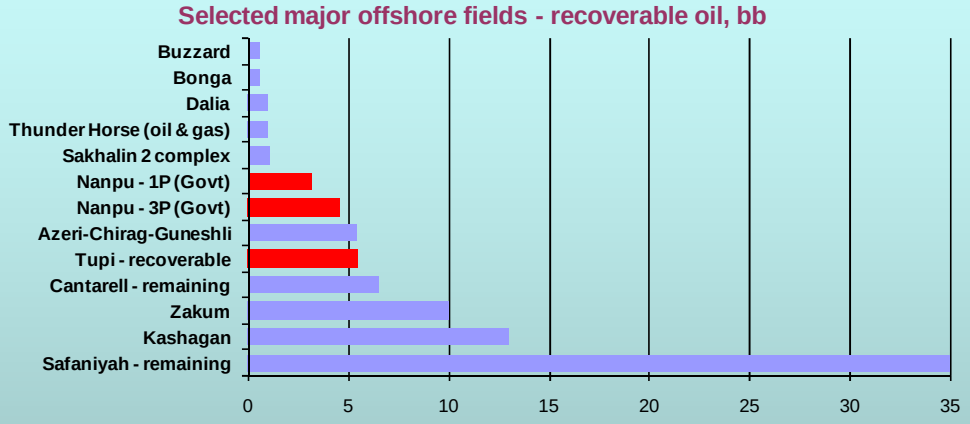




China – September actual: September Chinese production came in some 200 kb/d lower than anticipated at 3.72 mb/d, partly due to outages affecting offshore producer CNOOC. These are assumed to be temporary, with national production expected to recover to 3.9 mb/d in 4Q07 and through 2008. Growth in supply from China has been steady, if unspectacular, overshadowed by rapid demand growth and stable or declining output at its traditional baseload onshore eastern fields Daqing and Shengli, which account for nearly 40% of production. Significant new discoveries are being made however onshore western China and in the Bohai Bay area (see below).

Still Some Big Fish Lurking Offshore

Two recent, near-five billion barrel discoveries offshore Brazil and China suggest that a long overdue uptick in global exploration may yet generate significant incremental supplies outside the Middle East Gulf. Neither is in the super-league of Middle East giant fields (Saudi Arabia's offshore Safaniyah has an estimated 35 billion barrels, with onshore Ghawar still good for an estimated 70 billion barrels). However, reports suggest that combined, the two new discoveries could generate 1.5 mb/d of output by the end of the next decade. The discoveries were made by state firms Petrobras and PetroChina.



Petrobras' Tupi discovery in the deepwater Santos Basin holds an estimated 5-8 billion barrels of oil equivalent, with 85% of this expected to be crude of 28°API. This is the largest discovery ever made in Brazil. However, development will likely be very high-cost, as in addition to being in water depths of 2,000 metres or more, producing wells will need to cut through 6,000 metres of sediment and salt. With initial estimates based on only two wells, further appraisal drilling will be necessary before proven reserve levels and a feasible production schedule can be developed. Petrobras is already suggesting an initial 100 kb/d of production in the early part of the next decade, although analysts suggest full field development for up to 1 mb/d would possibly take several years on top of that.

PetroChina has announced that the offshore blocks of the Jidong Nanpu oilfield in the northern Bohai Bay may contain up to 1.6 billion tonnes of oil equivalent, suggesting close to 12 billion barrels. However, more conservative estimates from China's Ministry of Land and Resources put proven oil in place at 3.2 billion barrels and proven, probable and possible (3P) oil reserves at 4.6 billion barrels. There are definitional uncertainties as regards China's classification of reserves, and some analysts have questioned whether the reported 'proven' levels may overstate recoverable oil. However, this remains a hugely significant discovery, and PetroChina plans to produce 200 kb/d of 32°API oil from 2012, with ultimate production seen at anything between 300 and 500 kb/d.

Revisions to Non-OPEC Oil Supply
(million barrels per day)

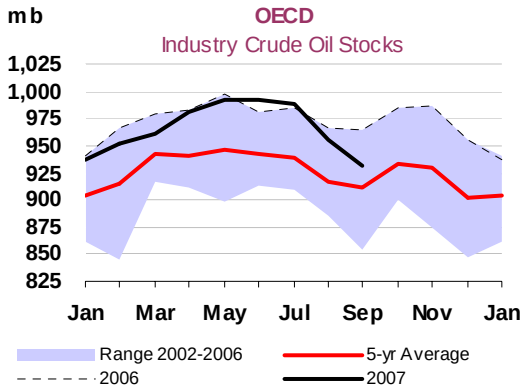
	Last Month's OMR				This Month's OMR				This Month vs. Last Month			
	2007	2008	07 v 06	08 v 07	2007	2008	07 v 06	08 v 07	2007	2008	07 v 06	08 v 07
North America	14.31	14.19	0.10	-0.13	14.31	14.18	0.10	-0.13	0.00	0.00	0.00	0.00
Europe	4.88	4.54	-0.30	-0.34	4.90	4.54	-0.28	-0.36	0.02	0.00	0.02	-0.02
Pacific	0.64	0.79	0.06	0.14	0.66	0.81	0.08	0.16	0.01	0.03	0.01	0.02
Total OECD	**19.83**	**19.51**	**-0.14**	**-0.32**	**19.87**	**19.54**	**-0.10**	**-0.33**	**0.04**	**0.02**	**0.04**	**-0.01**
Former USSR	12.74	13.25	0.50	0.51	12.72	13.25	0.47	0.54	-0.02	0.01	-0.02	0.03
Europe	0.13	0.12	-0.01	-0.01	0.13	0.12	-0.01	-0.01	0.00	0.00	0.00	0.00
China	3.81	3.91	0.13	0.11	3.79	3.91	0.12	0.12	-0.02	0.00	-0.02	0.02
Other Asia	2.70	2.79	-0.01	0.09	2.69	2.77	-0.02	0.07	-0.01	-0.02	0.00	-0.01
Latin America	4.43	4.74	0.03	0.31	4.39	4.71	0.00	0.31	-0.04	-0.03	-0.03	0.00
Middle East	1.65	1.61	-0.08	-0.05	1.65	1.61	-0.08	-0.05	0.00	0.00	0.00	0.00
Africa*	2.55	2.68	0.06	0.13	2.56	2.69	0.06	0.13	0.01	0.01	0.00	0.00
Total Non-OECD*	**28.01**	**29.10**	**0.61**	**1.08**	**27.94**	**29.06**	**0.54**	**1.12**	**-0.07**	**-0.03**	**-0.07**	**0.04**
Processing Gains	1.92	1.95	0.02	0.03	1.92	1.95	0.02	0.03	0.00	0.00	0.00	0.00
Other Biofuels	0.40	0.66	0.15	0.25	0.40	0.66	0.15	0.25	0.00	0.00	0.00	0.00
Total Non-OPEC*	**50.17**	**51.22**	**0.64**	**1.05**	**50.13**	**51.21**	**0.60**	**1.07**	**-0.04**	**-0.01**	**-0.04**	**0.03**

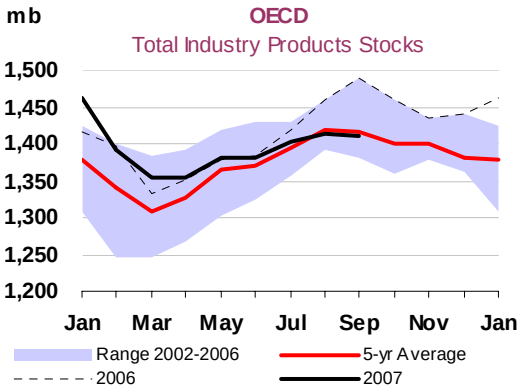
OMR = Oil Market Report
* adjusted to exclude Angola

OECD STOCKS

Summary

- **OECD industry stocks fell by 29.5 mb in September**, as crude levels drew by a total of 24.6 mb, spread over all three regions. Pacific crude stocks in particular decreased sharply, as Japanese crude levels fell to their lowest in at least 20 years. OECD product stocks decreased by only 1.6 mb and 'other oils' by a further 3.3 mb. A counter-seasonal third-quarter stock draw of -230 kb/d has brought down total OECD inventories to the level of their five-year average, or to 52.8 days in terms of forward demand cover at the end of September.





- **End-August stock data were revised up by 14.0 mb**, though increases in 'other oils' and product inventories of 9.4 mb and 7.9 mb respectively were set against a downward move of 3.3 mb for crude stocks. While overall OECD crude stocks remain higher relative to the five-year average than product stocks, it is crude inventories that have seen the steepest declines over the past few months, lifting crude prices and narrowing product to crude price differentials in the process.

- **Preliminary October stock data for the US, Japan and the EU-16 show** a further draw of 20.9 mb, underpinning the tight supply/demand balance. The draw was split evenly between crude and products, with strong crude falls in the US and Europe. In products, the downturn was almost wholly due to a near-10 mb draw in European middle distillates, which supported a sharp rise in diesel prices in late October and early November.

OECD Inventory Position at End-September and Revisions to Preliminary Data

Total OECD industry stocks fell by 29.5 mb in September, to 2,648 mb, and were 113.9 mb lower year-on-year. Crude inventories fell by 24.6 mb to 931 mb, or 34.0 mb lower than end-September last year. Total products drew by 1.6 mb to 1,411 mb, or 78.0 mb lower year-on-year. 'Other oils' fell by 3.3 mb. In terms of forward cover, end-September stocks fell to 52.8 days, or just in line with their five-year average. In both OECD Europe and the Pacific, forward cover is at the bottom of their respective five-year ranges, while in the US, it is one day higher than its five-year average.

Preliminary Industry Stock Change in September 2007 and Third Quarter 2007

	September (preliminary) *(million barrels)*				*(million barrels per day)*				Third Quarter 2007 *(million barrels per day)*			
	N. Am	Europe	Pacific	Total	N. Am	Europe	Pacific	Total	N. Am	Europe	Pacific	Total
Crude Oil	**-3.1**	**-7.9**	**-13.5**	**-24.6**	**-0.10**	**-0.26**	**-0.45**	**-0.82**	**-0.32**	**-0.17**	**-0.17**	**-0.67**
Gasoline	0.6	0.6	-1.3	-0.2	0.02	0.02	-0.04	-0.01	-0.11	0.01	-0.03	-0.13
Distillates	2.1	-3.8	-3.7	-5.5	0.07	-0.13	-0.12	-0.18	0.14	-0.10	0.11	0.15
Fuel Oil	-0.4	-0.3	1.5	0.7	-0.01	-0.01	0.05	0.02	0.01	0.02	0.04	0.07
Other Products	2.1	-1.1	2.3	3.3	0.07	-0.04	0.08	0.11	0.15	0.05	0.04	0.24
Total Products	**4.4**	**-4.7**	**-1.3**	**-1.6**	**0.15**	**-0.16**	**-0.04**	**-0.05**	**0.19**	**-0.02**	**0.15**	**0.33**
Other Oils[1]	-0.3	-0.9	-2.1	-3.3	-0.01	-0.03	-0.07	-0.11	0.12	-0.01	-0.01	0.11
Total Oil	**1.0**	**-13.4**	**-17.0**	**-29.5**	**0.03**	**-0.45**	**-0.57**	**-0.98**	**0.00**	**-0.20**	**-0.03**	**-0.23**

1 Other oils includes NGLs, feedstocks and other hydrocarbons.

Year-on-Year OECD Industry Stock Comparisons for September 2007

	(million barrels)					(Days of Forward Demand)			
	North America	Europe	Pacific	Total		North America	Europe	Pacific	Total
Crude Oil	**-2.0**	**-11.9**	**-20.1**	**-34.0**	**Total Oil**	**-2.3**	**-1.7**	**-5.0**	**-2.6**
Total Products	-50.4	-13.3	-14.2	-78.0	*Versus 2005*	1.6	-1.1	-1.8	0.2
Other Oils[1]	-2.4	1.5	-0.9	-1.9	*Versus 2004*	3.8	-0.2	-1.5	1.6
Total Oil	**-54.8**	**-23.8**	**-35.3**	**-113.9**	**Total Products**	**-2.1**	**-1.0**	**-2.1**	**-1.7**
Versus 2005	36.6	-18.2	-8.7	9.7	*Versus 2005*	0.5	0.2	0.2	0.4
Versus 2004	84.6	-11.3	-6.2	67.0	*Versus 2004*	1.0	0.3	0.8	0.7

1 Other oils includes NGLs, feedstocks and other hydrocarbons.

End-August stock data were revised up by 14.0 mb in total. 9.4 mb of this was in 'other oils' and a further 7.9 mb were due to an upward revision in product stocks, while crude inventories were revised down by 3.3 mb. Geographically, most of the changes took place in Europe, where product stocks were revised higher by 14.0 mb and 'other oils' by 3.8 mb. Again however, this was offset by a substantial downward revision to crude, of 8.4 mb, leaving total stocks 9.4 mb higher.

Revisions versus 11 October 2007 Oil Market Report

(million barrels)

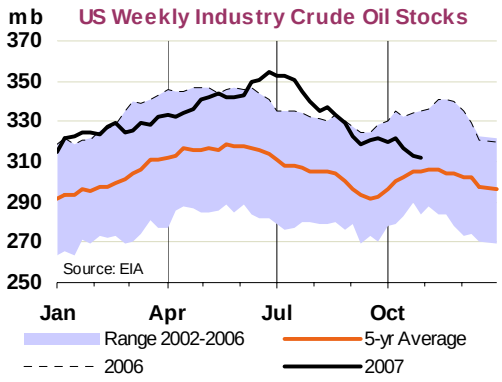
	North America		*Europe*		*Pacific*		*OECD*	
	Jul 07	Aug 07	Jul 07	Aug 07	Jul 07	Aug 07	Jul 07	Aug 07
Crude Oil	**0.0**	**3.2**	**0.1**	**-8.4**	**0.0**	**2.0**	**0.1**	**-3.3**
Gasoline	0.0	1.3	0.5	3.5	0.3	-0.3	0.8	4.6
Distillates	0.0	-3.4	2.0	6.2	0.3	-0.3	2.3	2.6
Residual Fuel Oil	0.0	-1.5	0.2	1.2	0.0	-0.1	0.2	-0.4
Other Products	0.0	-3.1	0.2	3.1	0.0	1.1	0.2	1.1
Total Products	**0.0**	**-6.6**	**3.0**	**14.0**	**0.6**	**0.5**	**3.6**	**7.9**
Other Oils[1]	1.2	5.8	1.2	3.8	0.0	-0.2	2.3	9.4
Total Oil	**1.2**	**2.4**	**4.3**	**9.4**	**0.6**	**2.3**	**6.1**	**14.0**

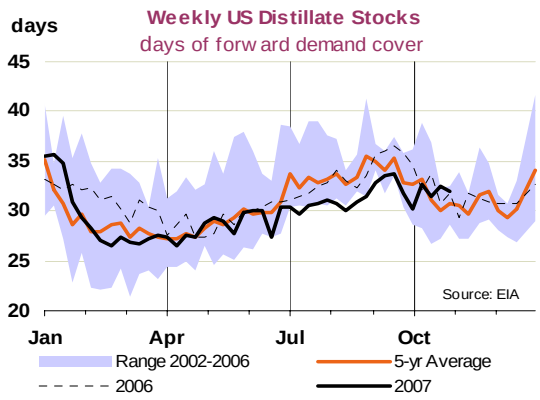
1 Other oils includes NGLs, feedstocks and other hydrocarbons.

OECD Industry Stock Changes in September 2007

OECD North America

Total North American industry stocks rose by 1.0 mb in September, as draws in crude and 'other oils' of 3.1 mb and 0.3 mb respectively partially offset a 4.4 mb product build. Nearly half of the product build was in middle distillate stocks, which rose by 2.1 mb, with 'other' products increasing a further 2.1 mb. US crude stocks fell by 7.6 mb in September, a drawdown of 37.7 mb since their end-June high of 366.6 mb, albeit in line with the seasonal trend. Meanwhile in Mexico, crude stocks rose by 4.5 mb in September.





Preliminary October numbers for the US, based on weekly data, show a further crude draw of 9.2 mb. This has seen US crude stocks falling to approach their five-year average and reflects the tightening of the crude market due to lower supplies, but also high oil prices and to some extent the backwardated market structure of crude futures (see *Falling Crude Stocks – It's All Down to Perceptions* in report dated 11 October

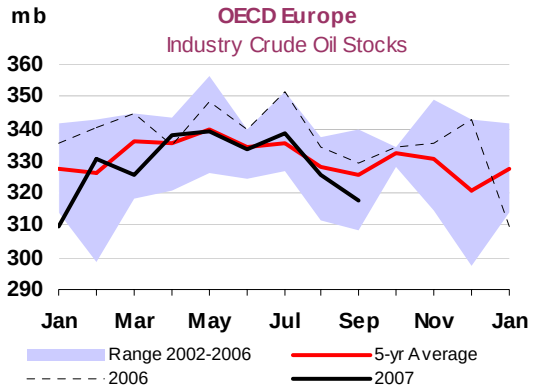
2007). Significantly, in October, crude stocks at Cushing fell again by 4.6 mb, to their lowest level since November 2004 and to less than half of where they stood in April and May of this year. As we have pointed out before, low Cushing crude stock levels have supported WTI's price rise relative to other crudes.

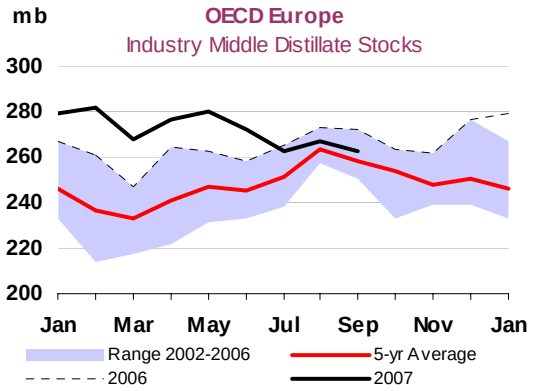
Total North American product inventories rose by 4.4 mb by end-September, with 2.1 mb gains for middle distillates and 'other' products respectively. Gasoline stocks built by 0.6 mb, while residual fuel oil fell by 0.4 mb. As with crude, US and Mexican stocks developments diverged. The US saw a 7.0 mb product build, with increases in middle distillates (+3.0 mb), gasoline (+1.0 mb) and residues (+0.6 mb) respectively. In Mexico, total product stocks fell by 2.6 mb, with draws in all four main product categories.

For products, US weekly October data saw a modest counter-seasonal stock build of 1.9 mb. Gasoline stocks rose by 2.7 mb and fuel oil by 0.9 mb. Unfinished product stocks fell by 1.4 mb and total distillates by 0.4 mb. However, the latter hid the fact that while heating oil inventories built by 3.7 mb, diesel fell by 4.1 mb. Heading into the winter, crucial PADD 1a, or New England, heating oil stocks are above their five-year average, while for overall distillates, slightly weaker demand has improved forward demand cover to 32 days in early November.

OECD Europe

In Europe, total industry stocks fell by 13.4 mb in September, to 23.8 mb lower than end-September last year. Crude stocks drew by 7.9 mb which, combined with end-August's downward revision of 8.4 mb, brought levels down below their five-year average. Crude inventories fell in Germany (-3.7 mb), the UK (-3.0 mb), the Netherlands (-1.5 mb) and France (-0.5 mb), but stayed unchanged in Italy. Preliminary October data from Euroilstock for the EU-15 and Norway indicate a further crude draw of 4.7 mb.



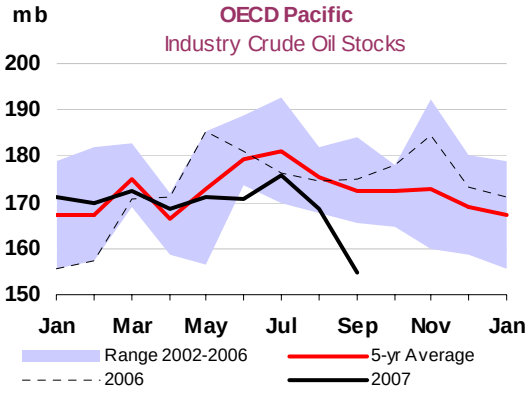


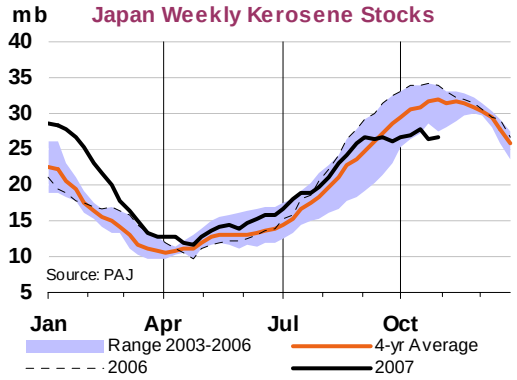
Total European product stocks drew by 4.7 mb in September, largely due to a middle distillate fall of 3.8 mb. Distillate stocks fell in all major countries reviewed, except in Germany, where they increased by 1.5 mb. European gasoline stocks rose by 0.6 mb, while 'other' products and residual fuel oil stocks fell by 1.1 mb and 0.3 mb respectively.

Preliminary Euroilstock data for October show that product stocks in the EU-16 fell by a further 11.5 mb, largely due to a 9.8 mb downturn in middle distillates. Refinery problems in Northwest Europe in particular tightened the market, leading to a sharp rise in diesel prices and in early November even a French heating oil loan from emergency stocks to keep the market balanced. Meanwhile, product stocks for the Amsterdam-Rotterdam-Antwerp region showed a 2.0 mb draw in October. Gasoil and jet/kerosene stocks each drew by around 1 mb, while gasoline, naphtha and fuel oil remained more or less unchanged.

OECD Pacific

Total Pacific industry stocks fell by 17.0 mb in September to 35.3 mb lower year-on-year. 13.5 mb of this was due to a draw in crude oil. OECD Pacific crude stocks at end-September stood at 154.8 mb, which represents a 20 mb drop since end-July, and leaves them at their lowest level since February 1995. September's crude stock draw was wholly due to a 13.7 mb drop in Japan, where levels have now fallen to their lowest in at least 20 years. Meanwhile, in Korea, crude stocks were virtually unchanged. Preliminary October data for Japan published by the Petroleum Association of Japan (PAJ) show a slight crude build of 3.4 mb, but this still leaves levels below their five-year range.

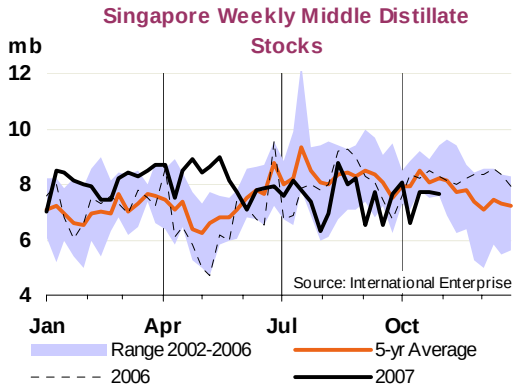


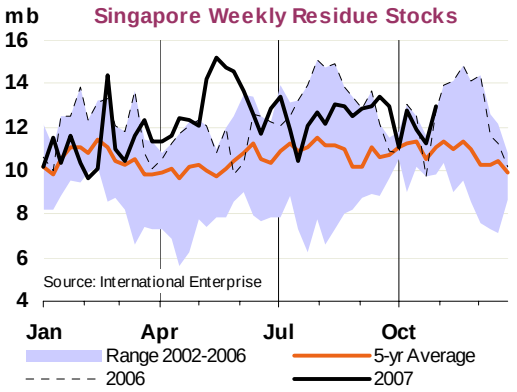


Total industry product stocks in the Pacific fell by 1.3 mb and stand 14.2 mb lower than end-September last year. A middle distillate draw of 3.7 mb was equally shared by Korea and Japan, while a gasoline draw of 1.3 mb was offset by a similar increase in residual fuel oil stocks. Total Pacific middle distillate stocks fell below their five-year average in September, while gasoline levels have been below their historical average since the end of June – both partly due to below-average Japanese refinery runs this year. Preliminary October data for Japan from PAJ show a 0.8 mb dip in total products, largely due to falling 'unfinished' products. Of note is Japan's level of kerosene stocks, which in October stayed more or less flat, counter to their usual seasonal build ahead of winter heating demand. Thus they have fallen to 5.2 mb below their four-year average or to their lowest end-October level since PAJ data has been available.

Recent Developments in Singapore Stocks

Product stocks in Singapore, as reported by International Enterprise, rose by 175 kb in October. Residual fuel oil stocks built by 1.0 mb, which offset draws in light and middle distillates of 650 kb and 210 kb respectively. Fuel oil stocks remain at the top of their five-year range, despite lower volumes of eastbound oil and sustained record-high high-sulphur fuel oil prices. Lower middle distillate stocks partly reflect below-average Japanese kerosene stocks and underpin tight Singapore jet/kerosene crack spreads versus Dubai.

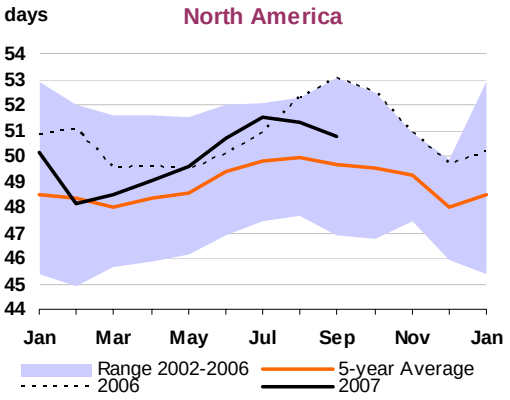


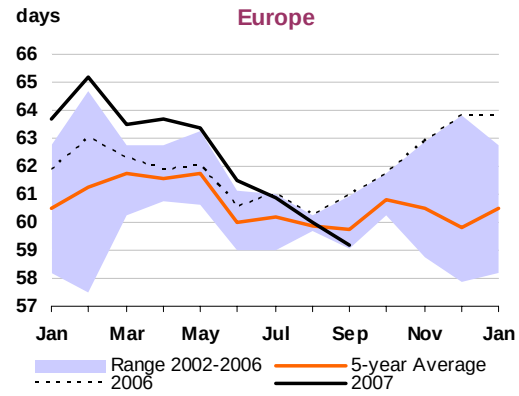


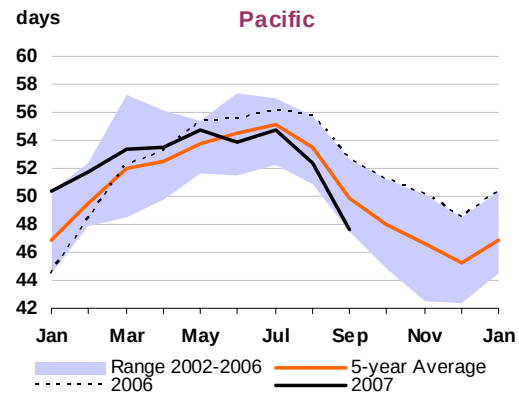
Regional OECD End-of-Month Industry Stocks

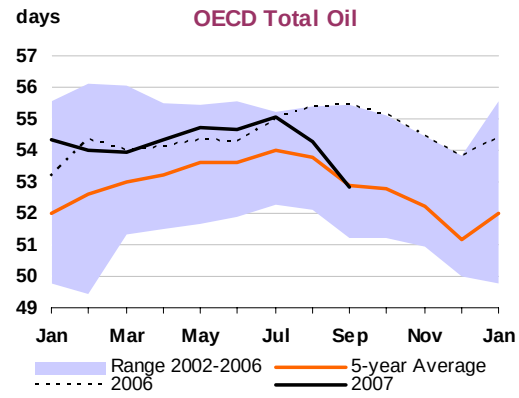
(in days of forward demand and millions barrels of total oil)

Days[1]

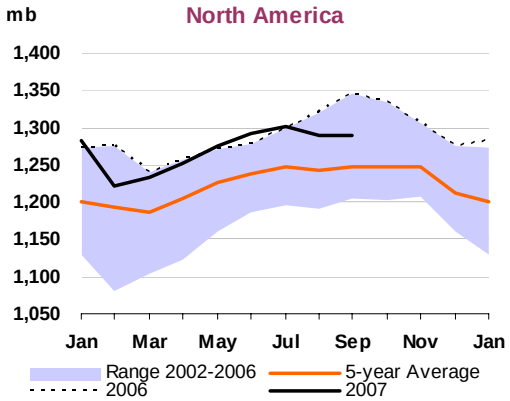


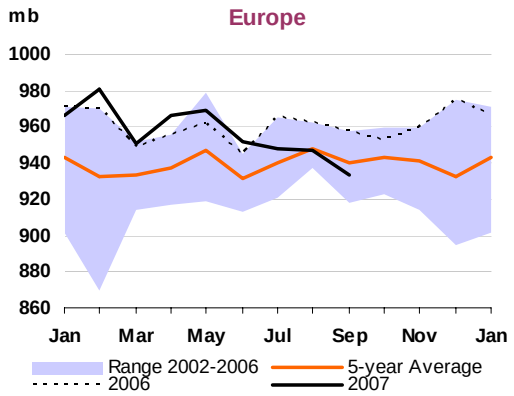


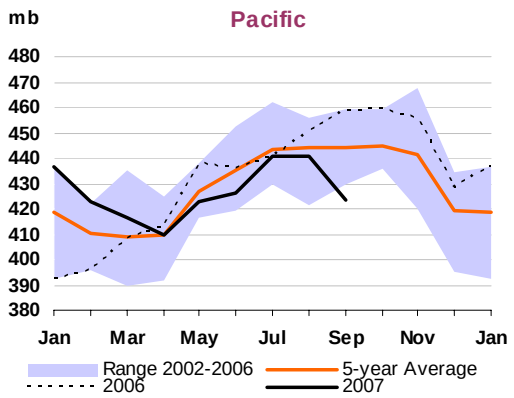


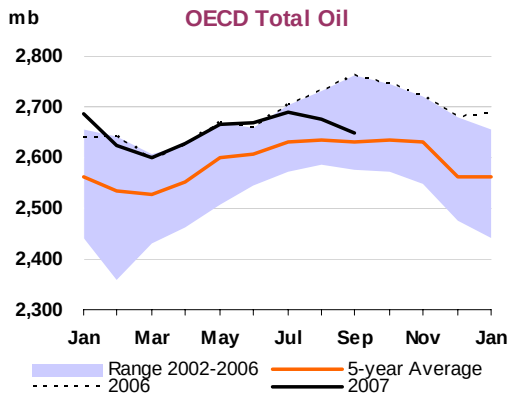


Million Barrels









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

PRICES

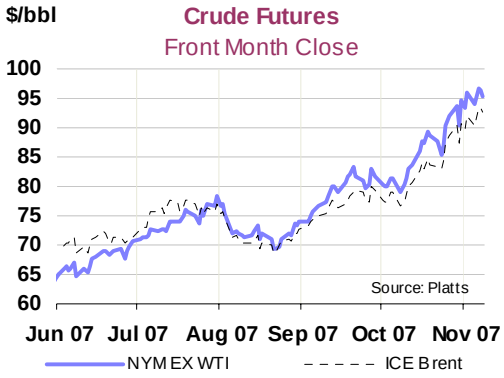
Summary

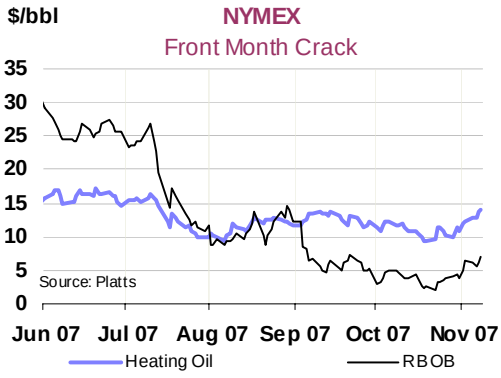
- **Crude futures surged in October and early November**, with WTI hitting a new record above $98/bbl on a further tightening of the market. Strong fundamentals, including lower crude stocks, constrained supplies and new geopolitical tensions supported markets, offsetting worries about economic downside risks to demand.

- **Spot markets were buoyant and predominantly crude-driven**, though the distillate complex showed strong gains on tight supplies and healthy demand ahead of the winter. Northwest European refinery problems triggered a diesel price spike in late October and jet/kerosene crack spreads surged in Asia, not least due to tight kerosene stocks in Japan. ICE Gasoil and NYMEX Heating Oil futures contracts hit new record highs.

- **Refining margins were mostly weaker or flat in October**. US Gulf Coast cracking margins in particular remain depressed on high light sweet crude and weak gasoline prices. Asian refining margins picked up on rising crack spreads, after a period of below-average refinery throughputs. In Europe, refining margins were down slightly, but remain higher in the north.

- **Middle East Gulf freight rates firmed slightly in October**, prompted by increased OPEC production. Sharper increases were seen for crude tanker rates in both West Africa, on stronger vessel demand, and especially in the Mediterranean, following delays in the Turkish Straits and higher Ceyhan loadings. However, all crude tanker rates continue to underwhelm in seasonal terms.



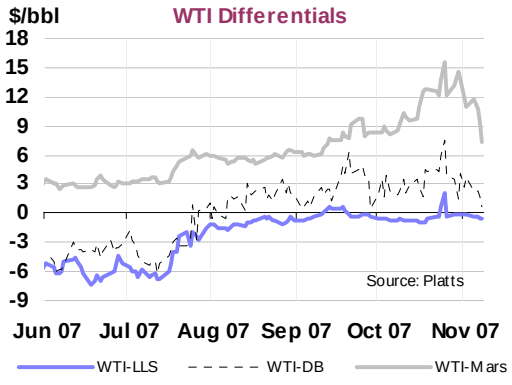


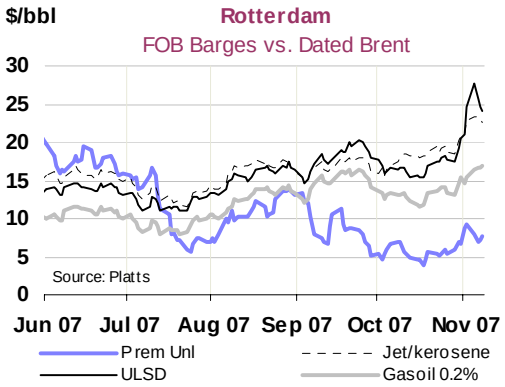
Overview

Crude futures again set new records well above $90/bbl in October and early November as all indications are that the market is tightening further. Crude stocks fell in the OECD in September and October, as demand stayed strong and supplies remained constrained. Storms caused production outages in Mexico and the North Sea, while Russia curbed October exports on pipeline maintenance to Primorsk. OPEC's production rose ahead of its pledged increase from 1 November, though this was largely due to higher exports from Iraq and Angola, the two countries that do not have production targets. Geopolitical tensions increased in Pakistan even as the situation on the Turkey/Iraq border improved. Nevertheless, markets remain jittery against a background of tighter stocks, for the moment at least shrugging off concerns about a downturn in the US and, by extension, the global economy.

Falling stocks in October and early November continue to reflect a fundamentally tight market. Despite this report's downward revision to fourth-quarter demand, supplies are likely to remain constrained through to the end of the year. Weather outages also contributed to tight conditions: late October saw

Mexico forced to shut in crude production due to storms, and the same happened to a lesser extent in the North Sea in early November. While OPEC apparently raised output in October, there is little indication so far that output targets will be reassessed ahead of OPEC's regular early-December meeting in Abu Dhabi.

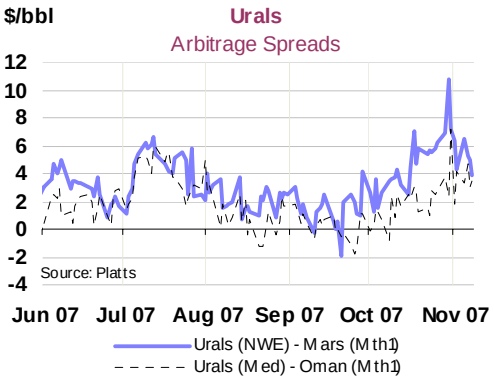


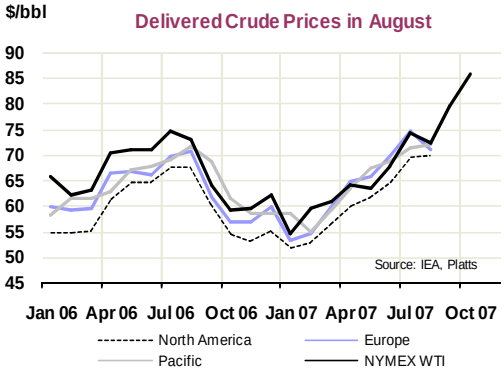


The tight crude market reflects in part refinery buying ahead of the end of seasonal maintenance and peak winter throughputs. However, refinery performance has been sub-par, notably in Europe, where there have been difficulties at some of the region's largest plants. In particular, the European middle distillate market is tight ahead of the 1 January 2008 switch to 1,000 ppm sulphur heating oil. Protracted maintenance and unplanned outages at French refineries and limited supplies in the Northwest European market prompted French authorities to loan 285,000 tonnes of heating oil (~2.13 mb) from strategic stocks. In China, weak refining margins kept refinery throughputs low and product markets tight as a result, encouraging authorities to raise retail prices on 1 November.

Spot Crude Oil Prices

Markets remain crude driven, with refining margins mostly down or flat in October. Physical prices tracked futures, and spot WTI in the **US** remains supported by Cushing crude stocks falling to their lowest level since November 2004 at 13.9 mb. Tight Cushing stocks also contributed to the squeeze on prompt WTI, briefly widening its premium to Brent to as much as $7.50/bbl in late October. WTI also widened versus Gulf Coast sours such as Mars or Poseidon, again illustrating the disconnect between the two markets, especially as refining margins on the Gulf Coast fell sharply in October. Gulf Coast sours weakened due to new output in the region, as well as extra Urals and Iraqi barrels offered into the market. But early November saw a reversal of this situation. WTI also widened its premium against heavy sours such as Maya, despite the Mexican outages.





In the **European market**, Brent remained strong compared with other regional crudes, despite a decline in Northwest European cracking margins in October. North Sea shut-ins of up to 500 kb/d due to storms appeared to have limited impact on prices at the time of writing. Brent versus Dubai remained in the $6/bbl range though volatile. Nigerian premia weakened slightly versus Brent, as Bonny Light cracking

margins in the US Gulf fell to nearly zero in October. On the other hand, Brent gained versus Mediterranean light sweets Azeri Light and Saharan Blend. European medium sour Urals strengthened on lower exports in October, though its discount to Brent remained flat. Arbitrage options to west and east weakened, as Urals gained versus Mars and Oman. Ukraine's Kremenchug refinery saw itself forced to tender for replacement cargoes into Odessa after its regular pipeline supplies from Russia's Tatneft were cut off due to a dispute. In the Mediterranean, Iraq tendered further Kirkuk supplies from Ceyhan, with October liftings calculated at 260 kb/d.

Spot Crude Oil Prices and Differentials

(monthly and weekly averages, $/bbl)

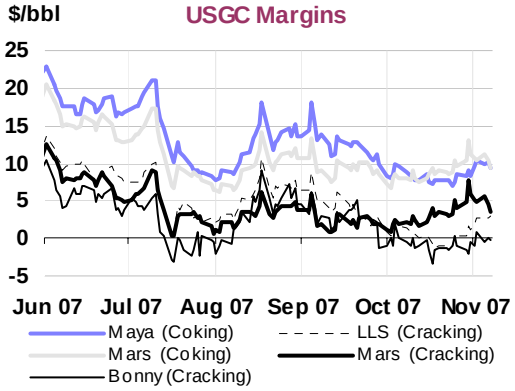
	Aug	Sep	Oct	Oct-Sep Avg Change	%	Week Commencing: 08 Oct	15 Oct	22 Oct	29 Oct	05 Nov
Crudes										
Dated Brent	70.73	76.87	82.50	5.63	7.3	78.95	84.47	84.34	90.35	93.92
Brent (Asia) Mth1 adjusted	71.33	76.59	82.22	5.63	7.4	78.20	83.60	84.99	89.71	92.60
WTI (Cushing) Mth1 adjusted	72.36	79.98	85.87	5.89	7.4	81.48	87.77	89.56	93.46	95.66
Urals (Mediterranean)	69.24	73.78	79.52	5.74	7.8	75.96	80.99	81.87	87.54	91.22
Dubai Mth1 adjusted	67.38	73.36	77.12	3.76	5.1	74.07	78.07	79.54	83.57	86.94
Tapis (Dated)	76.32	82.16	87.24	5.08	6.2	83.54	88.10	89.71	94.73	97.98
Differential to Dated Brent										
WTI (Cushing) Mth1 adjusted	1.63	3.11	3.38	0.26		2.54	3.30	5.22	3.11	1.74
Urals (Mediterranean)	-1.49	-3.09	-2.98	0.12		-2.99	-3.48	-2.47	-2.81	-2.70
Dubai Mth1 adjusted - Dated Brent	-3.35	-3.51	-5.37	-1.87		-4.88	-6.40	-4.80	-6.78	-6.98
Tapis (Dated)	5.58	5.29	4.74	-0.55		4.60	3.63	5.37	4.38	4.06
Prompt Month Differential										
Forward Cash Brent Mth1-Mth2 adj.	-0.14	0.22	0.37	0.16		0.31	0.64	0.28	0.37	0.42
Forward WTI Cushing Mth1-Mth2 adj	0.29	1.35	1.12	-0.23		0.77	1.26	1.65	1.02	0.83

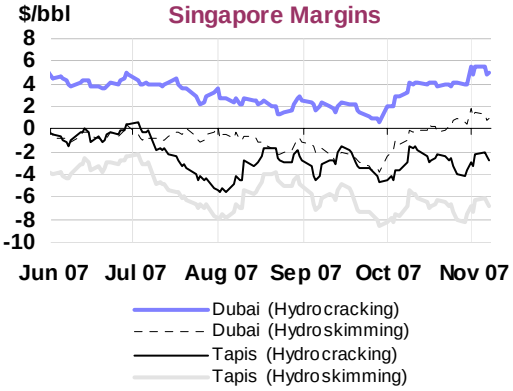
Source: Platts

In **Asia**, Dubai and other medium sours strengthened on strong fuel oil prices. Japanese crude stocks fell to their lowest level in at least 20 years, indicating, among other things, tight regional supplies, though Saudi and other Gulf producers' official selling prices for December (and the offer of full-term volumes) appeared to indicate a willingness to direct any additional OPEC volumes towards the east. Malaysian Tapis, a light sweet Asian crude benchmark, actually hit the $100/barrel level in early November.

Refining Margins

Strong crude prices continued to pressure refining margins in October. US Gulf Coast full-cost cracking margins fell towards zero or below on weak gasoline cracks and high light sweet crude prices. In contrast, rising gasoline and middle distillate cracks lifted margins slightly on the US West Coast.





Selected Refining Margins in Major Refining Centres

($/bbl)

		Monthly Average			Change	Average for week ending:				
		Aug 07	Sep 07	Oct 07	Oct 07-Sep 07	10 Oct	17 Oct	24 Oct	31 Oct	07 Nov
NW Europe	Brent (Cracking)	5.74	4.48	3.20	-1.28	3.68	2.58	3.21	3.62	5.93
	Urals (Cracking)	5.62	5.89	4.71	-1.18	4.95	4.66	4.67	4.59	7.33
	Brent (Hydroskimming)	-0.03	-1.33	-2.40	-1.07	-1.66	-2.99	-2.46	-2.43	-0.76
	Urals (Hydroskimming)	-1.83	-1.57	-2.07	-0.50	-1.82	-2.04	-2.07	-2.47	-0.36
Mediterranean	Es Sider (Cracking)	4.09	4.69	2.76	-1.94	3.46	2.48	2.35	2.67	5.22
	Urals (Cracking)	4.87	5.64	4.38	-1.26	4.51	4.17	4.50	4.59	6.81
	Es Sider (Hydroskimming)	-1.62	-1.55	-3.15	-1.60	-2.06	-3.35	-3.70	-3.81	-1.80
	Urals (Hydroskimming)	-2.29	-2.06	-2.66	-0.60	-2.38	-2.73	-2.52	-2.89	-1.43
US Gulf Coast	Bonny (Cracking)	3.34	3.17	0.26	-2.90	1.34	0.38	-0.54	0.02	1.73
	Brent (Cracking)	3.61	2.88	-0.89	-3.77	0.16	-1.49	-1.36	-1.01	-0.12
	LLS (Cracking)	5.64	4.32	0.36	-3.96	1.42	0.05	-1.11	0.80	2.57
	Mars (Cracking)	3.21	2.39	3.10	0.71	2.25	2.56	3.23	5.47	4.70
	Mars (Coking)	9.46	9.48	8.83	-0.65	8.30	8.26	8.75	10.95	10.40
	Maya (Coking)	12.19	12.60	8.18	-4.42	9.02	7.71	7.60	8.36	9.91
US West Coast	ANS (Cracking)	-0.41	-1.74	0.59	2.34	3.25	1.29	-1.31	-0.42	1.78
	Kern (Cracking)	4.41	2.21	4.18	1.98	6.22	3.49	2.78	4.85	5.07
	Oman (Cracking)	2.61	1.55	5.22	3.67	6.33	6.09	4.18	5.91	6.56
	Kern (Coking)	12.83	13.94	16.09	2.16	19.18	17.30	13.79	15.71	17.28
Singapore	Dubai (Hydroskimming)	-1.16	-2.57	-0.21	2.35	-0.73	0.05	0.08	0.88	1.10
	Tapis (Hydroskimming)	-5.56	-6.59	-6.99	-0.40	-6.65	-6.43	-6.59	-7.59	-6.58
	Dubai (Hydrocracking)	2.28	1.71	3.68	1.96	3.37	4.09	3.91	4.34	5.14
	Tapis (Hydrocracking)	-3.24	-3.25	-3.00	0.25	-2.70	-2.31	-2.50	-3.63	-2.58
China	Cabinda (Hydroskimming)	-3.79	-6.24	-7.01	-0.77	-5.94	-6.72	-7.23	-7.95	-5.61
	Daqing (Hydroskimming)	-7.88	-8.18	-11.17	-3.00	-10.38	-10.50	-11.43	-12.02	-8.98
	Dubai (Hydroskimming)	-1.51	-2.86	-0.55	2.31	-1.03	-0.27	-0.32	0.55	0.78
	Daqing (Hydrocracking)	-4.16	-3.12	-4.71	-1.59	-4.20	-3.77	-4.73	-5.33	-2.20
	Dubai (Hydrocracking)	1.88	1.42	3.36	1.94	3.10	3.78	3.53	4.06	4.89

For the purposes of this report, refining margins are calculated for various complexity configurations, each optimized 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.

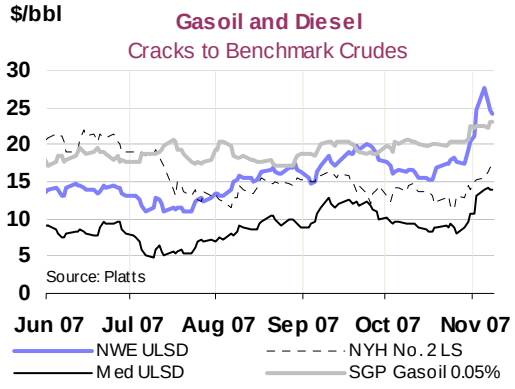
*The China refinery margin calculation represents a model based on spot product import/export parity, and does not reflect internal pricing regulations.
Sources: IEA, Purvin & Gertz Inc.

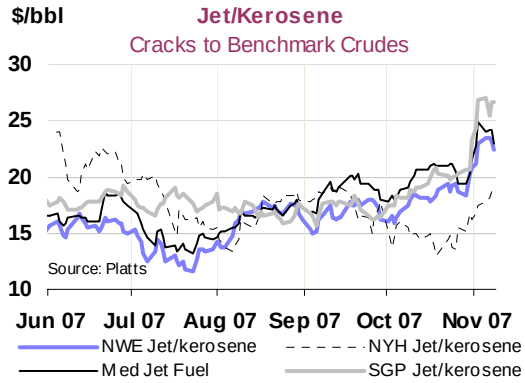
European margins all fell in October as gasoline and gasoil/diesel crack spreads, on average, declined. Margins remain higher in Northwest Europe than the Mediterranean, but in both regions, hydroskimming margins stayed in negative territory in contrast to positive cracking. In Singapore, Dubai hydrocracking rose by around $2/bbl, as did Dubai hydroskimming margins, which turned positive during the month. In Asia, all cracks except low-sulphur fuel oil increased. Korean refiner SK Energy, which had cut crude throughputs in October on weak margins, announced it would lift runs again in November, anticipating a recovery in margins.

Spot Product Prices

Spot product prices largely increased in tandem with crude, except **middle distillates**, which saw a strong rise in crack spreads. The onset of winter temperatures, tighter stocks in the OECD Pacific and Europe, low refining margins, and refinery problems in Europe have all contributed to price strength. Delayed return from maintenance at France's major Gonfreville refinery, coupled with ongoing maintenance at the Feyzin plant, caused French authorities to release 285,000 tonnes (~2.13 mb) of heating oil from strategic stocks into the market in early November, albeit only as a four-month loan. Europe's heating oil market is strained due to the requirement from 1 January 2008 to halve its sulphur content to 1,000 ppm. When a fire broke out at the UK's Coryton refinery in early November, forcing it to declare force majeure on product deliveries, Northwest European ultra-low-sulphur diesel cracks shot up. The UK's decision to voluntarily reduce sulphur content in diesel to 10 ppm from December (ahead of a general European

Union switch from 2009) has temporarily reduced supply flexibility. Jet/kerosene crack spreads also surged in Europe, partly because of the Coryton refinery's need to obtain prompt supplies to meet the needs of London's busy airports.





In Asia too, middle distillate cracks were strong, as lower-than-usual refinery throughputs on weak margins have tightened the market, notably in China, where fuel shortages were reported and the government put pressure on refiners to crank up output. The Chinese government also unexpectedly raised retail prices by around 9% from 1 November in order to raise the incentive for refiners to increase output. Furthermore, China trimmed gasoil exports in October, tightening the regional market. Meanwhile, stocks of Japanese heating fuel kerosene slipped below their four-year range in October. Further strong demand came from regional importers Indonesia and Vietnam.

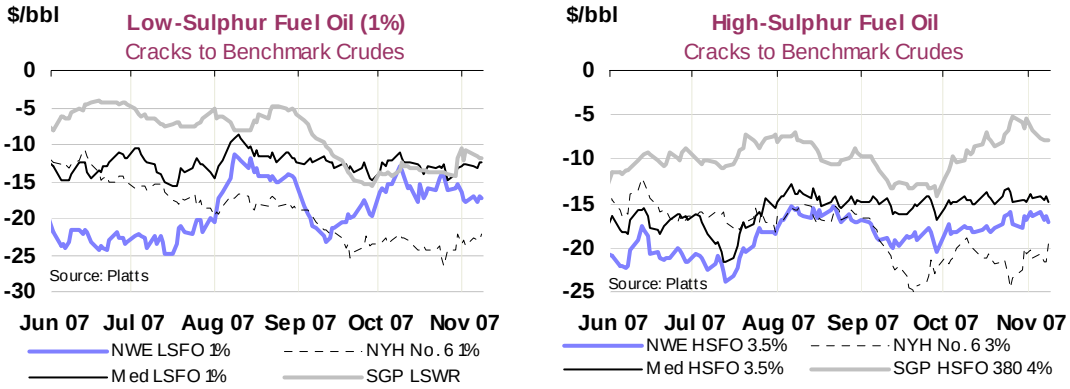
Spot Product Prices

(monthly and weekly averages, $/bbl)

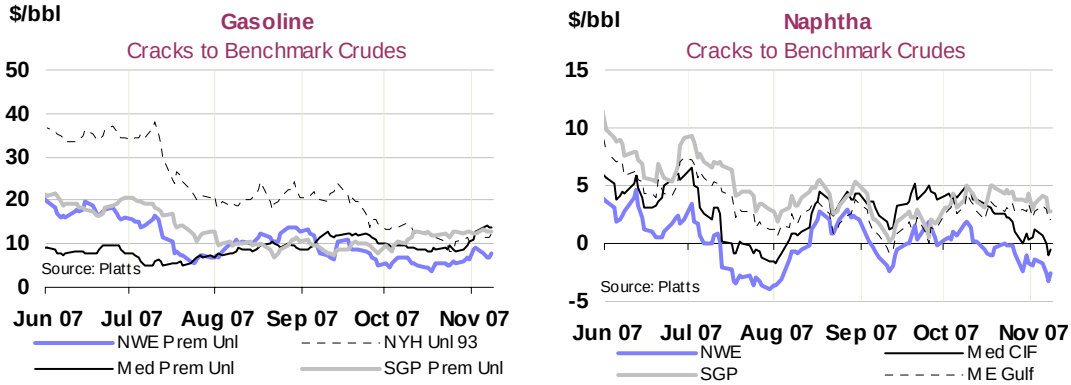
	Aug	Sep	Oct	Oct-Sep Change	Oct-Sep %	Week Commencing: 08 Oct	15 Oct	22 Oct	29 Oct	05 Nov	Aug	Sep	Oct
Rotterdam, Barges FOB											**Differential to Brent**		
Premium Unleaded	81.66	85.74	88.06	2.32	2.7	84.91	89.19	89.75	97.81	101.30	10.92	8.87	5.56
Naphtha	71.27	76.77	82.41	5.64	7.3	80.04	83.74	84.06	88.65	91.38	0.54	-0.10	-0.09
Jet/Kerosene	87.27	93.68	100.67	7.00	7.5	97.03	102.73	103.44	111.01	116.99	16.53	16.81	18.18
ULSD	86.40	94.83	99.44	4.61	4.9	95.21	100.29	102.08	110.90	119.45	15.66	17.96	16.94
Gasoil .2%	83.47	91.77	95.68	3.91	4.3	91.85	96.70	98.12	104.94	110.59	12.73	14.90	13.19
LSFO 1%	56.55	56.65	66.90	10.25	18.1	64.43	67.78	69.29	73.71	76.65	-14.18	-20.22	-15.60
HSFO 3.5%	54.46	58.03	64.91	6.89	11.9	61.02	66.56	67.70	73.63	77.31	-16.28	-18.84	-17.58
Mediterranean, FOB Cargoes											**Differential to Urals**		
Premium 50 ppm	79.56	83.65	86.42	2.77	3.3	82.63	87.92	89.03	96.19	99.91	10.32	9.88	6.90
Naphtha	71.05	76.99	82.40	5.41	7.0	80.07	83.92	83.99	88.24	90.87	1.80	3.21	2.88
Jet Aviation fuel	85.89	92.57	99.53	6.96	7.5	95.94	101.93	102.50	109.33	114.96	16.64	18.79	20.01
Gasoil .2%	85.49	93.60	97.12	3.52	3.8	92.90	98.21	100.05	107.05	112.93	16.25	19.82	17.60
LSFO 1%	58.14	60.92	66.58	5.66	9.3	63.87	67.68	68.46	74.41	78.45	-11.10	-12.86	-12.94
HSFO 3.5%	54.95	58.49	65.03	6.54	11.2	61.31	66.65	68.01	73.07	76.72	-14.29	-15.28	-14.49
New York Harbour, Barges											**Differential to WTI**		
Super Unleaded	92.86	99.57	97.85	-1.72	-1.7	94.96	99.96	98.95	104.71	107.41	20.49	19.58	11.97
Unleaded	83.89	87.92	91.04	3.12	3.5	87.66	92.90	92.55	99.57	103.47	11.52	7.93	5.16
Jet/Kerosene	88.83	97.70	100.62	2.92	3.0	96.38	101.73	103.94	109.91	114.08	16.47	17.72	14.75
No. 2 (Heating Oil)	83.14	91.46	95.82	4.36	4.8	92.01	97.23	98.61	104.39	108.06	10.78	11.47	9.95
LSFO 1%	54.41	57.60	62.18	4.58	7.9	58.74	63.54	64.75	70.12	73.03	-17.96	-22.38	-23.69
No. 6 3%	56.16	58.08	64.66	6.57	11.3	61.76	66.52	66.73	72.50	74.78	-16.21	-21.90	-21.22
Singapore, Cargoes											**Differential to Dubai**		
Premium Unleaded	77.15	82.51	88.71	6.20	7.5	85.82	90.36	91.82	96.16	99.94	9.77	9.14	11.59
Naphtha	71.34	75.28	81.18	5.90	7.8	78.36	82.37	83.85	87.17	90.50	3.96	1.92	4.06
Jet/Kerosene	84.28	90.44	96.62	6.17	6.8	92.84	98.31	99.55	106.70	113.21	16.89	17.08	19.49
Gasoil .5%	83.00	90.72	95.08	4.37	4.8	92.37	96.00	97.38	102.53	106.37	15.62	17.36	17.96
LSWR Cracked	61.08	61.47	63.70	2.24	3.6	61.04	64.51	65.68	71.60	75.30	-6.30	-11.89	-13.42
HSFO 180 CST	58.20	60.99	68.53	7.54	12.4	64.40	69.80	72.60	77.36	79.66	-9.19	-12.38	-8.59
HSFO 380 CST 4%	58.39	60.95	68.84	7.88	12.9	64.79	70.18	72.91	77.39	79.17	-8.99	-12.41	-8.29

Source: Platts

Fuel oil prices made steady gains in October and high-sulphur fuel oil in Singapore reached new record highs above $500/tonne. Japanese demand was strong in order to compensate for lower nuclear power. In addition, the situation of lower Iranian exports, as outlined in last month's report, remained unchanged, keeping regional supplies tight, as some eastbound cargoes were diverted to bunker hub Fujairah and elsewhere. Total volumes heading to Singapore in November were estimated at only 1.3-1.4 million tonnes, this year's low. Elsewhere, crack spreads remained more or less flat.



Gasoline cracks remained flat in October and early November in all regions. China again curbed exports –approximately halving outflows to around 100,000 tonnes for November – on strong demand and tighter supplies. Europe's supplies also suffered from the outages outlined above, but the region remains structurally long in gasoline. Naphtha cracks meanwhile were further depressed, especially in Europe. In Asia, India continues to keep exports high, raising outflows in October to around 240 kb/d, up by an average of 190 kb/d for the January-September 2007 period. Asian naphtha crackers are however already cranking up throughputs ahead of the festive season, which could curb losses.



End-User Product Prices in October

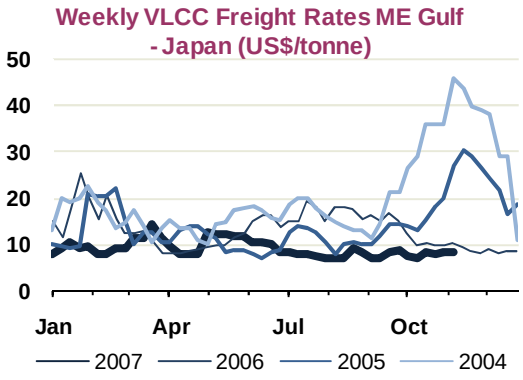
In US dollars, ex-tax, most end-user prices reached record highs in October, after a 3.4% rise on average from September. In national currency terms, ex-tax end-user prices overall gained 1.8% in October, with diesel prices in France and Germany, and LSFO in the UK and Japan reaching record highs. Year-on-year gains in dollar terms were very strong, with retail prices up around 20-40%. As for individual products, in dollar terms, ex-tax gasoline prices rose by 1.1% on average, with only the US declining (-0.8%). Diesel prices ex-tax, in US dollars, increased by 4.0% on average, while heating oil prices in Europe and Canada rose by 5-6% ahead of the winter. LSFO ex-tax prices in US dollars rose 4.6% month-on-month.

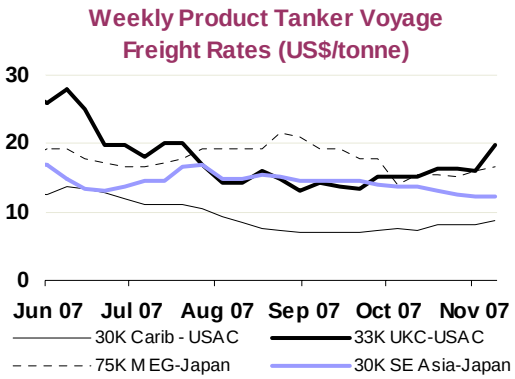
Freight

Increased OPEC production prompted a slight firming in Middle East Gulf tanker rates in October, but they continue to underwhelm in seasonal terms. A sharper rise was seen in West African rates, bringing them closer to fourth-quarter norms, as vessel interest for eastbound exports increased. Mediterranean dirty rates spiked dramatically on higher Ceyhan loadings and delays in the Turkish Straits. Clean tanker rates were mixed, but higher naphtha trade heading to Eastern Asia could lend support in the coming weeks.

VLCC rates from the Middle East Gulf firmed slightly on apparent increases in OPEC output from October. For Japan-bound trades, 250,000-tonne rates rose from around $7.20/tonne in mid-October to $8.50/tonne in early November, but remain well below seasonal averages. Tanker movement reports foresee higher eastbound Middle East Gulf liftings through mid-November, though this uptick may be offset by sluggish westbound flows. VLCC rates to the US Gulf rose from just over $13/tonne in the second half of October to finish the month nearer $15/tonne. Corresponding rates to the US Gulf in October 2006 averaged around $20/tonne. Without an upturn in regional vessel demand, the potential for ship owners to mitigate the cost of extremely high bunker prices by raising charter rates remains limited.

Crude freight rates rose sharply in the Atlantic basin in October on higher vessel demand. Asian purchases of West African grades in November were 100 kb/d higher than October and there were reports of increased US spot purchases of West African crude. VLCC rates from West Africa to US Atlantic rose from under $8/tonne in early October to almost $11/tonne at the start of November, before falling back to $9/tonne.





More dramatic increases in freight rates were seen in the Black Sea and Mediterranean region in October. Exports via the Baku-Tbilisi-Ceyhan pipeline rebounded after a period of Caspian production maintenance. Several tenders for Iraqi crude for almost immediate loading at Ceyhan added further sporadic pressure to regional vessel demand. At the same time, transit delays in the Turkish Straits of up to four days squeezed vessel supply. Black Sea to Mediterranean Aframax rates rose from under $8/tonne in early October to peak at almost $17/tonne near the end of the month, before subsiding to around $14/tonne at the time of writing.

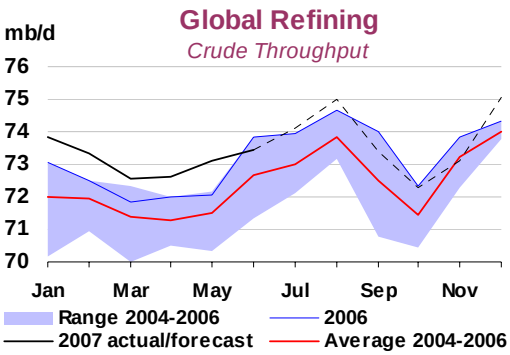
In the clean sector, Asian rates were mixed in October. Singapore to Japan clean rates for 30,000-tonne vessels fell by a couple of dollars to finish the month around $12/tonne, while Middle East Gulf to Japan 75,000-tonne rates rose by a similar amount to $16/tonne. Reports of petrochemical plants in Japan, Korea and Taiwan switching back to naphtha feedstock, rather than LPG (due to a run-up in butane prices), should support clean freight rates in the coming weeks. Naphtha trade has also been supported by high Indian exports for the last three months. Transatlantic clean rates were boosted by refinery problems in Europe which supported backhaul diesel trade from the US in early November. Rates for 33,000-tonne charters rose by almost $4/tonne to nearly $20/tonne in the first week of November.

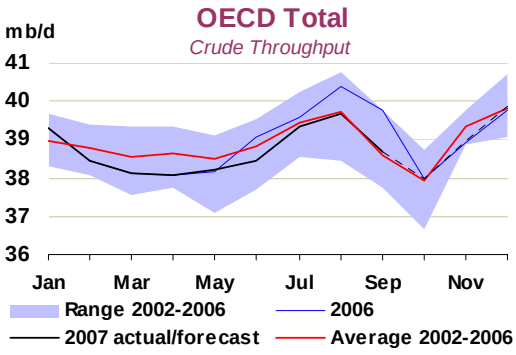
REFINING

Summary

- **Global refinery crude runs are forecast to average 73.1 mb/d in November,** as throughput recovers from the seasonal low point of 72.3 mb/d in October. Fourth-quarter throughput is expected to average 73.5 mb/d, 0.7 mb/d lower than last month's report, on the back of weaker demand, increased offline capacity and higher planned maintenance.

- **November OECD throughput is estimated to average 39.0 mb/d**, as refineries recover from peak seasonal maintenance in October and a series of unplanned shutdowns in all three OECD regions. Fourth-quarter OECD crude throughput is estimated at 39.0 mb/d, 0.3 mb/d lower than last month's report.





- **Gasoil/diesel yields remain strong in all three OECD regions.** However, diverging trends for jet/kerosene yields between OECD regions suggest that while European refiners continue to benefit from recent upgrading investments, North American refiners are still under pressure from strong demand growth in diesel. Interestingly, Japanese refiners appear to have boosted jet fuel production at the expense of kerosene production, possibly to avoid the voluntary run cuts seen late last year.

- **European distillate markets have tightened dramatically in recent weeks** ahead of the UK's move to 10 ppm sulphur diesel and the Europe-wide introduction of 0.1% (1000 ppm) sulphur heating oil. Heavy and protracted refinery maintenance and unplanned outages have restricted the European refining system's ability to accommodate strong demand for distillates that meet the tighter specifications.

Global Refinery Throughput

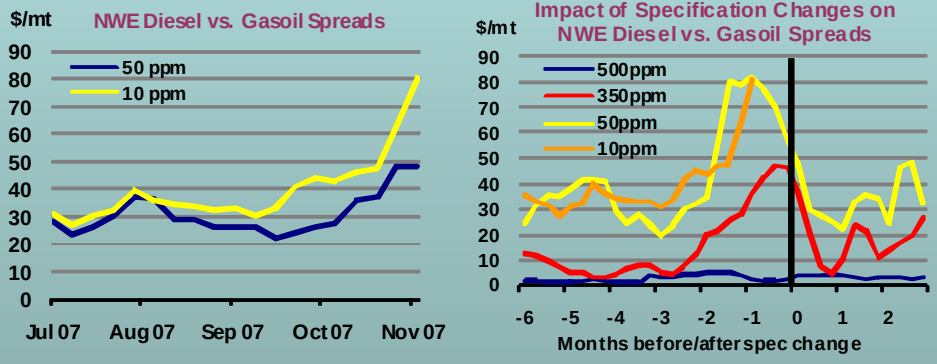
Global refinery crude throughput is projected to recover from the October low point of 72.3 mb/d to 75.0 mb/d by December, as refineries return from seasonal maintenance. Fourth-quarter throughput is estimated to average 73.5 mb/d, a downward revision of 0.7 mb/d from last month's report, on the back of expectations of weaker fourth-quarter OECD demand, heavier-than-expected maintenance and higher unplanned refinery downtime. Distillate markets remain tight, particularly in Europe and China. The UK's voluntary move to 10 ppm sulphur diesel in early December and the introduction of a 1000 ppm sulphur limit for heating oil from 1 January 2008 across Europe, (see *European Distillate Pinch*), have raised diesel and gasoil cracks in the region. In China strong demand growth and the impact of capped, albeit higher, domestic prices on refining economics, reportedly resulted in supply shortages for diesel and gasoil and to a lesser extent gasoline.

European Distillate Pinch

Recent price differentials in the North West European distillate market point to a rapid tightening of supply availability, particularly for 10 ppm sulphur material. Although the price of diesel is affected by both supply and demand factors, arguably it is supply-side constraints that currently appear to be driving the price. The demand for ultra low sulphur distillate in Europe is being affected by two legislative changes. Firstly, European heating oil specifications will tighten at the beginning of next year to 0.1% (1,000 ppm) sulphur. This change has forced some refineries to upgrade their hydrotreating capability to comply with the new specification, increasing seasonal maintenance and boosting the need for imports to supply the marginal barrel of ULSD. Secondly, the UK is voluntarily switching to 10 ppm sulphur diesel from the existing 50 ppm sulphur from 4 December, some 13 months ahead of the mandatory tightening required by the European Commission.

However, while the market may be temporarily distorted by these lower-sulphur specifications, the recent market tightness has been compounded by several unplanned production outages and delays to the restarting of refineries, following heavier-than-normal maintenance. This has reduced the ability of the European refinery system to provide incremental supplies of diesel at short notice. September and October witnessed several large refineries undergoing maintenance, notably Preem's Lysekil refinery in Sweden, Total's Gonfreville refinery in France and BP's Nerefco refinery in the Netherlands. Refineries reported to have suffered production upsets include Neste's Porvoo refinery, where the residue hydrocracker has been shutdown following the discovery of faulty valves; ExxonMobil's Fawley refinery in the UK and, perhaps most notably, the fire at Petroplus's Coryton refinery in the UK. These unplanned shutdowns have forced refinery operators to cover their supply requirements on the spot market, at a time when the refining system is already fully stretched to meet the tighter product specifications highlighted above.

Arguably, until late July the small premium that 10 ppm sulphur diesel had commanded over 50 ppm material reflected a degree of spare hydrotreating capacity in the European refining system. However, during August and into September this flexibility appears to have been eroded, with 10 ppm sulphur material commanding an ever greater premium, (as shown in the left hand graph).



From an historical perspective the step-change in sulphur limits in Europe has tended to result in temporary price spikes for the better quality material (as shown in the right-hand graph). Price differentials against gasoil tend to rise just ahead of the change date, as buyers pay a premium for prompt delivery. This was most clearly evident ahead of the introduction in 2005 of 50 ppm sulphur diesel across Europe, also a time when refinery problems disrupted some refiners' preparations for the new specifications. Similar price trends were also evident ahead of the move to 350 ppm sulphur diesel in 2000. Furthermore, the overall premium for diesel over gasoil has tended to increase, reflecting the higher manufacturing costs required to meet the tighter specification. The price moves seen so far may be exaggerated, but are not wholly unexpected given the changes occurring in the diesel and gasoil markets.

OECD fourth-quarter crude runs are estimated to average 39.0 mb/d, -0.3 mb/d below last month's forecast. The heavier-than-expected offline capacity in North America in October, plus an upward revision to offline capacity estimates over the balance of the quarter, accounts for the majority of the decline in throughputs. However, on an underlying basis we expect refinery utilisation in the US to improve over the course of the first half of next year as refineries currently suffering prolonged outages, (BP's Texas City and Whiting refineries

and Chevron's Pascagoula refinery), resume normal operations. The operational problems reported in Europe and Japan have similarly reduced estimated throughput levels. However, higher crude runs in November are expected to come from Korea, where maintenance has been completed.

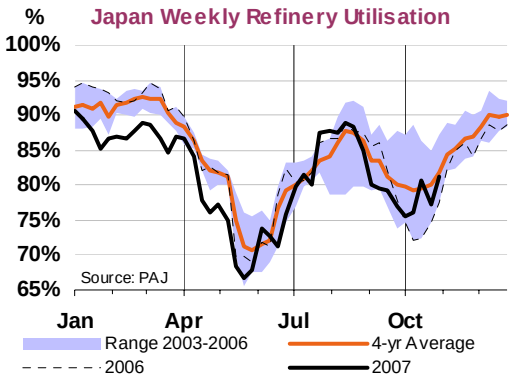
Global Refinery Crude Throughput[1]

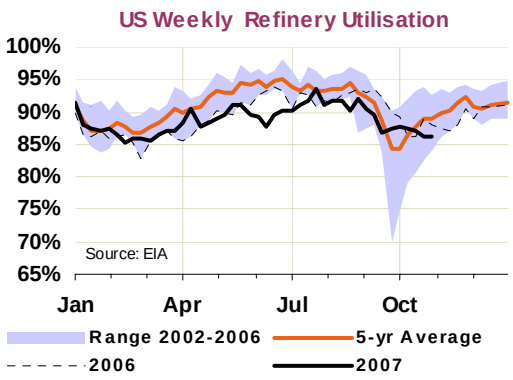
million barrels per day

	Apr 07	May 07	Jun 07	Jul 07	Aug 07	Sep 07	Oct 07	Nov 07	Dec 07
OECD Crude Runs									
North America	17.9	18.1	18.4	18.9	*18.7*	*18.2*	*17.9*	*18.2*	*18.5*
Europe	13.3	13.6	13.4	13.6	*13.8*	*13.6*	*13.1*	*13.5*	*13.9*
Pacific	6.9	6.5	6.6	7.0	*7.2*	*6.9*	*7.0*	*7.3*	*7.5*
Total OECD	38.1	38.2	38.4	39.5	*39.7*	*38.7*	*38.0*	*39.0*	*39.9*
NON-OECD Crude Runs									
FSU	5.6	5.6	5.8	5.9	*5.9*	*5.6*	*5.4*	*5.7*	*5.8*
Europe	0.7	0.6	0.7	0.7	*0.8*	*0.8*	*0.8*	*0.8*	*0.8*
China	6.5	6.6	6.8	6.5	*6.5*	*6.6*	*6.6*	*6.5*	*6.7*
Other Asia	*8.0*	*8.3*	8.0	7.8	*8.0*	*8.1*	*8.0*	*8.0*	*8.2*
Latin America	*5.6*	*5.4*	5.5	5.4	*5.6*	*5.2*	*5.2*	*5.3*	*5.4*
Middle East	*6.0*	*6.0*	6.1	6.2	*6.3*	*6.2*	*5.9*	*5.5*	*5.9*
Africa	*2.1*	*2.3*	2.1	2.2	*2.2*	*2.2*	*2.4*	*2.4*	*2.4*
Total Non-OECD	34.6	34.9	35.0	34.8	*35.3*	*34.7*	*34.3*	*34.1*	*35.2*
Total Crude Runs	72.6	73.1	73.5	74.3	*75.0*	*73.4*	*72.3*	*73.1*	*75.0*

1 Crude runs in Italics are estimates. Forecast crude throughput is based on current IEA demand forecasts.

Weekly data for October point to crude runs in the US remaining constrained by operational issues and heavy maintenance, falling to the bottom of the five-year range by the end of the month. Throughputs have been particularly hard hit in the US Midwest, with reports indicating planned maintenance affected crude units at six refineries, with a further three refineries working on upgrading units; this is in addition to the long-term outage at BP's Whiting refinery. Gulf Coast crude throughput is likely to be similarly constrained in the coming months with Chevron's Pascagoula refinery looking to complete repairs on its 160 kb/d crude unit in the first half of next year. Japanese crude runs have picked up in recent weeks, despite a higher-than-normal level of unplanned outages, largely related to problems with upgrading units. Barring further problems, refinery crude throughput in Japan should recover over the course of November.





Forecast **Middle East** crude runs have been reduced for the fourth quarter following the announcement of a shut down at Saudi Aramco's 400 kb/d Rabigh refinery for the whole of November. The maintenance work is partly to prepare for the integration of new petrochemical production capacity in 2008. Elsewhere in the region, the partial shut down of Iran's Abadan refinery for maintenance in November starts a period of planned work at several Iranian refineries that will extend into the first half of 2008, with the Bandar Abbas refinery set to undergo two partial shut downs to allow the expansion of crude distillation capacity. Lastly, the reported closure of a 120 kb/d crude unit and upgrading capacity at ADNOC's Ruwais refinery will limit the rebound in December crude runs in the region.

Forecast fourth-quarter crude throughput in the **FSU** has been reduced following the delay to restarting Lukoil's Odessa refinery in the Ukraine to the first quarter of 2008 from October, following a multi-year shut down to upgrade the refinery. Additionally, the restart to PKN Orlen's refinery at Mazeikiu, following work to complete repairs following the refinery fire there in 2006, has also been put back slightly. Lastly, the disruption to supplies at the Kremenchug refinery is also likely to curtail throughput over the balance of the fourth quarter. However, crude runs are still expected to increase over the course of the quarter following the completion of work at several refineries in Russia which curtailed throughputs by around 250 kb/d in October. **Latin American** crude runs in October are estimated to have been affected by a number of operational problems that affected Venezuelan refineries during October and the fire at ENAP's Aconcagua refinery in Chile. Consequently, we have reduced our October forecast by 0.2 mb/d.

Chinese crude throughput was stronger than estimated in September. Data released by the National Bureau of Statistics indicate that September crude throughput averaged 6.6 mb/d, an increase of 0.1 mb/d from August. However, the September estimate for offline distillation capacity is 0.5mb/d, an increase of 0.2 mb/d from August's level. It would, therefore, appear that other refineries in China pushed capacity utilisation up by around 0.3 mb/d. Driving this increase in crude throughput would appear to be Chinese government pressure on both national refiners to increase runs to ensure that diesel and gasoline is available across the country. This follows numerous reports of increasingly widespread product shortages, notably in diesel. Furthermore, reports indicate that net exports declined heavily for gasoline and diesel. In late October the government has raised domestic prices in an attempt to increase runs at independent (teapot) refineries, to further boost domestic supplies. Consequently, we have raised our estimates for the fourth quarter, given the continuing reports of product shortages affecting China and the improved (although still unattractive) refining economics.

OECD Data for September

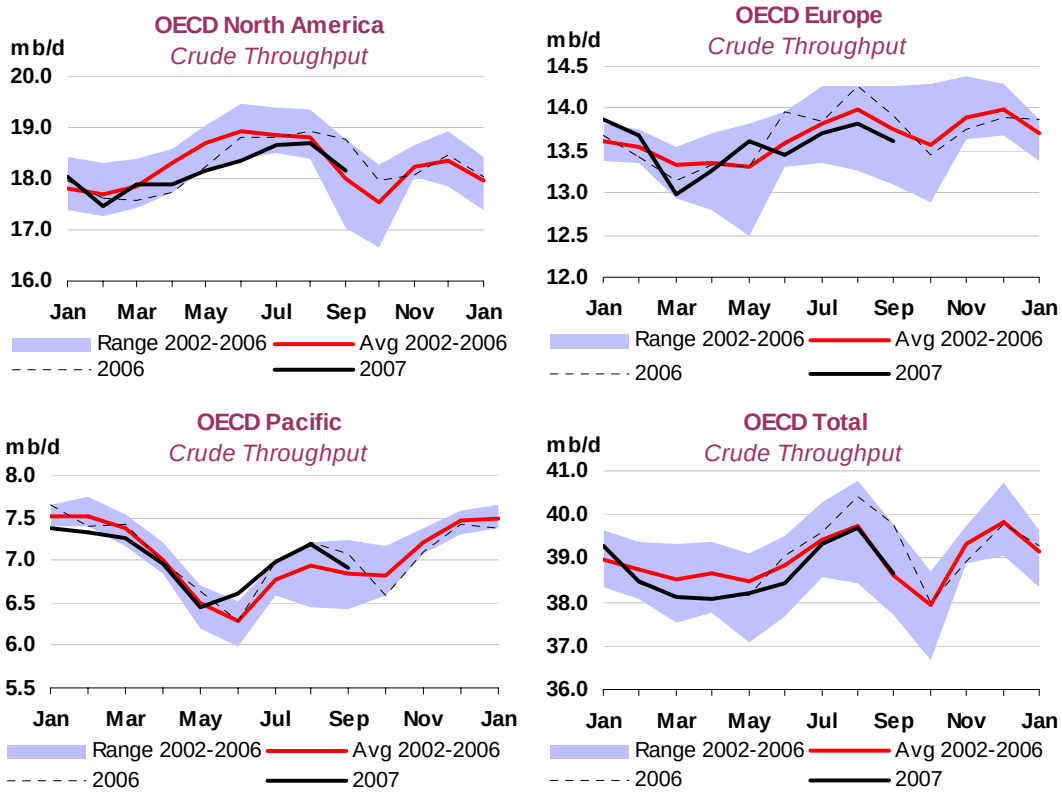
OECD September crude throughput averaged 38.7 mb/d, in line with our forecast. Crude runs were approximately 0.1 mb/d lower than expected in North America, 0.1 mb/d higher in Europe and in line with expectations in the OECD Pacific. Crude runs in September were 1.0 mb/d lower than in August with the onset of seasonal maintenance in the US and Japan reducing throughputs.

Refinery Crude Throughput and Utilisation in OECD Countries

	million barrels per day						*Change from*		Utilisation rate[2]	
	Apr 07	May 07	Jun 07	Jul 07	Aug 07	Sep 07	*Aug 07*	*Sep 06*	Sep 07	Sep 06
OECD North America										
US[3]	15.04	15.37	15.24	15.66	15.68	15.25	-0.43	-0.49	87.31	90.47
Canada	1.59	1.54	1.86	1.79	1.87	1.78	-0.09	-0.08	88.01	91.85
Mexico	1.24	1.23	1.26	1.20	1.14	1.13	-0.01	-0.05	73.47	71.96
Total	17.87	18.14	18.36	18.66	18.69	18.15	-0.54	-0.61	86.36	88.97
OECD Europe										
France	1.59	1.88	1.56	1.79	1.71	1.63	-0.08	-0.23	83.39	94.00
Germany	2.19	2.15	2.29	2.31	2.14	2.29	0.16	0.11	94.86	89.82
Italy	1.83	1.88	1.85	1.89	1.91	1.89	-0.02	0.01	81.09	81.07
Netherlands	1.01	1.04	0.95	1.02	1.05	1.08	0.03	0.06	89.45	83.91
Spain	1.22	1.19	1.16	1.15	1.16	1.16	0.00	-0.06	91.20	96.04
UK	1.60	1.63	1.56	1.55	1.67	1.57	-0.09	-0.07	83.32	87.52
Other OECD Europe	3.83	3.85	4.09	3.99	4.17	3.97	-0.21	-0.14	84.57	85.18
Total	13.27	13.62	13.46	13.70	13.82	13.61	-0.21	-0.32	86.25	87.43
OECD Pacific										
Japan	3.88	3.32	3.45	3.86	4.15	3.83	-0.32	-0.09	81.99	83.94
Korea	2.37	2.43	2.45	2.39	2.31	2.35	0.03	-0.12	85.76	95.56
Other OECD Pacific	0.70	0.71	0.70	0.72	0.73	0.73	0.01	0.04	91.12	86.62
Total	6.95	6.45	6.61	6.97	7.19	6.91	-0.28	-0.17	84.14	87.93
OECD Total	38.08	38.21	38.43	39.33	39.70	38.67	-1.03	-1.10	85.92	88.24

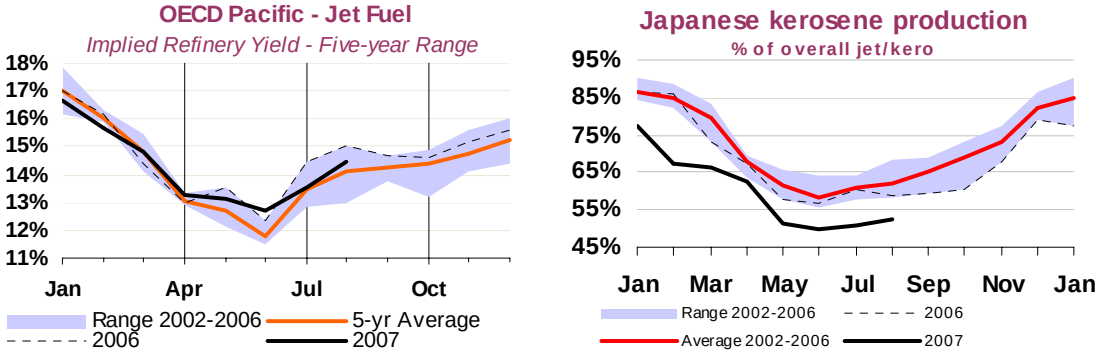
1 Estimate
2 Based on crude throughput and current operable refining capacity
3 US50

However, the resumption of crude runs at refineries in Germany provided a slight offset against the downturn. Compared with September 2006, OECD crude runs were 1.1 mb/d lower, with the US down 0.5 mb/d year-on-year, Europe down 0.3 mb/d (partly due to the turnaround at Total's Gonfreville refinery) and a decline in Korea due to maintenance at refineries operated by Hyundai and SK Corp.



OECD Refinery Yields

Middle distillate yields remain robust at OECD refineries, thanks to the recent investment in upgrading capacity. However, problems at Neste's Porvoo refinery, where the residue hydrocracker was shut down in mid-September to replace faulty valves, is expected to reduce European distillate yields until its expected mid-November restart. Despite gasoil/diesel yields continuing at the top of their five-year ranges in each of the OECD regions, jet/kerosene yields show a different picture between regions. In Europe jet/kerosene yields are above the five-year range, due to the recent additions of hydrocracking capacity. Conversely, North America jet/kerosene yields remain under pressure at the lower-end of the five-year range, suggesting that the rise in demand for ULSD continues to exert pressure on the middle distillate part of the barrel.



Perhaps more interestingly jet/kerosene yields in the Pacific, (shown above), remain above the five-year average, but mask an apparent switch by Japanese refiners to produce relatively more jet fuel at the expense of kerosene. Recent months have seen rising volumes of jet fuel exports from Japan, at a time when domestic kerosene stocks have reached a low plateau of 27mb, below the four-year range for the time of year, according to weekly PAJ data. This move by refiners should allow them to maintain a higher level of throughput than was seen last year when high kerosene stocks forced some refiners to voluntarily cut runs.

North American Product Market - 2008 Outlook

As part of a series of more in-depth looks at regional forecasts from our medium-term global product supply model, this month we consider prospects for North America in 2008.

The North American product market is expected to ease in 2008 with upgrading capacity expansions expected to keep pace with demand growth. However, perhaps the most important factor in the overall picture will be the potential for refineries to improve on recent poor utilisation rates and the return of several key refineries from prolonged outages.

The region's gasoline net imports should decrease in 2008 by 112 kb/d as investments in crude distillation and upgrading additions boost supply. Upgrading additions forecast to improve gasoline supply next year include new fluid catalytic cracking and alkylation capacity plus additional gasoline hydrotreating units. Ethanol production is forecast to grow by 63 kb/d in 2008, contributing to the easier gasoline market. Furthermore, in 2008, European exports are expected to increase as local demand weakens further. As a result we expect the Atlantic Basin gasoline balance to improve markedly.

Gasoil/diesel net imports are expected to increase due to strong diesel demand even as hydrocracking additions marginally improve North American refineries' distillate yields. The region's import requirements are expected to grow as demand is forecast to remain robust. Off-road diesel specifications have been tightened in 2007 to a sulphur content of 500 ppm, with further tightening expected in 2010, bringing it into line with on-road ULSD at 15 ppm sulphur. To meet this growing low and ultra-low-sulphur diesel demand, refineries continue to invest in diesel hydrotreating capacity. We expect the jet/kerosene balance to remain largely unchanged in 2008, with output increasing inline with crude runs. The increased need for diesel output will continue to limit the improvement in jet/kerosene yields.

The region's net fuel oil imports are expected to decline as natural gas substitution continues to weaken fuel oil demand and additional investment in coking capacity is anticipated to be offset by refiners switching to a heavier crude slate.

The US refinery system's ability to meet product demand has been undermined by an increase in planned and un-planned shutdowns in recent years. Refinery utilisation rates have been gradually declining since they peaked at 95.6% in 1998, reaching 89.7% in 2006. This year, runs have averaged 88.5%, highlighting the ongoing operational issues at several US refineries. The evolution of utilisation rates will remain a key uncertainty behind the region's product supply flexibility.

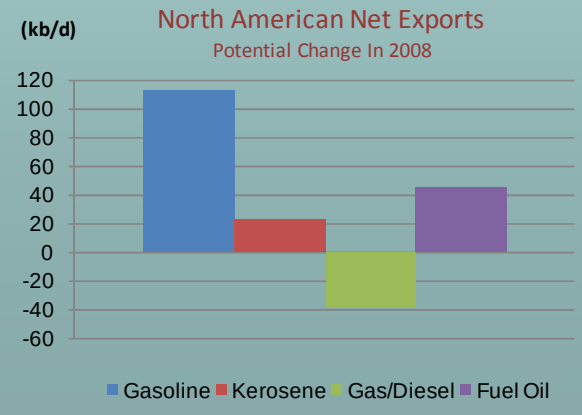


Table 1
WORLD OIL SUPPLY AND DEMAND
(million barrels per day)

	2004	2005	1Q06	2Q06	3Q06	4Q06	2006	1Q07	2Q07	3Q07	4Q07	2007	1Q08	2Q08	3Q08	4Q08	2008
OECD DEMAND																	
North America	25.4	25.5	25.2	25.1	25.5	25.4	25.3	25.7	25.4	25.5	25.4	25.5	25.9	25.6	25.7	25.7	25.7
Europe	15.5	15.6	16.0	15.2	15.6	15.7	15.6	15.3	15.0	15.5	15.8	15.4	15.7	15.2	15.7	15.8	15.6
Pacific	8.5	8.6	9.2	7.8	7.9	8.7	8.4	8.8	7.8	7.9	8.9	8.4	9.3	7.9	8.0	9.0	8.5
Total OECD	49.4	49.7	50.4	48.1	49.0	49.8	49.3	49.8	48.2	48.8	50.1	49.2	50.8	48.7	49.3	50.5	49.8
NON-OECD DEMAND																	
FSU	3.9	3.9	4.1	3.9	4.1	4.4	4.1	3.9	3.7	3.9	4.3	3.9	4.1	3.8	4.0	4.4	4.1
Europe	0.7	0.7	0.8	0.7	0.7	0.8	0.7	0.8	0.8	0.7	0.8	0.8	0.8	0.8	0.7	0.8	0.8
China	6.4	6.7	7.0	7.3	7.2	7.2	7.2	7.3	7.7	7.5	7.7	7.5	7.7	8.1	7.9	8.2	8.0
Other Asia	8.6	8.8	9.0	9.0	8.7	8.9	8.9	9.2	9.2	9.0	9.1	9.1	9.3	9.4	9.2	9.3	9.3
Latin America	5.0	5.1	5.2	5.3	5.4	5.4	5.3	5.3	5.5	5.6	5.6	5.5	5.5	5.7	5.8	5.7	5.7
Middle East	5.7	6.0	6.2	6.2	6.5	6.3	6.3	6.4	6.6	6.8	6.5	6.6	6.7	6.8	7.1	6.8	6.9
Africa	2.8	2.9	3.0	3.0	2.9	2.9	2.9	3.1	3.1	3.0	3.1	3.1	3.2	3.2	3.1	3.2	3.2
Total Non-OECD	33.1	34.2	35.1	35.3	35.4	35.9	35.4	36.1	36.5	36.5	37.0	36.5	37.4	37.7	37.9	38.5	37.9
Total Demand[1]	82.5	83.9	85.5	83.5	84.3	85.7	84.7	85.8	84.7	85.3	87.1	85.7	88.2	86.5	87.2	88.9	87.7
OECD SUPPLY																	
North America	14.6	14.1	14.2	14.2	14.2	14.2	14.2	14.4	14.4	14.2	14.3	14.3	14.4	14.1	14.0	14.2	14.2
Europe	6.1	5.6	5.5	5.1	4.9	5.2	5.2	5.2	4.9	4.7	4.8	4.9	4.8	4.5	4.3	4.6	4.5
Pacific	0.6	0.6	0.5	0.5	0.7	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.8	0.8	0.8	0.9	0.8
Total OECD	21.2	20.3	20.2	19.9	19.8	20.0	20.0	20.2	19.9	19.6	19.8	19.9	20.0	19.4	19.2	19.6	19.5
NON-OECD SUPPLY																	
FSU	11.4	11.8	11.9	12.2	12.4	12.5	12.2	12.7	12.7	12.7	12.8	12.7	13.0	13.2	13.3	13.5	13.3
Europe	0.2	0.2	0.2	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	3.5	3.6	3.7	3.7	3.7	3.6	3.7	3.7	3.8	3.7	3.9	3.8	3.9	3.9	3.9	3.9	3.9
Other Asia	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.8	2.8	2.8	2.8
Latin America	4.1	4.3	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.5	4.4	4.6	4.7	4.7	4.7	4.7
Middle East	1.9	1.8	1.8	1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.6	1.7	1.6	1.6	1.6	1.6	1.6
Africa[2]	3.4	3.7	3.9	3.8	3.9	4.1	3.9	2.6	2.5	2.5	2.6	2.6	2.7	2.7	2.7	2.7	2.7
Total Non-OECD	27.1	28.0	28.5	28.7	28.9	29.2	28.8	27.9	27.8	27.7	28.3	27.9	28.8	29.0	29.1	29.4	29.1
Processing Gains[3]	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0
Other Biofuels[4]	0.1	0.1	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.7	0.7	0.7	0.7	0.7
Total Non-OPEC[5]	50.3	50.4	50.9	50.7	50.8	51.4	50.9	50.4	50.1	49.6	50.4	50.1	51.4	51.0	50.9	51.5	51.2
Non-OPEC excl. Angola[2]	49.3	49.1	49.5	49.3	49.4	49.9	49.5	50.4	50.1	49.6	50.4	50.1	51.4	51.0	50.9	51.5	51.2
OPEC																	
Crude[6]	28.9	29.7	29.9	29.7	30.0	29.2	29.7	30.2	30.2	30.6							
NGLs	4.2	4.5	4.6	4.6	4.6	4.7	4.6	4.8	4.8	4.8	5.0	4.8	5.1	5.3	5.5	5.8	5.4
Total OPEC	33.1	34.2	34.5	34.3	34.7	33.9	34.3	35.0	35.0	35.4							
OPEC incl. Angola[2]	34.1	35.5	35.9	35.6	36.1	35.3	35.7	35.0	35.0	35.4							
Total Supply[7]	83.3	84.6	85.4	84.9	85.5	85.3	85.3	85.4	85.0	85.0							
STOCK CHANGES AND MISCELLANEOUS																	
Reported OECD																	
Industry	0.1	0.1	0.0	0.7	1.1	-0.9	0.2	-0.9	0.7	-0.2							
Government	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1							
Total	0.2	0.2	0.0	0.7	1.2	-0.9	0.3	-0.8	0.8	-0.1							
Floating Storage/Oil in Transit	0.0	-0.1	0.1	-0.1	0.3	-0.6	-0.1	0.2	-0.1	-0.2							
Miscellaneous to balance[8]	0.6	0.5	-0.2	0.8	-0.3	1.1	0.3	0.2	-0.2	-0.1							
Total Stock Ch. & Misc	0.8	0.7	-0.1	1.5	1.2	-0.4	0.5	-0.4	0.4	-0.3							
Memo items:																	
Call on OPEC crude + Stock ch.[9]	28.1	29.0	30.0	28.2	28.9	29.6	29.2	30.7	29.8	30.9	31.7	30.8	31.7	30.2	30.8	31.5	31.0
Adjusted Call on OPEC + Stock ch.[10]	28.7	29.6	29.7	29.0	28.6	30.7	29.5	30.9	29.5	30.8	32.0	30.8	32.0	30.4	31.0	31.8	31.3
"Call" incl. Angola[2]	29.1	30.3	31.4	29.5	30.3	31.1	30.6	30.7	29.8	30.9	31.7	30.8	31.7	30.2	30.8	31.5	31.0
"Adjusted Call" incl. Angola[2]	29.7	30.8	31.1	30.4	30.0	32.1	30.9	30.9	29.5	30.8	32.0	30.8	32.0	30.4	31.0	31.8	31.3

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 With effect from OMR of 13 February 2007, Angolan production will be reclassified within OPEC and excluded from the Non-OPEC and Africa totals, for the period January 2007 onwards. Secondary aggregates allow comparison with previous year totals by including Angola within OPEC retroactively.
3 Net volumetric gains and losses in the refining process (excludes net gain/loss in former USSR, China and non-OECD Europe) and marine transportation losses.
4 Biofuels from sources outside Brazil and US.
5 Non-OPEC supplies include crude oil, condensates, NGL and non-conventional sources of supply such as synthetic crude, ethanol and MTBE. No allowance is made in the non-OPEC forecast for exceptional events which have, at certain times historically, reduced non-OPEC supply by 300-400 kbd on an annual basis.
6 As of the March 2006 OMR, Venezuelan Orinoco heavy crude production is included within Venezuelan crude estimates. Orimulsion fuel remains within the OPEC NGL & non-conventional category, but Orimulsion production reportedly ceased from January 2007.
7 Comprises crude oil, condensates, NGLs, oil from non-conventional sources and other sources of supply.
8 Includes changes in non-reported stocks in OECD and non-OECD areas.
9 Equals the arithmetic difference between total demand minus total non-OPEC supply minus OPEC NGLs.
10 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 plus an extra 350 kb/d allowance for average understatement of non-OPEC supply added for forecast periods.

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

(million barrels per day)

	2004	2005	1Q06	2Q06	3Q06	4Q06	2006	1Q07	2Q07	3Q07	4Q07	2007	1Q08	2Q08	3Q08	4Q08	2008
OECD DEMAND																	
North America	-	-	-	-	-	-	-	-	-	-0.1	-0.3	-0.1	-0.1	-0.2	-0.2	-0.3	-0.2
Europe	-	-	0.1	0.1	-	0.1	0.1	-	-	-0.1	-	-	-	-0.1	-0.1	-0.1	-0.1
Pacific	-	-	-	-	-	-	-	-	-	0.1	-	-	-	-	-	-	-
Total OECD	-	-	0.1	0.1	-	0.1	0.1	-	-	-0.1	-0.4	-0.1	-0.1	-0.3	-0.2	-0.4	-0.3
NON-OECD DEMAND																	
FSU	-	-	-	-	-	-	-	-	-	-	-0.2	-	-	-	-	-0.1	-
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-0.1	-	-	-	-	-0.1	-	-
Other Asia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Latin America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Middle East	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Non-OECD	-	-	-	-	-	-	-	-	-	-0.1	-0.1	-	-	-	-0.1	-0.1	-
Total Demand	-	-	0.1	0.1	-	0.1	0.1	-	-	-0.2	-0.5	-0.2	-0.1	-0.3	-0.3	-0.5	-0.3
OECD SUPPLY																	
North America	-	-	-	-	-	-	-	-	-	-	0.1	-	-	-	-	-	-
Europe	-	-	-	-	-	-	-	-	-	0.1	-	-	-	-	-	-	-
Pacific	-	-	-	-	-	-	-	-	-	-	-	-	0.1	-	-	-	-
Total OECD	-	-	-	-	-	-	-	-	-	0.1	0.1	-	0.1	-	-	-	-
NON-OECD SUPPLY																	
FSU	-	-	-	-	-	-	-	-	-	-	-0.1	-	-	-	-	-	-
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-0.1	-	-	-	-	-	-	-
Other Asia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Latin America	-	-	-	-	-	-	-	-	-	-	-0.1	-	-0.1	-	-	-	-
Middle East	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Non-OECD	-	-	-	-	-	-	-	-	-	-0.1	-0.1	-0.1	-0.1	-	-	-	-
Processing Gains	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Biofuels	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Non-OPEC	-	-	-	-	-	-	-	-	-0.1	-0.1	-	-	-	-	-	-	-
Non-OPEC excl. Angola	-	-	-	-	-	-	-	-	-0.1	-0.1	-	-	-	-	-	-	-
OPEC																	
Crude	-	-	-	-	-	-	-	-	-	-							
NGLs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total OPEC	-	-	-	-	-	-	-	-	-	-							
OPEC incl. Angola	-	-	-	-	-	-	-	-	-	-							
Total Supply	-	-	-	-	-	-	-	-	-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								
Total Stock Ch. & Misc	-	-	-0.1	-0.1	-	-0.1	-0.1	-	-0.1	0.1							
Memo items:																	
Call on OPEC crude + Stock ch.	-	-	0.1	0.1	-	0.1	0.1	-	0.1	-0.1	-0.5	-0.1	-0.1	-0.3	-0.3	-0.5	-0.3
Adjusted Call on OPEC + Stock ch.	-	-	-	-	-	-	-	-	-	-0.6	-0.7	-0.3	-0.3	-0.4	-0.4	-0.7	-0.5
"Call" incl. Angola[2]	-	-	0.1	0.1	-	0.1	0.1	-	0.1	-0.1	-0.5	-0.1	-0.1	-0.3	-0.3	-0.5	-0.3
"Adjusted Call" incl. Angola	-	-	-	-	-	-	-	-	-	-0.6	-0.7	-0.3	-0.3	-0.4	-0.4	-0.7	-0.5

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

	2005	1Q06	2Q06	3Q06	4Q06	2006	1Q07	2Q07	3Q07	4Q07	2007	1Q08	2Q08	3Q08	4Q08	2008
Demand (mb/d)																
North America	25.49	25.22	25.06	25.50	25.37	25.29	25.67	25.43	25.46	25.44	25.50	25.91	25.64	25.67	25.66	25.72
Europe	15.61	15.95	15.22	15.60	15.72	15.62	15.28	14.96	15.47	15.77	15.37	15.68	15.16	15.65	15.85	15.59
Pacific	8.57	9.24	7.82	7.85	8.71	8.40	8.83	7.80	7.90	8.89	8.35	9.26	7.94	7.98	8.95	8.53
Total OECD	49.67	50.42	48.10	48.95	49.80	49.32	49.77	48.20	48.83	50.11	49.23	50.84	48.75	49.30	50.46	49.84
FSU	3.95	4.06	3.87	4.12	4.45	4.12	3.93	3.67	3.89	4.29	3.95	4.07	3.80	4.03	4.45	4.09
Europe	0.72	0.80	0.75	0.70	0.75	0.75	0.83	0.77	0.71	0.77	0.77	0.85	0.79	0.73	0.79	0.79
China	6.69	6.96	7.29	7.17	7.20	7.16	7.27	7.67	7.48	7.75	7.54	7.72	8.08	7.89	8.17	7.97
Other Asia	8.79	8.95	8.96	8.66	8.90	8.87	9.17	9.22	8.99	9.12	9.12	9.33	9.40	9.19	9.34	9.32
Latin America	5.13	5.15	5.29	5.40	5.38	5.31	5.33	5.50	5.64	5.55	5.51	5.49	5.65	5.80	5.72	5.66
Middle East	5.99	6.16	6.21	6.47	6.27	6.28	6.43	6.57	6.83	6.49	6.58	6.68	6.83	7.15	6.81	6.87
Africa	2.94	2.97	2.97	2.86	2.93	2.93	3.10	3.08	2.97	3.07	3.05	3.22	3.19	3.08	3.18	3.17
Total Non-OECD	34.22	35.05	35.35	35.38	35.89	35.42	36.06	36.47	36.52	37.04	36.52	37.36	37.74	37.85	38.45	37.85
World	83.89	85.48	83.45	84.34	85.68	84.74	85.83	84.67	85.34	87.14	85.75	88.20	86.48	87.15	88.91	87.69
of which:																
US50	*20.80*	*20.54*	*20.55*	*20.91*	*20.75*	*20.69*	*20.90*	*20.74*	*20.76*	*20.68*	*20.77*	*21.07*	*20.90*	*20.92*	*20.84*	*20.93*
Euro4	*8.22*	*8.49*	*7.94*	*8.15*	*8.18*	*8.19*	*7.85*	*7.69*	*7.90*	*8.14*	*7.90*	*8.11*	*7.81*	*8.02*	*8.17*	*8.03*
Japan	*5.31*	*5.89*	*4.72*	*4.75*	*5.29*	*5.16*	*5.39*	*4.61*	*4.75*	*5.39*	*5.03*	*5.73*	*4.70*	*4.77*	*5.39*	*5.15*
Korea	*2.19*	*2.29*	*2.04*	*2.04*	*2.32*	*2.17*	*2.35*	*2.12*	*2.06*	*2.36*	*2.22*	*2.42*	*2.15*	*2.09*	*2.40*	*2.27*
Mexico	*2.05*	*2.05*	*1.98*	*1.96*	*2.00*	*2.00*	*2.05*	*2.07*	*1.98*	*2.07*	*2.04*	*2.09*	*2.10*	*2.02*	*2.12*	*2.08*
Canada	*2.30*	*2.26*	*2.20*	*2.28*	*2.26*	*2.25*	*2.34*	*2.28*	*2.36*	*2.32*	*2.32*	*2.36*	*2.29*	*2.37*	*2.33*	*2.34*
Brazil	*2.19*	*2.18*	*2.20*	*2.28*	*2.30*	*2.24*	*2.25*	*2.28*	*2.36*	*2.35*	*2.31*	*2.31*	*2.33*	*2.42*	*2.41*	*2.37*
India	*2.58*	*2.71*	*2.67*	*2.48*	*2.70*	*2.64*	*2.88*	*2.83*	*2.57*	*2.76*	*2.76*	*2.95*	*2.89*	*2.64*	*2.82*	*2.82*
Annual Change (% per annum)																
North America	0.5	-1.4	-0.9	-0.3	-0.7	-0.8	1.8	1.5	-0.2	0.3	0.8	0.9	0.8	0.8	0.9	0.9
Europe	0.8	1.5	-0.2	-0.4	-0.5	0.1	-4.2	-1.7	-0.8	0.3	-1.6	2.6	1.3	1.2	0.5	1.4
Pacific	0.8	-2.5	-2.7	-2.1	-0.3	-1.9	-4.5	-0.2	0.6	2.1	-0.6	4.9	1.8	1.1	0.7	2.2
Total OECD	0.6	-0.7	-1.0	-0.6	-0.6	-0.7	-1.3	0.2	-0.3	0.6	-0.2	2.1	1.1	1.0	0.7	1.2
FSU	1.4	2.4	0.5	4.7	10.2	4.5	-3.2	-5.3	-5.4	-3.5	-4.3	3.7	3.5	3.4	3.7	3.6
Europe	4.2	3.4	3.4	3.4	3.4	3.4	2.8	2.7	2.5	2.1	2.6	2.3	2.7	2.7	2.6	2.6
China	4.2	4.2	12.1	7.1	4.6	6.9	4.5	5.2	4.4	7.6	5.4	6.2	5.4	5.5	5.4	5.6
Other Asia	2.0	-0.2	-0.8	1.6	2.9	0.8	2.4	2.9	3.8	2.5	2.9	1.8	2.0	2.2	2.5	2.1
Latin America	2.9	3.7	3.2	2.9	4.4	3.6	3.5	3.9	4.3	3.2	3.7	2.9	2.8	2.8	2.9	2.9
Middle East	4.6	4.8	4.2	4.7	5.3	4.8	4.4	5.8	5.5	3.5	4.8	3.9	3.9	4.6	4.9	4.3
Africa	6.1	-1.3	-0.9	-0.1	1.1	-0.3	4.4	3.7	3.8	4.6	4.1	3.7	3.6	3.5	3.7	3.6
Total Non-OECD	3.3	2.4	3.4	3.7	4.6	3.5	2.9	3.2	3.2	3.2	3.1	3.6	3.5	3.7	3.8	3.6
World	1.7	0.5	0.8	1.1	1.5	1.0	0.4	1.5	1.2	1.7	1.2	2.8	2.1	2.1	2.0	2.3
Annual Change (mb/d)																
North America	0.12	-0.35	-0.23	-0.07	-0.17	-0.21	0.44	0.37	-0.05	0.07	0.21	0.24	0.20	0.21	0.22	0.22
Europe	0.12	0.24	-0.04	-0.07	-0.08	0.01	-0.68	-0.26	-0.13	0.05	-0.25	0.40	0.20	0.18	0.08	0.21
Pacific	0.07	-0.24	-0.22	-0.17	-0.03	-0.16	-0.42	-0.02	0.05	0.18	-0.05	0.43	0.14	0.08	0.06	0.18
Total OECD	0.32	-0.36	-0.48	-0.31	-0.28	-0.36	-0.65	0.09	-0.13	0.31	-0.09	1.07	0.55	0.47	0.36	0.61
FSU	0.06	0.09	0.02	0.18	0.41	0.18	-0.13	-0.20	-0.22	-0.16	-0.18	0.15	0.13	0.13	0.16	0.14
Europe	0.03	0.03	0.02	0.02	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
China	0.27	0.28	0.79	0.47	0.32	0.46	0.31	0.38	0.31	0.55	0.39	0.45	0.41	0.41	0.42	0.42
Other Asia	0.17	-0.02	-0.07	0.13	0.25	0.07	0.22	0.26	0.33	0.22	0.26	0.17	0.18	0.20	0.22	0.19
Latin America	0.14	0.19	0.16	0.15	0.23	0.18	0.18	0.20	0.23	0.17	0.20	0.15	0.16	0.16	0.16	0.16
Middle East	0.26	0.28	0.25	0.29	0.31	0.29	0.27	0.36	0.36	0.22	0.30	0.25	0.26	0.32	0.32	0.29
Africa	0.17	-0.04	-0.03	0.00	0.03	-0.01	0.13	0.11	0.11	0.13	0.12	0.11	0.11	0.10	0.11	0.11
Total Non-OECD	1.10	0.81	1.15	1.25	1.57	1.20	1.00	1.13	1.13	1.15	1.10	1.30	1.27	1.34	1.41	1.33
World	1.41	0.46	0.67	0.94	1.29	0.84	0.35	1.22	1.01	1.46	1.01	2.37	1.81	1.81	1.77	1.94
Revisions to Oil Demand from Last Month's Report (mb/d)																
North America	0.00	0.00	0.00	0.02	0.00	0.01	0.00	-0.02	-0.12	-0.31	-0.11	-0.08	-0.19	-0.16	-0.30	-0.18
Europe	0.00	0.06	0.07	0.03	0.08	0.06	0.03	0.03	-0.08	-0.04	-0.02	-0.04	-0.05	-0.07	-0.08	-0.06
Pacific	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.01	-0.01	-0.03	0.01	-0.01	-0.01
Total OECD	0.00	0.06	0.07	0.05	0.08	0.06	0.03	0.01	-0.13	-0.35	-0.11	-0.12	-0.27	-0.23	-0.39	-0.25
FSU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.04	-0.15	-0.05	0.00	0.00	-0.03	-0.15	-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	0.00	0.00	0.00	0.00
China	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.10	0.02	-0.02	-0.01	0.00	-0.11	0.03	-0.02
Other Asia	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.03	0.00	0.01	-0.02	-0.02	0.01	-0.02	-0.01
Latin America	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.02	0.00	0.01	0.01	0.01	0.03	0.01	0.02
Middle East	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.01	0.01	0.00	0.01	0.04	0.01	0.01
Africa	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	-0.01	-0.01	0.00	0.00	0.01	-0.01	-0.01	0.00
Total Non-OECD	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.02	-0.06	-0.14	-0.04	-0.02	0.01	-0.06	-0.13	-0.05
World	0.00	0.07	0.07	0.05	0.08	0.06	0.04	0.02	-0.19	-0.50	-0.16	-0.14	-0.26	-0.29	-0.52	-0.30
Revisions to Oil Demand Growth from Last Month's Report (mb/d)																
World	0.00	0.07	0.07	0.05	0.08	0.06	-0.02	-0.05	-0.24	-0.57	-0.22	-0.18	-0.29	-0.10	-0.02	-0.15

Table 3
WORLD OIL PRODUCTION
(million barrels per day)

	2006	2007	2008	2Q07	3Q07	4Q07	1Q08	2Q08	Aug 07	Sep 07	Oct 07
OPEC											
Crude Oil											
Saudi Arabia	8.93			8.37	8.42				8.32	8.47	8.57
Iran	3.89			3.92	3.92				3.92	3.92	3.92
Iraq	1.90			2.01	2.11				1.99	2.18	2.30
UAE	2.62			2.54	2.57				2.59	2.55	2.55
Kuwait	2.21			2.08	2.18				2.17	2.19	2.21
Neutral Zone	0.58			0.55	0.55				0.56	0.56	0.56
Qatar	0.82			0.79	0.80				0.82	0.80	0.82
Angola[6]				1.58	1.61				1.64	1.63	1.73
Nigeria	2.24			2.07	2.14				2.15	2.18	2.19
Libya	1.71			1.69	1.70				1.70	1.72	1.72
Algeria	1.35			1.36	1.36				1.35	1.37	1.38
Venezuela	2.56			2.37	2.36				2.36	2.38	2.41
Indonesia	0.89			0.84	0.83				0.84	0.83	0.83
Total Crude Oil	29.69			30.16	30.56				30.40	30.76	31.17
Total NGLs[1]	4.63	4.84	5.44	4.80	4.83	4.99	5.11	5.29	4.83	4.83	4.99
Total OPEC	34.32			34.96	35.38				35.22	35.59	36.16
OPEC incl. Angola[6]	35.73			34.96	35.38				35.22	35.59	36.16
NON-OPEC[2]											
OECD											
North America	14.21	14.31	14.18	14.40	14.20	14.30	14.44	14.13	14.02	14.26	14.33
United States	7.34	7.44	7.41	7.56	7.40	7.36	7.46	7.48	7.35	7.37	7.45
Mexico	3.68	3.52	3.43	3.58	3.44	3.49	3.47	3.46	3.22	3.53	3.46
Canada	3.19	3.36	3.34	3.26	3.36	3.45	3.51	3.19	3.45	3.36	3.42
Europe	5.18	4.90	4.54	4.89	4.71	4.78	4.79	4.48	4.48	4.70	4.76
UK	1.66	1.64	1.45	1.70	1.48	1.60	1.59	1.44	1.33	1.49	1.58
Norway	2.78	2.53	2.36	2.46	2.49	2.44	2.46	2.30	2.40	2.46	2.43
Others	0.74	0.74	0.73	0.73	0.74	0.74	0.74	0.74	0.75	0.75	0.75
Pacific	0.58	0.66	0.81	0.63	0.67	0.73	0.80	0.79	0.67	0.70	0.74
Australia	0.53	0.58	0.70	0.56	0.58	0.63	0.69	0.69	0.57	0.59	0.63
Others	0.05	0.08	0.11	0.06	0.09	0.11	0.11	0.10	0.10	0.11	0.11
Total OECD	19.97	19.87	19.54	19.92	19.59	19.82	20.03	19.40	19.17	19.66	19.82
NON-OECD											
Former USSR	12.24	12.72	13.25	12.65	12.66	12.84	13.04	13.19	12.76	12.44	12.77
Russia	9.84	10.08	10.31	10.03	10.09	10.13	10.13	10.23	10.11	10.07	10.14
Others	2.40	2.63	2.95	2.63	2.56	2.71	2.92	2.96	2.65	2.37	2.63
Asia	6.39	6.48	6.68	6.48	6.37	6.64	6.64	6.66	6.43	6.35	6.62
China	3.67	3.79	3.91	3.79	3.71	3.92	3.92	3.90	3.75	3.72	3.92
Malaysia	0.75	0.75	0.80	0.74	0.76	0.77	0.78	0.80	0.74	0.78	0.77
India	0.79	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Others	1.17	1.13	1.16	1.14	1.10	1.13	1.13	1.15	1.12	1.04	1.12
Europe	0.15	0.13	0.12	0.14	0.13	0.13	0.13	0.12	0.13	0.13	0.13
Latin America	4.39	4.39	4.71	4.38	4.36	4.45	4.64	4.74	4.35	4.37	4.41
Brazil	2.10	2.17	2.52	2.14	2.14	2.24	2.44	2.54	2.12	2.14	2.18
Argentina	0.77	0.76	0.74	0.77	0.75	0.75	0.75	0.74	0.76	0.75	0.75
Colombia	0.53	0.53	0.55	0.53	0.53	0.55	0.55	0.55	0.53	0.55	0.55
Ecuador	0.54	0.50	0.47	0.51	0.50	0.48	0.48	0.47	0.50	0.49	0.49
Others	0.45	0.43	0.43	0.43	0.44	0.44	0.43	0.43	0.44	0.44	0.44
Middle East[3]	1.74	1.65	1.61	1.66	1.66	1.63	1.64	1.62	1.66	1.65	1.64
Oman	0.75	0.71	0.68	0.72	0.70	0.69	0.69	0.69	0.70	0.70	0.70
Syria	0.42	0.39	0.36	0.39	0.38	0.38	0.37	0.36	0.38	0.38	0.38
Yemen	0.38	0.37	0.38	0.36	0.38	0.37	0.39	0.38	0.38	0.38	0.38
Africa	3.91	2.56	2.69	2.54	2.53	2.59	2.66	2.70	2.51	2.52	2.55
Egypt	0.67	0.63	0.62	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63
Angola[6]	1.37										
Gabon	0.23	0.23	0.24	0.23	0.23	0.23	0.24	0.24	0.23	0.23	0.23
Others	1.63	1.70	1.83	1.68	1.66	1.73	1.80	1.83	1.64	1.65	1.69
Total Non-OECD	28.81	27.94	29.07	27.85	27.71	28.29	28.76	29.01	27.84	27.45	28.12
Processing Gains[4]	1.90	1.92	1.95	1.92	1.92	1.92	1.95	1.95	1.92	1.92	1.92
Other Biofuels[5]	0.26	0.40	0.66	0.40	0.40	0.40	0.66	0.66	0.40	0.40	0.40
TOTAL NON-OPEC	50.95	50.14	51.21	50.09	49.62	50.43	51.39	51.02	49.33	49.44	50.27
Non-OPEC excl. Angola[6]	49.54	50.14	51.21	50.09	49.62	50.43	51.39	51.02	49.33	49.44	50.27
TOTAL SUPPLY	85.27			85.05	85.01				84.56	85.02	86.43

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 will reportedly cease from January 2007.
2 Comprises crude oil, condensates, NGLs and oil from non-conventional sources. No allowance is made in the non-OPEC forecast for exceptional events, which have, at certain times historically, reduced non-OPEC supply by 300-400 kbd on an annual basis.
3 Includes small amounts of production from Israel, Jordan and Bahrain.
4 Net volumetric gains and losses in refining (excludes net gain/loss in FSU, China and non-OECD Europe) and marine transportation losses.
5 Comprises Fuel Ethanol and Biodiesel supply from outside Brazil and US.
6 With effect from OMR of 13 February 2007, Angolan production will be reclassified within OPEC and excluded from the Non-OPEC total, for the period January 2007 onwards. Secondary aggregates allow comparison with previous year totals by including Angola within OPEC retroactively

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			
	May2007	Jun2007	Jul2007	Aug2007	Sep2007*	Sep2004	Sep2005	Sep2006	4Q2006	1Q2007	2Q2007	3Q2007
North America												
Crude	480.8	487.9	473.8	461.4	458.3	391.3	433.2	460.4	-0.22	0.28	0.28	-0.32
Motor Gasoline	230.4	233.5	233.3	222.6	223.1	234.6	227.0	244.1	-0.05	-0.14	0.04	-0.11
Middle Distillate	196.4	195.3	204.3	206.4	208.6	195.4	198.5	224.3	-0.08	-0.29	0.05	0.14
Residual Fuel Oil	44.3	44.7	48.7	46.0	45.5	41.2	42.0	53.0	-0.03	-0.03	-0.03	0.01
Total Products[3]	649.3	655.4	674.0	668.8	673.2	653.9	662.7	723.6	-0.36	-0.71	0.27	0.19
Total[4]	1275.2	1290.9	1301.6	1289.6	1290.6	1206.0	1253.9	1345.4	-0.76	-0.48	0.63	0.00
Europe												
Crude	339.0	333.4	338.5	325.6	317.7	333.1	339.8	329.6	0.14	-0.19	0.09	-0.17
Motor Gasoline	102.8	102.7	103.1	103.3	103.9	111.2	103.7	102.6	0.11	-0.02	-0.08	0.01
Middle Distillate	280.3	271.9	262.8	266.8	262.9	250.6	258.7	272.4	0.05	-0.10	0.05	-0.10
Residual Fuel Oil	71.0	69.6	69.2	71.4	71.1	77.0	75.4	71.8	0.02	-0.02	-0.03	0.02
Total Products[3]	553.4	542.9	535.9	545.9	541.2	541.1	538.3	554.5	0.11	-0.15	-0.10	-0.02
Total[4]	968.9	951.8	948.3	947.3	933.8	945.2	952.1	957.6	0.19	-0.27	0.01	-0.19
Pacific												
Crude	171.2	170.7	175.8	168.4	154.8	168.7	168.1	174.9	-0.02	-0.01	-0.02	-0.17
Motor Gasoline	25.6	24.4	22.8	23.1	21.8	23.9	22.8	23.5	-0.01	0.03	0.00	-0.03
Middle Distillate	64.7	67.9	75.4	81.4	77.7	74.8	77.9	85.9	-0.14	-0.14	0.08	0.11
Residual Fuel Oil	22.6	22.1	24.4	24.3	25.8	21.3	23.9	23.8	-0.01	-0.01	0.00	0.04
Total Products[3]	178.1	182.4	191.7	197.8	196.5	186.2	191.5	210.7	-0.30	-0.14	0.12	0.15
Total[4]	422.9	425.9	440.4	440.4	423.4	429.6	432.0	458.6	-0.33	-0.13	0.10	-0.03
Total OECD												
Crude	991.1	992.0	988.0	955.4	930.8	893.0	941.0	964.9	-0.10	0.08	0.35	-0.66
Motor Gasoline	358.8	360.6	359.2	349.0	348.8	369.7	353.6	370.1	0.04	-0.14	-0.04	-0.13
Middle Distillate	541.3	535.2	542.5	554.6	549.1	520.8	535.1	582.5	-0.17	-0.53	0.18	0.15
Residual Fuel Oil	138.0	136.4	142.3	141.7	142.4	139.5	141.3	148.7	-0.02	-0.06	-0.05	0.07
Total Products[3]	1380.8	1380.6	1401.6	1412.5	1410.9	1381.1	1392.4	1488.9	-0.54	-0.99	0.30	0.33
Total[4]	2666.9	2668.6	2690.3	2677.2	2647.7	2580.7	2638.0	2761.6	-0.90	-0.89	0.75	-0.23

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			
	May2007	Jun2007	Jul2007	Aug2007	Sep2007*	Sep2004	Sep2005	Sep2006	4Q2006	1Q2007	2Q2007	3Q2007
North America												
Crude	690.3	690.3	690.3	690.4	692.9	670.3	693.7	687.8	0.01	0.00	0.02	0.03
Products	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	0.00	0.00	0.00	0.00
Europe												
Crude	175.0	175.3	177.0	176.7	176.7	157.9	166.4	175.5	-0.01	-0.01	0.01	0.02
Products	239.9	238.9	247.5	248.0	248.0	207.8	237.6	235.1	0.00	0.05	-0.01	0.10
Pacific												
Crude	385.0	385.0	385.0	385.0	385.0	384.9	382.1	381.5	0.03	0.01	0.00	0.00
Products	11.8	11.8	11.8	11.8	11.8	11.0	11.2	11.8	0.00	0.00	0.00	0.00
Total OECD												
Crude	1250.3	1250.6	1252.2	1252.1	1254.6	1213.1	1242.1	1244.8	0.04	0.00	0.03	0.04
Products	253.7	252.7	261.3	261.8	261.8	220.9	250.8	249.0	0.00	0.05	-0.01	0.10
Total[4]	1505.0	1504.2	1514.5	1514.9	1517.4	1434.9	1493.8	1494.8	0.04	0.05	0.02	0.14

* 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 2006		End December 2006		End March 2007		End June 2007		End September 2007 [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	179.2	79	180.1	77	182.5	80	186.3	-	-	-
Mexico	47.0	24	42.3	21	40.5	20	43.8	-	-	-
United States[4]	1787.0	86	1721.5	83	1678.8	81	1731.0	-	-	-
Total[4]	2035.3	80	1966.0	77	1923.9	76	1983.2	78	1985.5	78
Pacific										
Australia	35.3	37	34.8	37	34.3	37	38.9	-	-	-
Japan	649.1	123	630.8	117	615.3	133	617.9	-	-	-
Korea	160.5	69	151.8	65	156.1	74	158.3	-	-	-
New Zealand	7.0	46	7.1	46	7.7	49	7.7	-	-	-
Total	851.9	98	824.6	93	813.4	104	822.7	104	820.2	92
Europe[5]										
Austria	19.0	64	21.9	76	23.8	78	21.5	-	-	-
Belgium	30.5	53	30.2	48	28.2	51	28.7	-	-	-
Czech Republic	19.3	94	19.7	101	20.2	92	20.5	-	-	-
Denmark	21.2	113	18.5	97	18.3	96	17.1	-	-	-
Finland	26.8	116	26.6	113	29.5	138	26.3	-	-	-
France	187.5	96	192.4	98	177.0	96	185.7	-	-	-
Germany	281.9	104	282.8	117	290.5	120	285.6	-	-	-
Greece	36.7	76	36.8	79	33.6	85	35.6	-	-	-
Hungary	17.5	98	16.6	108	18.1	107	16.0	-	-	-
Ireland	13.9	70	12.5	62	12.9	69	11.1	-	-	-
Italy	134.1	78	133.1	79	133.9	80	133.0	-	-	-
Luxembourg	0.9	15	1.0	16	0.9	15	0.9	-	-	-
Netherlands	121.1	119	118.6	137	117.7	135	120.6	-	-	-
Norway	29.4	127	35.1	156	20.2	78	23.5	-	-	-
Poland	37.3	70	41.5	89	43.9	90	50.0	-	-	-
Portugal	23.8	83	24.0	77	23.7	78	24.7	-	-	-
Slovak Republic	7.4	95	7.5	101	7.0	83	6.9	-	-	-
Spain	133.9	84	134.8	83	129.3	81	130.5	-	-	-
Sweden	38.6	104	33.8	94	35.6	99	32.1	-	-	-
Switzerland	38.9	135	38.1	150	38.7	173	38.5	-	-	-
Turkey	52.2	73	52.8	84	56.8	94	57.4	-	-	-
United Kingdom	97.4	54	108.5	60	105.8	59	100.8	-	-	-
Total	1369.2	87	1386.8	92	1365.7	92	1366.9	88	1359.4	86
Total OECD	4256.4	85	4177.3	84	4103.0	86	4172.8	85	4165.1	83
DAYS OF IEA Net Imports[6]	-	118	-	121	-	120	-	121	-	-

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 2007 and September 2007 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. 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]*		
3Q2004	4016	1435	2581	80	28	51
4Q2004	3998	1450	2547	79	29	50
1Q2005	4005	1462	2543	82	30	52
2Q2005	4117	1494	2623	84	30	53
3Q2005	4132	1494	2638	83	30	53
4Q2005	4083	1487	2597	81	29	52
1Q2006	4084	1487	2597	85	31	54
2Q2006	4150	1493	2657	85	31	54
3Q2006	4256	1495	2762	85	30	55
4Q2006	4177	1499	2679	84	30	54
1Q2007	4103	1503	2600	86	31	54
2Q2007	4173	1504	2669	85	31	55
3Q2007	4165	1517	2648	83	30	53

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 2Q2007 and 3Q2007 (when latest forecasts are used).

Table 6

IEA Member Country Destinations of Selected Crude Streams[1]

(million barrels per day)

	2004	2005	2006	3Q06	4Q06	1Q07	2Q07	Jun 07	Jul 07	Aug 07	Year Earlier Aug 06	Year Earlier change
Saudi Light & Extra Light												
North America	0.55	0.46	0.60	0.62	0.60	0.68	0.73	0.57	0.70	0.67	0.69	-0.02
Europe	1.03	0.90	0.78	0.72	0.78	0.72	0.64	0.68	0.69	0.79	0.76	0.03
Pacific	1.24	1.31	1.32	1.29	1.28	1.17	1.20	1.22	1.26	1.09	1.30	-0.20
Saudi Medium												
North America	0.80	0.81	0.64	0.68	0.61	0.47	0.59	0.69	0.57	0.64	0.61	0.03
Europe	0.11	0.16	0.14	0.14	0.10	0.05	0.10	0.05	0.01	0.01	0.13	-0.12
Pacific	0.23	0.26	0.35	0.35	0.32	0.34	0.31	0.30	0.22	0.33	0.35	-0.03
Saudi Heavy												
North America	0.22	0.17	0.21	0.21	0.19	0.15	0.05	0.04	0.04	0.04	0.24	-0.21
Europe	0.23	0.23	0.18	0.21	0.14	0.09	0.16	0.17	0.15	0.13	0.18	-0.05
Pacific	0.15	0.25	0.23	0.22	0.23	0.20	0.18	0.13	0.20	0.17	0.24	-0.07
Iraqi Basrah Light[2]												
North America	0.71	0.60	0.52	0.60	0.46	0.51	0.39	0.48	0.57	0.61	0.60	0.01
Europe	0.21	0.23	0.32	0.40	0.36	0.29	0.28	0.36	0.44	0.28	0.42	-0.13
Pacific	0.12	0.06	0.08	0.10	0.07	0.11	0.18	0.21	0.08	0.27	0.13	0.15
Iraqi Kirkuk												
North America	0.02	-	0.00	0.01	-	-	-	-	-	-	0.03	-
Europe	0.08	0.05	0.01	0.04	0.01	0.04	-	-	0.04	0.05	0.03	0.01
Pacific	-	-	-	-	-	-	-	-	-	-	-	-
Iranian Light												
North America	-	-	-	-	-	-	-	-	-	-	-	-
Europe	0.24	0.20	0.26	0.31	0.27	0.31	0.31	0.24	0.29	0.28	0.26	0.02
Pacific	0.16	0.15	0.13	0.10	0.11	0.12	0.06	0.09	0.07	0.12	0.08	0.04
Iranian Heavy[3]												
North America	-	-	-	-	-	-	-	-	-	-	-	-
Europe	0.57	0.63	0.58	0.67	0.60	0.55	0.62	0.58	0.56	0.67	0.54	0.12
Pacific	0.65	0.62	0.56	0.51	0.61	0.66	0.63	0.71	0.64	0.65	0.49	0.17
Venezuelan Light & Medium												
North America	0.67	0.82	0.66	0.62	0.57	0.68	0.71	0.66	0.78	0.62	0.53	0.09
Europe	0.01	0.04	0.11	0.08	0.11	0.09	0.07	0.03	0.15	0.05	0.10	-0.05
Pacific	-	-	-	-	-	-	-	-	-	-	-	-
Venezuelan 22 API and heavier												
North America	0.88	0.72	0.72	0.74	0.72	0.55	0.70	0.66	0.78	0.76	0.81	-0.05
Europe	0.05	0.06	0.06	0.06	0.05	0.06	0.09	0.09	0.06	0.06	0.07	-0.01
Pacific	-	-	-	-	-	-	-	-	-	-	-	-
Mexican Maya												
North America	1.36	1.27	1.24	1.30	1.15	1.19	1.19	1.11	1.37	1.20	1.35	-0.15
Europe	0.16	0.17	0.16	0.16	0.15	0.14	0.11	0.20	0.19	0.12	0.19	-0.07
Pacific	0.00	-	-	-	-	-	-	-	-	-	-	-
Mexican Isthmus												
North America	-	0.03	0.04	0.01	0.02	0.02	0.01	0.01	0.01	0.01	0.00	0.01
Europe	0.01	0.03	0.01	0.00	0.01	0.01	0.06	0.01	-	-	-	-
Pacific	0.00	-	-	-	-	-	-	-	-	-	-	-
Russian Urals												
North America	0.12	0.13	0.09	0.16	0.05	0.11	0.12	0.06	0.02	-	0.25	-
Europe	1.86	1.77	1.68	1.66	1.54	1.85	1.97	2.13	2.07	1.81	1.73	0.07
Pacific	0.01	0.00	0.00	0.01	-	0.00	-	-	-	-	-	-
Nigerian Light[4]												
North America	0.80	0.90	0.79	0.78	0.72	0.95	0.77	0.75	0.75	0.83	0.85	-0.02
Europe	0.28	0.35	0.33	0.39	0.37	0.23	0.27	0.32	0.22	0.25	0.46	-0.21
Pacific	0.11	0.05	0.04	0.02	0.03	0.02	0.02	-	-	-	-	-
Nigerian Medium												
North America	0.23	0.17	0.17	0.16	0.17	0.24	0.15	0.22	0.14	0.25	0.02	0.23
Europe	0.04	0.07	0.10	0.08	0.14	0.06	0.02	0.02	0.17	0.05	0.10	-0.05
Pacific	0.01	0.01	0.00	0.01	-	0.02	-	-	-	-	0.03	-

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, Poland and the Slovak Republic.
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)

	2004	2005	2006	3Q2006	4Q2006	1Q2007	2Q2007	Jun-07	Jul-07	Aug-07	Year Earlier Aug-06	Year Earlier % change
Crude Oil												
North America	8431	8457	8156	8686	7937	8038	8151	8123	8025	8311	8064	3%
Europe	9478	9792	9771	10158	9770	9344	9760	9568	9644	10322	10167	2%
Pacific	6659	6801	6813	6680	6674	6953	6340	6419	6813	6695	6778	-1%
Total OECD	24569	25050	24740	25524	24381	24335	24251	24110	24481	25327	25549	-1%
LPG												
North America	24	18	14	12	28	16	14	12	18	42	20	107%
Europe	225	248	265	218	274	260	245	198	265	220	244	-10%
Pacific	541	527	579	595	497	565	588	587	501	554	645	-14%
Total OECD	790	793	858	826	799	841	847	797	784	816	909	-10%
Naphtha												
North America	99	115	62	64	96	33	31	25	54	20	74	-73%
Europe	282	273	312	304	314	271	222	191	268	281	362	-22%
Pacific	769	746	754	810	783	838	812	866	678	762	797	-4%
Total OECD	1150	1133	1128	1178	1193	1141	1066	1082	1000	1063	1233	-14%
Gasoline[3]												
North America	794	1034	1142	1157	944	916	1362	1394	1275	1218	1371	-11%
Europe	137	165	154	122	153	260	219	251	184	127	51	149%
Pacific	105	102	97	74	96	76	83	100	48	75	68	10%
Total OECD	1035	1301	1393	1353	1192	1253	1663	1745	1506	1420	1490	-5%
Jet & Kerosene												
North America	101	173	152	203	130	179	204	205	230	194	235	-17%
Europe	293	375	375	398	407	328	349	241	372	409	429	-5%
Pacific	77	66	71	43	76	49	35	31	32	38	40	-5%
Total OECD	471	614	598	644	612	557	588	477	634	641	704	-9%
Gasoil/Diesel												
North America	123	143	172	181	116	130	142	147	181	173	189	-8%
Europe	751	845	971	912	944	876	625	640	727	656	747	-12%
Pacific	74	79	81	65	81	83	97	117	83	103	66	55%
Total OECD	947	1067	1224	1158	1141	1090	864	904	990	933	1003	-7%
Heavy Fuel Oil												
North America	453	527	340	309	254	362	323	321	332	257	325	-21%
Europe	397	491	476	418	494	457	420	441	385	524	407	29%
Pacific	76	85	92	76	65	79	97	100	84	120	93	29%
Total OECD	926	1102	908	803	813	898	840	862	802	901	825	9%
Other Products												
North America	872	1024	1106	1298	991	1035	1209	1166	1130	1018	1333	-24%
Europe	676	781	920	944	939	841	838	818	853	1048	947	11%
Pacific	256	248	243	224	267	256	207	214	264	234	263	-11%
Total OECD	1805	2052	2269	2466	2197	2131	2253	2198	2247	2300	2543	-10%
Total Products												
North America	2466	3034	2988	3224	2559	2670	3285	3269	3219	2923	3547	-18%
Europe	2759	3177	3472	3316	3525	3293	2918	2781	3054	3266	3187	2%
Pacific	1898	1852	1918	1888	1865	1947	1918	2015	1689	1886	1972	-4%
Total OECD	7123	8063	8378	8428	7948	7910	8122	8065	7963	8075	8706	-7%
Total Oil												
North America	10897	11490	11144	11909	10496	10708	11436	11393	11244	11233	12152	-8%
Europe	12237	12969	13243	13474	13294	12637	12678	12349	12698	13588	13353	2%
Pacific	8558	8654	8731	8568	8539	8900	8258	8434	8502	8580	8750	-2%
Total OECD	31692	33113	33118	33951	32330	32245	32373	32175	32444	33402	34255	-2%

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

OIL MARKET REPORT CONTACTS

Editorial Enquiries

Editor — Lawrence Eagles
Head, Oil Industry & Markets Division
(+33) 0*1 40 57 65 90
e-mail: lawrence.eagles@iea.org

Demand — Eduardo Lopez
(+33) 0*1 40 57 65 93
e-mail: eduardo.lopez@iea.org

Supply — David Fyfe
(+33) 0*1 40 57 65 94
e-mail: david.fyfe@iea.org

Prices/OECD Stocks — Julius Walker
(+33) 0*1 40 57 65 22
e-mail: julius.walker@iea.org

Refining — David Martin
(+33) 0*1 40 57 65 95
e-mail: david.martin@iea.org

Demand — Toril Ekeland Bosoni
(+33) 0*1 40 57 66 36
e-mail: toril.bosoni@iea.org

Statistics/Freight/Trade — James Ryder
(+33) 0*1 40 57 66 18
e-mail: james.ryder@iea.org

End-User Prices/Statistical Support — Miklós Bánkuti
(+33) 0*1 40 57 67 76
e-mail: miklos.bankuti@iea.org

Editorial Assistant — Anne Mayne
(+33) 0*1 40 57 65 96
e-mail: anne.mayne@iea.org

Fax: *(+33) 0*1 40 57 65 99/40 57 65 09*

* 0 only within France

Media Enquiries

Press Office — Gwyn Darling
(+33) 0*1 40 57 65 54
e-mail: ieapressoffice@iea.org

Subscription and Delivery Enquiries

Oil Market Report Subscriptions (Attn: Ms. Sandra Coleman)
International Energy Agency
BP 586-75726 PARIS Cedex 15, France

Tel. +33 (0) 1 40 57 65 57
Fax. +33 (0) 1 40 57 65 59
e-mail: sandra.coleman@iea.org

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 Report (MTOMR) Report and Annual Statistical Supplement* (current issue of the statistical supplement dated 10 August 2007), 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 (© 2007 Platts - a division of McGraw-Hill Inc.).

INTERNATIONAL ENERGY AGENCY/AGENCE INTERNATIONALE DE L'ENERGIE

OIL MARKET REPORT

A MONTHLY OIL MARKET AND STOCKS ASSESSMENT

www.oilmarketreport.org

INTERNATIONAL ENERGY AGENCY

AGENCE INTERNATIONALE DE L'ENERGIE

14 December 2007

HIGHLIGHTS

- **Crude futures** tested $100/bbl in late November, but dipped on signs of higher supplies from OPEC/non-OPEC producers and improved product supply as refineries return from maintenance. A sharp jump in freight rates and a narrower backwardation underscored this shift. However, $90/bbl oil and significant price volatility still reflect underlying concerns over supply and economic growth.

- **Global oil product demand growth** is revised lower by 60 kb/d in 2007 to average 85.7 mb/d (+1.1% over 2006). Following a reappraisal of ethane prospects in the Middle East, 2008 demand is revised up by 115 kb/d to 87.8 mb/d (+2.5%), with growth driven by the non-OECD, as well as by an assumption of normal weather in the OECD.

- **World oil supply** rose 55 kb/d in November to 86.5 mb/d as output recovery in Mexico, China and Brazil offset lower OPEC supply. Non-OPEC supply is revised up by an average 50 kb/d to 50.2 mb/d in 2007 and 51.25 mb/d in 2008, on higher estimates for refinery processing gain. These offset downgrades of 95-140 kb/d for non-OPEC oil production.

- **November OPEC crude supply** averaged 31.1 mb/d, 180 kb/d lower than October. Offshore maintenance in Abu Dhabi removed an estimated 0.4 mb/d, offsetting increases from other producers. Early indications show rising supply in December, despite an unchanged OPEC output target. The call on OPEC crude and stock change is revised down by 100-200 kb/d for 2007 but 100 kb/d higher for 2008.

- **OECD industry stocks** fell by 22.4 mb in October, lowering demand cover to 52.6 days, just below the five-year average. A sharp decline in European products led the draw, with a similar picture emerging in November.

- **Global refinery crude runs** are forecast to average 74.9 mb/d in December, as throughput reaches its seasonal peak. Throughputs are expected to remain at these levels in January, but average 74.3 mb/d in 1Q08, 1 mb/d above a year earlier.

Next Issue: 16 January 2008

CONTENTS

IN THE BALANCE

In contrast to market expectations, OPEC maintained existing production targets at its December meeting. While winter weather always means considerable uncertainty in demand, OPEC's decision needs to be evaluated in the context of what is really happening in the market. OPEC 10 output had already started to rise by September, well ahead of the 1 November 2007 agreed output increase. Output rose 400 kb/d in September, reaching target levels of 27.3 mb/d in October, before UAE field maintenance prompted a dip to 27.1 mb/d in November. But, the additional oil from OPEC 10 has almost been doubled by increases from outside the targeted-10, with Iraqi output rising by 330 kb/d between August and November and Angolan by a more modest 70 kb/d.

While few would have predicted such an improvement in Iraqi security and output since September, the additional oil has been as welcome for the international market as it has been for Iraqi finances. But though the increase has been dramatic, the market continues to recognise the propensity for ongoing security issues and output volatility. On the other hand, Angolan output could continue to rise, despite its new OPEC target. Angola's allocation of 1.9 mb/d is still 85 kb/d above its estimated November output level, but could constrain supplies next year when output capacity could exceed the target. Scheduled maintenance also reduced UAE output by 395 kb/d in November, making room for production within the OPEC 10 to increase. While it is constructive that major producers are responding to high prices by raising output, it is clearly premature to project that these supplies will remain in place for the rest of the winter. Moreover, field outages and delays continue to act as a brake on actual production performance.

The development of the IEA's Refinery and Product Supply Model has also afforded a better understanding of refinery processing gain, identifying adjustments ranging from 50 kb/d for the early part of the decade, rising to 150 kb/d for 2006-2008. The net result lifts global processing gain, and therefore total supply, from 1.9 mb/d in 2007 to 2.1 mb/d. The shift is not a new source of supply, rather, it is an accounting change from the miscellaneous-to-balance and represents a reduction in the sources of discrepancies that occur when comparing crude oil supply and product demand.

High prices are beginning to squeeze demand in OECD Europe and North America. German and other European consumers are either holding off from filling home heating oil tanks or doing it piecemeal, while US demand growth remains weak. But if prices moderate, demand could rebound. Typically, from this point on, German (and other European) heating oil consumers start to run down their tanks, but with stocks already at the lower end of the five-year range consumer demand could be higher than normal. Lower prices or a cold snap could also prompt a flurry of buying. In contrast, where subsidies protect consumers in non-OECD regions, robust growth continues. But here too, it is possible that high prices may have depleted domestic stocks, or low refinery returns have discouraged refinery throughput, offering the potential for a rebound in demand

OECD total oil stocks have been trending lower since July, leaving forward cover fractionally below five-year average levels. That is typically the flip point between backwardation and contango for crude oil futures and represents a market-defined barometer of tightness. Of course, declining stocks are normal in the winter, but at present levels the market is likely to respond quickly if the currently higher OPEC supplies discussed above drop off, or non-OPEC supply and world demand veer off their projected path.

Overall, winter prospects have clearly improved. Reflecting this change, the forward price spreads for WTI, Brent and Dubai have narrowed considerably since the end of November. That suggests that the market is more comfortable with the pending supply and demand balance. But $90/bbl oil makes clear that the market is still on edge and is unlikely to relax until the peak weather risks have subsided and a clear trend in OPEC supplies is apparent.

DEMAND

Summary

- **Global oil product demand growth** has been adjusted down by almost 60 kb/d in 2007, mostly as a result of revisions in the OECD (3Q07 and 4Q07), Asia (3Q07), and the FSU and Latin America (4Q07). In 2008, global demand is revised up by roughly 100 kb/d following a reappraisal of ethane prospects in the Middle East. World demand is now forecast at 85.7 mb/d in 2007 (+1.1% over 2006) and 87.8 mb/d in 2008 (+2.5%), with growth largely driven by non-OECD countries, as well as by expectations of normal weather in the OECD.

- **OECD oil product demand** has been lowered marginally in both 2007 and 2008 (-51 kb/d and -8 kb/d, respectively). Stronger-than-expected 3Q07 demand in North America, driven by resilient transportation fuels deliveries, offset 4Q07 downward revisions in heating fuels demand as a result of October's mild weather. In the Pacific, the 3Q07 rebound (September), supported by strong oil-fired electricity demand, was revised down slightly, but the region's outlook remains strong in 4Q07, given persistent power needs in October. European demand was adjusted down because of continued weakness in heating oil and residual fuel oil demand. Overall, OECD demand is expected to decline to 49.2 mb/d in 2007 (-0.3% year-on-year), but should rebound to 49.8 mb/d in 2008 (+1.3%).

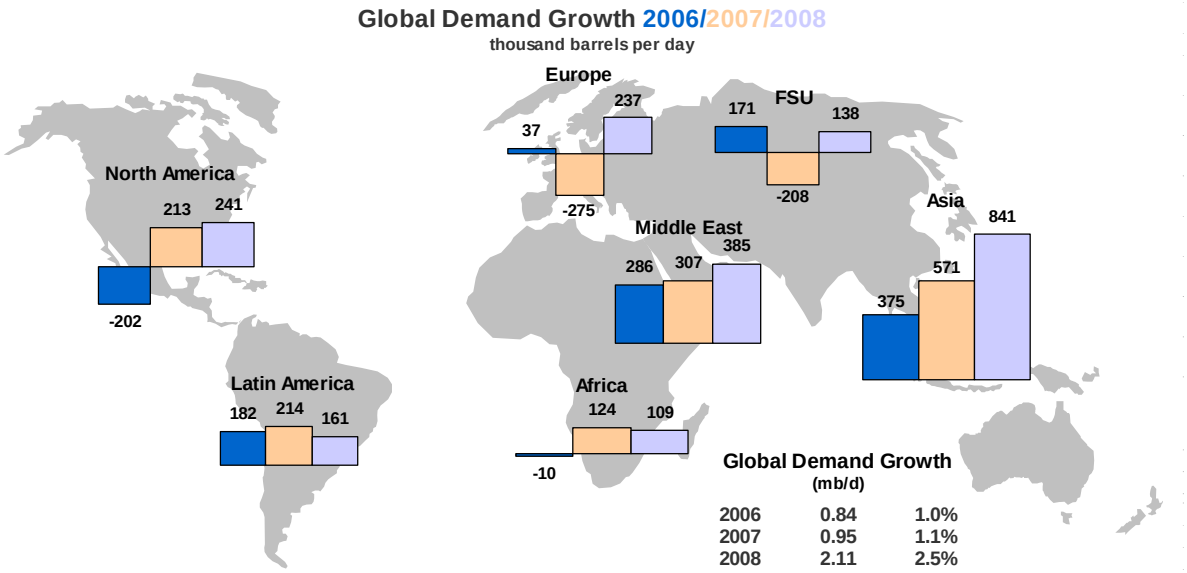
Global Oil Demand (2006-2008)

(million barrels per day)

	1Q06	2Q06	3Q06	4Q06	2006	1Q07	2Q07	3Q07	4Q07	2007	1Q08	2Q08	3Q08	4Q08	2008
Africa	3.0	3.0	2.9	2.9	2.9	3.1	3.1	3.0	3.1	3.1	3.2	3.2	3.1	3.2	3.2
Americas	30.4	30.4	30.9	30.7	30.6	31.0	31.0	31.2	30.9	31.0	31.4	31.4	31.6	31.3	31.4
Asia/Pacific	25.2	24.1	23.7	24.8	24.4	25.3	24.7	24.2	25.8	25.0	26.3	25.5	25.0	26.6	25.8
Europe	16.8	16.0	16.3	16.5	16.4	16.0	15.7	16.1	16.5	16.1	16.5	15.9	16.3	16.6	16.3
FSU	4.1	3.9	4.1	4.4	4.1	3.9	3.7	3.9	4.2	3.9	4.1	3.8	4.0	4.3	4.1
Middle East	6.2	6.2	6.5	6.3	6.3	6.4	6.6	6.8	6.5	6.6	6.8	6.9	7.3	6.9	7.0
World	**85.5**	**83.5**	**84.4**	**85.7**	**84.7**	**85.8**	**84.7**	**85.3**	**86.9**	**85.7**	**88.3**	**86.7**	**87.3**	**88.9**	**87.8**
Annual Chg (%)	0.5	0.8	1.1	1.5	1.0	0.4	1.6	1.1	1.5	1.1	3.0	2.3	2.4	2.2	2.5
Annual Chg (mb/d)	0.4	0.7	1.0	1.3	0.8	0.3	1.3	0.9	1.3	0.9	2.5	1.9	2.0	1.9	2.1
Changes from last month's report (mb/d)	0.00	0.00	0.01	0.00	0.00	-0.04	0.08	-0.09	-0.21	-0.06	0.14	0.20	0.14	-0.04	0.11

- **Non-OECD oil product demand** remains virtually unchanged in 2007, but has been adjusted upwards in 2008 by roughly 115 kb/d on average. Downward revisions in Asia (3Q07) and the FSU (4Q07) were compensated by upward adjustments in Latin America (1H07). The changes in 2008 were primarily driven by a reassessment of petrochemical demand for LPG/ethane in the Middle East, notably in Saudi Arabia. Overall, non-OECD demand is seen averaging 36.5 mb/d in 2007 (+3.1% on an annual basis) and 38.0 mb/d in 2008 (+4.0%).

- **Sustained high prices are starting to curb demand, but so far only at the margin.** In real terms, prices have not yet reached the peaks seen in the early 1980s, while oil use per unit of GDP has significantly diminished across the world over the past two decades, implying greater resilience to higher prices, despite significant differences regarding oil efficiency between OECD and non-OECD countries. Moreover, most of the largest and fastest-growing emerging countries cap end-user prices, thus insulating consumers and fuelling strong oil demand growth. Only in the OECD, where end-user prices are more sensitive to crude price shifts and oil demand has plateaued, is oil product demand growth gradually slowing, as evidenced by weak US gasoline data or sluggish European heating oil figures.



OECD

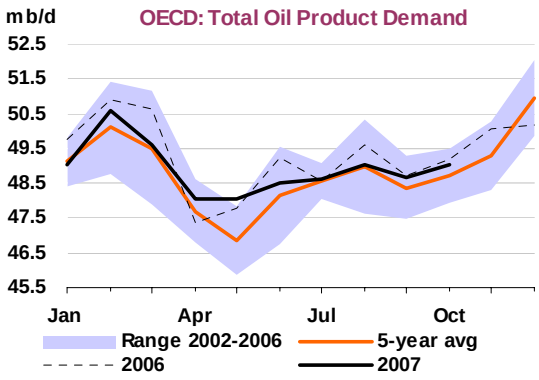
In October, according to preliminary data, total OECD inland deliveries (oil products supplied by refineries, pipelines and terminals) contracted by 0.3% year-on-year. The continued strength in oil product demand in the Pacific (+4.8% on a yearly basis) proved insufficient to offset demand weakness in both Europe (-1.4%) and North America (-1.1%). OECD demand is now forecast to average 49.2 mb/d in 2007 (-0.3%) and 49.8 mb/d in 2008 (+1.3%), marginally revised compared with last month's report.

OECD Demand based on Adjusted Preliminary Submissions - October 2007
(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*	**10.76**	**0.1**	**1.77**	**-5.7**	**4.28**	**6.9**	**0.96**	**-29.0**	**1.17**	**8.1**	**6.06**	**-2.52**	**25.00**	**-1.1**
US50	9.20	-0.7	1.53	-6.6	3.73	5.0	0.44	-42.3	0.68	11.0	4.64	-6.1	20.22	-2.7
Canada	0.72	1.1	0.13	-4.1	0.19	4.3	0.36	-3.4	0.10	5.4	0.76	14.0	2.27	4.4
Mexico	0.75	9.8	0.06	9.9	0.29	8.0	0.13	8.0	0.27	5.0	0.58	9.7	2.07	8.8
OECD Europe	**2.55**	**-1.2**	**1.33**	**0.8**	**4.41**	**4.9**	**2.20**	**-11.0**	**1.63**	**-7.1**	**3.67**	**-0.4**	**15.78**	**-1.4**
Germany	0.53	0.4	0.20	4.6	0.67	8.1	0.42	-37.4	0.13	-20.8	0.62	3.0	2.58	-7.5
United Kingdom	0.41	-3.2	0.35	-4.9	0.43	0.3	0.14	5.2	0.09	-16.0	0.34	8.0	1.76	-0.8
France	0.23	0.2	0.15	-0.8	0.71	7.2	0.40	1.8	0.10	-18.9	0.48	-1.3	2.07	1.2
Italy	0.29	-4.2	0.09	8.4	0.59	5.8	0.14	-3.9	0.18	-15.4	0.39	2.2	1.69	-0.2
Spain	0.16	-0.2	0.13	5.8	0.55	9.0	0.24	9.0	0.23	1.5	0.37	5.2	1.67	5.9
OECD Pacific	**1.58**	**2.2**	**0.89**	**13.2**	**1.31**	**3.6**	**0.52**	**0.9**	**0.97**	**13.7**	**2.99**	**2.4**	**8.26**	**4.8**
Japan	1.02	1.0	0.58	16.3	0.62	0.0	0.39	-2.5	0.57	22.3	1.76	0.6	4.93	4.1
Korea	0.17	6.0	0.19	12.8	0.32	9.9	0.13	12.2	0.37	4.6	1.02	6.0	2.21	7.2
Australia	0.34	4.2	0.11	1.9	0.32	4.4	0.00	-21.5	0.02	4.3	0.19	1.9	0.98	3.5
OECD Total	**14.89**	**0.1**	**3.99**	**0.2**	**9.99**	**5.5**	**3.68**	**-15.2**	**3.77**	**2.1**	**12.71**	**-0.8**	**49.04**	**-0.3**

* Including US territories

Oil product demand in OECD **North America** (including US Territories) fell in October, mostly due to depressed heating fuel deliveries in the US as a result of relatively mild temperatures. Transportation fuels were a notable exception, as strong gasoline demand in Mexico (and to a lesser extent, Canada) managed to offset a contraction in the US, arguably related to high retail prices. OECD **Pacific** demand continued to be mostly driven by Japan, where strong electricity demand forced utilities to turn to thermal sources to compensate for idled nuclear plants. Power demand,



though, was also buoyant in Korea, where oil-fired generation has seen a rebound following the closure of the country's oldest nuclear power plant. In addition, cold weather in Korea, coupled with stock rebuilds, boosted demand for heating fuels, such as LPG and jet fuel/kerosene. Finally, demand in OECD **Europe** continued to be dragged down by lower-than-average deliveries of heating oil and residual, notably in Italy and Germany.

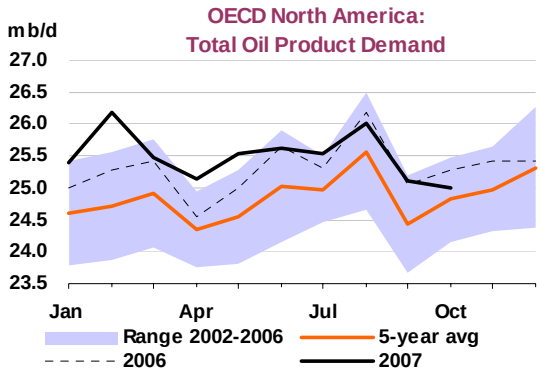
Total OECD Demand by Product
(million barrels per day)

	2006	2007	4Q06	1Q07	2Q07	3Q07	Jul 07	Aug 07	Sep 07*	Latest month vs. Aug 07	Latest month vs. Sep 06
LPG & Ethane	4.76	4.79	4.80	5.24	4.65	4.45	4.53	4.42	4.40	-0.03	0.20
Naphtha	3.17	3.22	3.37	3.38	3.06	3.15	3.16	3.17	3.12	-0.05	-0.02
Motor Gasoline	14.86	14.92	14.92	14.45	15.07	15.29	15.45	15.53	14.86	-0.67	0.00
Jet & Kerosene	4.16	4.12	4.24	4.35	3.90	3.95	3.97	4.01	3.88	-0.13	-0.03
Gas/Diesel Oil	13.25	13.20	13.61	13.51	12.61	12.89	12.60	12.80	13.27	0.47	-0.22
Residual Fuel Oil	4.04	3.95	3.88	4.20	3.87	3.78	3.73	3.82	3.78	-0.05	0.08
Other Products	5.08	4.97	4.99	4.58	5.03	5.27	5.19	5.29	5.34	0.05	-0.06
Total Products	**49.32**	**49.17**	**49.80**	**49.71**	**48.20**	**48.77**	**48.61**	**49.05**	**48.65**	**-0.40**	**-0.05**

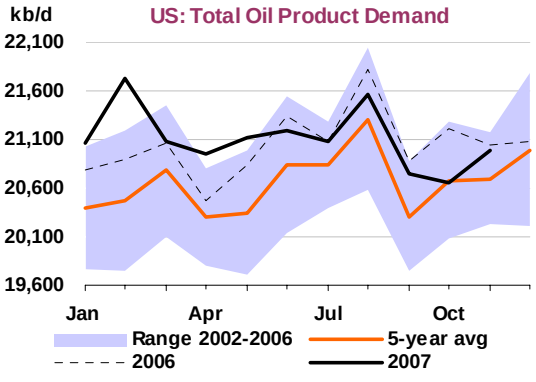
* Latest official OECD submissions (MOS)

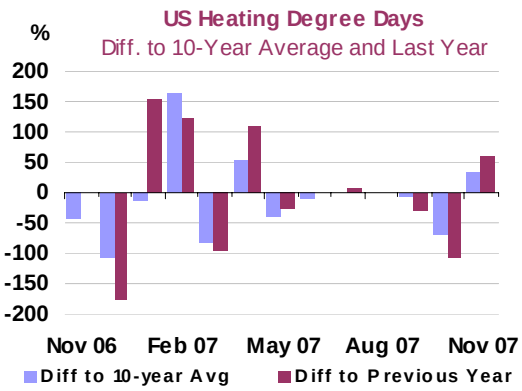
North America

Preliminary data show that oil product demand in North America (including US Territories) shrank by 1.1% year-on-year in October. With the exception of modest gains in transportation fuels, deliveries for other product categories posted negative growth during the month. In particular, strong gasoline demand in Mexico (and to a lesser extent in Canada) barely offset the small contraction in the US. Overall, the region's gasoline deliveries rose by a modest 0.1% on a yearly basis. Moreover, relatively mild temperatures in the US and Canada led to a sharp year-on-year fall in heating oil deliveries (-29.0%). Demand in OECD North America remains largely unchanged compared with last month's report, at 25.5 mb/d in 2007 (+0.8% on a yearly basis) and 25.7 mb/d in 2008 (+0.9%).



Inland deliveries in the continental **United States** – a proxy of oil product demand – fell by 2.7% year-on-year in October, according to adjusted preliminary data. This was the fifth consecutive month of falling demand, and the trend is likely to continue in November (-0.3%), according to weekly data. October's weakness was due to lower-than-expected deliveries of naphtha, gasoline, jet/fuel kerosene, distillates (heating oil and other gasoil) and 'other products'.

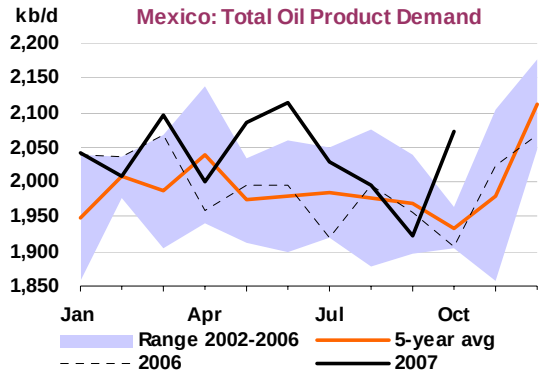


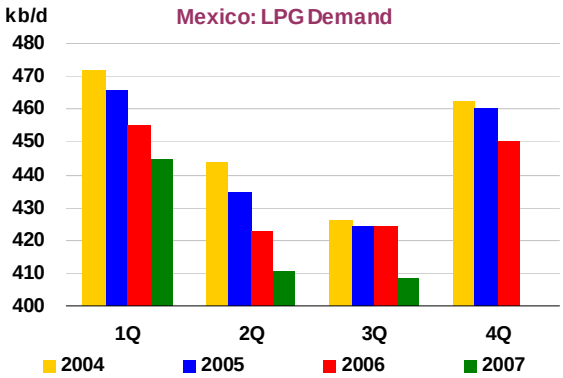


The weakness in gasoline demand is arguably related to both worsening economic conditions and the effects of high oil prices. For the first time in two years, gasoline deliveries contracted in both October and November (respectively -0.7% and -0.1% year-on-year). Nevertheless, it is arguably too early to establish a definitive conclusion regarding the short-term outlook of US gasoline demand (cf. text box below). As for the other product categories, their weakness is related to relatively benign temperatures (the number of heating-degree days in October was 71% lower than the 10-year average) and possibly to the slowdown of construction activity following the housing market woes. As such, US50 total oil product demand is seen reaching 20.8 mb/d in 2007 (+0.3% over 2006), and 20.9 mb/d in 2008 (+0.9% versus 2007), virtually unchanged from last month's report.

Preliminary data for October suggest that, after two months of stalling growth, oil product demand in **Mexico** jumped by 8.8% on a yearly basis. All product categories posted positive growth rates, particularly transportation fuels. Gasoline deliveries expanded by 9.8% year-on-year, together with jet fuel/kerosene (+9.9%) and diesel (+8.0%). The rebound suggests that economic activity continues to be resilient, despite the uncertainties prevailing in the US, Mexico's main market. From this perspective, the demand weakness observed in August and September could be related to one-off factors, notably the pipeline attacks that disrupted the flows of key products, natural gas and crude (in late July and early September), coupled with the holiday season.

Following the publication of a presidential decree, Mexico's LPG market is poised to become more competitive, transparent and safe. Under the new regulations, large consumers will be able to buy LPG directly from state-owned Pemex, instead of purchasing it through private intermediaries. In addition, bottled gas cylinders – used for cooking and heating by some three-quarters of Mexican households – will be available for sale in more places, under tighter security rules and higher quality control. Nevertheless, even though LPG end-user prices are subsidised, the market has been gradually shrinking over the past few years as natural gas distribution networks are built in major cities.





OECD North America Demand by Product

(million barrels per day)

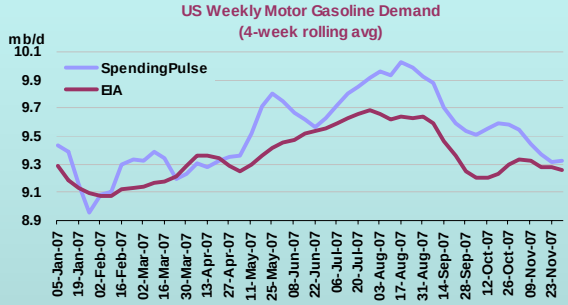
	2006	2007	4Q06	1Q07	2Q07	3Q07	Jul 07	Aug 07	Sep 07*	Latest month vs. Aug 07	Latest month vs. Sep 06
LPG & Ethane	2.86	2.91	2.92	3.24	2.75	2.72	2.73	2.73	2.71	-0.02	0.09
Naphtha	0.44	0.44	0.50	0.42	0.45	0.43	0.46	0.40	0.44	0.04	-0.09
Motor Gasoline	10.72	10.83	10.78	10.53	10.94	11.06	11.21	11.22	10.75	-0.47	0.05
Jet & Kerosene	1.91	1.89	1.88	1.88	1.89	1.91	1.94	2.00	1.79	-0.21	-0.07
Gas/Diesel Oil	5.17	5.26	5.28	5.48	5.13	5.14	4.97	5.26	5.17	-0.09	0.04
Residual Fuel Oil	1.20	1.25	1.09	1.38	1.26	1.20	1.17	1.26	1.16	-0.09	0.14
Other Products	2.99	2.94	2.92	2.74	3.02	3.10	3.04	3.15	3.10	-0.05	-0.08
Total Products	**25.29**	**25.51**	**25.37**	**25.67**	**25.43**	**25.56**	**25.53**	**26.02**	**25.12**	**-0.90**	**0.08**

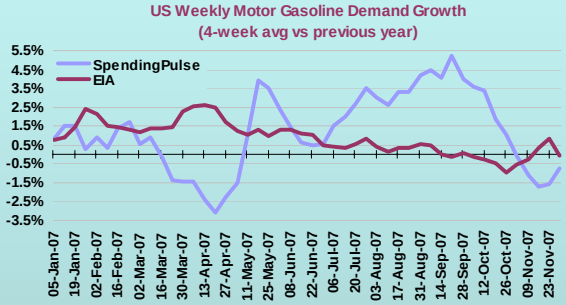
* Latest official OECD submissions (MOS)

Assessing US Gasoline Demand Trends

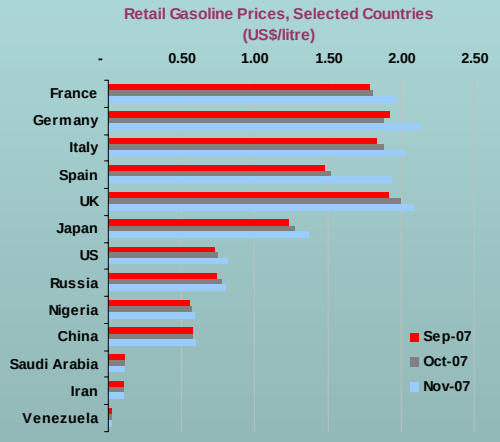
As noted, November's EIA weekly data – which serve as the starting point of our adjusted preliminary assessment – indicate that US gasoline demand contracted for the second month in a row on a yearly basis (-0.1%). This figure, however, is intriguing, for two reasons. First, the fall was much smaller than the one recorded in October (-0.7%). Although the Thanks Giving holiday may have supported demand, higher retail prices and growing economic uncertainties would arguably have favoured an even larger contraction.

Second, EIA data is sharply different to that collected by MasterCard through its SpendingPulse survey, whose estimates of gasoline demand are actually much higher. This could indicate that the EIA may be missing some demand – its weekly data, a preliminary sample from oil companies, reportedly represent some 90% of demand. But it could similarly be argued that the SpendingPulse survey, by tracking only credit card payments, is missing cash transactions, which represent the activity of the marginal consumer. In addition, the definitions of what constitutes 'demand' are different (EIA's deliveries versus MasterCard's sales). As such, refinery maintenance work may explain why the EIA survey shows lower deliveries. In the end, the absolute level of demand is perhaps less important than its direction, but then again, the trend is unclear: while SpendingPulse figures indicate that gasoline demand started to *rebound* in late November, EIA data suggest that demand began to *decline* again in mid-November.





This divergence brings back to the fore the question of how responsive is US gasoline demand to prices. Recent academic research appears to confirm that gasoline demand has indeed become more price inelastic, as a result of several social changes that have taken place over the past decades: the suburban sprawl; the relatively limited availability of public transportation outside of big cities; the emergence of dual working parents; and the rise of extracurricular events for children. After all, as shown in the chart, US retail gasoline prices are about two-thirds lower than those prevailing in most advanced economies. Moreover, 2Q07 data from the US Bureau of Economic Analysis (BEA) points out that the weight of motor fuel expenses relatively to average household incomes, albeit rising, is still below its early 1980s peak, at about 3.4% in 2007, versus 4.5% in 1981 (this share, however, is now probably closer to 4%, given the price spike in 2H07).



This doesn't mean that US motorists are impervious to retail price increases, but that their response is slow and largely dependent upon expectations of future prices – i.e., whether the rise is permanent or temporary. Unfortunately, the data are so far inconclusive. BEA quarterly figures do not disaggregate among income quintiles – arguably, the lower brackets of the population are feeling the brunt of the recent price increase and may thus be forced to change their driving habits, as opposed to higher income brackets. Similarly, demand data by state shows some weakness, but not a clear trend. This has not prevented some observers from contending that in some large regional markets, such as California, the weakness is related to mounting hybrid cars sales as a result of both higher prices and a heightened mindfulness about global warming. But nation-wide sales of hybrid cars remain negligible, at barely more than 12,000 units so far this year; more notably, October car sales data suggest that purchases of SUVs have rebounded to levels comparable to those observed in 2006.

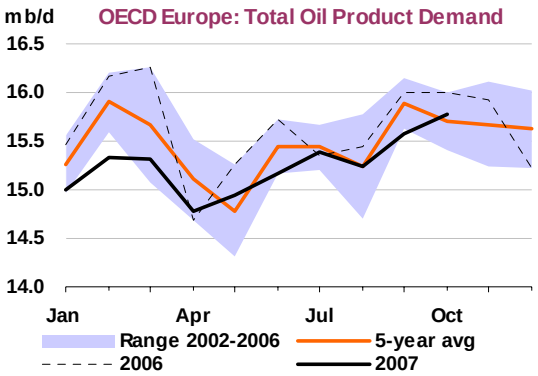
Assessing US Gasoline Demand Trends (continued)

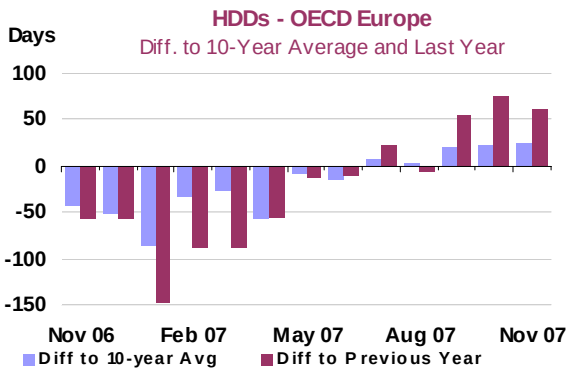
In sum, it is perhaps premature to conclude that US gasoline demand is inevitably poised to contract significantly in the months ahead. Most likely, its pace of growth will continue to slow down slightly, as motorists drive shorter distances or less frequently, or use the second, smaller car for short travel. More permanent behavioural changes will take longer and perhaps require much higher retail prices. In the longer-term, the adoption of measures to improve the country's vehicle fleet efficiency are more likely to bring about a lasting effect upon gasoline demand.

In that respect, the House of Representatives just passed a new energy law, which mandates a 40% improvement of Corporate Average Fuel Economy (CAFÉ) standards by 2020 – the new bill, though, must still be approved by both the Senate and President Bush, who has threatened to veto it in its current form. But even if federal legislation stalls, several key states are intent on improving efficiency and curbing emissions. In mid-November, following a lawsuit brought by eleven states and several environmental organizations, the 9th US Circuit Court of Appeals ordered the National Highway Traffic Safety Administration (NHTSA) to establish new fuel economy standards for light trucks, to close a loophole allowing SUVs and other light trucks to feature lower fuel efficiency standards than cars, and to set fuel economy standards for large pickup trucks that have so far been exempt from existing rules. It is unclear at this point whether the lawsuit will succeed, but it signals a marker of intent on fuel efficiency.

Europe

Total European oil product demand was down 1.4% year-on-year in October, unchanged from last month's report. Preliminary data for Germany, the UK and the Czech Republic came in slightly weaker than expected, but were offset by higher demand in Spain and France. Europe's weakness continued to be centred in heating oil and residual (-11.0% and -7.1%, respectively). However, heating oil demand is declining less rapidly than in previous months. In September, meanwhile, demand was revised down by 130 kb/d, given lower-than-expected figures for Spain, the UK and Italy, only partly offset by higher demand in Turkey, France and Norway. As such, 3Q07 demand averaged 15.4 mb/d, 1.3% lower than in the same period in 2006.

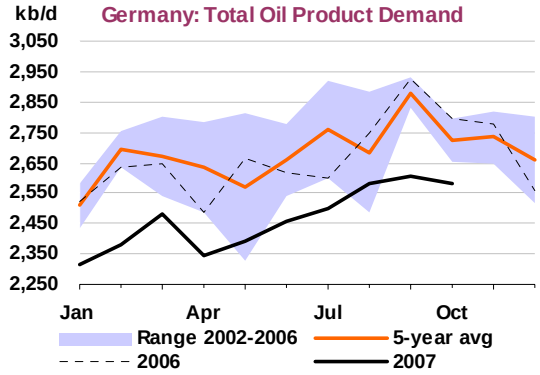


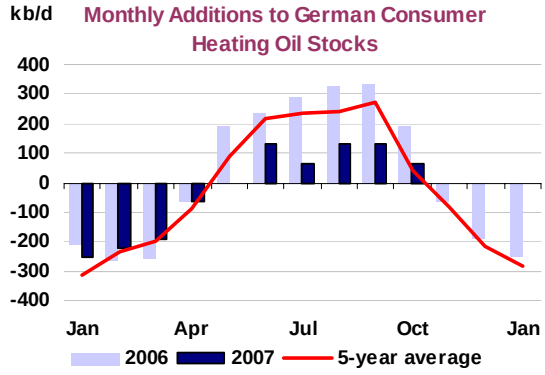


Demand is seen rebounding seasonally in 4Q07 to 15.7 mb/d (+0.1% versus 4Q06). So far this autumn, Europe has been significantly colder than last year, with HDDs slightly above the 10-year average. Overall, total demand is expected to average 15.3 mb/d in 2007 (-1.9% year-on-year) and 15.5 mb/d in 2008 (+1.4%). The forecast for both years is about 40 kb/d lower than last month's report, and represents a greater adjusted average contraction of demand growth over both years (-0.2%).

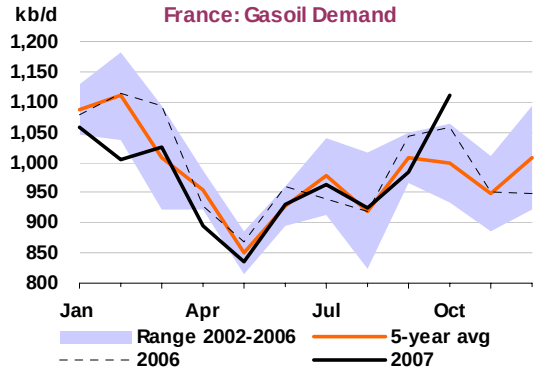
German demand remained feeble in October, with preliminary data indicating a 7.5% year-on-year decline. Heating oil demand was 37.4% below levels of a year ago. Last year, however, stockpiling was significant: end-user stocks rose by 195 kb/d in October 2006, due both to warm weather and an impending tax increase. This year, by contrast, household stocks rose by only 65 kb/d in the same month,

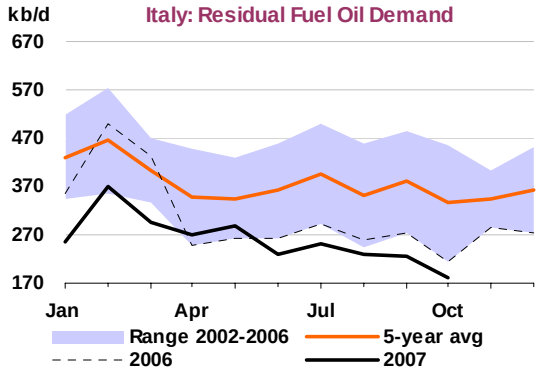
but the filling rate was still above the five-year average of 40 kb/d. By end-October, stocks stood at 61% of capacity (compared with 68% last year and 60% by end-September). As the winter sets in with household tanks at the lower end of the five-year range, end-user consumption and primary deliveries will likely become more closely linked. At only 134 kb/d, fuel oil deliveries in October were 20.8% down compared to last year – their lowest level since September 1999.





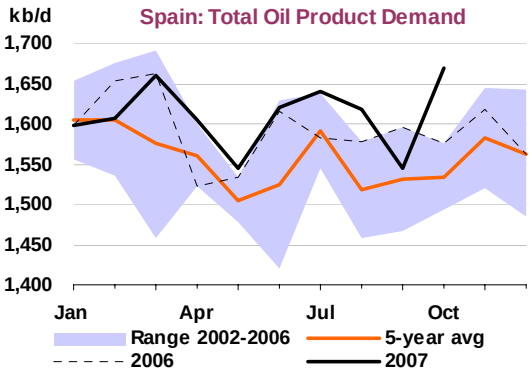
Preliminary **French** data for October indicate that demand grew by a higher-than-expected 1.2% year-on-year, in contrast to September, when it declined by 3.3%. Transportation fuels were particularly strong, with diesel deliveries soaring by 7.2% and gasoline demand gaining 0.2% (after falling for 28 consecutive months). Heating oil deliveries were also strong, catching up with 2006 levels for the first time this year. September data, though weak on an annual basis, came in 88 kb/d higher, as naphtha, gasoil and other products proved stronger than anticipated. As for 4Q07, it remains to be seen to what extent the strikes that hit the country's public transportation and energy sectors over October and November affected transportation fuel and power generation demand. Anecdotally, the use of private cars rose, but the net effect is still unclear as many workers carpooled, cycled or decided to stay at home during the strikes.

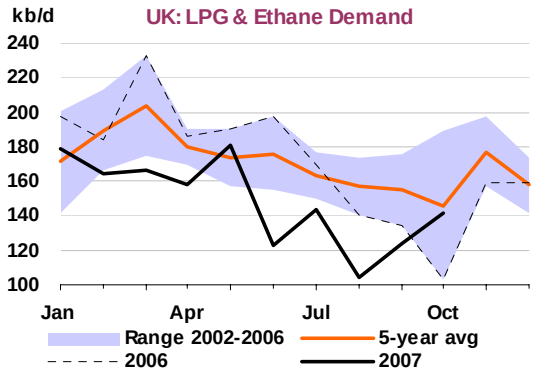




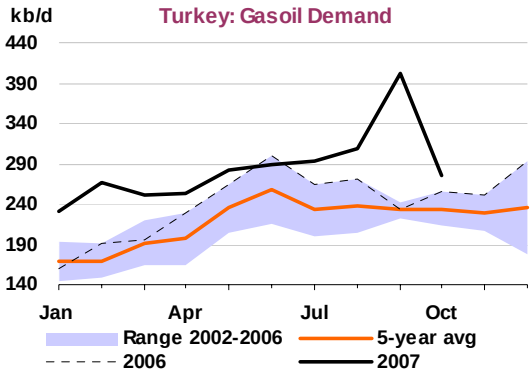
September's **Italian** preliminary demand estimate was lowered by 87 kb/d following the submission of official data, with more than two-thirds of this revision centred in residual fuel oil, which declined by 18.0% on an annual basis due to lower oil-fired electricity generation. In October, electricity demand was 1.2% higher year-on-year (and +1.3% than in September), due to an additional working day in the month and lower temperatures, which boosted heating needs. In addition, hydro power generation declined by 19.1% year-on-year. Surprisingly, preliminary data pointed to lower fuel oil consumption in October, possibly leading to upward revisions with the submission of official statistics. Gasoil demand, meanwhile, was very strong in October as diesel deliveries rose by 5.8%.

Spanish demand in September came in some 100 kb/d lower than suggested by preliminary data, mostly due to weak heating oil demand. October data, however, was revised up by 80 kb/d based on JODI figures, which show a 5.9% annual growth. Gasoil, in particular, was 9.0% higher, but all products bar gasoline posted positive growth. **UK** demand was weaker than expected in September, leading to a downward adjustment of 84 kb/d. Jet fuel/kerosene and motor gasoline demand was particularly subdued; both products were revised down by about 50 kb/d. LPG/ethane demand was also lower due to offshore field maintenance, but October data indicate a rebound within the seasonal range. Meanwhile, gasoline demand in the **Netherlands** has been revised down for 2007 following a correction to official data. Growth for 2007 now averages 0.4%, instead of 9.0% as previously reported.





Finally, **Turkish** monthly data have been adjusted back to January 2007, but the change was partly offset by our preliminary adjustment last month following revisions to 2006 data. However, the 2007 revisions were not uniform: 1Q07 was down by 57 kb/d, but 3Q07 was up by 39 kb/d. Moreover, September's demand is much stronger than expected (+33.0% year-on-year), with gasoil consumption roughly 73% higher than in August. As this spike remains unexplained (the split between diesel and heating oil is not available), it has not been yet carried through the 2008 forecast.



OECD Europe Demand by Product
(million barrels per day)

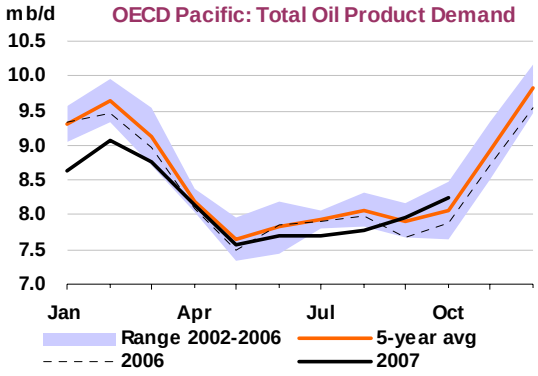
	2006	2007	4Q06	1Q07	2Q07	3Q07	Jul 07	Aug 07	Sep 07*	Latest month vs. Aug 07	Latest month vs. Sep 06
LPG & Ethane	0.98	0.96	0.94	1.03	0.98	0.87	0.92	0.80	0.89	0.09	0.15
Naphtha	1.12	1.12	1.14	1.21	1.05	1.08	1.07	1.11	1.08	-0.03	0.00
Motor Gasoline	2.57	2.51	2.55	2.39	2.59	2.59	2.64	2.65	2.48	-0.16	-0.15
Jet & Kerosene	1.27	1.29	1.26	1.22	1.28	1.39	1.40	1.41	1.36	-0.04	-0.01
Gas/Diesel Oil	6.25	6.15	6.44	6.19	5.74	6.09	5.97	5.93	6.36	0.42	-0.29
Residual Fuel Oil	1.86	1.75	1.81	1.83	1.72	1.68	1.70	1.65	1.69	0.04	-0.08
Other Products	1.57	1.56	1.57	1.35	1.60	1.69	1.68	1.70	1.70	0.01	-0.06
Total Products	**15.62**	**15.33**	**15.72**	**15.21**	**14.96**	**15.40**	**15.39**	**15.24**	**15.57**	**0.32**	**-0.43**

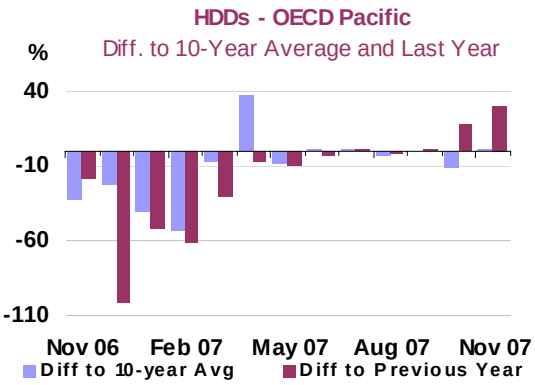
* Latest official OECD submissions (MOS)

Pacific

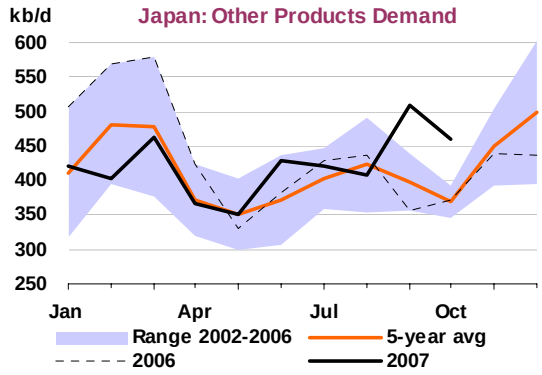
Preliminary data show that oil product demand in the Pacific rose by 4.8% year-on-year in October. Deliveries for all product categories bar naphtha registered gains. As in September, demand growth was driven by Japan. The country's demand – some two-thirds of the region's total – was again boosted by power demand and relatively warm temperatures (the number of heating-degree days in October, which

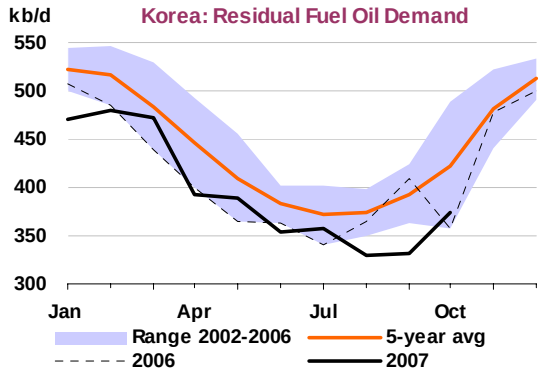
signals the start of the heating season, was 11% lower than the 10-year average). Naphtha's weakness, meanwhile, was due to depressed demand in Korea. As such, the outlook for OECD Pacific oil demand is virtually unchanged compared with last month's report, expected to average 8.3 mb/d in 2007 (-0.8% on a yearly basis) and 8.5 mb/d in 2008 (+2.4%).





According to preliminary data, oil product demand in **Japan** rose by 4.1% year-on-year in October. As in the previous month, oil demand growth was largely due to strong electricity demand, amid nuclear outages and lower operating rates at hydro generators. Most utilities have continued to rely to a large extent on thermal power, a situation expected to last at least until mid-2008, when most of the idled nuclear plants should come back online following extensive security checks. Demand for fuel oil and direct crude (included in 'other products') thus rose in October by 22.3% and 23.5%, respectively, compared with the same month in the previous year. Demand for both fuels was for the most part driven by Tokyo Electric Power Company (Tepco), the country's largest utility, whose usage of fuel oil and direct crude soared by 290.2% and 145.2%, respectively. It should be noted, though, that September's direct crude figure was revised down; as such, 'other products' demand in Japan stood at roughly 500 kb/d (+42.3%), instead of the previous estimate of 600 kb/d (+68.0%).





In **Korea**, preliminary data indicate that total oil product demand surged by 7.2% year-on-year in October, as all products bar naphtha registered gains. Demand for transportation fuels was particularly strong, with gasoline soaring by 6.0% and diesel by 9.9%. As a result of colder temperatures than those recorded in the previous year and extensive stock rebuilding, deliveries of heating fuels also rose (LPG soared by 34.0%, followed by jet fuel/kerosene with +12.8% and other gasoil with +12.2%). Fuel oil deliveries increased by 4.6%, prompted by strong electricity demand. Coupled with the closure of the country's oldest nuclear plant, the share of fuel oil in power generation (about 6%) is poised to rise slightly, although LNG – currently cheaper than residual in Asian markets – continues to make inroads. Finally, naphtha deliveries – the largest component of total Korean demand – plunged by 7.6% as petrochemical producers sought alternative feedstocks (naphtha has become particularly expensive in the region due to buoyant demand).

OECD Pacific Demand by Product
(million barrels per day)

	2006	2007	4Q06	1Q07	2Q07	3Q07	Jul 07	Aug 07	Sep 07*	Latest month vs. Aug 07	Latest month vs. Sep 06
LPG & Ethane	0.92	0.93	0.94	0.97	0.92	0.86	0.87	0.90	0.80	-0.10	-0.05
Naphtha	1.60	1.66	1.72	1.75	1.57	1.63	1.63	1.66	1.61	-0.06	0.07
Motor Gasoline	1.57	1.58	1.60	1.53	1.54	1.63	1.59	1.66	1.63	-0.03	0.09
Jet & Kerosene	0.98	0.94	1.10	1.25	0.73	0.65	0.63	0.60	0.73	0.13	0.05
Gas/Diesel Oil	1.83	1.79	1.88	1.85	1.75	1.67	1.66	1.61	1.74	0.13	0.04
Residual Fuel Oil	0.98	0.95	0.97	0.99	0.89	0.90	0.86	0.92	0.92	0.01	0.01
Other Products	0.52	0.48	0.50	0.49	0.41	0.48	0.46	0.44	0.54	0.10	0.08
Total Products	**8.40**	**8.34**	**8.71**	**8.83**	**7.80**	**7.81**	**7.70**	**7.79**	**7.96**	**0.18**	**0.30**

* Latest official OECD submissions (MOS)

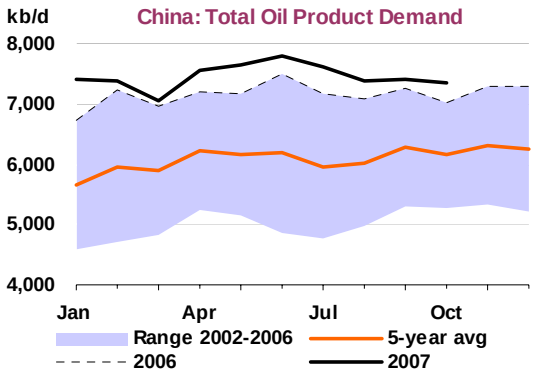
As noted in last month's report, the rise in international oil prices has become a politically sensitive issue, especially in the context of the approaching Korean presidential elections. Following the review of low-income living standards mandated by the President, the government has announced that it will reduce excise taxes by 30% for several heating and cooking fuels (LPG, kerosene and LNG) during the forthcoming winter, at a cost of some 1.4 trillion won in taxes (about $1.5 billion).

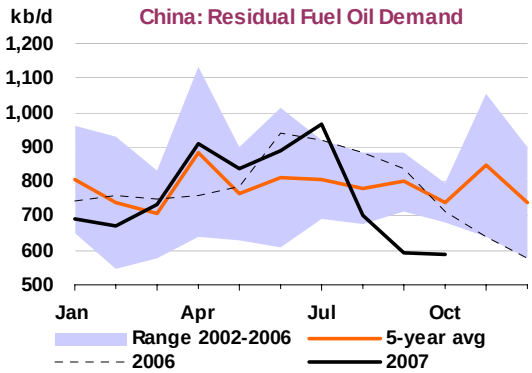
Non-OECD

China

According to preliminary data, China's apparent demand (defined as refinery output plus net oil product imports, adjusted for fuel oil and direct crude burning, smuggling and stock changes) rose by an estimated 4.4% year-on-year in October. All product categories bar LPG and residual fuel oil registered gains. Demand for gasoline and jet fuel/kerosene was particularly strong (+5.7% and +7.7%, respectively) on the back of the week-long National Day holidays. Meanwhile, the continued fall in fuel oil demand, as noted in previous reports, is related to its high price, which deters 'teapot' refineries from using fuel oil as a feedstock – thus limiting product supplies and contributing to widespread shortages and rationing of gas/diesel oil over the past two months.

The latest refining and trade figures help illustrate the magnitude of the squeeze. Seeking to trim refining losses as a result of domestic retail price caps, the country's largest (mostly state-owned) refineries undertook extended off-season maintenance (September's runs were 2% lower than those of August) and increased gross oil product exports (522 kb/d in September, the highest since August 2005). As for the teapots, many simply suspended or sharply reduced their own production. The ensuing shortages prompted the government to order Sinopec and PetroChina to increase diesel supplies to the domestic





market. The NOCs obligingly boosted both refinery runs by about 3% in October (month-on-month) and net imports by five times as much as in September, to roughly 26 kb/d (during most of this year China had been a net diesel exporter). However, both net crude oil and net fuel oil imports continued to fall – the former to 2.9 mb/d, -13% versus September, the latter to 217 kb/d, the lowest level since June 2002 –

suggesting that a) the NOCs chose to draw down rather than purchase expensive foreign crude; and b) that many teapot refineries remained idle or operated at very low capacity.

Arguably, November's 9% price increase *per se* will only marginally improve the supply picture. In order to tackle the problem, and short of further price increases (which have been officially ruled out, although in recent weeks Prime Minister Wen Jiabao hinted that domestic prices may rise again), state-owned oil companies have several options in order to adequately supply the domestic market: 1) delaying maintenance work at refineries, 2) increasing runs (distillate yields are already at a maximum), 3) raising net diesel imports, 4) selling domestically produced crude to teapot refineries at preferential prices, or potentially 5) tapping crude from China's strategic reserves. But, in exchange, the NOCs may, as in previous years, receive direct payments from the government to compensate their losses. Sinopec, the larger of the two state-owned refiners, received Rmb 9 billion in 2005 and Rmb 5 billion in 2006 ($1.2 billion and $677 million, respectively). Another possibility is that the government lowers or even abolishes oil product import duties, as recently suggested by the National Development and Reform Commission (NDRC) – however, other Chinese government officials have rejected this proposal.

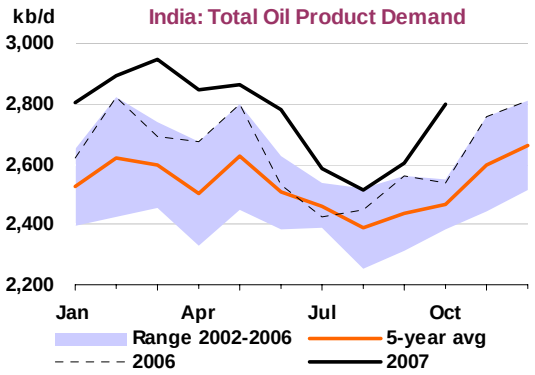
China Demand by Product
(thousand barrels per day)

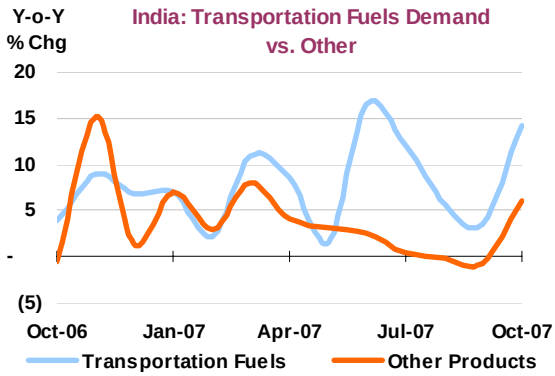
	Demand			Annual Chg (kb/d)		Annual Chg (%)	
	2005	2006	2007	2006	2007	2006	2007
LPG & Ethane	650	633	618	-17	-16	-2.6	-2.5
Naphtha	707	826	903	119	77	16.8	9.4
Motor Gasoline	1,131	1,170	1,201	39	32	3.4	2.7
Jet & Kerosene	246	280	297	34	17	13.8	6.3
Gas/Diesel Oil	2,239	2,338	2,478	99	140	4.4	6.0
Residual Fuel Oil	778	776	752	-2	-24	-0.2	-3.1
Other Products	943	1,135	1,279	192	144	20.3	12.7
Total Products	**6,693**	**7,157**	**7,527**	**464**	**370**	**6.9**	**5.2**

Although there have been reports that some service stations are blatantly exceeding capped diesel prices by as much as 40% in some inland and coastal provinces (Sichuan, Guizhou, Hebei, Ningxia, Shanxi and Hunan) in the face of strong truckers' demand, we believe that pent-up demand will not be entirely met over the rest of this year. (The government has barred officials from purchasing SUVs for government use, but this will unlikely reduce transportation fuels demand significantly). As such, we have slightly revised down our Chinese forecast in both 3Q07 and 4Q07. Total demand is now seen averaging 7.5 mb/d in 2007 (+5.2% year-on-year). Assuming that supply issues are addressed, demand growth should accelerate in 2008 to +5.7% (8.0 mb/d).

Other Non-OECD

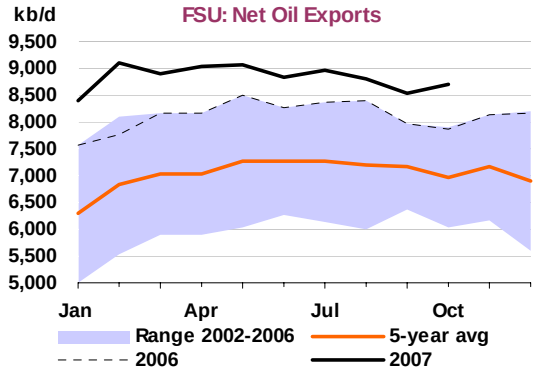
Oil product sales in **India** – a proxy of demand – soared by 10.2% on a yearly basis in October, according to preliminary data. Growth remained strong across all product categories, with the exception of 'other products' (-3.5%, although preliminary figures for this category, as previously noted, are generally revised upwards). Demand for transportation fuels continues to race ahead, with gasoline, jet fuel/kerosene and gasoil sales rising by 11.8%, 6.4% and 17.3%, respectively. The strong figures for gasoline and diesel are related to strong sales of passenger vehicles (almost 17% higher than in the same month of the previous year), coupled with October's festival season. The gasoil figure, meanwhile, is also likely reflective of the resumption of agricultural activities after a prolific summer monsoon (June-September). Given these strong data, our forecast of India's oil demand is slightly revised up, with total consumption seen rising by 5.1% in 2007 to roughly 2.8 mb/d. In 2008, oil demand growth is expected to slow down slightly to +3.0% in 2008 on the back of naphtha's weakness, displaced by natural gas.

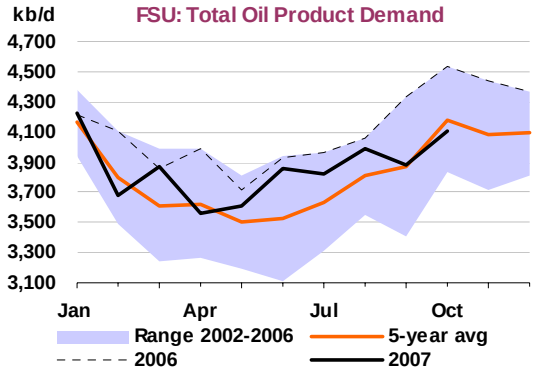




Most observers tend to focus on India's passenger vehicle market, which is indeed expanding at breakneck speed. Less advertised but equally significant is the growth in airline passenger traffic. The numbers are startling: so far this year, domestic airlines have carried some 35 million passengers (+35% versus the same period in 2006). Similarly, the domestic fleet is expected to reach 370 aircraft by year-end, nearly doubling since early 2005. More significantly, passenger traffic only represents about 3% of India's total population, currently estimated at some 1.1 billion people. Doubling or tripling that proportion will require significant investment in airport facilities and new aircraft. By the same token, jet fuel demand in India – roughly 97 kb/d today – will likely continue growing at a double-digit pace in the foreseeable future (in both 2005 and 2006, demand rose by almost 20% on average).

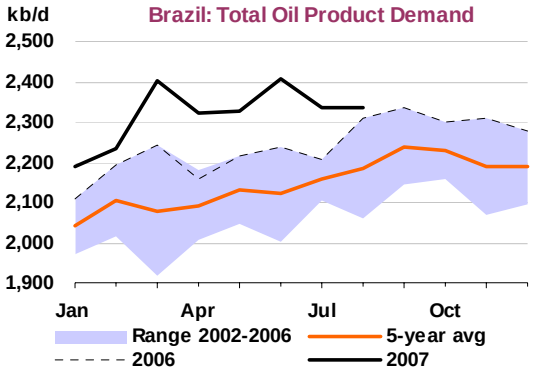
FSU apparent demand – defined as domestic crude production minus net exports of crude and oil products – has been revised down by about 30 kb/d in both 2007 and 2008. The changes were related to 4Q07adjustments of both supply (downward) and trade (upward), which have been carried out into next year. Overall, FSU total oil product demand is seen averaging 3.9 mb/d in 2007 (-5.0% year-on-year) and 4.1 mb/d in 2008 (+3.5%).

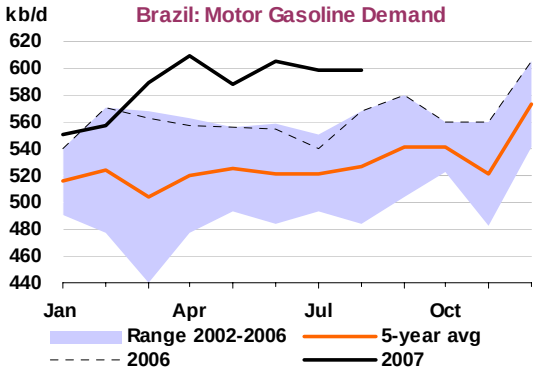




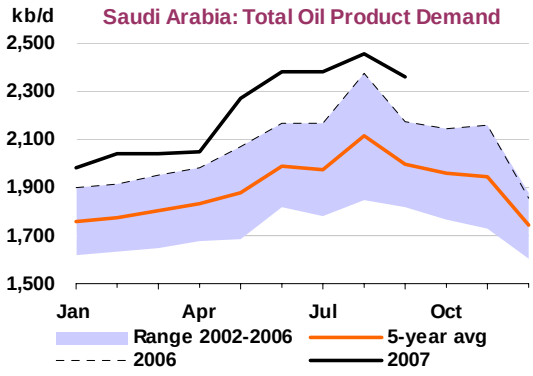
Russian service stations, particularly in the country's central regions, are reportedly facing oil product shortages as a result of refinery maintenance work (notably at the Moscow refinery), with some retailers being forced to close down or work only intermittently. In addition, the lack of supplies has led to a spike in wholesale prices.

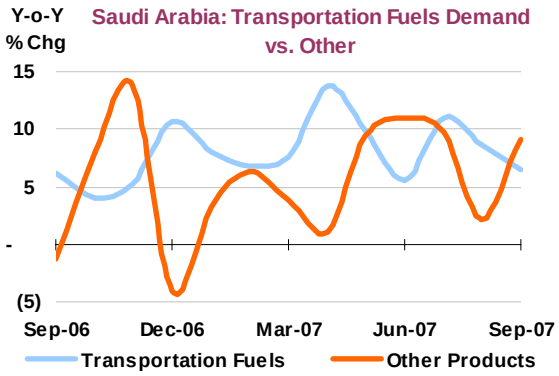
According to preliminary data, **Brazilian** oil demand rose by 1.2% year-on-year in August. Gasoline deliveries remained particularly buoyant, rising by +5.6% on a yearly basis. Intriguingly, 'other products' (which include ethanol) posted a decline of 30.4%. It is unclear whether this fall is due to lower ethanol demand as a result of price arbitrage between that fuel and gasoline – which would contradict anecdotal evidence of sustained and even cheaper ethanol supply – or whether it is related to data issues.





Indeed, over the past few months Brazil's demand data-reporting has been somewhat erratic – the National Petroleum Agency (ANP) suspended the publication of delivery figures in early 2007 for reportedly technical reasons, on a 'temporary' basis (but publication has not resumed; the last ANP data point is February). However, demand data consistent with historical figures resurfaced in JODI, but the latest data point is August. Based on JODI's figures, we have revised up Brazil's demand estimates by about 15 kb/d in both 2007 and 2008. Total oil demand is now seen growing by 3.7% to 2.3 mb/d in 2007, and by 2.6% to 2.4 mb/d in 2008, assuming that natural gas will displace some fuel oil demand in power generation.



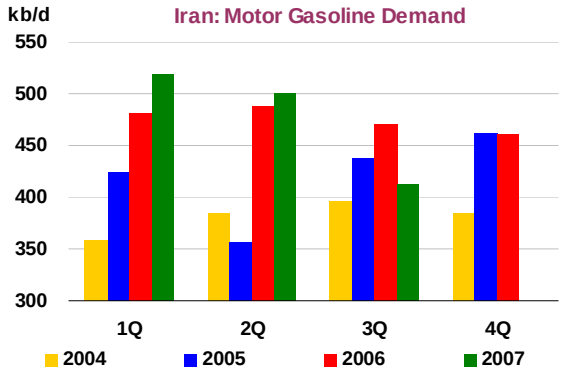


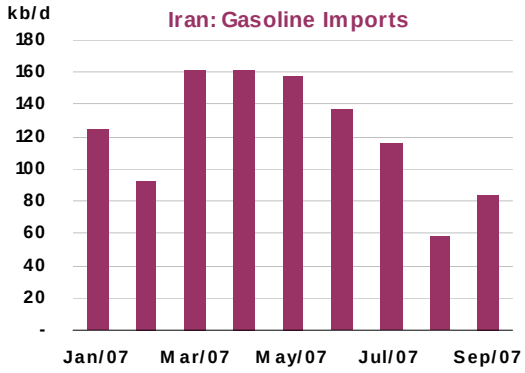
According to preliminary data, oil demand in **Saudi Arabia** increased by 8.6% year-on-year in September. All product categories posted strong growth, notably transportation fuels – gasoline: +6.7%; jet fuel/kerosene: +4.8%; gasoil: +2.8% – and fuel oil (+12.2%), which is used in power generation. These rates of growth are testimony of the Kingdom's buoyant economic expansion, retail price caps and mounting electricity needs. As such, total oil product demand should average 2.2 mb/d in 2007 (+6.2%) and 2.4 mb/d in 2008 (+9.0%). The strong 2008 forecast, which includes an upward revision of 100 kb/d, is related to a reassessment of ethylene cracking capacity; as the country develops its petrochemical industry, demand for LPG/ethane is poised to grow very rapidly.

In **Iran**, the government is set to increase quotas for the gasoline rationing system introduced last June given growing signs of scarcity – and popular resentment. The scheme currently allows every car owner to purchase 100 litres of subsidised gasoline per month over a period of six months (over the summer, though, a one-off monthly allocation was added to the quota, ostensibly to facilitate holiday travel). However, anecdotal evidence suggests that large swathes of the population are now running out of gasoline – well before the end of the six-month period.

September data from JODI suggest that gasoline demand has indeed fallen (by about 13% in 3Q07, compared with the same period in the previous year) to about 412 kb/d following the implementation of rationing. These figures seem consistent with import data, which has also markedly declined. Yet the

government announced early this month that on 22 December it will raise the monthly quota by 20% to 120 litres, with the declared goal of curbing the large black market that has – predictably, as argued in this report – emerged. The quota period, meanwhile, will be kept at six months. It is unclear, however, whether the rationing scheme will be abolished at the end of the second quota period (i.e., from next January to June) or whether it will be further extended (in late November, President Mahmoud Ahmadinejad suggested that rationing would end in March 2009).





Although extending the quota will bring some relief, the additional volumes will unlikely meet pent-up demand. Moreover, with black market prices reportedly two to three times higher than official levels, taxi drivers have no incentive to stop selling their quota rather instead of actually working. This is becoming a serious issue in a country where urban transportation needs are essentially fulfilled by taxis given the severe lack of public transportation.

The move may be motivated by political considerations – the forthcoming March 2008 parliamentary elections. As long as the government continues to postpone a key measure that was to be announced shortly after the implementation of the rationing scheme – setting the price at which above-quota gasoline would be sold – many private motorists will arguably continue to run out of gasoline before the end of the allocation period and public pressure to extend the quotas will re-emerge. Similarly, promoting the use of compressed natural gas (CNG) in state-owned vehicles, as the government has also suggested, is unlikely to make a significant difference in the short term.

SUPPLY

Summary

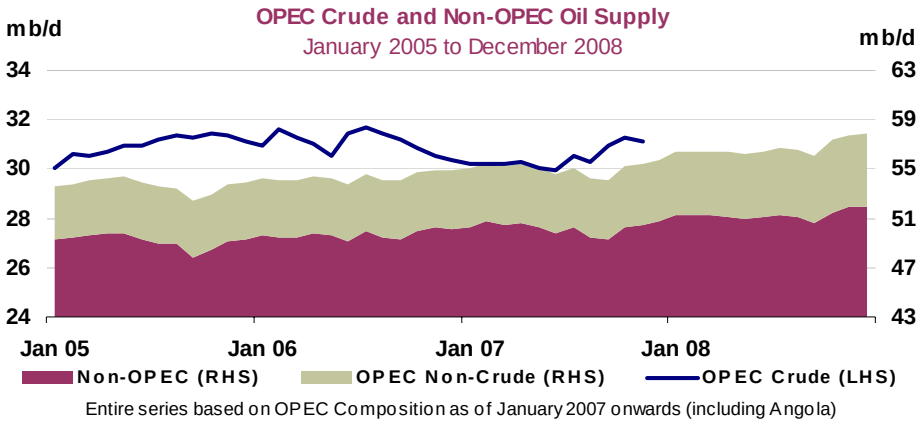
- **World oil supply** averaged 86.5 mb/d in November, up 55 kb/d from October (which saw a rise of nearly 1.5 mb/d versus September). November OPEC supply fell versus October, but an assumed supply rebound after October outages in Mexico, China and Brazil underpinned month-on-month growth among non-OPEC producers. Yearly comparison saw global supply in October and November move 1.0 mb/d higher than in 2006, after having averaged at or below 2006 levels for much of 2007.

- **Non-OPEC production** in 2007 is now estimated at 50.2 mb/d, with 51.25 mb/d expected for 2008, respectively 60 kb/d and 45 kb/d above last month's estimates. Global processing gain net of China and the FSU has been revised up by 155 kb/d for 2007 and 180 kb/d for 2008, reaching a total level of 2.1 mb/d next year. Oil production estimates are revised down by 95 kb/d and 135 kb/d, with North America, Russia, China, Brazil and the Middle East affected.

- **November OPEC crude supply** averaged 31.1 mb/d, some 180 kb/d lower than October. Offshore field maintenance in Abu Dhabi removed an estimated 0.4 mb/d of monthly supply, offsetting widespread, but limited, increases from other producers. Saudi Arabian supply reached 9.0 mb/d, its highest since last October, while Iraqi supply in October/November of 2.3 mb/d was its highest since spring 2004. Effective OPEC spare capacity remained largely unchanged at 2.5 mb/d.

- **OPEC-10 November production** averaged 27.1 mb/d, versus a 27.25 mb/d target set in early September. There are early indications of further OPEC supply gains in December. An extraordinary meeting of OPEC ministers in Abu Dhabi on 5 December left production targets unchanged, but another extraordinary meeting will take place in Vienna on 1 February 2008. New member Ecuador was allocated target output of 520 kb/d, with a first time allocation also agreed for Angola, at 1.9 mb/d.

- **The call on OPEC crude and stock change** is revised down by 100-200 kb/d for the second half of 2007 on weaker seasonal demand and refinery processing gain revisions. The call now centres on 31.7 mb/d for 4Q07. The 2008 call rises by 500-700 kb/d versus 2007, with steeper growth driven by now-higher estimates for Middle Eastern LPG and ethane demand. First-half 2008 requirements look notably stronger than last month's estimates, but remain highly weather-dependent.



Ecuador's reaccession to OPEC will be reflected in data in the report dated 16 January 2008.

All world oil supply figures for November discussed in this report are IEA estimates. Estimates for OPEC countries, Alaska, Kazakhstan 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. This totals –410 kb/d for non-OPEC as a whole, with downward adjustments focused in the OECD.

OPEC

November OPEC crude supply averaged 31.1 mb/d, some 180 kb/d lower than October. Offshore field maintenance in Abu Dhabi removed an estimated 0.4 mb/d of monthly supply, offsetting modest increases from Saudi Arabia, Qatar, Kuwait, Libya, Iraq, Venezuela and Angola. Saudi Arabian supply reached 9.0 mb/d, its highest since last October, while Iraqi supply in October and November of 2.3 mb/d was also its highest since spring 2004.

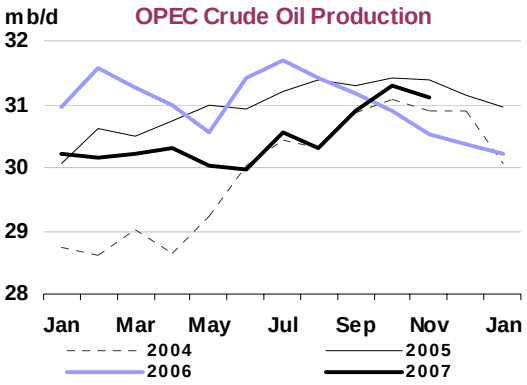
Effective OPEC spare capacity remained largely unchanged at 2.5 mb/d, with only minor changes to assumed sustainable capacity (Indonesia is trimmed from 880 kb/d to 870 kb/d and Libya increased from 1760 kb/d to 1780 kb/d). Expected net capacity additions over the next year will augment OPEC installed capacity by some 1.3 mb/d, with Saudi Arabia and Angola collectively generating over two thirds of the increase. Depending on variations in effective, as opposed to notional, installed capacity, and market requirements for OPEC crude, there is the prospect of a modestly wider margin of spare capacity in 2008.

OPEC Crude Production[1]
(million barrels per day)

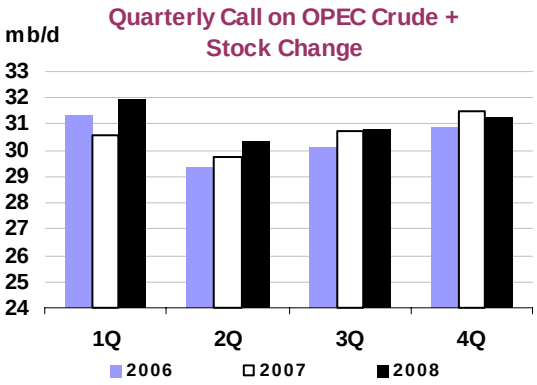
	Oct 2007 Production	Nov 2007 Production	1 November 2007 Target	Sustainable Production Capacity[2]	Spare Capacity vs Nov 2007 Production	Capacity end-2007	Capacity end-2008
Algeria	1.38	1.38	1.36	1.39	0.01	1.38	1.47
Indonesia	0.83	0.83	0.87	0.87	0.04	0.87	0.87
Iran	4.00	4.00	3.82	3.95	-0.05	3.88	3.97
Kuwait[3]	2.49	2.53	2.53	2.64	0.11	2.68	2.83
Libya	1.72	1.75	1.71	1.78	0.03	1.78	1.84
Nigeria[4]	2.16	2.16	2.16	2.47	0.31	2.45	2.39
Qatar	0.80	0.85	0.83	0.90	0.05	0.90	0.98
Saudi Arabia[3]	8.95	9.00	8.94	10.80	1.80	10.91	11.35
UAE	2.55	2.15	2.57	2.75	0.60	2.77	2.89
Venezuela[5]	2.41	2.43	2.47	2.60	0.18	2.62	2.60
Subtotal	**27.28**	**27.08**	**27.25**	**30.14**	**3.07**	**30.24**	**31.18**
Angola[1]	1.71	1.72		1.72	0.00	1.79	2.15
Iraq	2.30	2.32		2.40	0.09	2.40	2.40
Total	**31.29**	**31.11**		**34.26**	**3.15**	**34.43**	**35.73**
(excluding Indonesia, Iraq, Nigeria, Venezuela					*2.54)*		

1 Angola joins OPEC effective 1 January 2007.
2 Capacity levels can be reached within 30 days and sustained for 90 days.
3 Includes half of Neutral Zone Production.
4 Nigeria excludes some 545 kb/d of shut-in capacity.
5 Includes Orinoco extra-heavy oil assumed at 565 kb/d in November.

OPEC-10 November supply averaged 27.1 mb/d, marginally below the 27.25 mb/d target set in early September in Vienna. An extraordinary meeting of OPEC ministers in Abu Dhabi on 5 December left these targets for the OPEC-10 unchanged. However, there are early indications of further rises in physical OPEC supply in December, not least with returning production from the UAE, and the prospect for sustained or higher volumes in the next two to three months from Iraq and Angola. A further extraordinary OPEC meeting in Vienna on 1 February will allow ministers to reassess market conditions.



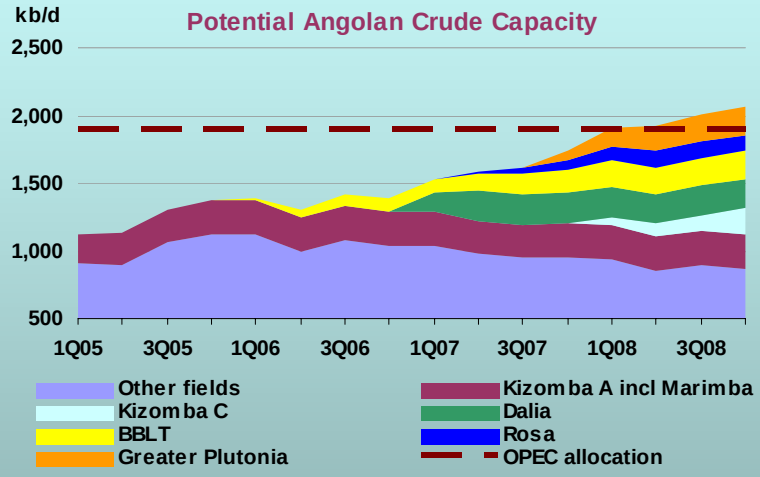
Entire series based on OPEC Composition as of January 2007 onwards (including Angola)



Entire series based on OPEC Composition as of January 2007 onwards (including Angola)

OPEC Sets Production Allocations for New Members

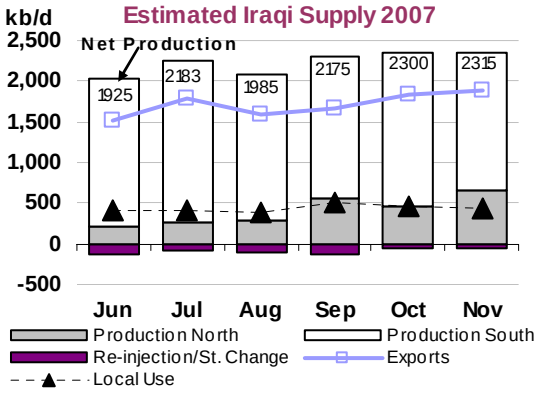
Having announced the widely anticipated reinstatement of Ecuador's full membership at the OPEC Heads of State summit in Riyadh in November, ministers allocated the South American producer an output target of 520 kb/d, rather higher than recent crude production levels around 500 kb/d. The organisation's second newest member Angola (which joined in January 2007) was given an allocation of 1.9 mb/d, which was below market expectations of a 2 mb/d-plus quota. There was some ambiguity over exactly when the new limits take effect, with OPEC sources variously reporting January and December. This report will incorporate Ecuador production within OPEC totals as of the January 2008 OMR (effectively including Ecuador within OPEC total production for December 2007 output onwards).



Recent trends in Ecuador's upstream investment environment mean it may struggle to fully match its allocation immediately. However, our estimates suggest that Angola could attain capacity in excess of 1.9 mb/d as early as 1Q08. Our Angolan numbers exclude gas liquids production of around 0.1 mb/d from the Sanha/Bomboco fields, which logically would be excluded from OPEC quota considerations. While it is not unprecedented for individual OPEC members to produce above or below quota for certain periods, the apparent mismatch between Angolan allocation and potential output raises a number of questions. Not least of these is the ability of foreign investors to fully recoup investments from production at newly-started fields. This could have a knock-on effect on future investment and ultimately on Angolan capacity levels (the *MTOMR* in July envisaged a further 0.5 mb/d of new field investments due for development by 2012, in addition to those itemised above).

Supply from **Iraq** in November was largely unchanged from October at 2.3 mb/d. After oscillating in a 1.7-2.0 mb/d-range since 2003, this year has seen a steady improvement in net supply. Iraq's output has increased from 1.9 mb/d in 1Q07 to 2.3 mb/d so far in 4Q, underpinned by the reinstatement of more regular northbound pipeline crude shipments from fields around Kirkuk to Ceyhan in Turkey. Seaborne tanker and pipeline exports from Ceyhan reached 270 kb/d in October and 460 kb/d in November. The latter figure included an estimated 60 kb/d of term pipeline crude supply taken by Turkish refiner Tupras, under a contract which runs through January. State marketer SOMO also announced that it had extended Kirkuk term contracts to 300 kb/d for the January to March period with 11 major buyers. However, despite encouraging news on Kirkuk exports, the northbound export pipeline suffered another 10 day outage in November after attacks, and tenders announced so far suggest that Ceyhan exports may dip below 400 kb/d for December.

Rising November Kirkuk exports were countered by weather delays which cut southern exports via Basrah and Khor al-Amaya by some 150 kb/d, to 1.4 mb/d, giving total monthly exports of just under 1.9 mb/d. Domestic refineries and power plants were estimated to have run around 440 kb/d of crude, giving a total November net supply level of 2315 kb/d.



The Oil Minister announced that Iraq aims to raise production capacity to 3 mb/d by the end of 2008, largely via improved recovery at existing fields. However, the country's fledgling hydrocarbon law has still to be approved by parliament.

The largest single shift in November OPEC supply occurred in the **UAE**, where offshore field maintenance in Abu Dhabi curbed monthly output by a net 395 kb/d to 2.15 mb/d. Work affected the Umm Shaif, Upper Zakum and part of the Lower Zakum fields, with Umm Shaif having resumed production in late November and Lower Zakum scheduled to recommence full output from 6 December. Term export volumes for Asian buyers for December and January have correspondingly risen, augmented by the fact that the Ruwais refinery will be partially offline those months.

Saudi Arabian supply is estimated at 9.0 mb/d for November, marginally higher than an upward-revised 8.95 mb/d in October. For now, it appears that the bulk of the Kingdom's efforts in boosting supply came during September and October, allowing November term exports to regain full contract volume for the first time in a year. December and January allocations have remained close to November levels, suggesting a levelling off in supply.

Saudi Arabia's crude oil and NGL capacity is scheduled to be boosted in December by start-up of facilities at the Khursaniyah field. Ultimate production will amount to 500 kb/d of Arab Light crude and 300 kb/d of gas liquids. This report assumes gradual build up in capacity at the new facilities, reaching capacity production in 3Q08. Depending on crude demand, state company Aramco may use the higher value Arab Light output to displace Arab Heavy or Arab Medium volumes. Saudi Arabia's crude capacity is seen reaching 11.4 mb/d by 4Q08 from an estimated 10.8 mb/d currently.

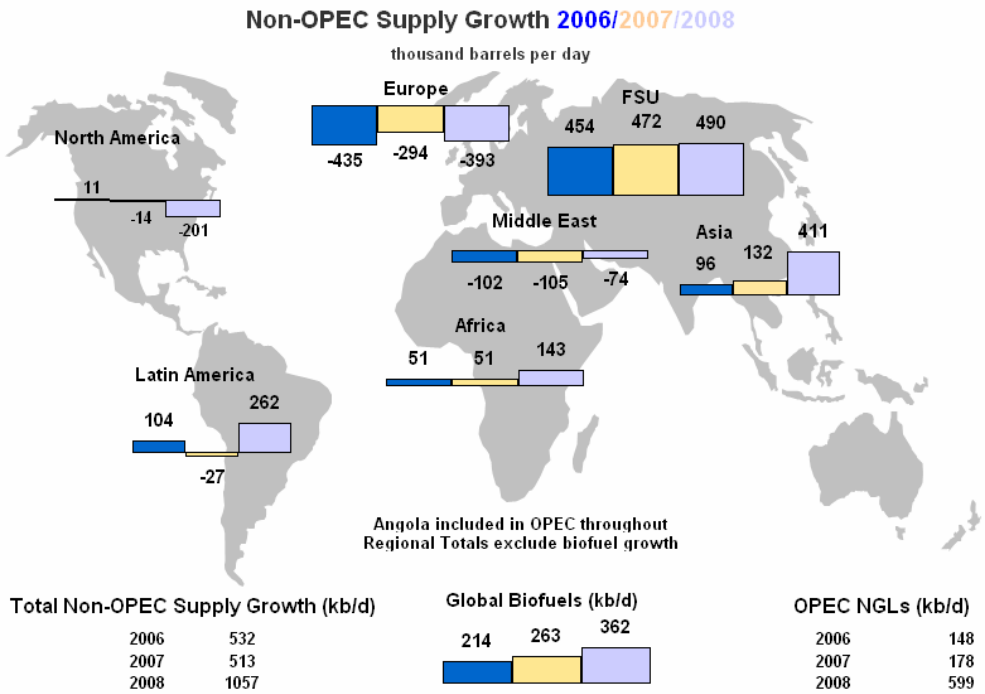
The Saudi Press Agency reported in late November that 208 suspected militants had been arrested by security forces, one group of the militants having been planning an attack on an oil facility in the Eastern Province. An abortive attack on the 7 mb/d Abqaiq oil processing facility in February 2006 led to a series of subsequent arrests and tightened security at major oil installations.

Nigerian production remains constrained by outages at fields within and offshore the Niger Delta, with over 500 kb/d of production still shuttered on a long-term basis. Total November Nigerian supply is estimated at 2.16 mb/d, unchanged from downwardly revised October levels. Plans to reinstate 110 kb/d of production at the offshore EA facility received a setback in late October after MEND rebels attacked a supply vessel. Output of Forcados crude was further reduced by some 50 kb/d in mid-November when a pipeline feeding the export terminal was blown up. An attack was also made on the Qua Iboe export terminal, although production was not affected.

Initial optimism over a 12 month ceasefire announced on 6 December between the government and MEND militia groups in Bayelsa state has receded after MEND leadership denounced the deal and said attacks on facilities would continue until greater local control over natural resources is established. The fragmented nature of rebel groups active in the region makes assessment of prospects for greater stability difficult. Meanwhile, Nigerian production may be further affected if the government follows through on plans to shut-in oilfield operations if gas flaring persists after 31 December 2007. Several producing companies had been lobbying for an extension of permitted flaring from 2008 to 2010.

Non-OPEC Overview

Downward adjustments to non-OPEC oil production averaging 95 kb/d for 2007 and 140 kb/d for 2008 are counterbalanced by the adoption of a revised global refinery processing gain methodology. This latter factor adds 155 kb/d to the previous 2007 supply forecast and 180 kb/d for 2008. This is however not 'new' supply, rather a statistical shift from our miscellaneous to balance item. Global annual biofuels supply estimates have also been smoothed within the forecast, to avoid the distortion of an exaggerated 1Q increase each year. This does not change the annual totals, but phases-in biofuel growth across the year – a more realistic trend given the growth seen, for example, in the USA in recent years. All told therefore, non-OPEC supply comes in at 50.2 mb/d for 2007 and 51.3 mb/d for 2008, up by 60 kb/d and 45 kb/d respectively from last month's estimates.



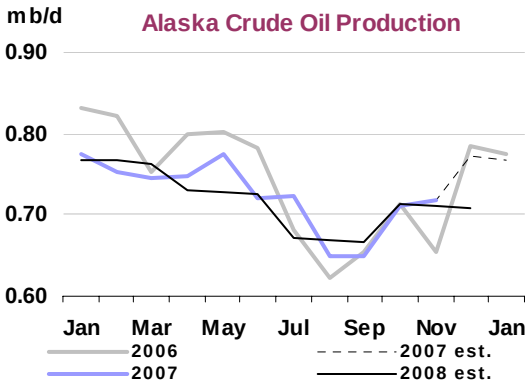
For the oil production forecast, 2007 totals are trimmed by 95 kb/d, focussed on the late part of the year in Canada, Mexico, Russia, China, Brazil and the Middle East region. Unscheduled stoppages and extended maintenance continue to dog existing production levels, even though this report has for some months

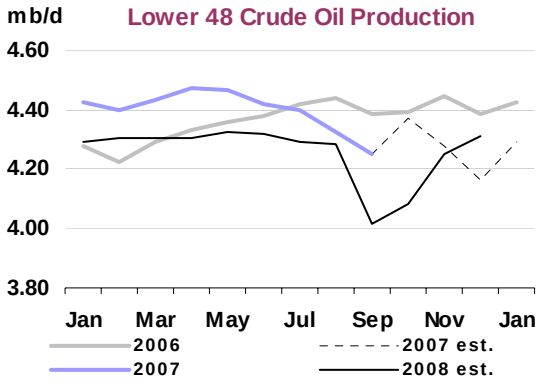
included a 410 kb/d contingency factor within the non-OPEC forecast. Revisions for 2008 amounting to 140 kb/d are front-end loaded and adversely affect the totals for the USA and, again, Russia, China, Brazil and the Middle East. We have re-examined decline rates for the US Gulf of Mexico (GOM), trimmed estimates for Lukoil, Surgutneftegaz and Sakhalin 1 in Russia, and incorporated lower recent months' production data for offshore areas of China and Brazil. The Middle Eastern adjustments are centred on a now weaker profile for Yemen, only partly offset by a stronger showing from Bahrain, Oman and Syria.

OECD

North America

US – November Alaska actual, others estimated: GOM crude supply, plus ethanol and NGL, are the sole sources of US supply growth for 2007 and 2008. September NGL supply regained 1.8 mb/d for the first time since Hurricanes Katrina and Rita in 2005. And US ethanol production has consistently over-shot forecast levels in recent months, despite questionable economics. Collectively, these elements drive a 105 kb/d increase in total US oil supply in 2007 to 7.44 mb/d (5.1 mb/d being crude oil). However, the prospect of decline from Alaska and onshore lower 48 states, plus outages at mature facilities, sees 2008 supply potentially slipping to 7.39 mb/d. This is despite the start-up of significant new fields in the GOM (notably the recently started Atlantis and Genghis Khan, plus Thunder Horse and Neptune next year).





November actually saw US supply exceed expectation by 120 kb/d, though this was wholly due to the absence of hurricane-related disruptions in the Gulf of Mexico. A hurricane adjustment of 185 kb/d previously employed for November 2007 and 2008, based on the rolling five year average, has accordingly been trimmed to 165 kb/d for November 2008. However, November production from the Mars and Ursa fields was depressed by maintenance. Meanwhile, Alaska saw crude production largely unchanged in November at around 720 kb/d, although this was an improvement on disrupted November 2006 levels.

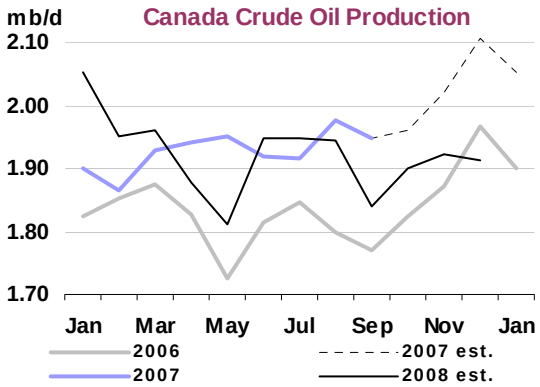
Enbridge Pipeline Outage

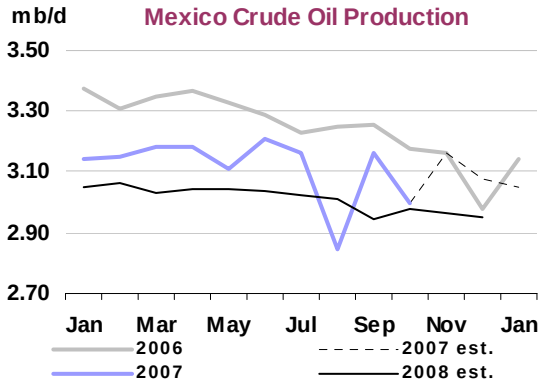
An explosion and fire on line 3 of Enbridge's 1.9 mb/d capacity Lakehead pipeline system on 28 November caused two deaths as workers attempted to repair an earlier leak. The explosion occurred south of the Clearbrook terminal in Minnesota, on the line which runs between Edmonton, Alberta and Superior, Wisconsin. Lakehead is the main route for Canadian crude imports feeding US refineries in Minnesota, Illinois, Ohio, Michigan and Wisconsin. Recent import levels of Canadian crude into US PADD 2 have been around 1.1 mb/d.

The company briefly closed line 3 (450 kb/d capacity), together with lines 1, 2 and 4, sending crude prices sharply higher. However, lines 1, 2 and 4 returned to service by the afternoon of 29 November, while line 3 was reactivated early on 3 December. Neither upstream production nor downstream operations were materially affected, rendering the incident's price impact very short-lived.

Canada – Newfoundland October actual, others September actual: Operational problems continue to plague production from the three heavy oil mining/upgrading projects in Alberta. A November fire at Shell's Scotford upgrader has caused the halt of bitumen production at the associated Muskeg River mine. Early December saw a coker fire adversely affect production at the Syncrude Canada plant. These, plus an earlier fire-related disruption at Suncor, will likely keep total Canadian upgraded mine output in a 650 kb/d-700 kb/d-range for much of the September 2007 to January 2008 period, compared with capacity production in excess of 800 kb/d. 4Q07 Canadian total oil supply is trimmed by 65 kb/d versus last month's projection to account for these outages. Forecast 2008 production remains largely unchanged compared with last month's forecast at 3.34 mb/d (1.92 mb/d of conventional crude), flat on 2007 levels.

Canada's National Energy Board (NEB) released revised scenarios for national oil supply in November. Under a $50/bbl WTI reference scenario, Canadian oil output increases to 4.05 mb/d by 2015, including 2.8 mb/d from the oil sands. This is a 200 kb/d downward revision compared with last year's projections, largely reflecting cost increases. Our own *MTOMR* in July envisaged Canadian production reaching around 3.85 mb/d in 2012, including 2.3 mb/d from Alberta's oil sands. Both sets of projections were made before Alberta announced increases in royalty rates from 2009. Analysts see the latter potentially having an adverse impact upon conventional oil and natural gas production more than the oil sands, although moves that impede gas supply growth could ultimately also affect oil sands production.



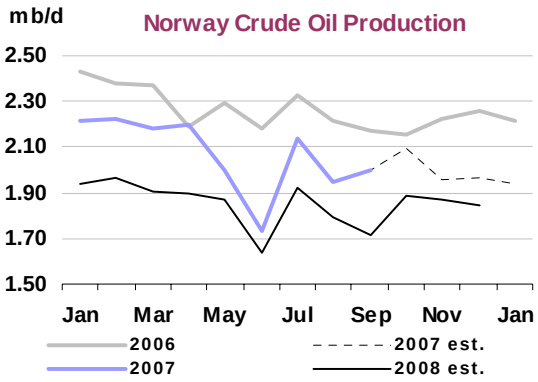


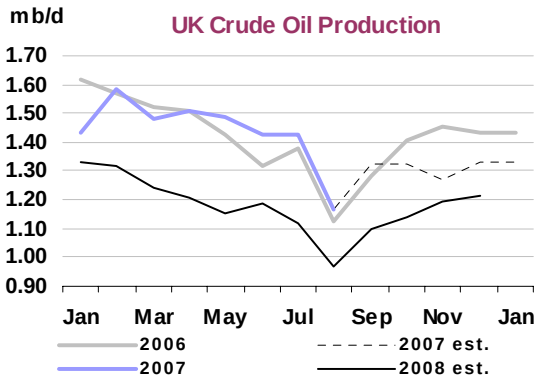
Mexico – October actual: This report's projection of October Mexican production understated the impact of storm outages on crude and NGL supply, with the result that October supply has been revised down by 90 kb/d. Looking ahead, we maintain a view of a general decline in Mexican production. Indeed, several months of weaker than expected NGL supply result in a downward adjustment of 25 kb/d running through 2008. However, recent months have seen crude output from the Ku-Maloob-Zaap and offshore south eastern areas exceeding our expectation. Crude supply is revised up by 15 kb/d on average for 2008. Average output for crude now stands at 3.11 mb/d in 2007 and 3.01 mb/d in 2008, with NGL at 0.4 mb/d and 0.41 mb/d for the two years respectively.

North Sea

Norway – September actual, October provisional: Forecast Norwegian crude output is revised up by 20 kb/d for 2007 and by some 50 kb/d for 2008, after a combination of stronger-than-expected October data and indications of a sharper than expected rebound in output after November storms. Crude output is now seen averaging 2.06 mb/d and 1.85 mb/d in 2007 and 2008 respectively. However, expected NGL and condensate supply is trimmed by 25-30 kb/d for 1Q08 onwards, after reports of problems at the newly 8started Ormen Lange gasfield and with facilities at the Visund and Kvitebjorn gas/condensate fields.

StatoilHydro on 13 December incurred a 25 kb oil leak at the Statfjord field. Bad weather impeded clean-up efforts, but neither landfall of the resultant oil slick, nor impeded production, were expected to result.



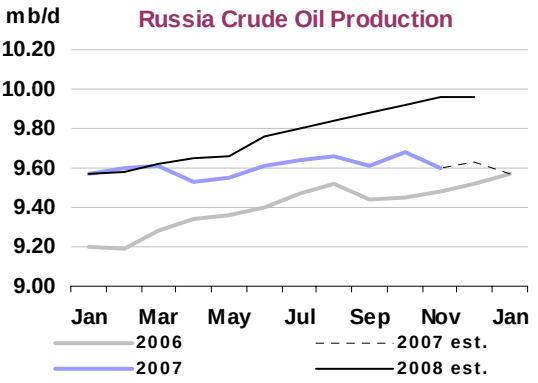


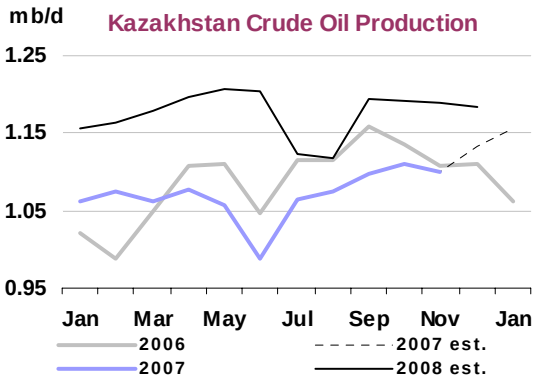
UK – September actual: This report retains a conservative forecast for UK oil production, averaging 1.63 mb/d in 2007, with decline accelerating to give output of 1.44 mb/d in 2008. This is towards the lower end of the range cited in equivalent government forecasts. Storm damage briefly disrupted November supply from one of the UK's newest developments, the Buzzard field, and forced the deferral of one December cargo. A turbine fire at the Thistle field in late November also trimmed supply there by 5 kb/d.

More evidence emerged in November of the mature nature of the UK production base. Tax changes proposed by the government on 6 December are designed to minimise the costs of facility decommissioning and to extend production at mature oil fields. Meanwhile the UK Health and Safety Executive (HSE) released a report suggesting that 50% of offshore facilities are in poor condition arising from insufficient priority allocated to ongoing maintenance. The tendency for mature production facilities throughout the OECD countries to suffer unscheduled stoppages underpinned our adoption in July 2007 of the field reliability factor which, for the UK, nets 125 kb/d off the base case production forecast.

Former Soviet Union (FSU)

Russia – October actual, November provisional: Forecast Russian production for 2008 is revised down by 65 kb/d, in line with weaker than expected output in November. Crude production now averages 9.61 mb/d in 2007 and 9.77 mb/d next year (with corresponding NGL and condensate supply of 465 kb/d and 475 kb/d). Russia's second largest producer, Lukoil, cut its 2007 production expectations due to delays in developing the Yuzhno-Khylchuyuskoye field in Timan Pechora, although this has minimal impact on the *OMR* forecast, as we previously assumed 2008 start-up. Of greater impact were reports that partners in the Sakhalin 1 project will curb 2008 production for as yet unspecified reasons. Although expected output levels were not specified, we have scaled back 2008 output from 240 kb/d to 210 kb/d.





Kazakhstan – November actual: Total November production of 1.37 mb/d (crude oil 1.1 mb/d) came in close to expectation, and 2007 output of 1.35 mb/d is now likely to be largely unchanged from the 2006 total. We expect renewed growth in 2008, with `liquids output reaching 1.46 mb/d on the basis of growth in supply from the Tengiz field.

Negotiations continue on the Kashagan project, mainstay of longer-term Kazakhstan growth prospects. Government proposals to boost state company Kazmunaigaz's equity in the project from 8.3% to 18.5% have reportedly met with agreement from most foreign partners, but not from ExxonMobil. A new deadline of 20 December has been set for concluding negotiations on equity stakes and operatorship of the 1.5 mb/d project. In response to delays at Kashagan, the Kazakh government announced that forecast national 2015 oil production had been scaled back by around 300 kb/d to 2.9 mb/d.

FSU Net Exports of Crude & Petroleum Products
(million barrels per day)

	2005	2006	4Q2006	1Q2007	2Q2007	3Q2007	Aug 07	Sep 07	Oct 07	Latest month vs. Sep 07	Latest month vs. Oct 06
Crude											
Black Sea	2.27	2.22	2.08	2.30	2.23	2.09	2.02	2.12	2.25	0.12	0.11
Baltic	1.59	1.55	1.43	1.58	1.60	1.58	1.51	1.66	1.69	0.02	0.35
Arctic/FarEast	0.19	0.15	0.19	0.29	0.30	0.38	0.38	0.33	0.32	-0.01	0.11
BTC	0.00	0.00	0.38	0.43	0.58	0.57	0.68	0.38	0.51	0.14	0.26
Crude Seaborne	4.05	4.07	4.08	4.60	4.70	4.61	4.59	4.50	4.77	0.27	0.83
Druzhba Pipeline	1.15	1.20	1.19	1.17	1.13	1.08	1.08	1.17	1.11	-0.06	-0.02
Other Routes	0.25	0.38	0.45	0.47	0.46	0.40	0.37	0.39	0.37	-0.01	-0.09
Total Crude Exports	5.45	5.64	5.71	6.23	6.29	6.09	6.04	6.06	6.25	0.19	0.72
Of Which: Transneft	4.12	4.22	4.06	4.33	4.31	4.19	4.05	4.42	4.43	0.01	0.52
Products											
Fuel oil	0.93	0.95	0.95	1.04	1.15	1.13	1.20	1.08	0.99	-0.09	0.04
Gasoil	0.87	0.95	0.91	0.94	0.88	1.01	1.01	0.95	0.97	0.02	0.05
Other Products	0.58	0.61	0.54	0.59	0.69	0.57	0.58	0.49	0.52	0.03	0.00
Total Product	2.38	2.51	2.40	2.57	2.73	2.71	2.80	2.53	2.48	-0.04	0.09
Total Exports	7.83	8.16	8.11	8.80	9.02	8.80	8.84	8.58	8.74	0.15	0.81
Imports	0.02	0.04	0.04	0.02	0.04	0.04	0.05	0.04	0.04	0.00	0.00
Net Exports	7.81	8.12	8.07	8.78	8.98	8.76	8.79	8.54	8.69	0.16	0.81

Sources: Petro-Logistics, IEA estimates
Note: Transneft data has been revised to exclude Russian CPC volumes.

October **FSU net oil exports**, at 8.69 mb/d, increased by 160 kb/d compared with September. Monthly crude exports rose by 190 kb/d, with BTC and CPC flows rebounding by 140 kb/d and 95 kb/d respectively as Caspian production maintenance wound down. Crude exports through Black Sea ports rose by 120 kb/d in October, despite seasonal transit delays through the Turkish Straits. Baltic ports handled 20 kb/d more crude in October, despite late-month maintenance on the BPS pipeline. Offsetting the monthly rise of 270 kb/d in seaborne FSU crude exports, Russian crude flows through the Druzhba pipeline fell by 60 kb/d versus September, likely in part due to higher crude export duties (averaging $250/t from 1 October).

After a large drop in September, October product exports fell again, this time by 40 kb/d in total. Although EU sulphur limits could have a negative impact on FSU flows of diesel to Europe, it was fuel oil exports which fell most significantly in October, by 90 kb/d.

Loading schedules suggest that November FSU exports via the Transneft network may have decreased by 100 kb/d, despite a potential recovery in Druzhba transits ahead of December's scheduled export tax hike. Weather-related delays in the Black Sea likely contributed, partly offset by increased Caspian exports. December exports may level off, with higher Primorsk volumes countering lower Azeri exports.

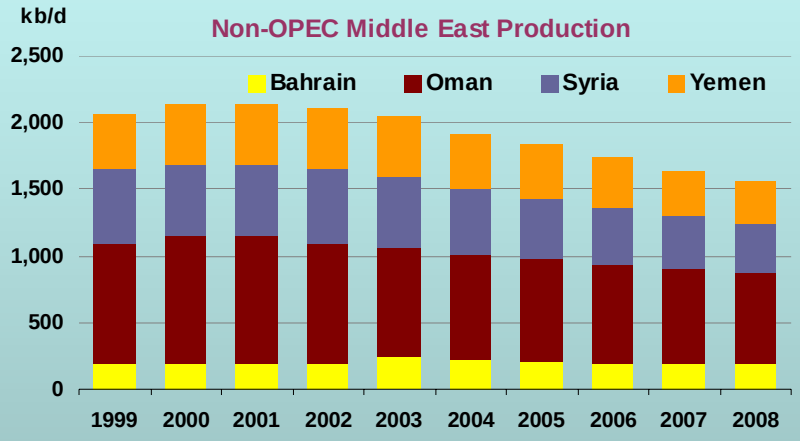
Longer-term Russian crude export expansion centres on the East Siberia to Pacific Ocean (ESPO) pipeline and phase 2 of the Baltic Pipeline System. Transneft reported in November that progress on the initial 600 kb/d phase of ESPO, originally due online in late 2008, was falling behind schedule. Contractor delays, shortages of skilled personnel and difficult terrain have been blamed for the delays, which may

push commissioning of the pipeline back to 2009. Meanwhile, a late 2008/early 2009 schedule for completion of the proposed 1 mb/d BPS-2 pipeline may also slip, given delays in the feasibility study, and making crude allocations. ESPO reportedly outranks BPS-2 in pipeline monopoly Transneft's priorities.

Middle Eastern Non-OPEC Production Eclipsed by OPEC Neighbours

Middle East Gulf OPEC producers will add 1.0 mb/d of crude capacity and a further 1.0 mb/d of gas liquids during 2007 and 2008. But their regional counterparts outside OPEC face dwindling reserves and little prospect of significant long-term growth. Unfavourable geology and in the case of Yemen, a deteriorating investment environment, puts non-OPEC Middle East oil output on a declining track. After a post-1995 decade plateau at 2.0 mb/d, collective output from Bahrain, Oman, Syria and Yemen now stands at 1.6 mb/d, and could slip towards 1.5 mb/d in 2008. July's *MTOMR* saw a levelling off in supply at best for 2010-2012, based on enhanced oil recovery in Oman and small-scale developments in Yemen.

Oil Ministry plans envisage **Oman's** production reaching 790 kb/d in 2008 from 740 kb/d in 2007, and potentially 1.0 mb/d by 2010. The *OMR* employs a lower base for 2007 of 710 kb/d based on January-September data, and less aggressive expansion at Occidental's Mukhaizna field, giving lower production estimates of 690 kb/d for 2008. The last *MTOMR* envisaged 760 kb/d for 2012. Moves are afoot to stem decline at Petroleum Development Oman's Harweel and Qarn Alam fields with ongoing gas and steam injection. While the 1.0 mb/d target for 2010 looks ambitious, these developments, plus more condensate output, may see modest upgrades to forecasts of Omani supply in the next *MTOMR*.



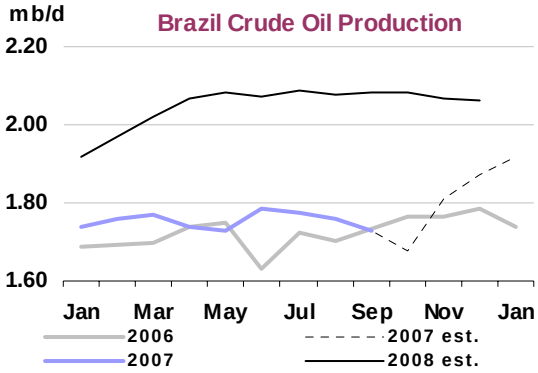
Bahrain has employed intensive drilling and gas injection to stem 14% natural decline at the 35 kb/d Awali oil field and envisages using thermal recovery to exploit as-yet untapped heavy zones at the field. It also receives 150 kb/d of offshore output from the Abu Safah field shared with Saudi Arabia. Although plans to double Awali field output have been discussed, the *MTOMR* took a more cautious view, with total Bahrain liquids output falling to 165 kb/d by 2012.

Syrian production looks to be in steady decline, although this month's *OMR* incorporates shallower rates than previously assumed. This follows reports on year-to-date production, seen to be averaging around 360 kb/d of crude and 35 kb/d of NGL. The July *MTOMR* saw Syrian output slipping to 300 kb/d by 2012.

In contrast to modest upgrades for this month's estimates for Oman, Bahrain and Syria, **Yemeni** production is scaled back by 50 kb/d for the second half of 2007 and by 65 kb/d for 2008. Total oil production averages 335 kb/d and 315 kb/d for the two years respectively. JODI data through August came in below expectations and subsequent investigation reveals new output from Block 9 and the Nabrajah and An Nagyah fields lagging this report's forecast. Bids for the country's fourth upstream tender are due by April 2008, aimed at stabilising national production at 0.3 mb/d, but the deepwater nature of acreage offered, and slow progress ratifying production sharing contracts signed last December under the third round, may limit participation. Growing infrastructure attacks by Al-Qaeda also discourage investment.

Other Non-OPEC

Brazil – September actual: Having risen towards 1.8 mb/d in 4Q06, Brazilian crude production has struggled to retain such levels for much of 2007. Planned and unplanned stoppages at existing facilities, allied to delays in new project start-ups, have eaten into supply, with September production coming in 50 kb/d below our forecast, at 1.73 mb/d and preliminary October data also lagging at some 1.75 mb/d. However, renewed growth is expected to materialise after the November start-up of the P-52 facility on the Roncador field and a new floating production, storage and offloading (FPSO) vessel at the Golfinho field. Together with Roncador's newly started P-54 installation, these facilities could contribute a combined 400 kb/d of new supply in 2008. In all, Brazilian crude output is forecast to average 2.1 mb/d in the second half of 2008, although clearly further slippage from this ambitious growth programme remains a possibility if 2007 delays are repeated.



Revisions to Non-OPEC Oil Supply
(million barrels per day)

	Last Month's OMR				This Month's OMR				This Month vs. Last Month			
	2007	2008	07 v 06	08 v 07	2007	2008	07 v 06	08 v 07	2007	2008	07 v 06	08 v 07
North America	14.31	14.18	0.10	-0.13	14.29	14.15	0.08	-0.14	-0.02	-0.03	-0.02	-0.01
Europe	4.90	4.54	-0.28	-0.36	4.91	4.52	-0.28	-0.38	0.00	-0.02	0.00	-0.02
Pacific	0.66	0.81	0.08	0.16	0.65	0.81	0.07	0.16	-0.01	0.00	-0.01	0.01
Total OECD	**19.87**	**19.54**	**-0.10**	**-0.33**	**19.85**	**19.49**	**-0.13**	**-0.36**	**-0.02**	**-0.05**	**-0.03**	**-0.03**
Former USSR	12.72	13.25	0.47	0.54	12.71	13.20	0.47	0.49	0.00	-0.05	0.00	-0.05
Europe	0.13	0.12	-0.01	-0.01	0.13	0.12	-0.01	-0.01	0.00	0.00	0.00	0.00
China	3.79	3.91	0.12	0.12	3.77	3.90	0.10	0.13	-0.02	-0.02	-0.02	0.00
Other Asia	2.69	2.77	-0.02	0.07	2.68	2.80	-0.03	0.12	-0.01	0.03	-0.01	0.04
Latin America	4.39	4.71	0.00	0.31	4.39	4.70	-0.01	0.31	-0.01	-0.01	-0.01	0.00
Middle East	1.65	1.61	-0.08	-0.05	1.64	1.56	-0.11	-0.07	-0.02	-0.04	-0.02	-0.03
Africa*	2.56	2.69	0.06	0.13	2.55	2.69	0.05	0.14	-0.01	0.00	-0.01	0.01
Total Non-OECD*	**27.94**	**29.06**	**0.54**	**1.12**	**27.87**	**28.98**	**0.46**	**1.11**	**-0.07**	**-0.09**	**-0.07**	**-0.02**
Processing Gains	1.92	1.95	0.02	0.03	2.07	2.13	0.04	0.06	0.15	0.18	0.02	0.03
Other Biofuels	0.40	0.66	0.15	0.25	0.40	0.65	0.15	0.25	0.00	0.00	0.00	0.00
Total Non-OPEC*	**50.13**	**51.21**	**0.60**	**1.07**	**50.19**	**51.25**	**0.51**	**1.06**	**0.06**	**0.04**	**-0.09**	**-0.02**

OMR = Oil Market Report
* adjusted to exclude Angola

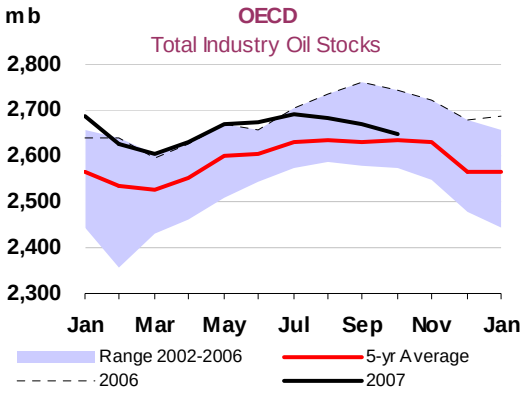
OECD STOCKS

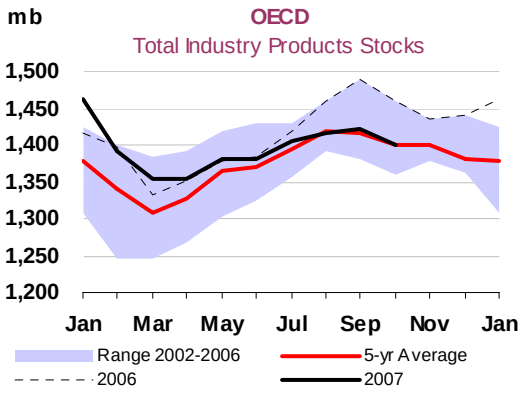
Summary

- **OECD industry stocks fell by 22.4 mb in October**, sliding close to their five-year average and, at 52.6 days, just below average forward demand cover. A large stockdraw in Europe, totalling 23.3 mb and led by products, alongside slightly lower North American stocks were partially offset by a Pacific stock build. Notably, French middle distillate stocks fell by 6.1 mb, as heavy and delayed Northwest European refinery maintenance tightened the regional market. US crude stocks fell by 9.1 mb, continuing their downward slide, while crude inventories in Japan rose by 7.2 mb in October, recovering from an upwardly revised September.

- **Preliminary November data for the US and Japan and much of Europe show a further draw of around 24 mb**, as both crude and products fell further in the US and middle distillate stocks fell further in Europe.

- **End-September OECD stocks were revised higher by 22.8 mb** on upward corrections to products in Europe and crude stocks in Japan. In North America, an upward revision of 5.1 mb in 'other oils' was offset by downward adjustments to both crude and product stocks.





OECD Inventory Position at End-October and Revisions to Preliminary Data

Total OECD industry stocks fell by 22.4 mb in October, to 2,648 mb, or 97.2 mb lower year-on-year. Most of this was due to a 21.1 mb draw in product stocks caused by seasonal refinery maintenance in Europe and the Pacific. Total product inventories decreased to 1,399 mb or 60.2 mb lower than at the end of October last year. Total crude stocks rose by 1.9 mb to 940 mb, but remain 45.0 mb lower year-on-year. Regionally, the draw was concentrated in Europe, where total stocks fell by 23.3 mb, while Pacific and North American stock changes more or less balanced each other.

Preliminary Industry Stock Change in October 2007 and Third Quarter 2007

	October (preliminary) *(million barrels)*				October (preliminary) *(million barrels per day)*				Third Quarter 2007 *(million barrels per day)*			
	N. Am	Europe	Pacific	Total	N. Am	Europe	Pacific	Total	N. Am	Europe	Pacific	Total
Crude Oil	**-6.0**	**-5.0**	**12.9**	**1.9**	**-0.19**	**-0.16**	**0.42**	**0.06**	**-0.38**	**-0.14**	**-0.11**	**-0.63**
Gasoline	2.4	-1.2	0.6	1.9	0.08	-0.04	0.02	0.06	-0.06	0.02	-0.03	-0.06
Distillates	1.4	-12.6	-4.7	-15.8	0.05	-0.41	-0.15	-0.51	0.13	-0.06	0.11	0.17
Fuel Oil	1.8	-3.4	-3.8	-5.4	0.06	-0.11	-0.12	-0.17	0.00	0.06	0.04	0.11
Other Products	-0.4	-0.3	-1.1	-1.7	-0.01	-0.01	-0.03	-0.06	0.09	0.07	0.03	0.20
Total Products	**5.2**	**-17.4**	**-8.9**	**-21.1**	**0.17**	**-0.56**	**-0.29**	**-0.68**	**0.16**	**0.10**	**0.15**	**0.41**
Other Oils[1]	-1.4	-0.9	-0.9	-3.2	-0.05	-0.03	-0.03	-0.10	0.18	0.00	-0.01	0.17
Total Oil	**-2.2**	**-23.3**	**3.1**	**-22.4**	**-0.07**	**-0.75**	**0.10**	**-0.72**	**-0.04**	**-0.05**	**0.04**	**-0.05**

1 Other oils includes NGLs, feedstocks and other hydrocarbons.

Year-on-Year OECD Industry Stock Comparisons for October 2007

	(million barrels)					*(Days of Forward Demand)*			
	North America	Europe	Pacific	Total		North America	Europe	Pacific	Total
Crude Oil	**-23.3**	**-17.5**	**-4.2**	**-45.0**	**Total Oil**	**-2.3**	**-1.7**	**-5.0**	**-2.6**
Total Products	-25.4	-12.6	-22.2	-60.2	*Versus 2005*	1.6	-1.1	-1.8	0.2
Other Oils[1]	3.8	4.7	-0.6	8.0	*Versus 2004*	3.8	-0.2	-1.5	1.6
Total Oil	**-45.0**	**-25.3**	**-26.9**	**-97.2**	**Total Products**	**-2.1**	**-1.0**	**-2.1**	**-1.7**
Versus 2005	12.4	-32.3	-19.8	-39.6	*Versus 2005*	0.5	0.2	0.2	0.4
Versus 2004	86.1	-19.2	-5.4	61.6	*Versus 2004*	1.0	0.3	0.8	0.7

1 Other oils includes NGLs, feedstocks and other hydrocarbons.

Overall, total OECD industry stocks have continued their contra-seasonal downward slide. In terms of forward demand, end-October cover fell further to 52.6 days, slightly below its five-year average, and providing some fundamental explanation to the recent record prices.

Revisions versus 13 November 2007 Oil Market Report

(million barrels)

	North America		*Europe*		*Pacific*		*OECD*	
	Aug 07	Sep 07	Aug 07	Sep 07	Aug 07	Sep 07	Aug 07	Sep 07
Crude Oil	**0.0**	**-2.7**	**1.2**	**4.3**	**0.0**	**6.1**	**1.2**	**7.7**
Gasoline	0.2	5.0	0.0	0.7	0.0	0.1	0.2	5.9
Distillates	0.2	-1.5	0.7	3.3	0.1	0.1	1.1	1.9
Residual Fuel Oil	-0.2	-0.9	1.5	5.5	0.0	-0.2	1.3	4.4
Other Products	0.8	-5.2	0.7	2.8	0.0	-0.2	1.5	-2.6
Total Products	**1.1**	**-2.5**	**2.9**	**12.3**	**0.1**	**-0.2**	**4.1**	**9.6**
Other Oils[1]	0.0	5.1	0.1	0.2	0.0	0.2	0.2	5.5
Total Oil	**1.1**	**-0.2**	**4.2**	**16.8**	**0.1**	**6.1**	**5.4**	**22.8**

1 Other oils includes NGLs, feedstocks and other hydrocarbons.

End-September OECD stocks were revised up by 22.8 mb on upward corrections in Europe and the Pacific. In the former, total product inventories were adjusted higher by 12.3 mb and crude stocks by 4.3 mb. The Netherlands, Germany and Italy saw upward revisions of 3.3 mb, 2.0 mb and 1.7 mb respectively. In the Pacific, Japanese crude stocks for September were reported 6.1 mb higher than in last month's tables, while in North America, an upward correction of 5.1 mb in 'other oils' was offset by downward shifts in both crude and product stocks. Together, September and August changes now mean that the third quarter only saw a counter-seasonal stock draw of 50 kb/d.

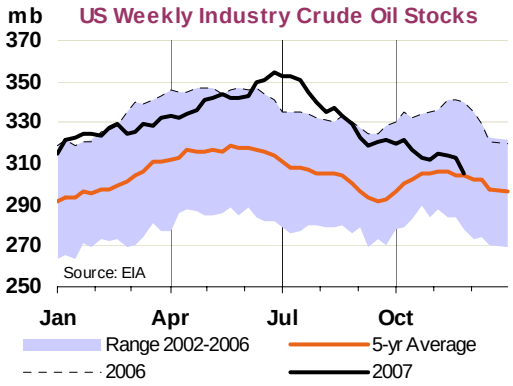
OECD Industry Stock Changes in October 2007

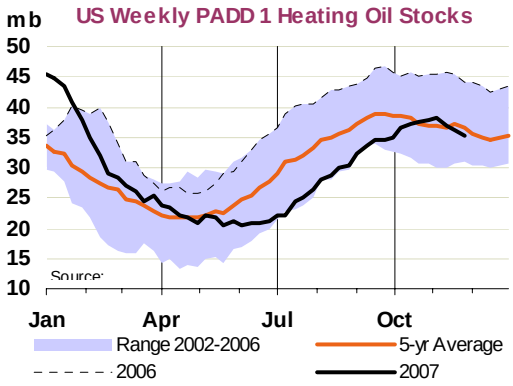
OECD North America

Total North American industry stocks fell by 2.2 mb in October and are 45.0 mb lower than end-October 2006. While crude stocks drew by 6.0 mb and 'other oils' by 1.4 mb, total products rose by 5.2 mb. The general trend reflected a period of below average crude imports into the US, a gradual return of refineries from maintenance, while US demand growth saw the first signs of weakening. In the US, crude stocks fell by 9.1 mb, only partly offset by an increase of 3.1 mb in Mexico.

Preliminary weekly US stock data for November show a further crude stock draw of 6.9 mb, as refinery runs increased and imports remained below average. At the very end of November, the Enfield pipeline from Canada into the US Midwest suffered a brief outage due to a fire, but the greater effect in terms of dampening crude imports into the US was likely high crude prices, which incentivised refiners to draw down stocks. Year-end tax considerations may also have played a role. US crude stocks have now fallen nearly 50 mb since a late-June peak of 354.0 mb. Crude stocks in Cushing, meanwhile, have risen 2.0 mb in November, likely contributing to the WTI futures contract's weakness relative to Gulf Coast sweet LLS and ICE Brent and also narrowing its backwardation, in place since late July.

North American product inventories rose by 5.2 mb in October, but remain 25.4 mb lower on the year. Gains were seen in all three product categories, as year-on-year demand growth slowed slightly. Product stock builds were more or less evenly shared between the US and Mexico, albeit the former saw growth predominantly in gasoline, and the latter in middle distillates.

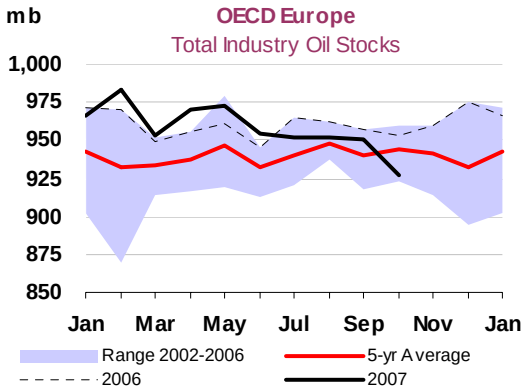


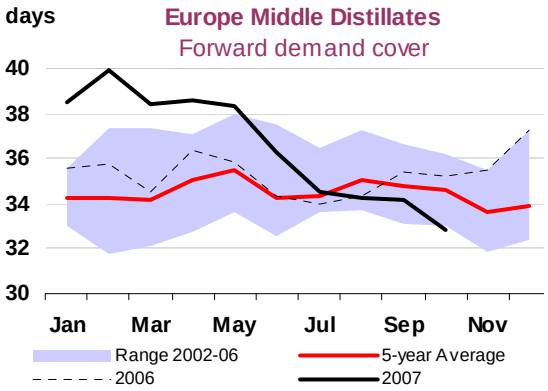


Preliminary November US data showed total product stocks down by 5.2 mb, as a dip in distillates (essentially heating oil) and 'other oils' outweighed increases in gasoline. While the first cold weather has hit the US Northeast and Midwest, regional heating oil stocks are in line with their five-year average. Total distillate stocks are only just marginally below their five-year average in terms of forward cover. Meanwhile, gasoline stocks, after trending below average for the past nine months, have recovered somewhat and at 21.7 days ended November within a day of their five-year average demand cover.

OECD Europe

European industry stocks drew by 23.3 mb in October, trending below their five-year average for the first time since August 2005. They also remain 25.3 mb lower than the end of October 2006. While the greater drop was in product stocks, crude inventories also fell by 5.0 mb, continuing the September trend, and are now 15 mb below their five-year average. Large draws were seen in Germany (-4.4 mb), France (-3.9 mb) and the Netherlands (-3.0 mb), while Italy and the UK saw builds of 3.7 mb and 1.5 mb respectively. Euroilstock data for November, published on Tuesday 11 December, showed a further 13.82 mb draw in Euro-16 stocks, dominated by an 11.77 mb fall in middle distillate stocks probably linked to lower refinery throughputs.





Similarly, total product stocks in Europe fell by 17.4 mb in October to below their five-year average. The fall was largely in middle distillates, which drew by 12.6 mb, though residual fuel oil and gasoline also decreased by 3.4 mb and 1.2 mb respectively. Half of the distillate draw occurred in France, where stocks fell by 6.1 mb after heavy refinery maintenance in October. Coinciding with maintenance at several other

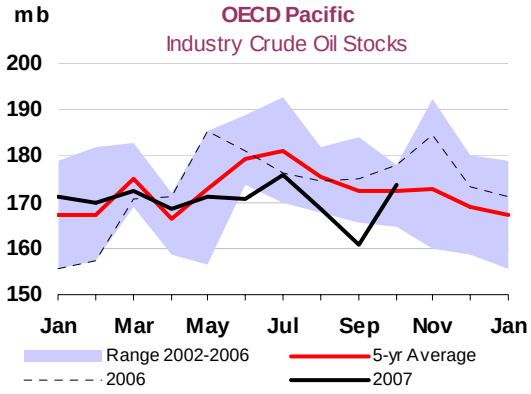
large European refineries, a fire at the UK's Coryton plant in early November, Northwest European ultra-low-sulphur diesel prices spiked on the temporary shortage. This prompted French authorities to temporarily loan 285,000 tonnes (~2.13 mb) of heating oil to the market.

Elsewhere, the Netherlands and Germany also saw distillate stocks fall in October, by 1.9 mb and 1.5 mb respectively, rising marginally in the UK and remaining flat in Italy. Total European middle distillate stocks have now fallen to their five-year average, or to the bottom of their five-year range in terms of forward demand cover.

Product stocks held independently in the Amsterdam-Rotterdam-Antwerp region have also registered sharp falls in gasoil and jet/kerosene inventories, while gasoline and fuel oil stocks remain above average.

OECD Pacific

Total industry stocks in the Pacific – the only region to see a net gain in October – rose by 3.1 mb. A crude build of 12.9 mb more than offset draws in products and 'other oils' of 8.9 mb and 0.9 mb respectively. Crude and product stock builds and draws respectively were more or less evenly split between Japan and Korea. In the former, crude stocks rose by 7.2 mb in October, on top of a large upward revision to the low September crude stock level reported last month. However, they remain 7.0 mb lower than end-October last year. Meanwhile, crude stocks in Korea increased by 5.8 mb in October and are slightly higher year-on-year.



Preliminary data from the Petroleum Association of Japan (PAJ) show a further uptick of 1.5 mb for crude stocks in November, despite a strong rise in crude runs as refineries returned from maintenance.

Pacific product stocks meanwhile fell by 8.9 mb in October, 22.2 mb lower on the year and slightly below their five-year range. Middle distillates and fuel oil fell by 4.7 mb and 3.8 mb respectively, while gasoline inventories rose by 0.6 mb. Again, the trends were similar in Japan and Korea, though crucially, Japan saw the bulk of the drop in distillate stocks. November PAJ data showed a slight build in product stocks of 330 kb, as refineries ramped up production, reaching their highest throughput levels since March 2003. But kerosene stocks (for heating) dipped by 440 kb and ended the month around 5.0 mb below their five-year average, even as inventories of jet fuel increased.

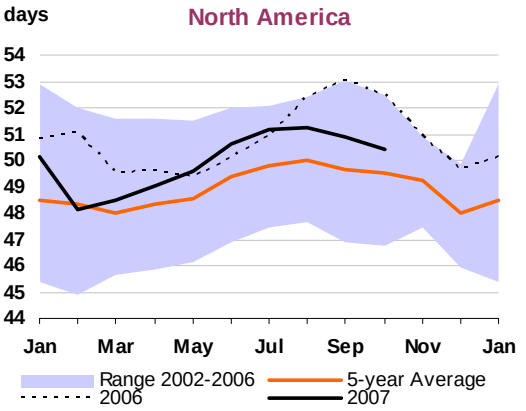
Recent Developments in Singapore Stocks

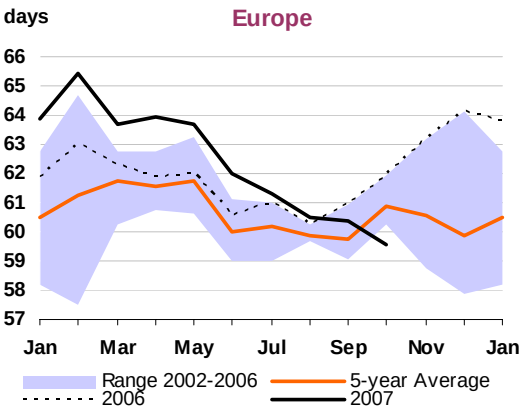
Product stocks in Singapore, as reported by International Enterprise, fell by 850 kb in November. Light and middle distillates saw builds of 770 kb and 440 kb respectively, and both remain slightly below their five-year averages. Naphtha stocks are likely lower on rising seasonal petrochemical demand, while trade data show a steady flow of distillate to Europe. Fuel oil inventories, meanwhile, rose by 400 kb to a six-month high and the top of their five-year range. China has been importing lower volumes, as refining margins especially for small 'teapot' refiners remained low, while an influx of barrels has come from Europe, Russia and Latin America.

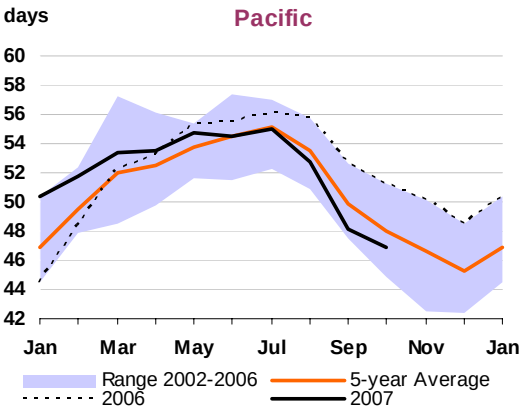
Regional OECD End-of-Month Industry Stocks

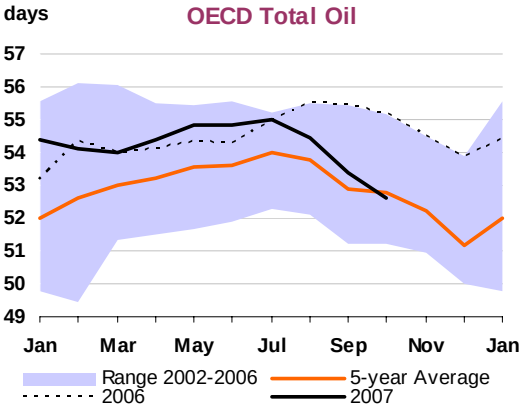
(in days of forward demand and millions barrels of total oil)

Days[1]

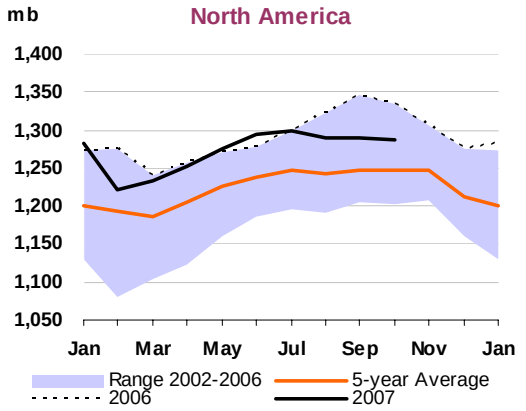


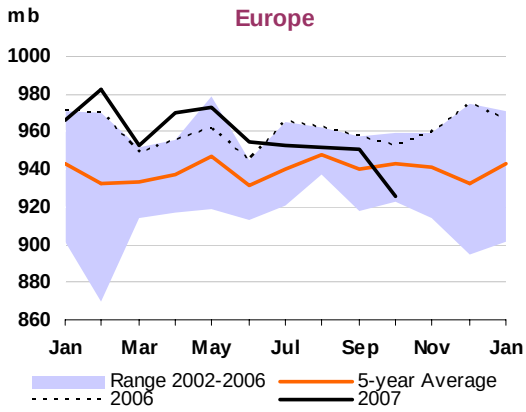


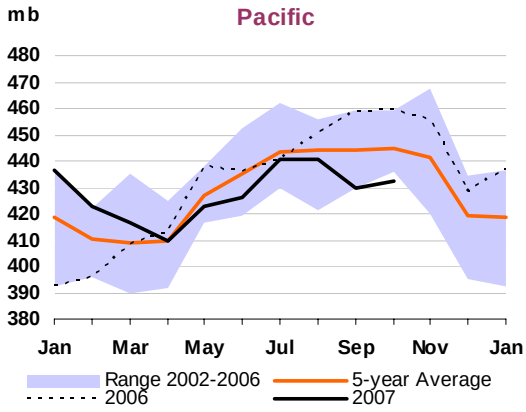


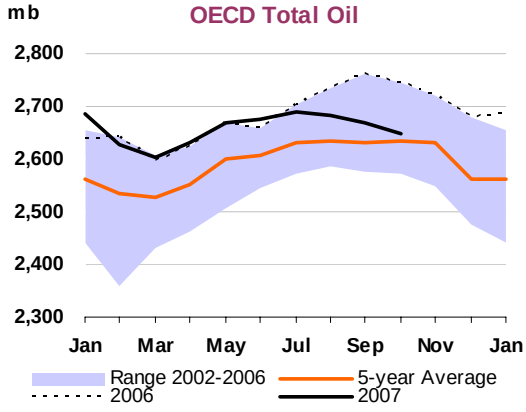


Million Barrels









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

PRICES

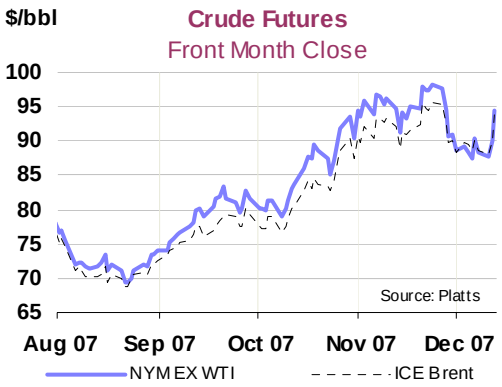
Summary

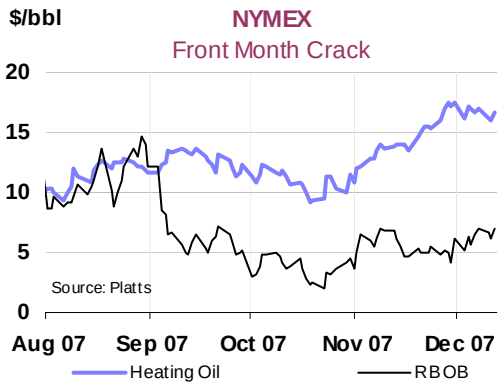
- **Crude futures almost reached $100/bbl in late November**, but subsequently dipped on signs of higher supplies from Iraq and a return of UAE fields from scheduled maintenance. At the time of writing, a cut in the Fed funds rate by the US Federal Reserve, alongside moves to shore up financial liquidity, have supported oil futures at around $93/bbld. There was little reaction to the 5 December decision by OPEC to leave targets unchanged. Net non-commercial positions on NYMEX light crude futures continue to decline, characterised by falling net long positions and rising short positions. The dollar continued to weaken in November on average, but has remained relatively static since early December.

- **Refining margins were mixed**, showing gains in Europe and Asia on strong distillate cracks. US margins weakened or saw only small increases, dragged down by weaker gasoline spreads as refineries returned from seasonal maintenance and long-term outages, bolstering domestic gasoline stocks. Gulf Coast cracking margins turned negative in late November which combined with WTI's slide *vis-à-vis* other Atlantic Basin light sweets to deter transatlantic arbitrage.

- **The refined product market was driven by winter heating fuel demand**, raising gasoil, diesel and jet/kerosene crack spreads in all regions. This was particularly true in Europe, where refinery throughputs were below average in November due to protracted maintenance. Tight distillates markets were also exacerbated by the UK switch to lower-sulphur diesel standards. In Asia, strong Chinese gasoil imports to ease domestic tightness and below-average Japanese kerosene stocks kept the market tight. Naphtha cracks rose in all regions on growing petrochemical demand, while gasoline spreads were comparatively flat.

- **VLCC freight rates** from the Middle East Gulf tripled between mid-November and early December, rising to two-year highs. Higher OPEC December cargoes drove up demand for VLCCs in the Middle East Gulf, leaving vessel availability extremely thin. Asian clean tanker rates rose seasonally, supported by a tight regional product market.



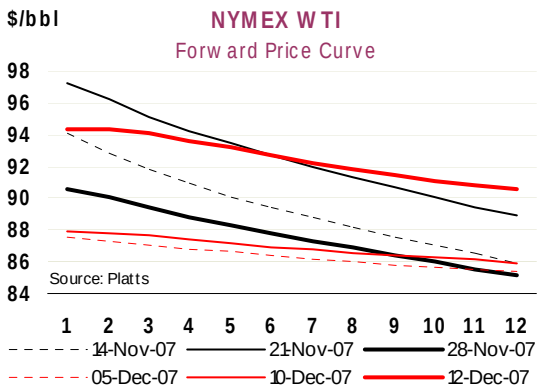


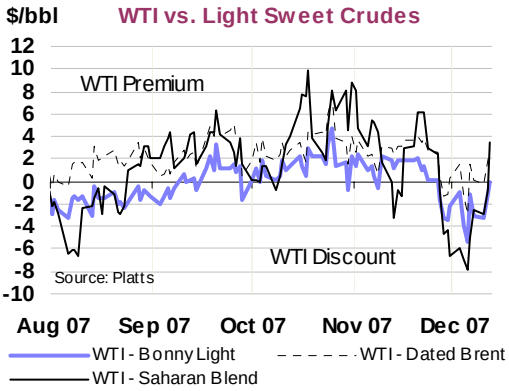
Overview

Crude futures rose further in November on strong fundamentals, with WTI hitting a new nominal record of $99.29/bbl on November 21st. Winter heating demand, falling stocks, crude outages and refinery problems contributed to higher prices. Subsequently, crude futures fell to around $90/bbl in early December as market tightness eased. The widespread assumption (until late November) that OPEC would raise production when it met in early December may have contributed to lower prices, but the weakening of the spot premium (backwardation) suggests that physical supplies improved. Underscoring the fundamental forces behind price movements, the market showed little reaction to

OPEC's decision to leave production unchanged. However, at the time of writing, WTI front-month futures were being supported at around $93/bbl by a cut in the Fed funds rate by the US Federal Reserve, alongside co-ordinated moves with four foreign central banks to shore up global financial liquidity. Geopolitical issues were mixed, with a US intelligence report saying that Iran had abandoned its nuclear weapons programme earlier this decade offset by still-strong political pressure, and in Nigeria, the rebel group MEND have sent mixed signals over future military activity.

November field maintenance in the UAE offset increases in output from within the OPEC 10 and from Iraq and Angola. Output was also restrained by problems in non-OPEC producing countries. However, fields resumed production at the end of the month, and early indications, together with sharp increases in long haul freight rates out of the Middle East Gulf suggest more widespread increments.





Futures prices painted a similar picture, with a sharp narrowing of the backwardation in crude futures in late November. The M1-2 spread had been consistently around $1/bbl since early September, but slipped to a matter of cents in late November and early December. Particular pressure stems from four consecutive increases in crude stocks at Cushing, WTI's delivery point in Oklahoma.

A US National Intelligence estimate published in early December appeared to take some of the heat out of tensions over Iran, as it was interpreted by many to make a potential conflict more unlikely. Nonetheless, doubts remain, as Iran has not complied with UN Security Council demands to halt uranium enrichment. In Nigeria, a local ceasefire with some Delta militants was heralded as a breakthrough, but is unlikely to mean an imminent resumption of crude from shut-in production. Group leaders continue to express their discontent with regional investment pledges. Despite the latest central bank moves to bolster global liquidity, downside risks to the global economy and hence oil demand remain, as the fallout from the subprime and financial crisis is still uncertain. In the shorter term, winter weather remains key.

Spot Crude Oil Prices

Spot crude prices mirrored futures, gaining on average in November, but trending lower towards the end of the month and early December. In the **Atlantic Basin**, east-west arbitrage options decreased, as WTI weakened relative to other light sweets, likely due to four consecutive weeks of Cushing crude stock gains. Moreover, US refining margins mostly weakened further, with Gulf Coast cracking margins moving into negative territory in the latter part of November and early December. Demand for regional sour crudes also increased as complex refinery capacity in the Gulf of Mexico returned from seasonal maintenance. At the time of writing, WTI had staged a significant recovery against other sweet crudes.

Stronger regional refining margins and less attractive transatlantic arbitrage activity led refiners in **Asia** to draw in more West African sweets. China's refiners were ramping up production to counter widespread product shortages, while the petrochemical market picked up. However, the Brent/Dubai spread

remained relatively high throughout the last month, on average around $6/bbl. Regional sweet benchmark Tapis also weakened compared with Atlantic Basin light sweets.

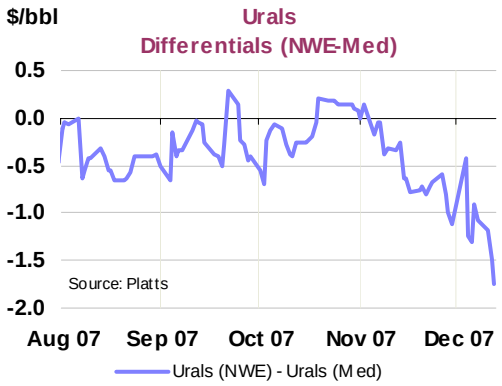
Spot Crude Oil Prices and Differentials

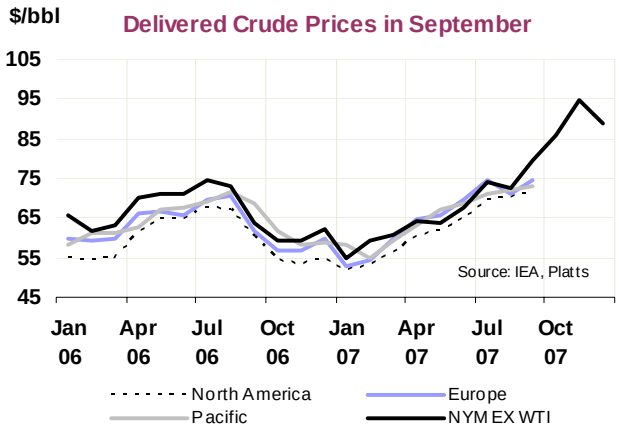
(monthly and weekly averages, $/bbl)

	Sep	Oct	Nov	Nov-Oct Avg Change	%	Week Commencing: 12 Nov	19 Nov	26 Nov	03 Dec	10 Dec
Crudes										
Dated Brent	76.87	82.50	92.61	10.12	12.3	90.66	94.17	92.30	88.93	89.24
Brent (Asia) Mth1 adjusted	76.59	82.22	92.85	10.63	12.9	91.20	94.71	93.48	89.08	88.63
WTI (Cushing) Mth1 adjusted	79.98	85.87	94.74	8.86	10.3	93.68	97.57	92.50	88.73	90.76
Urals (Mediterranean)	73.78	79.52	90.24	10.72	13.5	88.53	92.45	89.59	86.43	87.75
Dubai Mth1 adjusted	73.36	77.12	86.87	9.75	12.6	85.27	88.39	87.44	84.04	83.51
Tapis (Dated)	82.16	87.24	97.20	9.96	11.4	95.24	98.62	97.66	94.10	93.27
Differential to Dated Brent										
WTI (Cushing) Mth1 adjusted	3.11	3.38	2.12	-1.25		3.03	3.39	0.20	-0.20	1.52
Urals (Mediterranean)	-3.09	-2.98	-2.37	0.60		-2.13	-1.73	-2.71	-2.51	-1.49
Dubai Mth1 adjusted - Dated Brent	-3.51	-5.37	-5.74	-0.37		-5.39	-5.79	-4.86	-4.89	-5.74
Tapis (Dated)	5.29	4.74	4.59	-0.15		4.58	4.44	5.36	5.17	4.03
Prompt Month Differential										
Forward Cash Brent Mth1-Mth2 adj.	0.22	0.37	0.35	-0.02		0.50	0.25	0.17	0.30	0.06
Forward WTI Cushing Mth1-Mth2 adj	1.35	1.12	0.91	-0.21		1.19	0.79	0.69	0.22	0.10

Source: Platts

In **Europe**, Dated Brent was supported by minor North Sea outages, but further pressure was put on the Urals discounts to Brent from higher volumes of Iraqi Kirkuk entering the Mediterranean market. But Urals remained attractive compared with North American and Middle Eastern sour benchmarks Mars and Dubai, and so was less likely to flow outside the region.





Refining Margins

Full-cost refining margins in Europe and Asia rose on average in November and were mixed in the US. In Europe, margins were driven by strong gains in distillate cracks, particularly ultra-low-sulphur diesel. Cracks in Northwest Europe, which had surged in late October on market tightness, have dipped slightly, but remain high. Jet cracks also increased, as did gasoline, while fuel oil spreads weakened. In Asia, tighter jet/kerosene and low-sulphur fuel oil cracks played a larger role, though gasoline, diesel and naphtha were also up.

In the US in contrast, refining margins mostly weakened or made only small gains. US Gulf Coast margins on average picked up slightly in November, but trended sharply downwards throughout the month and into early December. Brent and Bonny Light cracking spreads both moved into negative territory in recent weeks, weighed down by weaker gasoline crack spreads, unlike the other regions. Heating oil cracks were also down on the US Gulf Coast, as was fuel oil. Only jet cracks were reasonably strong.

Selected Refining Margins in Major Refining Centres

($/bbl)

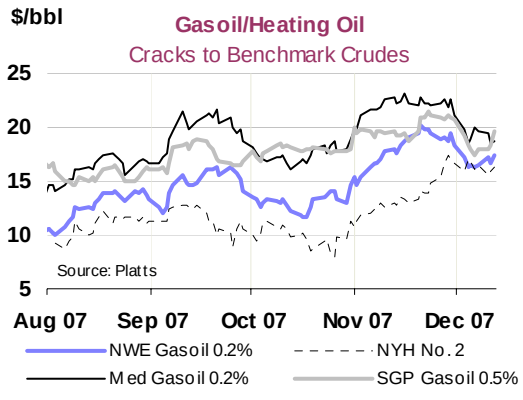
		Monthly Average			Change	Average for week ending:				
		Sep 07	Oct 07	Nov 07	Nov 07-Oct 07	07 Nov	14 Nov	21 Nov	28 Nov	05 Dec
NW Europe	Brent (Cracking)	4.45	3.17	6.19	3.02	5.89	6.79	6.67	5.88	4.47
	Urals (Cracking)	5.85	4.67	7.05	2.38	7.30	7.44	7.05	6.66	6.09
	Brent (Hydroskimming)	-1.36	-2.43	0.01	2.44	-0.78	0.59	0.64	-0.15	-1.07
	Urals (Hydroskimming)	-1.59	-2.10	-0.81	1.28	-0.39	-0.25	-0.79	-1.54	-1.64
Mediterranean	Es Sider (Cracking)	4.66	2.72	5.67	2.94	5.18	6.64	5.60	5.73	3.80
	Urals (Cracking)	5.60	4.34	6.68	2.33	6.77	7.40	6.54	6.35	5.16
	Es Sider (Hydroskimming)	-1.58	-3.18	-0.93	2.25	-1.83	0.06	-0.81	-0.86	-2.20
	Urals (Hydroskimming)	-2.09	-2.68	-1.91	0.77	-1.46	-1.11	-2.06	-2.68	-3.10
US Gulf Coast	Bonny (Cracking)	3.17	0.26	0.40	0.13	1.73	2.68	1.04	-1.94	-4.60
	Brent (Cracking)	2.88	-0.89	-0.80	0.09	-0.12	1.12	0.10	-2.45	-5.26
	LLS (Cracking)	4.32	0.36	1.15	0.79	2.57	2.61	0.64	-0.11	-1.96
	Mars (Cracking)	2.39	3.10	2.01	-1.09	4.70	2.94	-0.48	1.50	0.54
	Mars (Coking)	9.48	8.83	8.30	-0.52	10.40	8.53	5.93	8.84	6.73
	Maya (Coking)	12.60	8.18	8.98	0.80	9.91	9.56	8.06	9.12	6.67
US West Coast	ANS (Cracking)	-1.74	0.59	1.59	0.99	1.78	3.16	-0.01	0.73	4.08
	Kern (Cracking)	2.21	4.18	5.98	1.80	5.07	6.59	5.54	4.86	11.59
	Oman (Cracking)	1.55	5.22	4.17	-1.05	6.56	6.57	4.42	1.02	0.20
	Kern (Coking)	13.94	16.09	14.98	-1.11	17.28	17.83	14.99	11.44	12.10
Singapore	Dubai (Hydroskimming)	-2.57	-0.21	0.19	0.41	1.10	1.03	0.30	-1.17	-1.61
	Tapis (Hydroskimming)	-6.59	-6.99	-5.09	1.89	-6.58	-5.42	-4.78	-3.96	-4.47
	Dubai (Hydrocracking)	1.71	3.68	4.87	1.20	5.14	5.13	5.07	4.46	3.37
	Tapis (Hydrocracking)	-3.25	-3.00	-1.13	1.86	-2.58	-1.58	-0.92	0.19	-0.81
China	Cabinda (Hydroskimming)	-6.24	-7.01	-4.35	2.66	-5.61	-3.41	-3.74	-4.73	-4.60
	Daqing (Hydroskimming)	-8.18	-11.17	-6.94	4.23	-8.98	-6.67	-6.10	-6.41	-6.82
	Dubai (Hydroskimming)	-2.86	-0.55	-0.40	0.16	0.78	0.72	-0.14	-2.19	-2.86
	Daqing (Hydrocracking)	-3.12	-4.71	-0.34	4.37	-2.20	-0.11	0.44	0.29	-1.00
	Dubai (Hydrocracking)	1.42	3.36	4.33	0.97	4.89	4.89	4.70	3.46	2.06

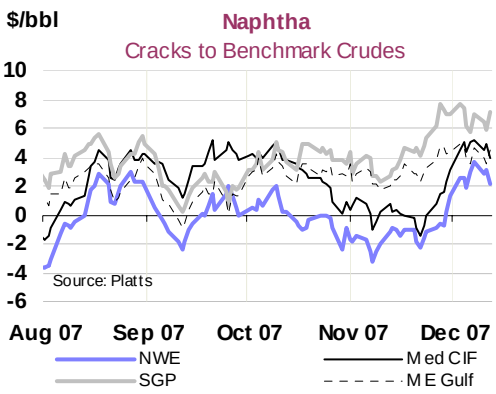
For the purposes of this report, refining margins are calculated for various complexity configurations, each optimized for processing the specific crude in a specific refining centre on a 'full-cost' basis. Consequently, reported margins should be taken as an indication, or proxy, of changes in profitability 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.

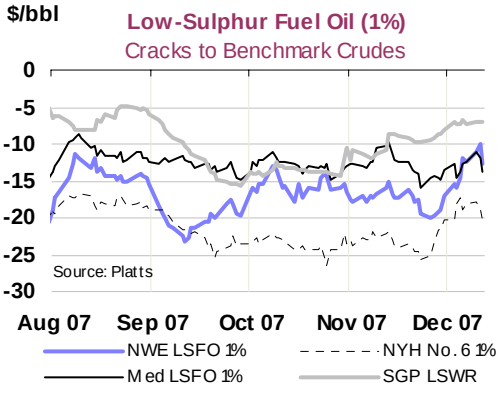
*The China refinery margin calculation represents a model based on spot product import/export parity, and does not reflect internal pricing regulations.
Sources: IEA, Purvin & Gertz Inc.

Spot Product Prices

Refined product markets were dominated by distillates, as winter heating demand kicked in. Diesel and heating oil cracks were particularly strong in **Europe**, as refinery throughputs remained below average after protracted maintenance. This report has revised down projected total European refinery runs in November by -0.4 mb/d from last month on problems and delayed start-ups. Last month's report had also highlighted diesel price spikes in Northwest Europe ahead of the new UK limits on sulphur levels in diesel, while EU heating oil specifications will change from 1 January. Against a background of strong regional demand, European distillate stocks fell to the bottom of their five-year range in October, with preliminary data showing further draws in November. As a consequence, Europe has been drawing in distillate cargoes from Russia, the US and Asia. Fuel oil discounts to crude also narrowed, while gasoline crack spreads remained flat.







In **Asia**, Chinese diesel shortages and low Japanese jet/kerosene stocks kept distillate cracks high, while naphtha cracks edged up on strong petrochemical demand and lower Indian exports in December. Volumes from the latter were expected to be around 520,000 tonnes in December, down from 900,000 tonnes in November. Gasoline remained flat versus benchmark crudes and fuel oil cracks were mixed. High-sulphur fuel oil discounts to Dubai widened on an influx of barrels from around the world (independent product stocks held in Singapore rose to a six-month high in early December) and demand from China was lower-than-normal. Smaller 'teapot' refineries in China, which typically take straight-run fuel oil as a feedstock, were affected by weak margins. At the same time, low-sulphur waxy residue (LSWR) narrowed its discount to crude on strong regional utility demand.

Spot Product Prices

(monthly and weekly averages, $/bbl)

	Sep	Oct	Nov	Nov-Oct Change	Nov-Oct %	Week Commencing: 12 Nov	19 Nov	26 Nov	03 Dec	10 Dec	Sep	Oct	Nov
Rotterdam, Barges FOB											**Differential to Brent**		
Premium Unleaded	85.74	88.06	98.79	10.74	12.2	97.71	99.23	96.31	93.10	94.85	8.87	5.56	6.18
Naphtha	76.77	82.41	91.26	8.85	10.7	89.53	92.61	92.14	91.66	91.95	-0.10	-0.09	-1.35
Jet/Kerosene	93.68	100.67	115.76	15.09	15.0	113.61	117.85	115.77	109.93	110.21	16.81	18.18	23.15
ULSD	94.83	99.44	118.34	18.90	19.0	115.78	122.08	118.17	108.13	107.87	17.96	16.94	25.73
Gasoil .2%	91.77	95.68	110.76	15.08	15.8	108.99	113.89	111.21	105.51	106.34	14.90	13.19	18.15
LSFO 1%	56.65	66.90	75.03	8.13	12.1	74.17	76.52	73.27	74.87	78.07	-20.22	-15.60	-17.59
HSFO 3.5%	58.03	64.91	73.62	8.70	13.4	73.02	73.63	70.09	67.57	67.47	-18.84	-17.58	-19.00
Mediterranean, FOB Cargoes											**Differential to Urals**		
Premium 50 ppm	83.65	86.42	98.06	11.64	13.5	97.48	98.73	95.74	92.38	94.75	9.88	6.90	7.82
Naphtha	76.99	82.40	90.09	7.69	9.3	88.25	91.05	90.56	90.25	90.74	3.21	2.88	-0.14
Jet Aviation fuel	92.57	99.53	113.50	13.97	14.0	111.53	115.38	112.81	107.26	107.74	18.79	20.01	23.26
Gasoil .2%	93.60	97.12	112.29	15.17	15.6	111.11	114.70	111.69	105.78	106.59	19.82	17.60	22.05
LSFO 1%	60.92	66.58	77.32	10.74	16.1	77.36	78.54	75.25	73.12	75.43	-12.86	-12.94	-12.92
HSFO 3.5%	58.49	65.03	72.99	7.96	12.2	72.28	73.15	69.47	67.71	67.55	-15.28	-14.49	-17.25
New York Harbour, Barges											**Differential to WTI**		
Super Unleaded	99.57	97.85	105.27	7.42	7.6	104.41	107.24	101.73	98.17	99.60	19.58	11.97	10.53
Unleaded	87.92	91.04	101.59	10.56	11.6	101.05	103.83	98.03	94.28	96.35	7.93	5.16	6.86
Jet/Kerosene	97.70	100.62	113.78	13.16	13.1	112.23	116.21	113.68	109.66	110.69	17.72	14.75	19.04
No. 2 (Heating Oil)	91.46	95.82	108.54	12.71	13.3	106.75	111.54	109.16	105.20	106.66	11.47	9.95	13.80
LSFO 1%	57.60	62.18	71.65	9.47	15.2	70.70	73.05	70.10	70.19	71.78	-22.38	-23.69	-23.08
No. 6 3%	58.08	64.66	72.26	7.60	11.8	72.60	72.83	68.04	68.05	68.60	-21.90	-21.22	-22.48
Singapore, Cargoes											**Differential to Dubai**		
Premium Unleaded	82.51	88.71	100.29	11.58	13.1	98.78	102.24	101.13	96.24	96.68	9.14	11.59	13.42
Naphtha	75.28	81.18	91.38	10.20	12.6	88.76	93.00	94.42	90.81	89.99	1.92	4.06	4.51
Jet/Kerosene	90.44	96.62	112.77	16.15	16.7	110.65	114.43	113.58	106.83	105.84	17.08	19.49	25.90
Gasoil .5%	90.72	95.08	106.97	11.89	12.5	104.53	109.26	108.34	102.25	102.17	17.36	17.96	20.10
LSWR Cracked	61.47	63.70	77.01	13.31	20.9	76.16	78.81	78.59	76.84	76.49	-11.89	-13.42	-9.85
HSFO 180 CST	60.99	68.53	77.57	9.05	13.2	77.71	77.27	75.33	72.25	71.67	-12.38	-8.59	-9.30
HSFO 380 CST 4%	60.95	68.84	77.51	8.68	12.6	77.50	77.41	75.59	72.77	72.42	-12.41	-8.29	-9.35

Source: Platts

US product price differentials to regional crudes were, meanwhile, more muted. Gasoline crack spreads declined as refineries increased throughputs and stocks increased. Jet fuel and heating oil cracks saw strong gains on rising demand, as the cold snaps and snow reached the US Northeast in November. Diesel cracks also gained, though less so.

End-User Product Prices in November

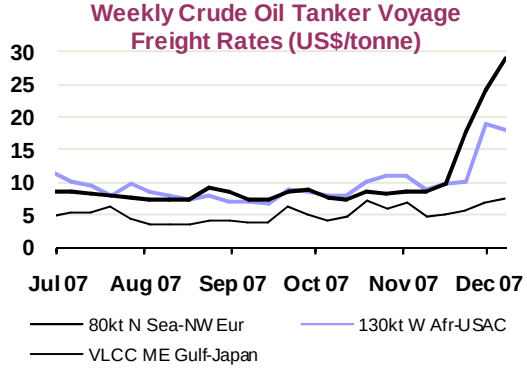
Retail prices increased strongly across-the-board in November, in many cases reaching record nominal highs. Diesel and gasoline prices on average rose 12% and 10% respectively in US dollars, ex-tax, while due to the dollar's weakness, gains in national currencies were slightly lower. Heating oil prices rose by around 13% on average in US dollars, ex-tax, driven by gains in Europe. But the strongest gains were seen in low-sulphur fuel oil, which on average gained 14% in Europe and Japan. Compared with November last year, retail prices on average increased by around 45% in US dollars and by around 30% in national currencies, both ex-tax.

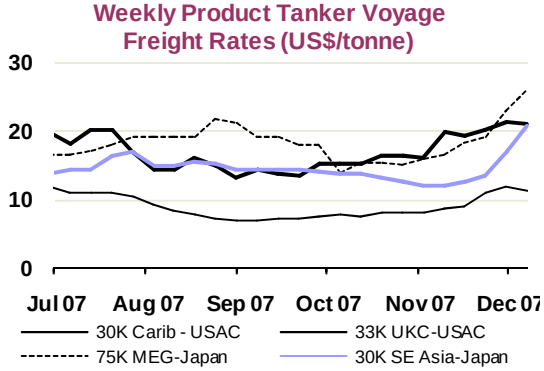
Freight

VLCC freight rates from the Middle East Gulf tripled between mid-November and early December, rising to two-year highs. Higher OPEC December cargoes drove up demand for VLCCs leaving the Middle East Gulf on long-haul trades. Alongside higher Chinese purchases of West African cargoes, this has left available tonnage extremely thin. Suezmax rates were also supported by a spill over of vessel demand from the VLCC sector. Aframax trades were disrupted by bad weather in several areas. Asian clean tanker rates were supported by a tight regional product market.

By the first week of December, VLCC rates from the Middle East Gulf to Japan had risen to $28.84/tonne from a mid-November level of just below $10/tonne, around the average 2007 freight rate for this route. This surge took rates to levels not seen since early 2006. Corresponding rates from the Middle East Gulf to the US Gulf jumped from around $14/tonne to almost $40/tonne over the same period, and are now at three-year highs. The key factor behind these increases was an apparent increase in OPEC cargoes for December loading. A post-maintenance rebound of UAE output in December looks to have built upon earlier export increases from other OPEC countries, while Saudi Aramco reduced prices of its crude to US and Japanese customers for December. Tanker movement reports suggest at least a 400 kb/d increase in Middle East sailings through the first three weeks of December, compared with November, 300 kb/d of which will head to Western markets. The higher vessel demand associated with these increased sailings, much of it for long-haul voyages, has left vessel availability in the Middle East Gulf extremely thin. An oil spill from a single-hulled VLCC involved in a collision with a barge off South Korea added further upward pressure to VLCC rates in early December, by boosting demand for double-hulled vessels.

The recovery in the VLCC sector also boosted Suezmax rates for vessel loading not only from the Middle East Gulf but also West Africa. One-million barrel rates from West Africa to US Atlantic rose from under $10/tonne in mid-November to almost $19/tonne at the end of the month, before dropping by a dollar in





the first week of December. Chinese purchases of West African crude in December were at record highs, of 920 kb/d, following a push to replenish Chinese crude stocks. Conversely, US demand for West African cargoes was lower in December and may remain limited in January with physical WTI recently falling below Brent. Higher Ceyhan liftings also supported Suezmax demand in November. Aframax rates rose less dramatically, with intra-North West European rates gaining around $2/tonne in the second half of November to finish at $7.40/tonne in early December. Vessels of this size faced particular disruption in November from bad weather in the North Sea and around the US Gulf Coast. Reduced transit hours in the Turkish Straits dented Mediterranean Aframax supply, as vessels waited up to 12 days to pass through.

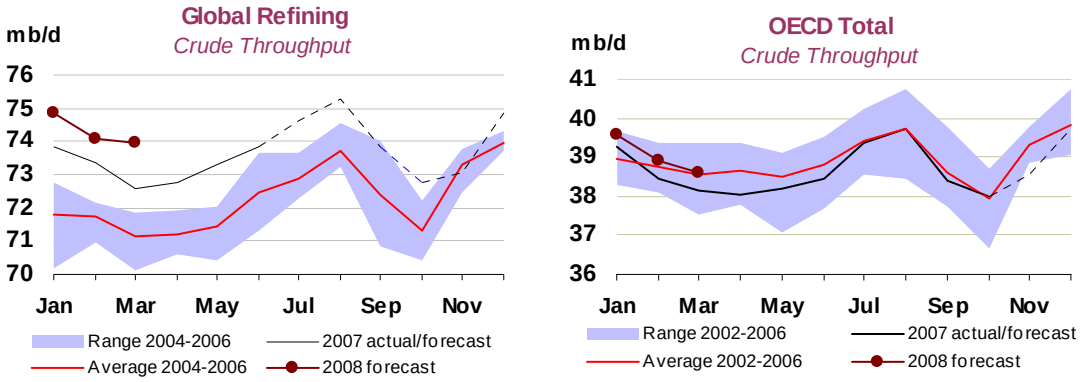
Clean freight rates ticked up in line with seasonal trends in November. Shipping rates for Middle East Gulf clean cargoes of 75,000 tonnes heading for Japan were over $26/tonne in early December, up almost $10/tonne from mid-November. Winter product demand, including higher petrochemical throughputs, low product stocks in Japan and diesel shortages in China and Indonesia underpinned the need for incremental product imports into and within Asia. Elsewhere, European diesel tightness maintained the demand for backhauling diesel imports from the US, and reportedly opened up East-to-West arbitrage opportunities. Clean, 33,000-tonne rates between UK Continent and the US Atlantic Coast have held firm around $20/tonne since the second week of November, two dollars higher than the November 2006 average.

REFINING

Summary

- **Global refinery crude runs are forecast to average 74.9 mb/d in December,** as throughput reaches its seasonal winter peak. Crude runs are expected to remain at these levels in January. Crude Throughput in 1Q08 is forecast to average 74.3 mb/d, a year-on-year increase of 1.0 mb/d.

- **December OECD throughput is estimated to average 39.7 mb/d**, with downward revisions to North America and Europe partially offset by higher runs in the Pacific, where Japanese crude throughput reached 4.6 mb/d earlier this month, the highest level since March 2003. OECD crude throughput in 1Q08 is forecast to average 39.0 mb/d, 0.4mb/d higher than in 1Q07, following the return to service of several US refineries from long-term outages.



- **September gasoil/diesel yields remain at record levels for the time of year,** largely driven by increases in European countries. Fuel oil yields strengthened in Canada, following reports of operational problems with upgrading units. A similar pattern is evident in the OECD Pacific, particularly in New Zealand. Kerosene yields in the Pacific remain low compared with seasonal norms, given Japanese refiners' continued preference to produce (and export) jet fuel.

- **European product market outlook for 2008** is forecast to evolve in line with the long-term trends for the respective products. Gasoline and fuel oil exports should grow in 2008 while import requirements for middle distillates should increase as heating oil demand rebounds and diesel demand growth continues.

Global Refinery Throughput

Global refinery crude throughput is projected to average 74.9 mb/d in December; 0.1 mb/d lower than our previous estimate, but up by 1.8 mb/d from maintenance-afflicted November. It is seen holding at this higher level through to the end of January. Lower December throughput estimates for Europe and the US are partially offset by increased runs in the Pacific. First quarter 2008 throughputs are seen averaging 74.3 mb/d, 1.0 mb/d higher year-on-year, on the assumption of normal weather conditions.

OECD October crude throughput averaged 38.0 mb/d, in line with our forecast. Crude runs were consistent with expectations in North America and 0.1 mb/d higher than expected in Europe. This was partly offset by the OECD Pacific, where crude throughput was 0.2 mb/d lower than forecast. October crude runs mark the seasonal low-point in refinery throughput as maintenance work reached its peak in the OECD. Crude runs in North America were broadly flat against levels of a year ago, while Pacific crude throughputs were above levels of a year ago. European crude throughput remains weak compared with the five-year range, down 0.2 mb/d year-on-year. This suggests that European refineries may have undertaken higher than normal maintenance, linked to the introduction of tighter heating oil quality specifications in 2008.

Global Refinery Crude Throughput[1]

million barrels per day

	Jul 07	Aug 07	Sep 07	Oct 07	Nov 07	Dec 07	Jan 08	Feb 08	Mar 08
OECD Crude Runs									
North America	18.7	18.7	18.1	17.9	*18.0*	*18.4*	*18.5*	*18.1*	*17.9*
Europe	13.7	13.8	13.6	13.2	*13.1*	*13.6*	*13.6*	*13.5*	*13.4*
Pacific	7.0	7.2	6.7	6.8	*7.4*	*7.6*	*7.5*	*7.4*	*7.3*
Total OECD	39.4	39.7	38.4	38.0	*38.6*	*39.7*	*39.6*	*38.9*	*38.6*
NON-OECD Crude Runs									
FSU	5.9	*5.9*	*5.7*	*5.5*	*5.8*	*5.8*	*5.9*	*5.9*	*5.9*
Europe	0.7	*0.8*	*0.8*	*0.8*	*0.8*	*0.8*	*0.8*	*0.8*	*0.8*
China	6.5	6.5	6.6	6.5	*6.7*	*6.8*	*6.8*	*6.8*	*6.8*
Other Asia	*8.1*	*8.3*	*8.2*	*8.1*	*7.9*	*8.0*	*8.2*	*8.2*	*8.1*
Latin America	*5.4*	*5.5*	*5.5*	*5.3*	*5.4*	*5.4*	*5.5*	*5.4*	*5.5*
Middle East	*6.2*	*6.3*	*6.2*	*6.2*	*5.6*	*5.9*	*5.8*	*5.8*	*6.0*
Africa	*2.4*	*2.3*	*2.3*	*2.4*	*2.4*	*2.4*	*2.4*	*2.4*	*2.4*
Total Non-OECD	35.3	35.6	35.4	34.8	34.5	35.2	35.3	35.1	35.4
Total Crude Runs	*74.6*	*75.3*	*73.8*	*72.7*	*73.1*	*74.9*	*74.9*	*74.1*	*74.0*

1 Crude runs in Italics are estimates. Forecast crude throughput is based on current IEA demand forecasts.

Third-quarter crude runs were higher-than-estimated in Malaysia, Egypt and Venezuela leading us to revise up average crude throughput for 3Q07 by 0.4 mb/d to 74.6 mb/d. These higher crude runs have been carried forward in our forecasts as it appears that we were too cautious on these countries. October crude throughputs are also revised higher from last month's report, by 0.4 mb/d, following higher-than-expected crude runs in Saudi Arabia and Iran in addition to the adjustments to the countries mentioned above.

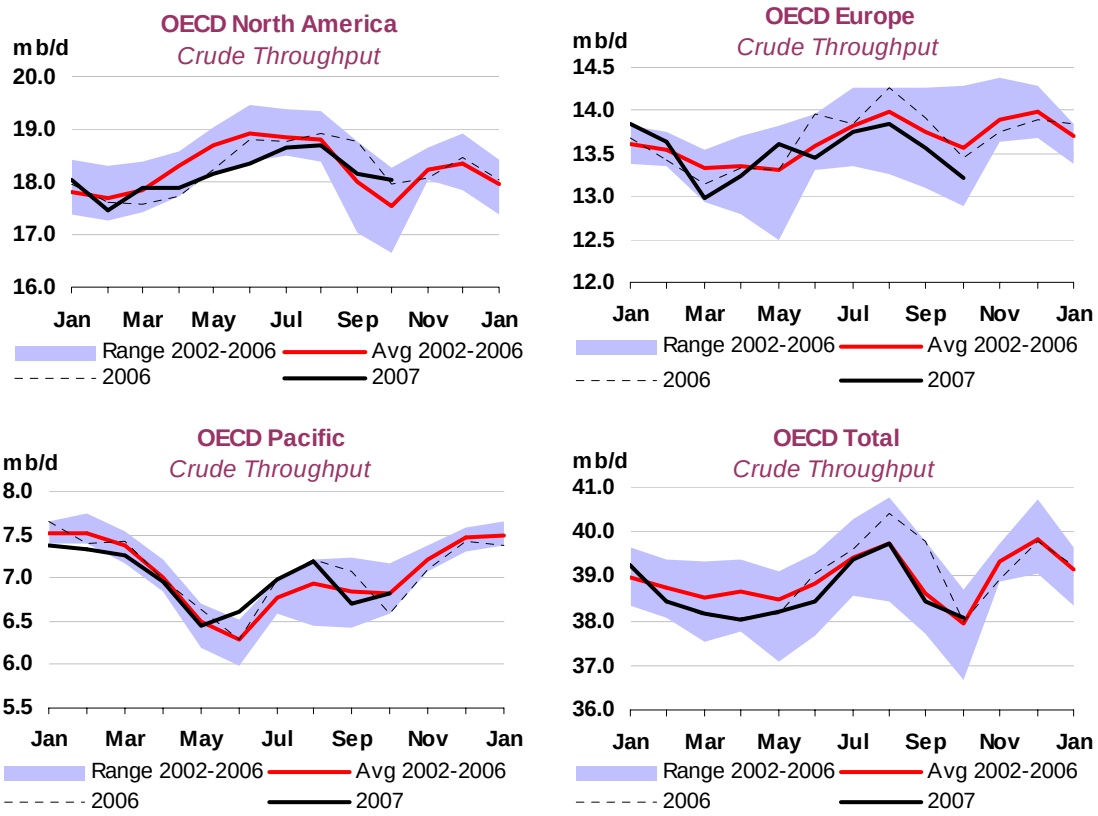
Refinery Crude Throughput and Utilisation in OECD Countries

	million barrels per day						*Change from*		Utilisation rate[2]	
	May 07	Jun 07	Jul 07	Aug 07	Sep 07	Oct 07	*Sep 07*	*Oct 06*	Oct 07	Oct 06
OECD North America										
US[3]	15.37	15.24	15.66	15.68	15.22	14.99	-0.23	-0.01	85.84	86.26
Canada	1.54	1.86	1.79	1.87	1.80	1.68	-0.11	-0.14	83.31	90.03
Mexico	1.23	1.26	1.20	1.14	1.13	1.26	0.13	0.12	81.76	71.96
Total	18.14	18.36	18.66	18.69	18.15	17.93	-0.22	-0.02	85.30	85.13
OECD Europe										
France	1.88	1.56	1.79	1.71	1.64	1.54	-0.10	-0.20	78.78	87.88
Germany	2.15	2.29	2.31	2.14	2.30	2.24	-0.06	0.05	92.72	90.16
Italy	1.88	1.85	1.89	1.91	1.85	1.85	-0.01	-0.10	79.12	83.86
Netherlands	1.04	0.95	1.02	1.05	1.08	1.01	-0.07	0.00	83.52	83.16
Spain	1.19	1.16	1.15	1.16	1.16	1.11	-0.05	-0.06	87.19	91.88
UK	1.63	1.56	1.55	1.67	1.57	1.57	0.00	0.22	83.38	71.88
Other OECD Europe	3.84	4.09	4.04	4.20	3.97	3.89	-0.09	-0.16	82.82	83.80
Total	13.61	13.45	13.75	13.85	13.58	13.21	-0.36	-0.24	83.76	84.48
OECD Pacific										
Japan	3.32	3.45	3.86	4.15	3.66	3.83	0.17	0.39	81.96	73.75
Korea	2.43	2.45	2.39	2.31	2.35	2.27	-0.08	-0.16	82.90	94.10
Other OECD Pacific	0.71	0.70	0.72	0.73	0.68	0.72	0.04	0.00	89.79	89.96
Total	6.45	6.61	6.97	7.19	6.69	6.82	0.13	0.23	83.04	81.88
OECD Total	38.20	38.42	39.38	39.73	38.41	37.97	-0.45	-0.04	84.35	84.32

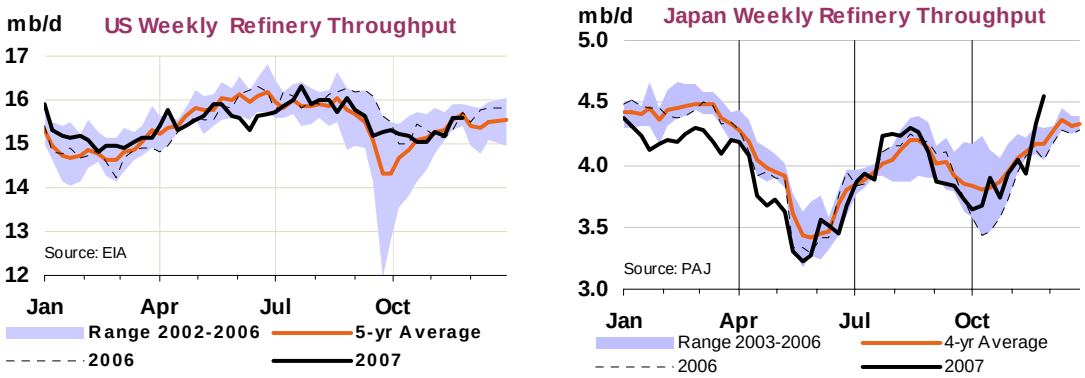
1 Estimate
2 Based on crude throughput and current operable refining capacity
3 US50

OECD fourth-quarter crude runs are estimated to average 38.7 mb/d - 0.2 mb/d versus last month's forecast. Slower than anticipated restarts following maintenance at several refineries in Europe (notably BP's Nerefco, OMV's Burghausen and Total's Gonfreville refineries) have reduced November's estimated

crude runs by 0.4 mb/d. Industry reports indicate an apparent rise in unplanned outages at Japanese refineries, particularly with regard to upgrading equipment. However, weekly data would suggest we have overestimated the impact of these problems on crude runs, resulting in a small upward revision. Offsetting this, October OECD submissions provided upward revisions to European and North American crude throughput, partly offset by a small downward revision to Japanese throughputs.



Weekly data reveal that Japanese refineries recovered quickly from the November operational problems. By early December, crude runs had reached 4.6 mb/d, the highest level since March 2003. Nevertheless, despite high crude throughputs, kerosene and gasoline stocks remain below seasonal norms. Weekly US data indicate that crude runs reached 15.5 mb/d, in late November, their highest level since mid-September, and they are forecast to average around 15.5 mb/d for the whole of December. The recovery in crude runs in the US Midwest has been most pronounced in recent weeks, following the completion of planned works at BP's Toledo refinery and other plants, including Flint Hill Resources' Pine Bend refinery.



Fourth quarter **Middle East** crude runs have been revised up following stronger-than-expected throughput in October data for Iran and Saudi Arabia. The planned shutdown at Saudi Aramco's 400 kb/d Rabigh refinery

may have occurred later than our assumed mid-October start date, resulting in a higher level of average throughput for the month. Alternatively, other refineries within the Kingdom may have compensated for the shutdown by processing extra crude. Ahead of data confirming November's throughput level, we have left Saudi crude forecasts unchanged but recognise that a later start date could have an impact upon December runs. Iranian throughputs were similarly higher; continuing the pattern of upward adjustments in recent months. Consequently, we have revised up November and December crude runs for the region.

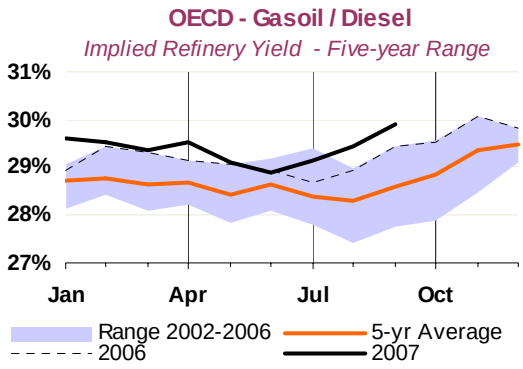
Latin American crude throughput in September is revised up by 0.3 mb/d following higher-than-expected crude runs in Argentina and Venezuela, the latter despite several reports of unplanned outages and planned long-term maintenance work on coking facilities at the Amuay refinery. Consequently, we have carried part of this upward revision forward in our forecasts through to the end of the first quarter of next year, when the work is expected to be completed, as crude runs appear to have been relatively unaffected by the work on the upgrading units.

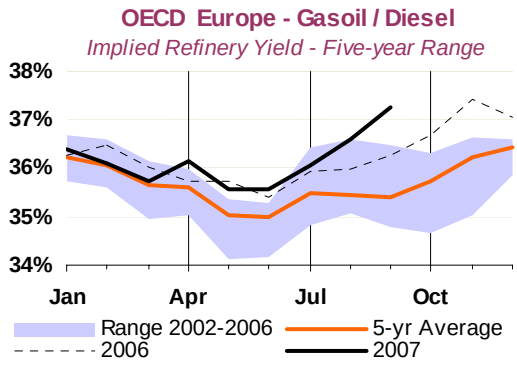
Chinese October crude throughputs were 6.5 mb/d, 0.1 mb/d weaker-than-forecast. November crude throughput is expected to have increased to 6.7 mb/d, with a further increase in December to 6.8 mb/d. These increases by Chinese refiners are in response to government pressure to resolve diesel and gasoline supply shortages. Other measures to help ease the tight product supply situation include the curtailment of gasoline and diesel exports, high levels of diesel and gasoline imports and the offer of cheap, additional crude supplies to some independent refiners. Ultimately, erratic supplies are likely to remain a pattern of Chinese domestic supply until domestic prices both upstream and downstream more closely follow international prices.

First quarter 2008 global throughputs are seen provisionally around 74.3 mb/d. This represents an increase of 1.0 mb/d against 1Q07 and assumes higher throughput to meet normal seasonal demand, albeit with much of the growth in regions that either have strong demand growth or returning refinery capacity – namely North America and China. In the US, the return to service of BP's Texas City and Whiting refineries from long-term outages and our assumption that Chevron will recommission a 160 kb/d crude unit at its Pascagoula refinery underpin the growth. In China, capacity additions and pressure from the Chinese government on Sinopec and PetroChina to ensure adequate supplies of products, most notably diesel, results in strong crude throughput growth. Globally, the adjustments for offline capacity are based largely on estimated seasonal average maintenance levels, due to the currently limited published information on actual planned maintenance. The first quarter of next year is forecast to see a gradual decline in runs from January's level of 74.9 mb/d, to 74.0 mb/d in March, as the start of spring maintenance, initially in the US and the Middle East reduces runs. Later in the quarter we expect work to start in Europe and Asia.

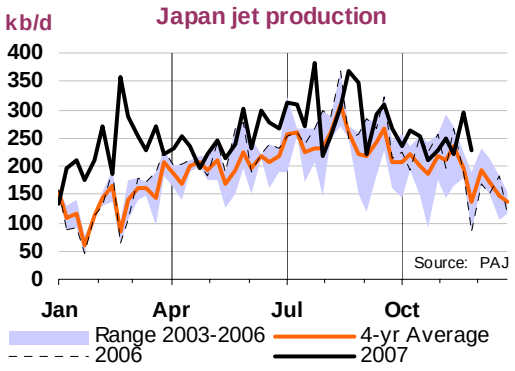
OECD Refinery Yields

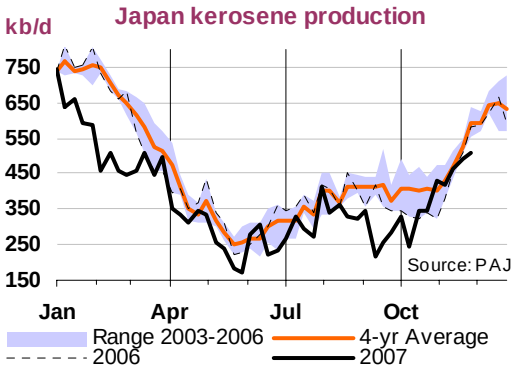
Middle distillate yields reached record seasonal levels in September, and reached levels that are close to all-time highs. Higher gasoil/diesel yields in Europe and North America underpin the increase, partly at the expense of jet/kerosene. European gasoil/diesel yields reached 37.3%, a level only surpassed by last





November's 37.4%. Increased gasoil/diesel yields were seen in the majority of European countries. However, October's gasoil/diesel yield is likely to be lower due to the maintenance and unplanned downtime highlighted in last month's report. Fuel oil yields increased in North America, largely due to higher Canadian fuel oil yields, as a result of problems with upgrading equipment, given the corresponding reduction in gasoline and gasoil/diesel yields.





As highlighted last month, Japanese and Korean refiners continue to produce increased amounts of jet fuel, at the expense of kerosene. The higher jet fuel production is being exported while domestic stocks of kerosene remain low compared with the historical range.

Revising Processing Gain Methodology – Utilising the Global Product Supply Model

Following the development of the refining and product supply model for the *Medium-Term Oil Market Report (MTOMR)* we have developed a new, more detailed, method for calculating refinery processing gain, (reflecting the volumetric increase achieved when the heavier fractions of crude oil are processed through upgrading capacity). Consequently, global processing gain has risen steadily over time as refineries have added more upgrading units, in order to raise the percentage of light products produced. But the trend is not linear: growth in processing gains tends to slow down when spare refinery capacity is tight and marginal (and simple) hydroskimming refineries are increasingly used.

The new methodology will serve as the basis for the forecasts in both the *Oil Market Report* and the *MTOMR*. The largest changes are in 1986, 1987 and 1992 where we have cut estimated processing gain by an average 260 kb/d. Conversely, for the period 1995-2005 the net change to processing gains averages zero. However, from 2006 onward the increases become more significant; a reflection of increasing levels of upgrading capacity.

The detailed modelling brings together the yields of individual upgrading units, together with an assessment of crude quality and trade, providing a regional and global assessment of the net processing gains. As a broad guideline, the following unit specific assumptions for volumetric gains have been used:

- a 18.1% gain on delayed coking using vacuum residue as feed,
- a 20.7% gain on hydrocracking vacuum gasoil in diesel-max mode,
- a 14.9% gain on fluid catalytic cracking of vacuum gasoil in gasoline max mode.

These assumptions will of course be subject to change, alongside shifts in technology, investment and utilisation.

Processing Gains Revisions

	2000	2001	2002	2003	2004	2005	2006	2007	2008
Previous	1715	1736	1760	1804	1834	1863	1901	1920	1950
Revised	1746	1751	1773	1848	1873	1900	2038	2074	2131

European Product Market - 2008 Outlook

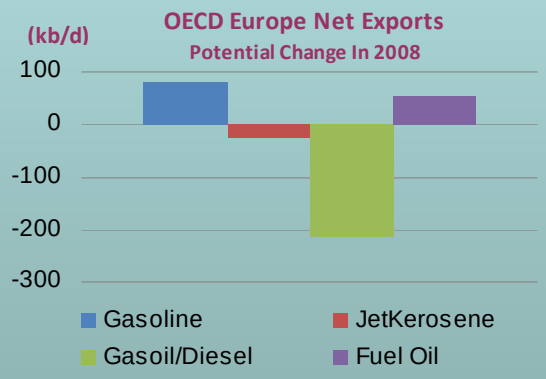
As part of a series of more in-depth looks at regional forecasts from our medium-term global product supply model, this month we consider prospects for Europe in 2008.

The 2008 European product market outlook is driven heating oil demand, (which we assume returns to its seasonal norms), and diesel, where demand growth is expected to continue apace. Consequently the refining industry, despite investment in hydrocracking and hydrotreating capacity, will struggle to match the pace of distillate demand growth, but be forced to increase exports of gasoline and fuel oil as demand for these fuels continues to weaken.

European gasoline exports are expected to grow by 80kb/d in 2008, largely as a result of continued weak demand as the dieselisation of Europe's car fleet continues. Weaker European gasoline demand and stronger diesel demand growth have forced refineries to operate in a distillate-maximisation mode, relegating gasoline to a subsidiary role. Gasoline refinery yields have declined from an average 21.8% in 1995 to 19.9% in 2007, even though OECD Europe crude import quality has not changed over the same period. We noted in last month's report that North American net imports of gasoline were expected to decrease by 112kb/d in 2008. Consequently, European refiners will need to find alternative customers for their increasing export volumes at a time when two major importers, Iran and Nigeria, are both likely to import less in 2008 compared with 2007. Gasoline output is expected to remain under pressure, as refiners seek to maximize diesel output, but squeezing gasoline yields further could prove difficult given refinery hydrogen balances, which rely on naphtha reforming for a substantial part of the supply.

Kerosene yields are expected to remain under pressure due to strong growth in diesel demand. European refiners are assumed to meet marginal ultra-low-sulphur diesel demand where possible and rely increasingly on imports of jet fuel from other regions to balance their supply commitments. Kerosene output remains relatively unchanged in 2008, while demand is forecast to grow by 1.6%, leaving the overall balance 20 kb/d tighter. This suggests that jet fuel cracks will be supported by the need to import product into the region and as a source of alternate value to ULSD production.

Continued strong diesel demand growth and winter heating oil demand, plus the limited addition of hydrocracking capacity in 2008 are forecast to require an incremental 210 kb/d of distillate imports in 2008. In addition, refiners must prepare for the introduction of 10 ppm sulphur diesel in 2009, raising the possibility of heavy maintenance next autumn to upgrade hydrotreating capacity to meet the tighter specifications. The addition of distillate hydro-treating capacity in 2007 reflects the need to meet tighter sulphur requirements for heating oil that will come into force at the beginning of 2008 – particularly the need to continue to desulphurise Russian gasoil supplies (the source of marginal heating oil in Europe).



As a result, higher hydroskimming margins will be needed to incentivise incremental crude runs in the region, offsetting the strong growth and tightening supply trend in middle distillates that would otherwise be seen.

Fuel oil exports are forecast to increase by 70 kb/d in 2008, as European demand continues to weaken in the face of rising natural gas substitution. However, demand may be stronger than forecast if next year's weather patterns are colder than normal in winter or warmer in summer, but in this regard, we note that natural gas stocks are reportedly high throughout Europe.

Prospects for Emission Trading in OECD Regions

Several regions and countries are developing or proposing greenhouse gas emissions trading schemes (ETS). While some have designed their schemes and defined rules (the European Union, North Eastern US States, Japan, Norway), others are still in the process of elaborating their system's design (Australia, Canada, New Zealand).

The European Union ETS, the largest scheme in operation, is currently evolving on two fronts. First, the European Commission has approved all EU countries' National Allocation Plans (NAPs) running from 2008 to 2012, in line with the first trading period of the Kyoto Protocol. The total cap for these countries represents a 6.5% reduction from 2005 emissions. The second front relates to the scheme's next phase, post-2012. In parallel, the Commission has proposed to include the aviation sector in the ETS by 2011.

Following its ratification of the Kyoto Protocol on 3 December, Australia is likely to establish a GHG trading scheme that would operate starting 2010. While details have yet to be worked out, the similarities between the options proposed by the former prime minister's Task Group on Emissions Trading and the States and Territories' National Emissions Trading Taskforce (NETT) suggest that the scheme would apply to the energy, transport and industrial sectors as well as fugitive emissions (e.g. greenhouse gases that escape during the process of fuel production, storage or transport, such as methane given off during oil and gas drilling and refining).

In Canada's Regulatory Framework for Air Emissions, the government has proposed emission objectives on an intensity basis (emissions per unit of output) in the following sectors: electricity, oil and gas, forest products, smelting, refining, iron and steel, cement, lime, and chemicals production sectors. To comply, emitters could rely on five options: internal reductions; a domestic offsets system; contributions to a technology fund; a pool of early action credits; and Certified Emission Reductions from the Kyoto Protocol's Clean Development Mechanism, to meet 10% of their compliance obligation.

On 4 December 2007, the New Zealand Parliament introduced legislation to establish an emissions trading scheme following the government's September 2007 detailed framework proposal. The proposed cap-and-trade system should cover all six major GHG emissions and will be introduced in stages, applying to all sectors of the economy by 2013. It will be fully open to the Kyoto Protocol's trading mechanisms.

Of Particular Relevance to the Oil and Gas Sector

Several of these schemes intend to cover the oil industry. Some schemes would put emission caps on the carbon content of liquid fuels produced or imported in the country (Australia and New Zealand); others could impose caps on the refining sector's direct emissions (EU and Canada), and on other energy end-users, including aviation in the EU.

'Upstream' Allocation

An upstream coverage seeks to assign the obligation on emissions to firms that produce or import fossil fuels in an economy; they are made liable for the CO2 content of fuels they sell into the country, and must surrender emission allowances matching such volume. Fossil fuel producers and importers would then take measure to comply, buying allowances to cover emissions above their initial allocation, and curbing demand for fuels, including through pricing. None of the proposals for upstream coverage would allocate allowances for free to the liquid fuel sector; liable entities would either purchased allowances at auctions, or acquire them from the domestic or international carbon markets. The purpose of an upstream allocation is to send a carbon price signal to all fossil fuel consumers, through a single policy instrument.

The New Zealand ETS is to cover all liquid fossil fuels (primarily used for transport) as of January 1, 2009, except international aviation and marine. Obligations would lie with large fuel suppliers, and no free allocation will be provided. In the Australian domestic ETS, permit liability could also be placed on fuel suppliers with a series of short-term annual caps.

Under the EU ETS at present, refinery installations are allocated allowances for their direct emissions (i.e., not for the carbon content of processed fuels). The carbon constraint may increase variable costs whenever extra emission allowances are needed to cover emissions over and above the initial allocation.

In Australia, fugitive emissions such as methane emitted during oil and gas drilling as well as during the refining could be covered. In such a case, emitters would be capped and liable for those emissions.

Prospects for Emission Trading in OECD Regions (continued)

Caps on Direct Emissions in the Oil and Gas Sector

In the Canadian proposed scheme, existing facilities that are covered (i.e. including refinery installations) may be required to reduce their GHG emissions intensity by 6% each year from 2007 to 2010. This yields an initial emissions intensity reduction of 18% from 2006 levels in 2010, the year the proposed greenhouse gas regulations would be implemented. Every year thereafter, a 2% continuous improvement in emissions intensity will be required. By 2015, therefore, a reduction in the GHG emissions intensity of 26% from 2006 would be mandated.

Caps on Direct Emissions of Aviation

The European Commission proposes to include the aviation sector in the EU ETS as of 2011, a proposal backed by the Council and Parliament, though they have yet to approve the proposal presented by the Commission on 20 December 2006. Members of Parliament voted, on 13 November, in favour of slightly toughening up the Commission's proposal, requesting that all airlines flying to and from EU territory should join the scheme in 2011; airlines would be required to reduce emissions by 10% compared to average 2004-2006 levels; 25% of the emission allowances would be auctioned; the cost of all CO2 allowances bought by airlines would be multiplied by two unless the Commission develops legislation to address additional climate impacts caused by nitrogen oxide (NOx) emissions from aircraft; an 'efficiency clause' states that the aviation sector can only buy allowances from other sectors if it first improves its fuel efficiency; and military flights and planes weighing less than 20,000 kg, such as business jets, would be excluded.

Based on IEA/OECD Annex 1 Experts Group paper *Emissions Trading: Trends and Prospect*. For more details, please contact Julia Reinaud: Julia.REINAUD@iea.org or Cédric Philibert: Cedric.Philibert@iea.org.

Table 1
WORLD OIL SUPPLY AND DEMAND

(million barrels per day)

	2004	2005	1Q06	2Q06	3Q06	4Q06	2006	1Q07	2Q07	3Q07	4Q07	2007	1Q08	2Q08	3Q08	4Q08	2008
OECD DEMAND																	
North America	25.4	25.5	25.2	25.1	25.5	25.4	25.3	25.7	25.4	25.6	25.4	25.5	25.9	25.6	25.8	25.6	25.7
Europe	15.5	15.6	16.0	15.2	15.6	15.7	15.6	15.2	15.0	15.4	15.7	15.3	15.7	15.2	15.5	15.8	15.5
Pacific	8.5	8.6	9.2	7.8	7.9	8.7	8.4	8.8	7.8	7.8	8.9	8.3	9.3	7.9	8.0	9.0	8.5
Total OECD	49.4	49.7	50.4	48.1	49.0	49.8	49.3	49.7	48.2	48.8	50.0	49.2	50.8	48.7	49.3	50.5	49.8
NON-OECD DEMAND																	
FSU	3.9	4.0	4.1	3.9	4.1	4.4	4.1	3.9	3.7	3.9	4.2	3.9	4.1	3.8	4.0	4.3	4.1
Europe	0.7	0.7	0.8	0.7	0.7	0.8	0.7	0.8	0.8	0.7	0.8	0.8	0.8	0.8	0.7	0.8	0.8
China	6.4	6.7	7.0	7.3	7.2	7.2	7.2	7.3	7.7	7.5	7.7	7.5	7.7	8.1	7.9	8.1	8.0
Other Asia	8.6	8.8	9.0	9.0	8.7	8.9	8.9	9.2	9.2	9.0	9.2	9.1	9.4	9.4	9.2	9.4	9.3
Latin America	5.0	5.1	5.2	5.3	5.4	5.4	5.3	5.4	5.6	5.6	5.5	5.5	5.5	5.7	5.8	5.7	5.7
Middle East	5.7	6.0	6.2	6.2	6.5	6.3	6.3	6.4	6.6	6.8	6.5	6.6	6.8	6.9	7.3	6.9	7.0
Africa	2.8	2.9	3.0	3.0	2.9	2.9	2.9	3.1	3.1	3.0	3.1	3.1	3.2	3.2	3.1	3.2	3.2
Total Non-OECD	33.1	34.2	35.1	35.3	35.4	35.9	35.4	36.1	36.6	36.5	36.9	36.5	37.5	38.0	38.0	38.4	38.0
Total Demand[1]	82.5	83.9	85.5	83.5	84.4	85.7	84.7	85.8	84.7	85.3	86.9	85.7	88.3	86.7	87.3	88.9	87.8
OECD SUPPLY																	
North America	14.6	14.1	14.2	14.2	14.2	14.2	14.2	14.4	14.4	14.2	14.2	14.3	14.4	14.1	14.0	14.1	14.2
Europe	6.1	5.6	5.5	5.1	4.9	5.2	5.2	5.2	4.9	4.7	4.8	4.9	4.8	4.5	4.3	4.5	4.5
Pacific	0.6	0.6	0.5	0.5	0.7	0.6	0.6	0.6	0.6	0.6	0.7	0.6	0.8	0.8	0.8	0.9	0.8
Total OECD	21.2	20.3	20.2	19.9	19.8	20.0	20.0	20.2	19.9	19.5	19.8	19.8	20.0	19.3	19.1	19.5	19.5
NON-OECD SUPPLY																	
FSU	11.4	11.8	11.9	12.2	12.4	12.5	12.2	12.7	12.7	12.7	12.8	12.7	13.0	13.1	13.2	13.5	13.2
Europe	0.2	0.2	0.2	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	3.5	3.6	3.7	3.7	3.7	3.6	3.7	3.7	3.8	3.7	3.8	3.8	3.9	3.9	3.9	3.9	3.9
Other Asia	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.6	2.7	2.7	2.7	2.8	2.8	2.9	2.8
Latin America	4.1	4.3	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.6	4.7	4.7	4.7	4.7
Middle East	1.9	1.8	1.8	1.8	1.7	1.7	1.7	1.7	1.7	1.6	1.6	1.6	1.6	1.6	1.6	1.5	1.6
Africa[2]	3.4	3.7	3.9	3.8	3.9	4.1	3.9	2.6	2.5	2.5	2.6	2.6	2.7	2.7	2.7	2.7	2.7
Total Non-OECD	27.1	28.0	28.5	28.7	28.9	29.2	28.8	27.9	27.8	27.7	28.1	27.9	28.6	28.9	29.0	29.3	29.0
Processing Gains[3]	1.9	1.9	2.0	2.1	2.1	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.1
Other Biofuels[4]	0.1	0.1	0.2	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.5	0.4	0.6	0.7	0.7	0.7	0.7
Total Non-OPEC[5]	50.3	50.4	51.0	50.8	51.0	51.5	51.1	50.4	50.2	49.7	50.5	50.2	51.3	51.0	51.0	51.8	51.3
Non-OPEC excl. Angola[2]	49.3	49.2	49.6	49.5	49.6	50.1	49.7	50.4	50.2	49.7	50.5	50.2	51.3	51.0	51.0	51.8	51.3
OPEC																	
Crude[6]	28.9	29.7	29.9	29.7	30.0	29.2	29.7	30.2	30.1	30.6							
NGLs	4.2	4.5	4.6	4.6	4.6	4.7	4.6	4.8	4.8	4.8	5.0	4.8	5.1	5.3	5.5	5.8	5.4
Total OPEC	33.1	34.2	34.5	34.3	34.7	33.9	34.3	35.0	34.9	35.4							
OPEC incl. Angola[2]	34.1	35.5	35.9	35.6	36.1	35.3	35.7	35.0	34.9	35.4							
Total Supply[7]	83.4	84.6	85.4	85.1	85.7	85.4	85.4	85.4	85.1	85.1							
STOCK CHANGES AND MISCELLANEOUS																	
Reported OECD																	
Industry	0.1	0.1	0.0	0.7	1.1	-0.9	0.2	-0.9	0.8	0.0							
Government	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.1							
Total	0.2	0.2	0.0	0.7	1.1	-0.9	0.3	-0.8	0.8	0.1							
Floating Storage/Oil in Transit	0.0	-0.1	0.1	-0.1	0.3	-0.6	-0.1	0.2	-0.1	-0.2							
Miscellaneous to balance[8]	0.7	0.6	-0.2	1.0	-0.1	1.2	0.5	0.2	-0.3	-0.1							
Total Stock Ch. & Misc	0.9	0.7	0.0	1.7	1.3	-0.3	0.7	-0.4	0.4	-0.2							
Memo items:																	
Call on OPEC crude + Stock ch.[9]	28.0	29.0	29.9	28.0	28.7	29.5	29.0	30.6	29.7	30.8	31.5	30.6	32.0	30.4	30.8	31.3	31.1
Adjusted Call on OPEC + Stock ch.[10]	28.7	29.6	29.7	29.0	28.6	30.7	29.5	30.8	29.4	30.7	31.8	30.7	32.3	30.7	31.1	31.6	31.4
"Call" incl. Angola[2]	29.0	30.2	31.3	29.4	30.1	30.9	30.4	30.6	29.7	30.8	31.5	30.6	32.0	30.4	30.8	31.3	31.1
"Adjusted Call" incl. Angola[2]	29.7	30.8	31.1	30.3	30.0	32.1	30.9	30.8	29.4	30.7	31.8	30.7	32.3	30.7	31.1	31.6	31.4

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 With effect from OMR of 13 February 2007, Angolan production will be reclassified within OPEC and excluded from the Non-OPEC and Africa totals, for the period January 2007 onwards. Secondary aggregates allow comparison with previous year totals by including Angola within OPEC retroactively.
3 Net volumetric gains and losses in the refining process (excludes net gain/loss in former USSR, China and non-OECD Europe) and marine transportation losses.
4 Biofuels from sources outside Brazil and US.
5 Non-OPEC supplies include crude oil, condensates, NGL and non-conventional sources of supply such as synthetic crude, ethanol and MTBE. No allowance is made in the non-OPEC forecast for exceptional events which have, at certain times historically, reduced non-OPEC supply by 300-400 kbd on an annual basis.
6 As of the March 2006 OMR, Venezuelan Orinoco heavy crude production is included within Venezuelan crude estimates. Orimulsion fuel remains within the OPEC NGL & non-conventional category, but Orimulsion production reportedly ceased from January 2007.
7 Comprises crude oil, condensates, NGLs, oil from non-conventional sources and other sources of supply.
8 Includes changes in non-reported stocks in OECD and non-OECD areas.
9 Equals the arithmetic difference between total demand minus total non-OPEC supply minus OPEC NGLs.
10 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 plus an extra 350 kb/d allowance for average understatement of non-OPEC supply added for forecast periods.

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

(million barrels per day)

	2004	2005	1Q06	2Q06	3Q06	4Q06	2006	1Q07	2Q07	3Q07	4Q07	2007	1Q08	2Q08	3Q08	4Q08	2008
OECD DEMAND																	
North America	-	-	-	-	-	-	-	-	-	0.1	-0.1	-	-	-	0.1	-	-
Europe	-	-	-	-	-	-	-	-0.1	-	-0.1	-	-	-	-	-0.1	-	-
Pacific	-	-	-	-	-	-	-	-	-	-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	-
Latin America	-	-	-	-	-	-	-	-	0.1	-	-	-	-	0.1	-	-	-
Middle East	-	-	-	-	-	-	-	-	-	-	-	-	0.1	0.1	0.1	0.1	0.1
Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Non-OECD	-	-	-	-	-	-	-	-	0.1	-	-0.1	-	0.2	0.2	0.1	-	0.1
Total Demand	-	-	-	-	-	-	-	-	0.1	-0.1	-0.2	-0.1	0.1	0.2	0.1	-	0.1
OECD SUPPLY																	
North America	-	-	-	-	-	-	-	-	-	-	-0.1	-	-	-	-	-	-
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total OECD	-	-	-	-	-	-	-	-	-	-0.1	-	-	-0.1	-0.1	-	-	-0.1
NON-OECD SUPPLY																	
FSU	-	-	-	-	-	-	-	-	-	-	-	-	-0.1	-0.1	-0.1	-0.1	-0.1
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-	-0.1	-	-	-	-	-	-
Other Asia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.1	-
Latin America	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Middle East	-	-	-	-	-	-	-	-	-	-	-	-	-0.1	-	-	-	-
Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Non-OECD	-	-	-	-	-	-	-	-	-	-0.1	-0.2	-0.1	-0.1	-0.1	-0.1	-	-0.1
Processing Gains	-	-	0.1	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Other Biofuels	-	-	-0.1	-	-	0.1	-	-0.1	-	-	0.1	-	-0.1	-	-	0.1	-
Total Non-OPEC	-	-	0.1	0.2	0.2	0.2	0.1	-	0.1	-	-	0.1	-0.1	-	0.1	0.2	-
Non-OPEC excl. Angola	-	-	0.1	0.2	0.2	0.2	0.1	-	0.1	-	-	0.1	-0.1	-	0.1	0.2	-
OPEC																	
Crude	-	-	-	-	-	-	-	-	-0.1	-							
NGLs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total OPEC	-	-	-	-	-	-	-	-	-0.1	-							
OPEC incl. Angola	-	-	-	-	-	-	-	-	-0.1	-							
Total Supply	-	-	0.1	0.2	0.2	0.2	0.1	-	0.1	0.1							
STOCK CHANGES AND MISCELLANEOUS																	
REPORTED OECD																	
Industry	-	-	-	-	-	-	-	-	-	0.2							
Government	-	-	-	-	-	-	-	0.1	-	-							
Total	-	-	-	-	-	-	-	0.1	-	0.2							
Floating Storage/Oil in Transit	-	-	-	-	-	-	-	-	-	-							
Miscellaneous to balance	-	-	0.1	0.2	0.2	0.2	0.1	-	-0.1	-							
Total Stock Ch. & Misc	-	-	0.1	0.2	0.2	0.2	0.1	-	-	0.2							
Memo items:																	
Call on OPEC crude + Stock ch.	-	-	-0.1	-0.2	-0.2	-0.2	-0.1	-0.1	-	-0.1	-0.2	-0.1	0.3	0.2	0.1	-0.3	0.1
Adjusted Call on OPEC + Stock ch.	-	-	-	-	-	-	-	-0.1	-0.1	-0.2	-0.2	-0.1	0.3	0.3	0.1	-0.2	0.1
"Call" incl. Angola[2]	-	-	-0.1	-0.2	-0.2	-0.2	-0.1	-0.1	-	-0.1	-0.2	-0.1	0.3	0.2	0.1	-0.3	0.1
"Adjusted Call" incl. Angola	-	-	-	-	-	-	-	-0.1	-0.1	-0.2	-0.2	-0.1	0.3	0.3	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

	2005	1Q06	2Q06	3Q06	4Q06	2006	1Q07	2Q07	3Q07	4Q07	2007	1Q08	2Q08	3Q08	4Q08	2008
Demand (mb/d)																
North America	25.49	25.22	25.06	25.52	25.37	25.29	25.67	25.43	25.56	25.36	25.51	25.89	25.63	25.82	25.65	25.75
Europe	15.61	15.95	15.23	15.60	15.72	15.62	15.21	14.96	15.40	15.74	15.33	15.66	15.15	15.54	15.82	15.55
Pacific	8.57	9.24	7.82	7.85	8.71	8.40	8.83	7.80	7.81	8.92	8.34	9.25	7.95	7.96	8.99	8.54
Total OECD	49.67	50.42	48.11	48.97	49.80	49.32	49.71	48.20	48.77	50.02	49.17	50.81	48.73	49.32	50.46	49.83
FSU	3.95	4.06	3.87	4.12	4.45	4.12	3.93	3.68	3.89	4.16	3.92	4.08	3.81	4.03	4.30	4.05
Europe	0.72	0.80	0.75	0.70	0.75	0.75	0.83	0.77	0.71	0.77	0.77	0.85	0.79	0.73	0.79	0.79
China	6.69	6.96	7.29	7.17	7.20	7.16	7.27	7.67	7.46	7.70	7.53	7.72	8.08	7.89	8.13	7.96
Other Asia	8.79	8.95	8.96	8.66	8.90	8.87	9.17	9.22	8.96	9.18	9.13	9.36	9.42	9.17	9.43	9.35
Latin America	5.13	5.15	5.29	5.40	5.38	5.31	5.36	5.57	5.64	5.51	5.52	5.52	5.73	5.81	5.67	5.68
Middle East	5.99	6.16	6.21	6.47	6.27	6.28	6.43	6.57	6.83	6.52	6.59	6.78	6.93	7.25	6.92	6.97
Africa	2.94	2.97	2.97	2.86	2.93	2.93	3.10	3.08	2.99	3.07	3.06	3.22	3.18	3.09	3.18	3.17
Total Non-OECD	34.23	35.05	35.35	35.38	35.89	35.42	36.08	36.55	36.48	36.91	36.51	37.53	37.95	37.97	38.41	37.97
World	83.90	85.47	83.45	84.35	85.68	84.74	85.79	84.75	85.25	86.94	85.69	88.34	86.68	87.29	88.87	87.80
of which:																
US50	*20.80*	*20.54*	*20.55*	*20.91*	*20.75*	*20.69*	*20.90*	*20.74*	*20.78*	*20.59*	*20.75*	*21.07*	*20.90*	*20.99*	*20.82*	*20.94*
Euro4	*8.22*	*8.49*	*7.94*	*8.15*	*8.18*	*8.19*	*7.85*	*7.69*	*7.87*	*8.12*	*7.88*	*8.09*	*7.79*	*7.94*	*8.13*	*7.99*
Japan	*5.31*	*5.89*	*4.72*	*4.75*	*5.29*	*5.16*	*5.39*	*4.61*	*4.67*	*5.40*	*5.02*	*5.72*	*4.70*	*4.76*	*5.42*	*5.15*
Korea	*2.19*	*2.29*	*2.04*	*2.04*	*2.32*	*2.17*	*2.35*	*2.12*	*2.06*	*2.38*	*2.23*	*2.42*	*2.15*	*2.09*	*2.41*	*2.27*
Mexico	*2.05*	*2.05*	*1.98*	*1.96*	*2.00*	*2.00*	*2.05*	*2.07*	*1.98*	*2.10*	*2.05*	*2.08*	*2.09*	*2.01*	*2.13*	*2.08*
Canada	*2.30*	*2.26*	*2.20*	*2.30*	*2.26*	*2.25*	*2.34*	*2.28*	*2.45*	*2.30*	*2.34*	*2.36*	*2.30*	*2.46*	*2.32*	*2.36*
Brazil	*2.19*	*2.18*	*2.20*	*2.28*	*2.30*	*2.24*	*2.28*	*2.35*	*2.36*	*2.31*	*2.33*	*2.34*	*2.41*	*2.42*	*2.37*	*2.39*
India	*2.58*	*2.71*	*2.67*	*2.48*	*2.70*	*2.64*	*2.88*	*2.83*	*2.57*	*2.82*	*2.78*	*2.97*	*2.91*	*2.65*	*2.91*	*2.86*
Annual Change (% per annum)																
North America	0.5	-1.4	-0.9	-0.2	-0.7	-0.8	1.8	1.5	0.2	0.0	0.8	0.9	0.8	1.0	1.1	0.9
Europe	0.8	1.5	-0.2	-0.4	-0.5	0.1	-4.6	-1.7	-1.3	0.1	-1.9	2.9	1.3	1.0	0.5	1.4
Pacific	0.8	-2.5	-2.7	-2.1	-0.3	-1.9	-4.5	-0.2	-0.5	2.4	-0.8	4.9	1.8	1.9	0.7	2.4
Total OECD	0.6	-0.7	-1.0	-0.6	-0.6	-0.7	-1.4	0.2	-0.4	0.5	-0.3	2.2	1.1	1.1	0.9	1.3
FSU	1.4	2.2	0.3	4.5	10.0	4.3	-3.1	-5.1	-5.4	-6.4	-5.0	3.8	3.6	3.4	3.3	3.5
Europe	4.2	3.4	3.4	3.4	3.4	3.4	2.8	2.7	2.5	2.1	2.6	2.3	2.7	2.7	2.6	2.6
China	4.2	4.2	12.1	7.1	4.6	6.9	4.5	5.2	4.1	6.9	5.2	6.2	5.4	5.7	5.6	5.7
Other Asia	2.0	-0.2	-0.8	1.6	2.9	0.8	2.4	2.9	3.4	3.2	3.0	2.1	2.2	2.4	2.7	2.4
Latin America	2.9	3.7	3.2	2.9	4.4	3.6	4.0	5.3	4.4	2.5	4.0	3.1	2.9	2.9	2.8	2.9
Middle East	4.6	4.8	4.2	4.7	5.3	4.8	4.4	5.8	5.4	3.9	4.9	5.6	5.5	6.2	6.1	5.8
Africa	6.1	-1.3	-0.9	-0.1	1.1	-0.3	4.4	3.6	4.3	4.6	4.2	3.7	3.5	3.5	3.6	3.6
Total Non-OECD	3.3	2.3	3.4	3.7	4.6	3.5	2.9	3.4	3.1	2.9	3.1	4.0	3.8	4.1	4.1	4.0
World	1.7	0.5	0.8	1.1	1.5	1.0	0.4	1.6	1.1	1.5	1.1	3.0	2.3	2.4	2.2	2.5
Annual Change (mb/d)																
North America	0.12	-0.35	-0.23	-0.06	-0.17	-0.20	0.44	0.37	0.05	0.00	0.21	0.22	0.20	0.25	0.28	0.24
Europe	0.12	0.23	-0.04	-0.07	-0.08	0.01	-0.74	-0.27	-0.20	0.02	-0.29	0.45	0.19	0.15	0.09	0.22
Pacific	0.07	-0.24	-0.22	-0.17	-0.03	-0.16	-0.42	-0.02	-0.04	0.21	-0.06	0.43	0.14	0.15	0.07	0.20
Total OECD	0.32	-0.36	-0.48	-0.30	-0.28	-0.35	-0.71	0.09	-0.19	0.23	-0.15	1.10	0.53	0.55	0.44	0.66
FSU	0.06	0.09	0.01	0.18	0.40	0.17	-0.12	-0.20	-0.22	-0.29	-0.21	0.15	0.13	0.13	0.14	0.14
Europe	0.03	0.03	0.02	0.02	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
China	0.27	0.28	0.79	0.47	0.32	0.46	0.31	0.38	0.29	0.50	0.37	0.45	0.41	0.42	0.43	0.43
Other Asia	0.17	-0.02	-0.07	0.14	0.25	0.07	0.22	0.26	0.29	0.29	0.26	0.19	0.20	0.22	0.25	0.21
Latin America	0.14	0.19	0.16	0.15	0.23	0.18	0.20	0.28	0.24	0.13	0.21	0.16	0.16	0.16	0.16	0.16
Middle East	0.26	0.28	0.25	0.29	0.31	0.29	0.27	0.36	0.35	0.25	0.31	0.36	0.36	0.43	0.40	0.39
Africa	0.17	-0.04	-0.03	0.00	0.03	-0.01	0.13	0.11	0.12	0.13	0.12	0.11	0.11	0.10	0.11	0.11
Total Non-OECD	1.10	0.80	1.15	1.25	1.56	1.19	1.03	1.21	1.10	1.03	1.09	1.44	1.40	1.49	1.50	1.46
World	1.41	0.45	0.66	0.95	1.28	0.84	0.32	1.30	0.90	1.25	0.95	2.54	1.93	2.03	1.94	2.11
Revisions to Oil Demand from Last Month's Report (mb/d)																
North America	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.11	-0.08	0.01	-0.01	-0.01	0.15	-0.02	0.03
Europe	0.00	0.00	0.00	0.00	0.00	0.00	-0.06	0.00	-0.08	-0.03	-0.04	-0.01	-0.01	-0.11	-0.02	-0.04
Pacific	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.09	0.03	-0.01	-0.01	0.00	-0.02	0.04	0.00
Total OECD	0.00	0.00	0.00	0.01	0.00	0.00	-0.06	0.00	-0.05	-0.08	-0.05	-0.03	-0.02	0.02	0.00	-0.01
FSU	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	-0.13	-0.03	0.01	0.01	0.00	-0.15	-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
China	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.02	-0.05	-0.02	0.00	0.00	0.00	-0.03	-0.01
Other Asia	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.04	0.07	0.01	0.02	0.02	-0.01	0.09	0.03
Latin America	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.08	0.01	-0.04	0.02	0.03	0.08	0.01	-0.05	0.02
Middle East	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.01	0.10	0.11	0.11	0.10	0.11
Africa	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.01	0.00	0.00
Total Non-OECD	0.01	0.00	0.00	0.00	0.00	0.00	0.03	0.08	-0.04	-0.12	-0.01	0.17	0.21	0.12	-0.04	0.12
World	0.01	0.00	0.00	0.01	0.00	0.00	-0.04	0.08	-0.09	-0.21	-0.06	0.14	0.20	0.14	-0.04	0.11
Revisions to Oil Demand Growth from Last Month's Report (mb/d)																
World	0.00	-0.01	-0.01	0.01	-0.01	0.00	-0.04	0.08	-0.10	-0.21	-0.07	0.17	0.12	0.22	0.16	0.17

Table 3
WORLD OIL PRODUCTION
(million barrels per day)

	2006	2007	2008	2Q07	3Q07	4Q07	1Q08	2Q08	Sep 07	Oct 07	Nov 07
OPEC											
Crude Oil											
Saudi Arabia	8.93			8.37	8.42				8.57	8.67	8.72
Iran	3.89			3.92	3.92				3.92	4.00	4.00
Iraq	1.90			2.01	2.11				2.18	2.30	2.32
UAE	2.62			2.54	2.57				2.55	2.55	2.15
Kuwait	2.21			2.08	2.18				2.19	2.21	2.25
Neutral Zone	0.58			0.55	0.55				0.56	0.56	0.57
Qatar	0.82			0.79	0.80				0.79	0.80	0.85
Angola[5]				1.58	1.61				1.63	1.71	1.72
Nigeria	2.24			2.01	2.17				2.23	2.16	2.16
Libya	1.71			1.69	1.70				1.72	1.72	1.75
Algeria	1.35			1.36	1.36				1.37	1.38	1.38
Venezuela	2.56			2.37	2.36				2.38	2.41	2.43
Indonesia	0.89			0.84	0.83				0.83	0.83	0.83
Total Crude Oil	29.69			30.10	30.59				30.90	31.29	31.11
Total NGLs[1]	4.63	4.84	5.44	4.80	4.83	4.98	5.11	5.29	4.83	4.98	4.98
Total OPEC	34.32			34.90	35.41				35.73	36.27	36.09
OPEC incl. Angola[6]	35.73			34.90	35.41				35.73	36.27	36.09
NON-OPEC[2]											
OECD											
North America	14.21	14.29	14.15	14.40	14.18	14.23	14.41	14.10	14.20	14.16	14.28
United States	7.34	7.44	7.39	7.56	7.39	7.39	7.44	7.46	7.32	7.47	7.38
Mexico	3.68	3.51	3.42	3.58	3.44	3.46	3.45	3.45	3.53	3.37	3.55
Canada	3.19	3.34	3.34	3.26	3.36	3.38	3.51	3.19	3.35	3.33	3.36
Europe	5.19	4.91	4.52	4.89	4.69	4.83	4.77	4.46	4.63	4.94	4.73
UK	1.67	1.63	1.44	1.70	1.49	1.58	1.58	1.43	1.50	1.60	1.54
Norway	2.78	2.54	2.38	2.46	2.48	2.52	2.48	2.32	2.41	2.61	2.46
Others	0.74	0.73	0.71	0.73	0.73	0.73	0.72	0.71	0.72	0.73	0.73
Pacific	0.58	0.65	0.81	0.63	0.64	0.73	0.79	0.79	0.61	0.72	0.71
Australia	0.53	0.57	0.70	0.56	0.55	0.62	0.69	0.68	0.50	0.62	0.60
Others	0.05	0.08	0.11	0.06	0.09	0.11	0.11	0.10	0.11	0.11	0.11
Total OECD	19.98	19.85	19.49	19.92	19.52	19.80	19.97	19.35	19.44	19.83	19.72
NON-OECD											
Former USSR	12.24	12.71	13.20	12.66	12.66	12.82	12.99	13.13	12.42	12.80	12.80
Russia	9.84	10.07	10.24	10.03	10.09	10.10	10.06	10.17	10.07	10.14	10.07
Others	2.40	2.64	2.96	2.63	2.56	2.72	2.93	2.97	2.34	2.67	2.74
Asia	6.39	6.45	6.70	6.45	6.34	6.56	6.64	6.66	6.32	6.45	6.61
China	3.67	3.77	3.90	3.79	3.71	3.84	3.90	3.89	3.72	3.73	3.89
Malaysia	0.75	0.75	0.81	0.74	0.76	0.79	0.79	0.81	0.78	0.79	0.78
India	0.79	0.81	0.81	0.81	0.81	0.82	0.82	0.81	0.81	0.82	0.81
Others	1.17	1.11	1.18	1.11	1.07	1.12	1.13	1.16	1.01	1.11	1.12
Europe	0.15	0.13	0.12	0.14	0.13	0.13	0.13	0.12	0.13	0.13	0.13
Latin America	4.39	4.39	4.70	4.38	4.38	4.41	4.63	4.73	4.37	4.30	4.44
Brazil	2.10	2.16	2.50	2.14	2.15	2.18	2.42	2.52	2.12	2.07	2.21
Argentina	0.77	0.77	0.75	0.77	0.76	0.76	0.76	0.75	0.77	0.76	0.76
Colombia	0.53	0.53	0.55	0.53	0.53	0.55	0.55	0.55	0.55	0.55	0.55
Ecuador	0.54	0.50	0.47	0.51	0.50	0.48	0.48	0.47	0.49	0.49	0.48
Others	0.45	0.43	0.43	0.43	0.44	0.44	0.43	0.43	0.44	0.44	0.44
Middle East[3]	1.74	1.64	1.56	1.65	1.63	1.60	1.58	1.57	1.62	1.61	1.60
Oman	0.75	0.71	0.69	0.72	0.71	0.70	0.70	0.69	0.71	0.70	0.70
Syria	0.42	0.39	0.37	0.40	0.39	0.38	0.38	0.37	0.39	0.39	0.38
Yemen	0.38	0.34	0.31	0.34	0.33	0.32	0.32	0.32	0.33	0.33	0.32
Africa	3.91	2.55	2.69	2.53	2.52	2.58	2.66	2.69	2.51	2.54	2.61
Egypt	0.67	0.63	0.62	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63
Angola[6]	1.37										
Gabon	0.23	0.23	0.24	0.23	0.23	0.23	0.24	0.24	0.23	0.23	0.23
Others	1.63	1.69	1.83	1.67	1.65	1.72	1.80	1.83	1.64	1.68	1.74
Total Non-OECD	28.82	27.87	28.98	27.81	27.65	28.11	28.63	28.91	27.36	27.83	28.18
Processing Gains[4]	2.04	2.07	2.13	2.08	2.10	2.11	2.11	2.10	2.10	2.11	2.11
Other Biofuels[5]	0.26	0.40	0.65	0.40	0.40	0.46	0.55	0.66	0.40	0.46	0.46
TOTAL NON-OPEC	51.09	50.20	51.25	50.21	49.67	50.46	51.26	51.02	49.30	50.22	50.46
Non-OPEC excl. Angola[6]	49.68	50.20	51.25	50.21	49.67	50.46	51.26	51.02	49.30	50.22	50.46
TOTAL SUPPLY	85.41			85.11	85.08				85.03	86.50	86.55

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 will reportedly cease from January 2007.
2 Comprises crude oil, condensates, NGLs and oil from non-conventional sources. No allowance is made in the non-OPEC forecast for exceptional events, which have, at certain times historically, reduced non-OPEC supply by 300-400 kbd on an annual basis.
3 Includes small amounts of production from Israel, Jordan and Bahrain.
4 Net volumetric gains and losses in refining (excludes net gain/loss in FSU, China and non-OECD Europe) and marine transportation losses.
5 Comprises Fuel Ethanol and Biodiesel supply from outside Brazil and US.
6 With effect from OMR of 13 February 2007, Angolan production will be reclassified within OPEC and excluded from the Non-OPEC total, for the period January 2007 onwards. Secondary aggregates allow comparison with previous year totals by including Angola within OPEC retroactively

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			
	Jun2007	Jul2007	Aug2007	Sep2007	Oct2007*	Oct2004	Oct2005	Oct2006	4Q2006	1Q2007	2Q2007	3Q2007
North America												
Crude	491.0	470.1	461.4	455.7	449.6	405.8	450.1	472.9	-0.22	0.28	0.31	-0.38
Motor Gasoline	233.7	233.3	222.8	228.2	230.6	233.8	231.1	233.0	-0.05	-0.14	0.04	-0.06
Middle Distillate	195.5	204.3	206.7	207.1	208.5	189.3	197.9	216.4	-0.08	-0.29	0.05	0.13
Residual Fuel Oil	44.4	48.7	45.8	44.6	46.4	44.4	43.3	51.4	-0.03	-0.03	-0.03	0.00
Total Products[3]	655.7	674.4	669.9	670.6	675.9	643.3	664.2	701.3	-0.36	-0.71	0.28	0.16
Total[4]	1294.3	1298.4	1290.7	1290.4	1288.2	1202.1	1275.8	1333.2	-0.76	-0.48	0.67	-0.04
Europe												
Crude	335.1	340.3	326.8	322.0	317.0	328.1	334.1	334.5	0.14	-0.18	0.10	-0.14
Motor Gasoline	102.5	103.0	103.3	104.6	103.4	113.2	107.8	104.3	0.11	-0.04	-0.08	0.02
Middle Distillate	271.9	263.3	267.5	266.2	253.6	253.4	263.0	263.9	0.05	-0.08	0.03	-0.06
Residual Fuel Oil	70.6	70.3	72.9	76.6	73.2	76.7	76.8	76.5	0.02	-0.01	-0.02	0.06
Total Products[3]	544.3	538.0	548.8	553.6	536.1	547.0	549.9	548.7	0.11	-0.13	-0.10	0.10
Total[4]	954.9	952.3	951.5	950.6	927.3	946.5	959.6	952.7	0.19	-0.25	0.02	-0.05
Pacific												
Crude	170.7	175.8	168.4	160.9	173.8	177.1	174.6	178.0	-0.02	-0.01	-0.02	-0.11
Motor Gasoline	24.4	22.8	23.1	21.9	22.5	23.3	24.4	23.8	-0.01	0.03	0.00	-0.03
Middle Distillate	67.9	75.4	81.5	77.8	73.1	75.0	84.5	87.4	-0.14	-0.14	0.08	0.11
Residual Fuel Oil	22.1	24.4	24.3	25.6	21.8	21.1	24.0	23.5	-0.01	-0.01	0.00	0.04
Total Products[3]	182.4	191.7	197.9	196.3	187.4	188.8	202.1	209.6	-0.30	-0.14	0.12	0.15
Total[4]	425.9	440.4	440.5	429.5	432.6	438.0	452.4	459.5	-0.33	-0.13	0.10	0.04
Total OECD												
Crude	996.7	986.1	956.6	938.6	940.5	910.9	958.8	985.4	-0.10	0.09	0.39	-0.63
Motor Gasoline	360.5	359.0	349.2	354.7	356.5	370.3	363.3	361.0	0.04	-0.15	-0.04	-0.06
Middle Distillate	535.3	542.9	555.7	551.1	535.2	517.7	545.5	567.7	-0.17	-0.52	0.16	0.17
Residual Fuel Oil	137.1	143.4	143.0	146.8	141.4	142.1	144.1	151.4	-0.02	-0.05	-0.05	0.11
Total Products[3]	1382.4	1404.1	1416.6	1420.5	1399.4	1379.1	1416.2	1459.6	-0.54	-0.97	0.30	0.41
Total[4]	2675.1	2691.1	2682.7	2670.5	2648.1	2586.6	2687.8	2745.4	-0.90	-0.86	0.79	-0.05

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			
	Jun2007	Jul2007	Aug2007	Sep2007	Oct2007*	Oct2004	Oct2005	Oct2006	4Q2006	1Q2007	2Q2007	3Q2007
North America												
Crude	690.3	690.3	690.4	692.8	694.0	670.3	685.2	688.6	0.01	0.00	0.02	0.03
Products	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	0.00	0.00	0.00	0.00
Europe												
Crude	175.3	177.0	176.7	177.4	177.4	162.3	166.4	174.7	-0.01	-0.01	0.01	0.02
Products	238.9	247.5	248.0	246.5	246.5	204.5	236.9	234.7	0.00	0.05	-0.01	0.08
Pacific												
Crude	385.0	385.0	385.0	385.1	385.1	382.5	381.1	381.5	0.03	0.01	0.00	0.00
Products	16.4	16.8	17.6	17.9	17.9	11.0	11.1	11.8	0.00	0.05	0.00	0.02
Total OECD												
Crude	1250.6	1252.2	1252.1	1255.2	1256.4	1215.1	1232.7	1244.8	0.04	0.00	0.03	0.05
Products	257.2	266.3	267.6	266.3	266.3	217.6	250.0	248.5	0.00	0.10	-0.01	0.10
Total[4]	1508.8	1519.5	1520.7	1522.5	1523.7	1433.6	1483.6	1494.3	0.04	0.10	0.02	0.15

* 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 2006		End December 2006		End March 2007		End June 2007		End September 2007 [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	179.2	79	180.1	77	182.5	80	189.7	78	198.8	-
Mexico	47.0	24	42.3	21	40.5	20	43.8	22	43.5	-
United States[4]	1787.0	86	1721.5	83	1678.8	81	1731.0	84	1720.9	-
Total[4]	2035.3	80	1966.0	77	1923.9	76	1986.6	78	1985.2	78
Pacific										
Australia	35.3	37	34.8	37	34.3	37	38.9	42	37.3	-
Japan	649.1	123	630.8	117	619.9	134	622.4	133	629.6	-
Korea	160.5	69	151.8	65	156.1	74	158.3	77	157.4	-
New Zealand	7.0	46	7.1	46	7.7	49	7.7	50	8.1	-
Total	851.9	98	824.6	93	818.0	105	827.3	106	832.4	93
Europe[5]										
Austria	19.0	64	21.9	76	23.8	78	21.5	68	22.6	-
Belgium	30.5	53	30.2	48	28.2	51	28.7	53	29.1	-
Czech Republic	19.3	94	19.7	101	20.2	92	20.5	95	19.5	-
Denmark	21.2	113	18.5	97	18.3	96	17.1	89	18.9	-
Finland	26.8	116	26.6	113	29.5	138	26.3	114	29.7	-
France	187.5	96	192.4	98	177.0	96	185.7	96	186.7	-
Germany	281.9	104	282.8	117	290.5	120	285.6	110	278.7	-
Greece	36.7	76	36.8	79	33.6	85	35.6	85	34.6	-
Hungary	17.5	98	16.6	108	18.1	107	16.0	94	17.1	-
Ireland	13.9	70	12.5	62	12.9	69	11.1	56	12.6	-
Italy	134.1	78	133.1	79	133.9	80	133.0	82	134.2	-
Luxembourg	0.9	15	1.0	16	0.9	15	0.9	15	0.9	-
Netherlands	121.1	119	118.6	138	117.7	137	120.6	133	118.9	-
Norway	29.4	127	35.1	156	20.2	78	23.5	93	24.2	-
Poland	37.3	70	41.5	89	43.9	90	50.0	90	50.9	-
Portugal	23.8	83	24.0	77	23.7	78	24.7	80	23.2	-
Slovak Republic	7.4	95	7.5	101	7.0	83	6.9	79	7.7	-
Spain	133.9	84	134.8	83	129.3	81	130.5	82	136.7	-
Sweden	38.6	104	33.8	94	35.6	99	32.1	90	31.5	-
Switzerland	38.9	135	38.1	150	38.7	173	38.5	157	38.1	-
Turkey	52.2	73	52.8	85	59.2	89	60.5	80	61.1	-
United Kingdom	97.4	54	108.5	60	105.8	59	100.8	58	98.5	-
Total	1369.2	87	1386.8	92	1368.2	92	1370.0	89	1375.4	87
Total OECD	4256.4	85	4177.3	84	4110.0	86	4183.9	86	4193.0	84
DAYS OF IEA Net Imports[6]	-	118	-	121	-	121	-	121	-	122

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 2007 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. 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]*		
3Q2004	4016	1435	2581	80	28	51
4Q2004	3998	1450	2547	79	29	50
1Q2005	4005	1462	2543	82	30	52
2Q2005	4117	1494	2623	84	30	53
3Q2005	4132	1494	2638	83	30	53
4Q2005	4083	1487	2597	81	29	52
1Q2006	4084	1487	2597	85	31	54
2Q2006	4151	1493	2658	85	30	54
3Q2006	4256	1495	2762	85	30	55
4Q2006	4177	1499	2679	84	30	54
1Q2007	4110	1507	2603	86	31	54
2Q2007	4184	1509	2675	86	31	55
3Q2007	4193	1523	2671	84	30	53

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 3Q2007 (when latest forecasts are used).

Table 6

IEA Member Country Destinations of Selected Crude Streams[1]

(million barrels per day)

	2004	2005	2006	4Q06	1Q07	2Q07	3Q07	Jul 07	Aug 07	Sep 07	Year Earlier Sep 06	Year Earlier change
Saudi Light & Extra Light												
North America	0.55	0.46	0.60	0.60	0.68	0.73	0.72	0.70	0.66	0.79	0.55	0.24
Europe	1.03	0.90	0.78	0.78	0.72	0.64	0.70	0.69	0.79	0.61	0.63	-0.02
Pacific	1.24	1.31	1.32	1.28	1.17	1.20	1.15	1.26	1.09	1.11	1.28	-0.18
Saudi Medium												
North America	0.80	0.81	0.64	0.61	0.47	0.59	0.59	0.57	0.65	0.56	0.75	-0.19
Europe	0.11	0.16	0.14	0.10	0.05	0.10	0.02	0.01	0.01	0.04	0.16	-0.12
Pacific	0.23	0.26	0.35	0.32	0.34	0.31	0.31	0.22	0.33	0.39	0.33	0.06
Saudi Heavy												
North America	0.22	0.17	0.21	0.19	0.15	0.05	0.11	0.04	0.04	0.27	0.21	0.06
Europe	0.23	0.23	0.18	0.14	0.09	0.16	0.11	0.15	0.13	0.04	0.23	-0.19
Pacific	0.15	0.25	0.23	0.23	0.20	0.18	0.20	0.20	0.17	0.23	0.22	0.01
Iraqi Basrah Light[2]												
North America	0.71	0.60	0.52	0.46	0.51	0.39	0.64	0.57	0.61	0.76	0.60	0.16
Europe	0.21	0.23	0.32	0.36	0.29	0.28	0.38	0.44	0.28	0.42	0.41	0.01
Pacific	0.12	0.06	0.08	0.07	0.11	0.18	0.20	0.08	0.27	0.24	0.13	0.11
Iraqi Kirkuk												
North America	0.02	-	0.00	-	-	-	-	-	-	-	-	-
Europe	0.08	0.05	0.01	0.01	0.04	-	0.06	0.04	0.05	0.10	0.04	0.06
Pacific	-	-	-	-	-	-	-	-	-	-	-	-
Iranian Light												
North America	-	-	-	-	-	-	-	-	-	-	-	-
Europe	0.24	0.20	0.26	0.27	0.31	0.31	0.26	0.29	0.28	0.22	0.27	-0.05
Pacific	0.16	0.15	0.13	0.11	0.12	0.06	0.07	0.07	0.12	0.04	0.14	-0.10
Iranian Heavy[3]												
North America	-	-	-	-	-	-	-	-	-	-	-	-
Europe	0.57	0.63	0.58	0.60	0.55	0.62	0.57	0.56	0.67	0.49	0.72	-0.22
Pacific	0.65	0.62	0.56	0.61	0.66	0.63	0.56	0.64	0.65	0.39	0.54	-0.14
Venezuelan Light & Medium												
North America	0.67	0.82	0.66	0.57	0.68	0.71	0.74	0.78	0.64	0.80	0.69	0.11
Europe	0.01	0.04	0.11	0.11	0.09	0.07	0.09	0.15	0.05	0.06	0.10	-0.03
Pacific	-	-	-	-	-	-	-	-	-	-	-	-
Venezuelan 22 API and heavier												
North America	0.88	0.72	0.72	0.72	0.55	0.70	0.75	0.78	0.80	0.66	0.72	-0.07
Europe	0.05	0.06	0.06	0.05	0.06	0.09	0.06	0.06	0.06	0.05	0.04	0.00
Pacific	-	-	-	-	-	-	-	-	-	-	-	-
Mexican Maya												
North America	1.36	1.27	1.24	1.15	1.19	1.19	1.25	1.37	1.20	1.18	1.23	-0.05
Europe	0.16	0.17	0.16	0.15	0.14	0.11	0.17	0.19	0.12	0.21	0.11	0.10
Pacific	0.00	-	-	-	-	-	-	-	-	-	-	-
Mexican Isthmus												
North America	-	0.03	0.04	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	-0.01
Europe	0.01	0.03	0.01	0.01	0.01	0.06	-	-	-	-	0.01	-
Pacific	0.00	-	-	-	-	-	-	-	-	-	-	-
Russian Urals												
North America	0.12	0.13	0.09	0.05	0.11	0.12	0.01	0.02	-	-	0.14	-
Europe	1.86	1.77	1.68	1.54	1.85	1.97	1.78	2.07	1.81	1.45	1.62	-0.17
Pacific	0.01	0.00	0.00	-	0.00	-	-	-	-	-	-	-
Nigerian Light[4]												
North America	0.80	0.90	0.79	0.72	0.95	0.77	0.87	0.75	0.85	1.02	0.64	0.38
Europe	0.28	0.35	0.33	0.37	0.23	0.27	0.22	0.22	0.25	0.19	0.26	-0.07
Pacific	0.11	0.05	0.04	0.03	0.02	0.02	-	-	-	-	0.03	-
Nigerian Medium												
North America	0.23	0.17	0.17	0.17	0.24	0.15	0.22	0.14	0.25	0.27	0.25	0.03
Europe	0.04	0.07	0.10	0.14	0.06	0.02	0.08	0.17	0.05	0.03	0.10	-0.07
Pacific	0.01	0.01	0.00	-	0.02	-	-	-	-	-	-	-

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, Poland and the Slovak Republic.
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)

	2004	2005	2006	4Q2006	1Q2007	2Q2007	3Q2007	Jul-07	Aug-07	Sep-07	Year Earlier Sep-06	Year Earlier % change
Crude Oil												
North America	8431	8457	8156	7937	8038	8151	8270	8023	8314	8479	8483	0%
Europe	9478	9792	9771	9770	9344	9760	9992	9644	10403	9926	10016	-1%
Pacific	6659	6801	6813	6674	6953	6340	6562	6813	6699	6161	6637	-7%
Total OECD	24569	25050	24740	24381	24335	24251	24824	24480	25417	24566	25638	-4%
LPG												
North America	24	18	14	28	16	14	38	18	42	56	1	7200%
Europe	225	248	265	274	287	283	241	265	221	238	205	16%
Pacific	541	527	579	497	565	588	502	501	554	450	593	-24%
Total OECD	790	793	858	799	867	885	782	784	817	744	798	-7%
Naphtha												
North America	99	115	62	96	33	31	33	54	20	25	71	-66%
Europe	282	273	312	314	271	222	280	268	284	290	304	-5%
Pacific	769	746	754	783	838	812	768	678	762	867	802	8%
Total OECD	1150	1133	1128	1193	1141	1066	1081	1000	1066	1181	1177	0%
Gasoline[3]												
North America	794	1034	1142	944	916	1362	1229	1275	1213	1199	1002	20%
Europe	137	165	154	153	261	219	135	184	143	76	139	-45%
Pacific	105	102	97	96	76	83	56	48	75	45	61	-28%
Total OECD	1035	1301	1393	1192	1253	1663	1420	1506	1431	1320	1202	10%
Jet & Kerosene												
North America	101	173	152	130	179	204	205	230	194	191	201	-5%
Europe	293	375	375	407	329	349	386	372	412	372	435	-14%
Pacific	77	66	71	76	49	35	37	32	38	43	45	-5%
Total OECD	471	614	598	612	557	588	629	634	644	607	681	-11%
Gasoil/Diesel												
North America	123	143	172	116	130	142	141	181	173	68	196	-65%
Europe	751	845	971	944	905	635	732	727	721	749	1036	-28%
Pacific	74	79	81	81	83	97	91	83	99	91	66	39%
Total OECD	947	1067	1224	1141	1119	873	964	990	994	908	1297	-30%
Heavy Fuel Oil												
North America	453	527	340	254	362	323	287	332	257	270	283	-5%
Europe	397	491	476	494	458	420	477	385	526	521	358	45%
Pacific	76	85	92	65	79	97	92	84	120	70	44	59%
Total OECD	926	1102	908	813	898	840	855	802	902	861	685	26%
Other Products												
North America	872	1024	1107	991	1035	1209	1032	1129	1022	942	1281	-26%
Europe	676	781	920	939	863	858	938	875	1051	887	917	-3%
Pacific	256	248	243	267	256	207	262	264	234	289	137	110%
Total OECD	1805	2052	2270	2197	2154	2274	2232	2268	2307	2118	2334	-9%
Total Products												
North America	2466	3034	2989	2559	2670	3285	2966	3219	2922	2752	3034	-9%
Europe	2759	3177	3473	3525	3373	2987	3189	3076	3357	3132	3393	-8%
Pacific	1898	1852	1918	1865	1947	1918	1808	1689	1882	1855	1748	6%
Total OECD	7123	8063	8379	7949	7990	8190	7964	7984	8161	7739	8176	-5%
Total Oil												
North America	10897	11490	11145	10496	10708	11436	11236	11242	11236	11231	12019	-7%
Europe	12237	12969	13243	13295	12717	12747	13181	12719	13761	13058	13409	-3%
Pacific	8558	8654	8731	8539	8900	8258	8370	8502	8581	8016	8386	-4%
Total OECD	31692	33113	33119	32330	32325	32441	32787	32464	33577	32305	33814	-4%

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

OIL MARKET REPORT CONTACTS

Editorial Enquiries

Editor — Lawrence Eagles
Head, Oil Industry & Markets Division
(+33) 0*1 40 57 65 90
e-mail: lawrence.eagles@iea.org

Demand — Eduardo Lopez
(+33) 0*1 40 57 65 93
e-mail: eduardo.lopez@iea.org

Supply — David Fyfe
(+33) 0*1 40 57 65 94
e-mail: david.fyfe@iea.org

Prices/OECD Stocks — Julius Walker
(+33) 0*1 40 57 65 22
e-mail: julius.walker@iea.org

Refining — David Martin
(+33) 0*1 40 57 65 95
e-mail: david.martin@iea.org

Demand — Toril Ekeland Bosoni
(+33) 0*1 40 57 66 36
e-mail: toril.bosoni@iea.org

Statistics/Freight/Trade — James Ryder
(+33) 0*1 40 57 66 18
e-mail: james.ryder@iea.org

End-User Prices/Statistical Support — Miklós Bánkuti
(+33) 0*1 40 57 67 76
e-mail: miklos.bankuti@iea.org

Editorial Assistant — Anne Mayne
(+33) 0*1 40 57 65 96
e-mail: anne.mayne@iea.org

Fax: *(+33) 0*1 40 57 65 99/40 57 65 09*

* 0 only within France

Media Enquiries

Press Office — Gwyn Darling
(+33) 0*1 40 57 65 54
e-mail: ieapressoffice@iea.org

Subscription and Delivery Enquiries

Oil Market Report Subscriptions
International Energy Agency
BP 586-75726 PARIS Cedex 15, France
e-mail: OMRSubscriptions@iea.org

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 Report (MTOMR) Report and Annual Statistical Supplement* (current issue of the statistical supplement dated 10 August 2007), 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 (© 2007 Platts - a division of McGraw-Hill Inc.).