

Oil Market Report

15 March 2018

HIGHLIGHTS

- **Demand is expected to increase by 1.5 mb/d in 2018 to 99.3 mb/d, a 0.1 mb/d upward revision compared to last month's forecast.** Global oil demand is estimated at 97.8 mb/d in 2017, unchanged from last month.
- **Strong early data contributed to an upward revision of 240 kb/d in our outlook for OECD growth in 2018.** The switch to natural gas in Pakistan and Iraq's power sectors is responsible for a downward revision of 150 kb/d to non-OECD demand.
- **Global oil supply in February eased to 97.9 mb/d and was up by 0.7 mb/d on a year earlier due to higher non-OPEC output.** Strong growth in the US is expected to boost this year's non-OPEC expansion to 1.8 mb/d compared to 760 kb/d in 2017.
- **OPEC crude oil production edged lower in February to 32.1 mb/d, led by losses in Venezuela and the UAE.** The call on OPEC crude rises steadily to 32.6 mb/d in 2H18, 480 kb/d higher than current output.
- **OECD commercial stocks rose in January for the first time in seven months to reach 2 871 mb.** However, the 18 mb increase was only half the usual level. The surplus to the five-year averaged fell to 53 mb. Cushing crude stocks reached their lowest level in three years.
- **Global crude oil prices fell in the first half of February, before stabilising later in the month.** The ICE Brent futures curve remains in backwardation. However, spreads are narrowing. Brent prices have averaged close to \$67/bbl this year.
- **Global refining throughput in 1Q18 slowed from 4Q17's record levels by 0.9 mb/d.** It will ramp up to a new record in 2Q18 at 81.8 mb/d. We assume refining throughput will only partially meet the seasonal demand increase, with inventories filling the gap.

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On balance

The past month has been relatively uneventful in terms of data changes, apart from an increase to our demand growth estimate. Crude oil prices are slightly lower than last month, and have generally been relatively stable for several weeks. Even so, the value of Brent crude oil is still averaging close to \$67/bbl in 2018, which is about 20% higher than in the early part of last year.

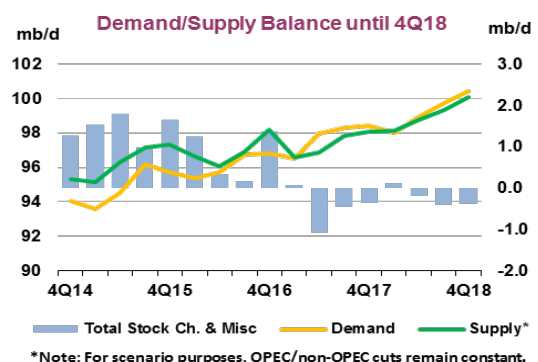
Looking at demand, our estimate for global growth in 2018 has increased by 90 kb/d taking it up to 1.5 mb/d. Although this is a modest revision, it is interesting that provisional data suggests very strong starts to the year in China and India, which, taken together, accounted for nearly 50% of global demand growth in 2017. Cold weather in some parts of the northern hemisphere in January-February saw an increase in heating demand.

On supply, new and revised data shows very little change in the outlook versus last month. Although US production was lower than expected in December, there is no change to our overall 2017 number neither to our outlook for 2018 that expects crude output there to grow by 1.3 mb/d. We retain our view that total non-OPEC production grew by 760 kb/d last year and that it will surge by 1.78 mb/d this year. Within the OPEC countries, the biggest risk factor is, and will likely remain, Venezuela. Our estimate for February shows output down again, by 60 kb/d. Other countries with a risk factor include Libya, and, to a lesser extent, Nigeria. In Libya, we saw another modest supply gain in February to 1.02 mb/d and, although stability cannot be taken for granted, it appears that the frequency and severity of production interruptions is declining and higher rates of output are being maintained. Taking OPEC as a whole, quota compliance in February was 147%, but even if Venezuela's production were at its allocated level, the group's compliance would still be close to 100%.

Stocks, and specifically OECD stocks, remain the most-cited indicator of oil market re-balancing. In this *Report*, we note that in January they increased month-on-month for the first time since July. However, the increase of 18 mb was half the average level for January seen in the past five years. Indeed, the surplus of total OECD stocks against the five-year average fell for the ninth successive month to 50 mb, with products showing a very small deficit.

In the meantime, market re-balancing is clearly moving ahead with key indicators – supply and demand becoming more closely aligned, OECD stocks falling close to average levels, the forward price curve in backwardation at prices that increasingly appear to be sustainable – pointing in that direction. In our chart, we assume for scenario purposes that OPEC production remains flat for the rest of 2018, and on this basis there will be a very small stock build in 1Q18 with deficits in the rest of the year. With supply from Venezuela clearly vulnerable to an accelerated decline, without any compensatory change from other producers it is possible that the Latin American country could be the final element that tips the market decisively into deficit.

Moving further into the future than is usual in this *Report*, in the IEA's five-year outlook, published in *Oil 2018 – Analysis and Forecasts to 2023*, we highlighted how in 2017 discoveries of new resources fell to a record low of only 4 bn barrels while 36 bn barrels were actually produced. We also pointed out that in 2018 investment spending is likely to grow only by 6% having barely increased at all in 2017. To 2020, production increases from non-OPEC countries are by themselves enough to meet demand growth. After that time, the pace of growth from these countries is less certain, and the market might well need the supplies currently being held off the market by leading producers.



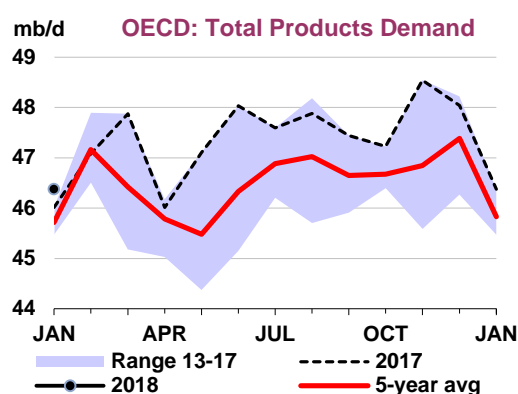
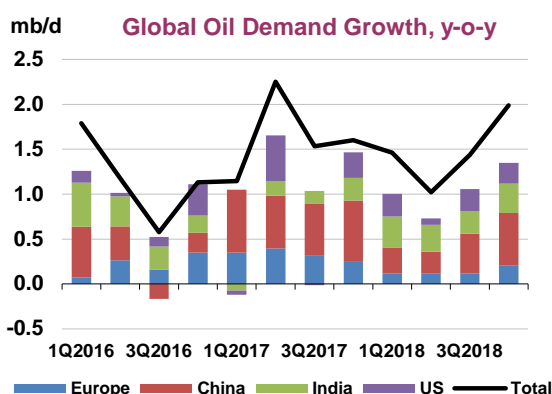
DEMAND

Summary

We now have our first set of complete 2017 data for OECD countries and the major non-OECD countries. Global oil product demand in 2017 is estimated at 97.8 mb/d, unchanged from last month. Global oil demand is expected to rise by 1.5 mb/d to 99.3 mb/d in 2018, a 90 kb/d increase compared to last month's Report.

OECD oil demand has been revised up by 240 kb/d in 2018, reflecting the impact of recent strong data and lower prices. For Europe in particular, recent data show strong demand growth in Poland and Turkey. US demand has also been revised higher, reflecting the impact of low temperatures in January and February on gasoil demand and as lower prices are expected to boost gasoline consumption. Japan's 2018 oil demand is likely to be stronger than expected in our previous forecast.

By contrast, non-OECD demand has been revised down by 150 kb/d for 2018. In Asia, small upward revisions in China and India almost offset downward revisions to Pakistan, where fuel oil deliveries fell sharply on new LNG imports. Russia's historical and forecast demand has been lowered due to changes to estimates of demand for 'other products'. Revisions in the Middle East reflect the rapid displacement of crude oil for direct use in power generation by imported and domestic natural gas in Iraq, demand changes in Saudi Arabia following the recent retail price increases, and downward revisions to demand in Qatar due to the embargo.



Fundamentals

While the economic assumptions that underpin our demand projections are unchanged since last month's report, price and weather inputs have been adjusted to reflect recent developments. World economic growth is expected to accelerate from 3.7% in 2017 to 3.9% in 2018, and this pick-up in growth will be broad-based. Recent signs of protectionism from the US are a risk to the forecast, raising the possibility of a global trade war. The growth in world trade has been particularly strong, accelerating from 2.5% in 2016 to 4.7% in 2017. This probably explains part of the strong increase in global gasoil demand in 2017 of 1.8%. The International Monetary Fund expects world trade to increase by 4.6% in 2018, suggesting continued support to oil demand. A slowdown would have strong consequences, particularly for fuel used in the maritime sector and in the trucking industry.

Temperature variations have had a strong impact on OECD heating oil demand so far in 1Q18. We compute heating degree-days (HDDs) for OECD countries using temperature data through February. For the forecast, we generally assume a return of HDDs to the 10-year historical average. A cold snap in North America in December/January supported strong heating oil demand in the US, triggering a spike in prices in the Atlantic Basin. By contrast, Europe experienced mild temperatures in January, and

provisional data showed particularly weak deliveries during the month. Colder weather in February likely boosted demand, however.

On prices, we updated our assumption with the ICE Brent futures curve as of early March. As a result, prices used in the model were 6.8% lower than that of February. With oil demand at roughly 99 mb/d and price elasticity close to -0.03, a decline of 7% in oil prices would result in an increase of 200 kb/d to the projections for 2018. The impact of falling prices is partially offset by other factors, in particular the switch to natural gas in some countries.

Global Oil Demand (2016-2018)

	(million barrels per day)*														
	1Q16	2Q16	3Q16	4Q16	2016	1Q17	2Q17	3Q17	4Q17	2017	1Q18	2Q18	3Q18	4Q18	2018
Africa	4.3	4.3	4.2	4.3	4.3	4.4	4.3	4.2	4.3	4.3	4.5	4.4	4.3	4.4	4.4
Americas	31.1	31.1	31.7	31.4	31.3	30.9	31.5	31.7	31.6	31.4	31.1	31.6	31.9	32.0	31.7
Asia/Pacific	33.3	32.7	32.1	33.3	32.9	34.1	33.9	33.3	34.5	33.9	35.1	34.5	34.0	35.5	34.8
Europe	14.3	14.7	15.2	14.9	14.8	14.7	15.1	15.5	15.2	15.1	14.8	15.2	15.6	15.4	15.3
FSU	4.5	4.5	4.9	4.8	4.7	4.5	4.7	4.9	4.8	4.7	4.6	4.7	5.0	4.9	4.8
Middle East	7.9	8.4	8.7	8.1	8.3	7.9	8.5	8.6	8.0	8.3	7.9	8.6	8.9	8.2	8.4
World	95.4	95.7	96.8	96.8	96.2	96.5	98.0	98.3	98.4	97.8	98.0	99.0	99.7	100.4	99.3
Annual Chg (%)	1.9	1.2	0.6	1.2	1.2	1.2	2.4	1.6	1.7	1.7	1.5	1.0	1.5	2.0	1.5
Annual Chg (mb/d)	1.8	1.2	0.6	1.1	1.2	1.1	2.3	1.5	1.6	1.6	1.5	1.0	1.4	2.0	1.5
Changes from last OMR (mb/d)	0.0	0.0	-0.1	-0.1	-0.1	-0.1	0.0	-0.1	0.3	0.0	0.2	0.0	0.1	0.1	0.1

* Including biofuels

While the global demand picture is little changed, recent revisions reflect higher demand recently observed in OECD countries and lower growth expected in some non-OECD countries in 2018. Recent OECD strength results mainly from strong economic activity and relatively low oil prices, while downward revisions to non-OECD demand arise from a rapid switch to natural gas in the power sector and exceptional conditions reducing demand.

OECD

This month we have our first complete set of data for OECD countries for 2017. Preliminary estimates are available for the US, Mexico, Japan, Korea and some European countries for January 2018. Recent data point to weak demand in Europe and robust demand in the US.

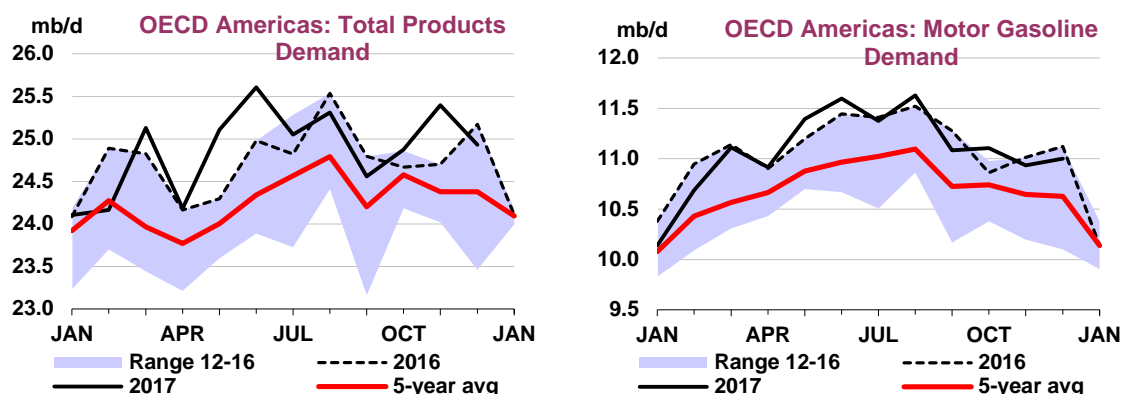
OECD Demand based on Adjusted Preliminary Submissions - January 2018

	(million barrels per day)													
	Gasoline		Jet/Kerosene		Diesel		Other Gasoil		RFO		Other		Total Products	
	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa
OECD Americas*	10.49	3.5	1.85	-1.6	4.66	6.2	0.57	7.3	0.68	-7.9	6.36	-1.03	24.61	2.1
US50	8.80	3.4	1.56	-2.7	3.80	7.2	0.27	17.7	0.42	-9.1	4.85	-0.64	19.70	2.5
Canada	0.80	4.7	0.14	3.9	0.29	-0.7	0.25	6.6	0.05	-12.6	0.81	-7.33	2.33	-0.7
Mexico	0.75	2.7	0.09	8.7	0.36	4.0	0.02	-43.0	0.11	-8.6	0.60	5.81	1.93	2.4
OECD Europe	1.71	1.4	1.30	2.2	4.45	2.1	1.35	-19.5	0.89	-2.6	3.65	-1.42	13.36	-1.9
Germany	0.41	4.1	0.22	5.1	0.70	0.8	0.32	-18.2	0.10	-13.7	0.58	-10.58	2.32	-5.0
United Kingdom	0.27	0.1	0.31	-3.5	0.44	3.2	0.10	2.1	0.02	-13.4	0.31	1.22	1.45	0.3
France	0.16	4.6	0.15	1.4	0.66	-1.2	0.22	-32.8	0.06	-22.5	0.35	-5.41	1.60	-8.2
Italy	0.14	-3.0	0.09	14.7	0.41	-0.5	0.06	-22.0	0.06	-10.5	0.40	0.45	1.16	-1.5
Spain	0.09	-0.1	0.11	-5.3	0.42	1.9	0.18	-11.1	0.14	-0.4	0.30	-2.42	1.24	-2.3
OECD Asia & Oceania	1.34	0.4	1.26	6.0	1.33	9.8	0.54	3.7	0.64	-5.6	3.30	-1.83	8.40	1.4
Japan	0.70	-1.7	0.76	2.4	0.39	1.2	0.38	6.3	0.33	-8.0	1.55	-3.72	4.12	-1.3
Korea	0.21	7.5	0.27	21.1	0.39	12.8	0.10	-1.5	0.27	-2.8	1.54	0.73	2.77	4.0
Australia	0.30	0.8	0.16	3.9	0.49	15.5	0.00	0.0	0.02	-1.2	0.14	-0.90	1.12	6.8
OECD Total	13.54	2.9	4.41	1.6	10.44	4.8	2.47	-9.8	2.21	-5.1	13.30	-1.33	46.37	0.8

* Including US territories

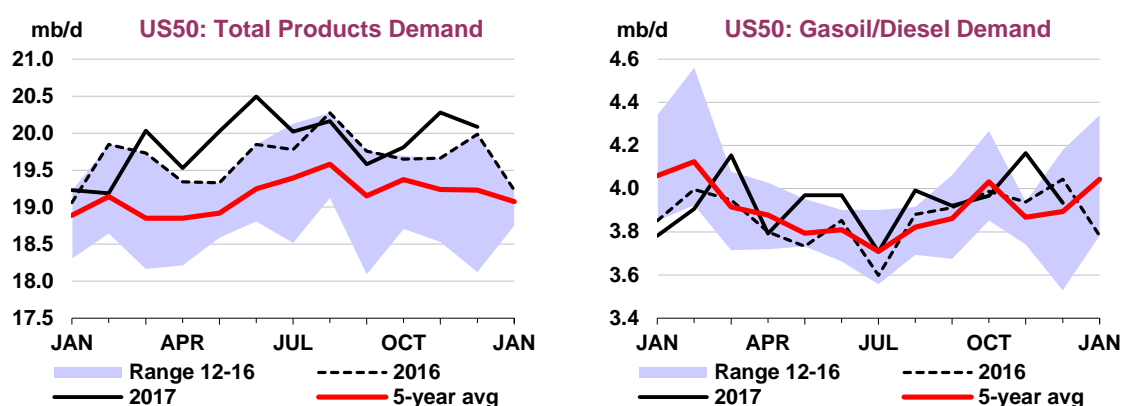
Preliminary data for January show a strong y-o-y increase in US gasoil demand and sharp declines in heating oil demand in Europe. It reflects in part cold weather in the US and warmer weather in Europe, and in part the impact of a spike in gasoil prices in January that discouraged European demand. The end-December/January cold snap in the US triggered a jump in heating oil demand and some refinery outages, supporting gasoil prices during the month.

Americas



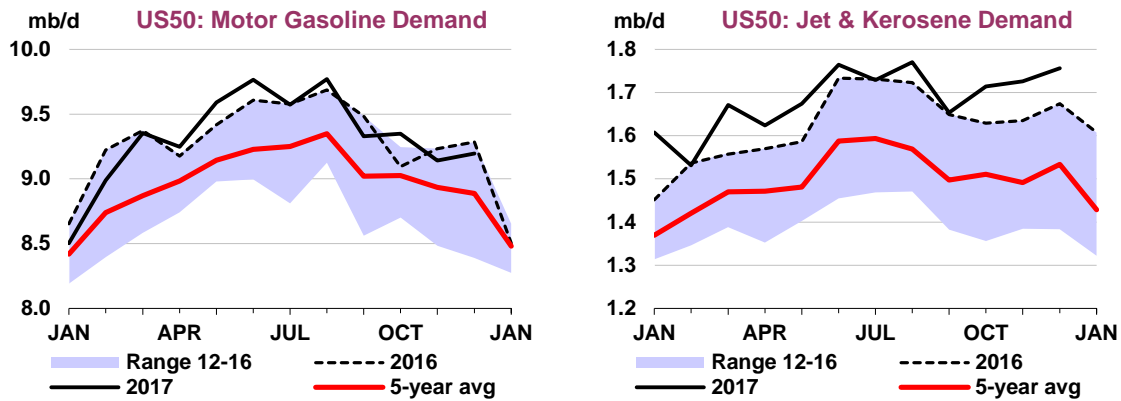
US oil demand rose by 100 kb/d y-o-y in December after growth of 620 kb/d in November. Department of Energy data shows a strong increase in LPG/ethane demand, up by 260 kb/d year-on-year (y-o-y), reflecting the start-up of ethane crackers on the US Gulf Coast. Jet fuel demand jumped by 80 kb/d y-o-y in December, after growth of 90 kb/d in November. The International Air Transport Association reported a growth of 3.9% y-o-y in US domestic air transport. The January cold snap reduced US air transport, as flights were cancelled, with New York airports the worst affected. The extreme cold weather also affected air travel in Canada.

US growth mainly came from LPG/ethane demand, which jumped by 260 kb/d in December after growth of 285 kb/d in November, possibly reflecting the start-up of the new Dow ethane cracker (1.5 mt capacity) at Freeport, Texas. Ethane demand should get a further boost in 2Q18 with the commissioning of Exxon-Mobil's new Baytown cracker (1.5 mt capacity).



Gasoline demand declined by 85 kb/d y-o-y in December as cold temperatures at the end of the month reduced transport demand. The Department of Transportation reported growth in travel demand of only 0.7% y-o-y in December, after growth of 1.1% in November. Traffic in the North East region declined by 0.2% y-o-y and Vehicle Miles Travelled in the South Atlantic region slowed by 0.6% y-o-y as cold temperatures reduce travel.

US gasoil demand declined slightly in December by 110 kb/d but is expected to rebound by 295 kb/d in January, according to weekly data. Gasoil demand continues to be supported by global trade, and CPB world trade monitor (Netherlands Bureau for Economic Policy Analysis) shows an increase of 7.0% y-o-y in the volume of US imports in December. Gasoil demand in January also benefited from cold temperatures, and a robust growth in US manufacturing production, accelerating from 3.4% in December to 3.6% y-o-y in January.



Canada's oil demand declined by 115 kb/d y-o-y in December on poor LPG/ethane deliveries, following strong demand in November. **Mexico's** demand continued to decline, by 230 kb/d y-o-y in December after a drop of 110 kb/d in November. Demand for all products declined with gasoil and gasoline deliveries falling by 60 kb/d and 30 kb/d respectively.

North American demand is expected to remain robust in 1Q18 after a strong 4Q17, supported by ethane deliveries. LPG/ethane demand was up 105 kb/d y-o-y in 4Q17 and in 1Q18 it should remain 190 kb/d higher than last year. Gasoline demand growth is expected to accelerate from 15 kb/d in 4Q17 to 50 kb/d in 1Q18. Gasoil demand, benefiting from severe weather conditions, increased by 55 kb/d y-o-y in 4Q17 and should expand by 75 kb/d in 1Q18. Total North American oil demand, after growing by 130 kb/d in 2017, should accelerate to 175 kb/d in 2018, supported by robust economic activity and several ethane crackers coming on stream.

Europe

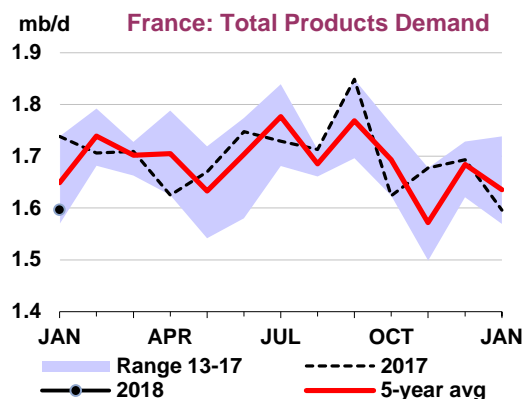
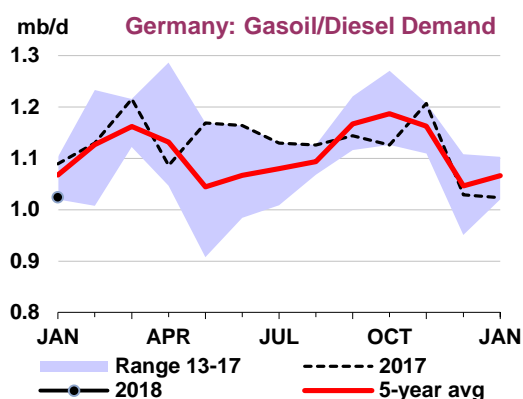
European oil demand rose by 480 kb/d y-o-y in November but growth slowed to 70 kb/d in December. Preliminary data point to a decrease of 260 kb/d in January. Total oil deliveries fell sharply in January in France and Germany, by 140 kb/d and 120 kb/d respectively.

Gasoil deliveries are largely responsible for the swing observed in total European demand. Demand rose by 255 kb/d y-o-y in November, but its growth slowed to only 5 kb/d in December and preliminary data point to a decline of 230 kb/d in January. Mild temperatures in January and a gasoil price spike in December/January are the main factors.

In **Germany**, oil demand declined by 75 kb/d y-o-y in December and by 120 kb/d in January, on poor gasoil and naphtha demand. For **France**, oil demand also showed some weakness, dropping by 140 kb/d in January on weak gasoil deliveries. In **Italy**, oil demand declined in December and January, by 20 kb/d and 15 kb/d respectively.

Our forecast for diesel demand in Germany has been slightly reduced to the benefit of gasoline, reflecting the impact of the so-called "diesel-gate" affair. At the end of February, Germany's highest federal administrative court ruled that cities could ban older diesel cars from their streets even without nationwide rules. Cars that only meet Euro-4 emission standards could therefore be banned from some

German cities from next January, while Euro-5 compliant vehicles could be banned from 1 September 2019. Euro-6 cars could remain on the road. Germany has 15 million diesel cars and only 2.7 million of these have Euro-6 technology. The court ruling is likely to further discourage the sales of diesel cars, whose share in new registrations declined from 46% in 2016 to 39% in 2017.

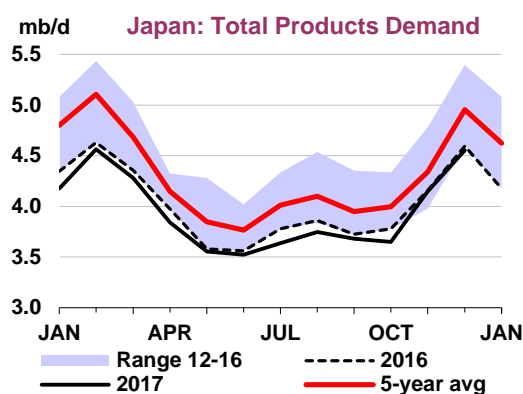
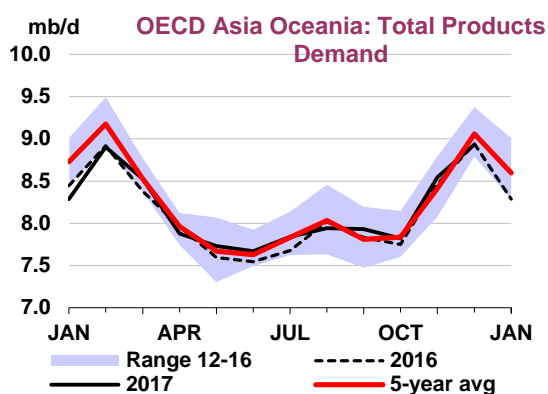


While the forecast for gasoil demand in 2018 has been slightly reduced for Germany, it has been raised by 30 kb/d for Poland to reflect robust demand reported in the latest data. Our forecast for Turkey has also been raised, by 60 kb/d on strong fuel oil and other product deliveries.

Overall, we expect demand growth of 250 kb/d in 4Q17 in Europe, slowing to 115 kb/d in 1Q18, reflecting the new January data. European oil demand growth should slow to 140 kb/d in 2018 from 330 kb/d in 2017.

Asia Oceania

Asia Oceania demand declined by 10 kb/d y-o-y in December, after rising by 75 kb/d in November. LPG demand, in particular, contracted by 80 kb/d y-o-y. In contrast, naphtha demand posted a strong growth of 90 kb/d. Gasoline demand rose by 40 kb/d and gasoil demand by 30 kb/d.



In **Japan**, oil demand dropped by 40 kb/d y-o-y in December and is expected to contract by 55 kb/d in January. Demand for gasoline and jet-kerosene rose in December by 30 kb/d and 35 kb/d respectively. Demand has been revised up slightly for 2018 to reflect stronger recent data. Japanese oil demand declined by roughly 80 kb/d in 2017 and we expect a decline of 85 kb/d in 2018 – a lower drop than in our previous forecast. **South Korean** demand declined by 50 kb/d y-o-y in December but bounced back by 110 kb/d in January, supported by strong naphtha, gasoil and kerosene deliveries. Naphtha deliveries rose by 100 kb/d y-o-y in December and 70 kb/d in January.

In **Australia**, gasoil demand continues to grow strongly, rising by 55 kb/d y-o-y in December. It has been increasing since the start of 2017, in part supported by the restarting of coal mining at the end of 2016.

Asia OECD oil demand increased by 45 kb/d in 4Q17 and is expected to rise by 10 kb/d in 1Q18. For the year as a whole demand in the region increased by 40 kb/d in 2017 but it will contract by 60 kb/d in 2018.

Non-OECD

Several large non-OECD countries are showing strong growth in January. India and Brazil, in particular, showed an impressive start to 2018. In other countries, for example Iraq and Pakistan, the switch to natural gas has accelerated and is displacing oil even faster than we had anticipated.

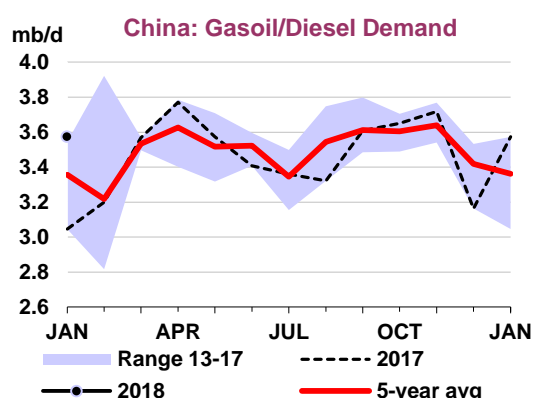
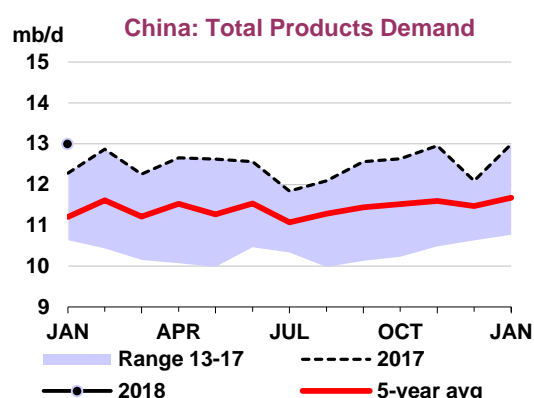
Non-OECD: Demand by Product

(thousand barrels per day)

	Demand			Annual Chg (kb/d)		Annual Chg (%)	
	2Q17	3Q17	4Q17	3Q17	4Q17	3Q17	4Q17
LPG & Ethane	6,474	6,285	6,472	173	46	2.8	0.7
Naphtha	2,766	2,696	2,873	71	141	2.7	5.2
Motor Gasoline	11,414	11,373	11,450	414	331	3.8	3.0
Jet Fuel & Kerosene	3,107	3,215	3,024	95	77	3.1	2.6
Gas/Diesel Oil	15,022	14,727	14,802	180	195	1.2	1.3
Residual Fuel Oil	5,167	5,153	4,944	-8	-213	-0.2	-4.1
Other Products	6,961	7,214	6,935	303	517	4.4	8.1
Total Products	50,912	50,661	50,500	1,229	1,095	2.5	2.2

China

The Chinese National Bureau of Statistics (NBS) published combined data for January/February, to offset possible distortions due to the New Year holidays. The NBS reported runs for January/February roughly unchanged on average vs. December. We assume slightly higher runs in January and lower runs in February, reflecting the impact of New Year holidays. The other components of China's apparent demand were available for January alone.



Product inventories rose strongly in January, as refiners prepared to meet New Year demand. Gasoline inventories rose by 75 kb/d, diesel by 105 kb/d and kerosene by 55 kb/d. Trade data showed a sharp drop in exports during the month, pushing up total net imports of oil products to 500 kb/d, from net exports of 190 kb/d in December. Higher refinery runs, higher stock building and lower exports pushed up the growth in Chinese estimated oil demand to 710 kb/d in January after 325 kb/d in December.

Gasoline demand declined by 430 kb/d y-o-y in January, largely reflecting a very strong increase in gasoline demand in January 2017. The drop in gasoline demand was more than offset by a strong increase in gasoil deliveries. Last year, the New Year holiday was in January and caused a rise in gasoline demand and reduced gasoil demand during the month. Gasoline growth will likely be corrected in February to show strong y-o-y growth.

In the short term, we expect Chinese oil demand growth to slow from 685 kb/d in 4Q17 to around 510 kb/d in 1Q18. For the year as a whole, growth should slow to 420 kb/d in 2018 from 640 kb/d in 2017.

China: Demand by Product

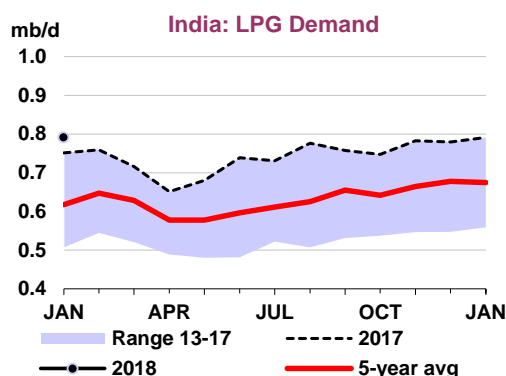
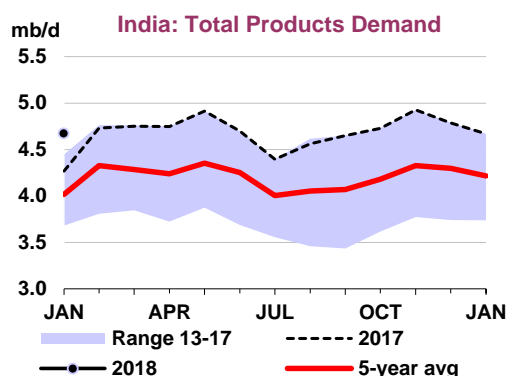
(thousand barrels per day)

	Demand			Annual Chg (kb/d)		Annual Chg (%)	
	2016	2017	2018	2017	2018	2017	2018
LPG & Ethane	1,513	1,644	1,707	130	64	8.6	3.9
Naphtha	1,115	1,172	1,218	57	46	5.1	3.9
Motor Gasoline	2,861	2,925	2,998	64	73	2.2	2.5
Jet Fuel & Kerosene	648	704	742	56	38	8.6	5.4
Gas/Diesel Oil	3,423	3,449	3,524	25	75	0.7	2.2
Residual Fuel Oil	336	378	390	43	11	12.7	3.0
Other Products	1,913	2,173	2,288	261	114	13.6	5.3
Total Products	11,809	12,445	12,867	637	422	5.4	3.4

Other Non-OECD

India oil demand rose by a strong 400 kb/d in January, after growth of 320 kb/d in December. Gasoil demand was particularly strong, followed by gasoline and LPG. LPG demand grew by 40 kb/d in 2017, as government policies supported demand growth in the residential sector. As LPG replaced kerosene used in heating and lighting, household kerosene demand dropped by 48 kb/d y-o-y. In January, however, the reduction in household demand was more than offset by an increase in jet-kerosene demand and thus total kerosene deliveries rose by 5 kb/d. Indeed, in January's India domestic air transportation industry posted the fastest growth in the world in terms of revenue passenger kilometers at 17.9%.

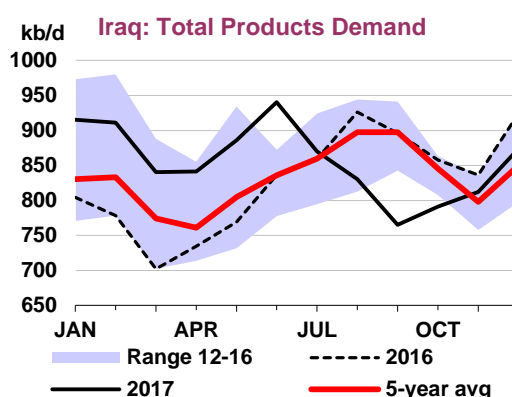
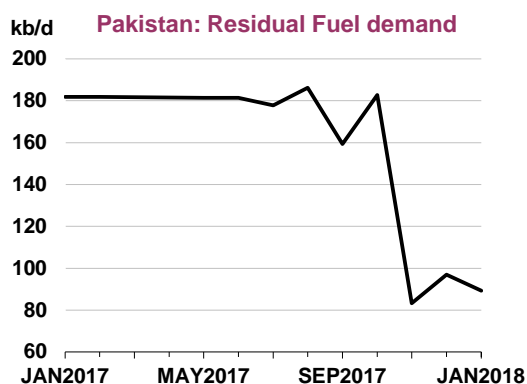
Gasoline demand rose by 80 kb/d y-o-y in January, as passenger car sales rebounded after a relatively weak end to 2017. Car sales were close to 185 000 in January/February, up from 158 000 in December 2017.



Gasoil demand rose by 205 kb/d in January, reflecting strong industrial production growth – up to 8% in recent data.

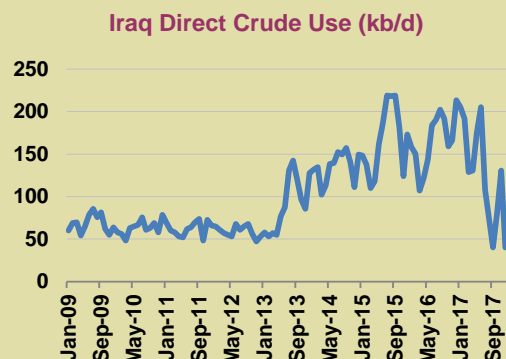
Our overall oil demand forecast for India in 2018 is largely unchanged: following growth of 120 kb/d in 2017, we will see an acceleration to 305 kb/d this year.

Pakistan's oil demand, has been revised down by 40 kb/d for 2018. Data from the Pakistan Oil Companies Advisory Council show a strong drop in fuel oil demand as power generation switches to LNG. In the first 10 months of 2017 demand was 180 kb/d, and from November 2017 to January 2018 it fell to 90 kb/d in as the country commissioned a second LNG terminal. A third terminal should start up in 2019.



Iraq switching to natural gas

Iraq's direct crude burning has been falling dramatically in recent months, as gas is making inroads into the power generation sector. Iraq used 165 kb/d of crude oil in its power sector in 2016 and 170 kb/d on average in the first 6 months of 2017. Since then, crude burning has been reported at 110 kb/d in July, 70 kb/d in August and zero in September. After a rebound to close to 100 kb/d in October and November, direct crude use was once again reported at zero in December. For December, however, Iraq reported very strong fuel oil demand. It seems implausible that crude use disappeared completely and our estimates have been adjusted to around 40 kb/d for the two months in question.



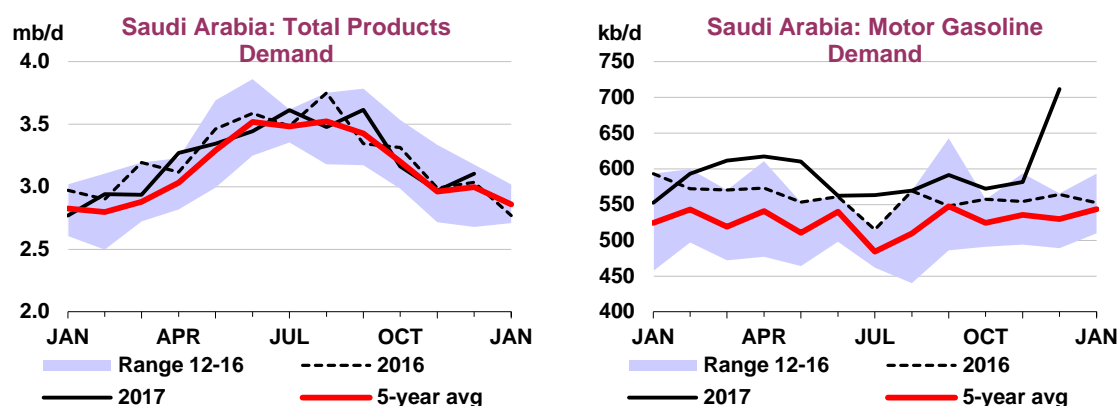
The drop in Iraqi direct crude burning is caused by the increased use of natural gas in its power sector. This partly comes from increased utilisation of associated gas that was previously flared, and partly from gas imports from Iran. Iraq still flares more than half of its associated gas, but the Basra Gas Company increased its recovery by 4.2 mcm/d in 2017 at the Rumaila, West Qurna and Zubair oil fields. The commissioning of a gas processing plant at the Badra field will add 4.4 mcm/d of natural gas production in 1Q18, used by the Zubaidiya power plant.

In addition, Iraq started to import natural gas from Iran in June 2017, starting at 7 mcm/d and rising to around

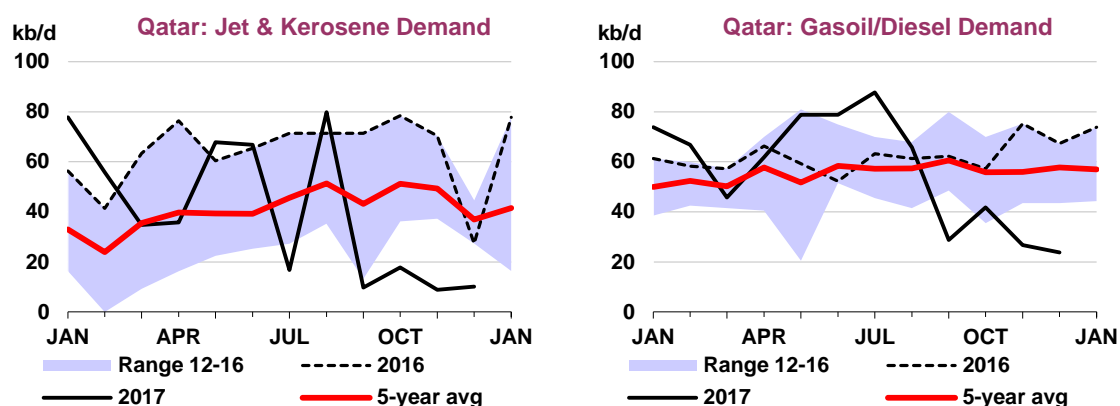
12 mcm/d currently. This gas is consumed in the power sector, and GE started a new gas power plant to receive Iranian gas at Mansuriya in Diyala province. Iranian gas exports are due to rise to 14 mcm/d in 2Q18. Furthermore, Iran plans to start supplying Basra with 25 mcm/d of gas from 2Q18. We estimate that domestic production and imports of gas from Iran initially could have replaced 30% of Iraq's direct crude use last summer, rising to 50% currently. In 2H18, natural gas, if the construction of the necessary infrastructure proceeds according to plan, could replace all crude oil currently used in power generation. Building the pipelines on the Iraqi side is however a difficult task and, for the moment, it seems to be prudent to assume that gas will replace roughly half the crude oil, leaving direct crude use in the power sector at about 90 kb/d on average in 2018. Most of the revision occurs in the first part of the year, as we had expected natural gas to arrive later. There is also a possibility that an increasing share of crude oil used in the power sector will be replaced by fuel oil.

Saudi Arabian oil demand rose by 70 kb/d y-o-y in December, on surging gasoline deliveries. They jumped by 150 kb/d in December, ahead of January price increases. Gasoline prices were increased by 127% from 1 January in an attempt to progressively bring them toward market levels. The price of 91 octane gasoline rose to US\$ 0.37/litre (+83%) and the price of 95 gasoline to US\$ 0.55/litre (+127%). The prices also include a new 5% VAT rate effective from January 1st. Diesel and kerosene prices were not raised. JODI data suggest that Saudi drivers have very quickly adopted a market oriented behaviour, reacting to price changes in a hurry. Gasoline deliveries are expected to post a y-o-y decline in January similar to the December increase. Gasoline demand growth is expected to remain subdued in 2018.

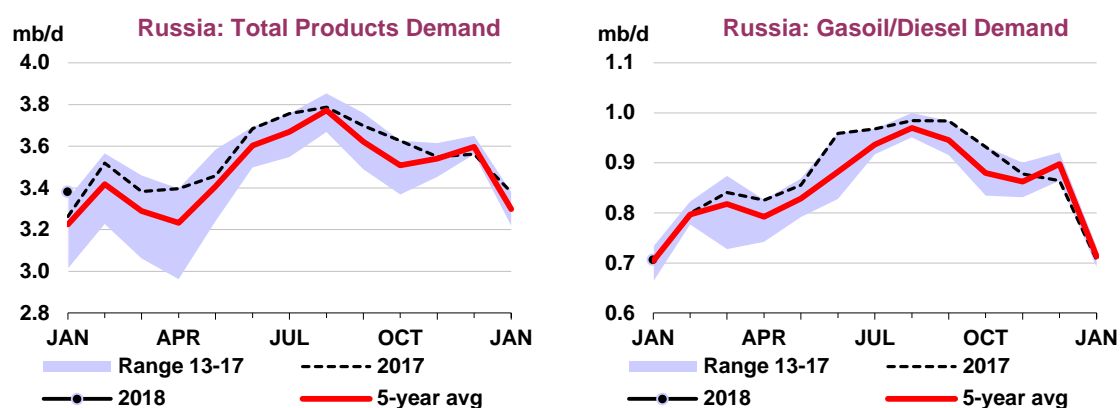
Overall, we expect Saudi oil demand to increase by 65 kb/d in 2018. In 2017, gasoil demand was particularly affected by the slowdown in construction projects, declining by 110 kb/d on average. In 2018, gasoil demand should stabilise, posting a small growth of 5 kb/d.



In **Qatar**, recent data showed the impact of the embargo imposed on the country by several Gulf Cooperation Council members and other countries in June 2017. Qatar's land border was closed by Saudi Arabia and the operations of Qatar Airways were severely hampered. However, according to the IMF, the impact on the economy has been mostly transitory and new trade routes were quickly established (*IMF March 5, 2018; Qatar: Staff Concluding Statement for the 2018 Article IV Mission*). Oil demand data continues however to reflect a significant drop in economic activity. Total oil demand is down by 55 kb/d y-o-y since July and jet kerosene demand is down by 40 kb/d.



For **Russia**, oil product demand rose by 120 kb/d y-o-y in January. Following a revision of estimates for 'other products', Russian demand is lower by 20 kb/d in 2016 and by 60 kb/d in 2017. However, in 2018 Russian oil product demand is forecast to increase by 60 kb/d.



Brazil's oil demand rose by a strong 75 kb/d in January, supported by robust gasoil and gasoline deliveries. Oil product sales have been increasing y-o-y for the past nine months, with the exception of December, supported by the ongoing economic recovery. Car sales, however, remain subdued, with close to 150 000 units sold in recent months, compared to 230 000 in 2014. Brazil's oil demand is expected to increase by 40 kb/d in 2018.

In **South Africa**, oil demand in 3Q17 has been revised up slightly, by 10 kb/d. Statistics from the Department of Energy showed demand stabilising after a continuous decline in 2016 and through mid-2017. Gasoil demand posted a small y-o-y growth during the quarter. South Africa's oil demand is expected to be unchanged through the end of the forecast period.

Non-OECD: Demand by Region

(thousand barrels per day)

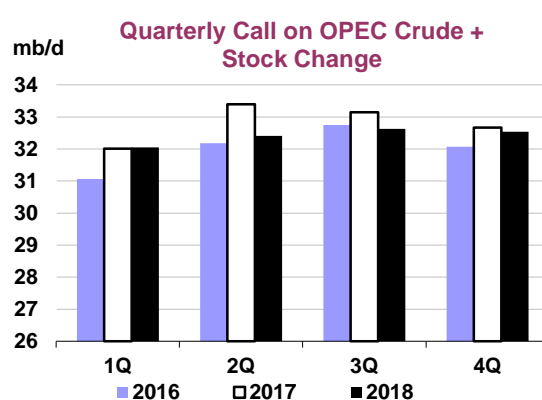
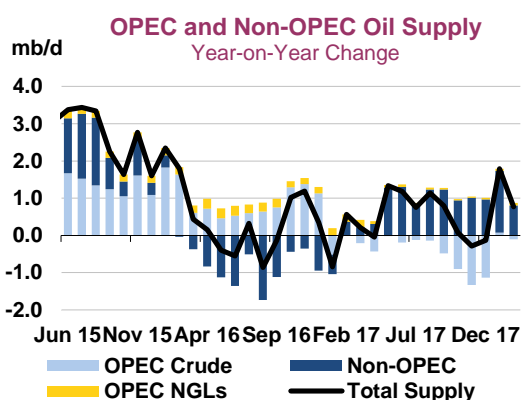
	Demand		Annual Chg (kb/d)			Annual Chg (%)	
	2Q17	3Q17	4Q17	3Q17	4Q17	3Q17	4Q17
Africa	4,311	4,235	4,332	54	14	1.3	0.3
Asia	26,108	25,400	26,037	1,108	1,165	4.6	4.7
FSU	4,686	4,949	4,810	69	-33	1.4	-0.7
Latin America	6,573	6,680	6,582	22	47	0.3	0.7
Middle East	8,494	8,647	7,992	-52	-131	-0.6	-1.6
Non-OECD Europe	740	751	748	29	31	4.0	4.4
Total Products	50,912	50,661	50,500	1,229	1,095	2.5	2.2

SUPPLY

Summary

Global oil supply eased a touch in February, but at 97.9 mb/d was up 740 kb/d on a year ago thanks to a stronger performance from the US. Further expansion in non-OPEC countries is expected over the remainder of 2018, lifting total gains for the year to 1.8 mb/d, more than double the rate of last year when the US returned to growth. While the US is expected to account for the majority of the increase, expanding by 1.5 mb/d, gains will also come from Canada, Brazil and Kazakhstan. This will offset declines elsewhere including in Mexico and China.

For February, non-OPEC supply was 58.9 mb/d and stood 810 kb/d higher than a year ago. As for OPEC, a little over a year into the output deal, its oil production is down only slightly on 2017. A steep slide in Venezuelan output has been mostly offset by rebounds in Libya and Nigeria.



Compared with the previous month, OPEC crude oil production edged lower to 32.1 mb/d, led by losses in Venezuela and the UAE. Further declines in Venezuela raised OPEC's compliance rate in February to 147%, the highest so far, and lifted the average since the start of the deal to 102%. Compliance by the non-OPEC countries was less impressive at 86%, but still robust. As for the market balances, quickening demand growth implies the requirement for OPEC crude oil will rise and reach 32.6 mb/d in 2H18 – 480 kb/d more than the 14-member group is pumping currently. That suggests further stock draws lie ahead assuming current levels of production are maintained.

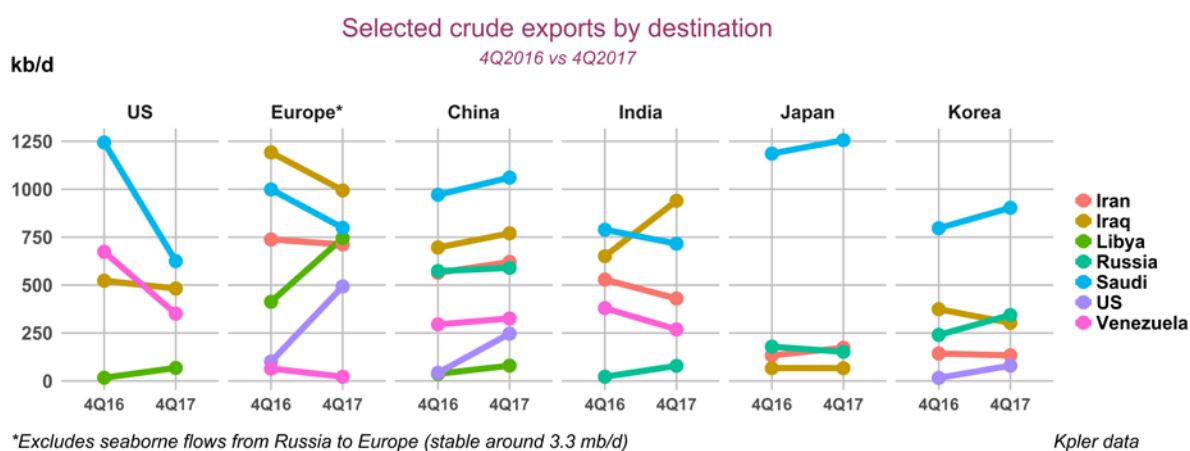
Officials from Saudi Arabia and Russia, drivers of the deal, have stressed their willingness to keep the pact in place and insist that any exit will be orderly. They have also signalled their willingness to institutionalise the partnership, although there is little detail available as to what this entails.

While attention has focused on the production side of the cutbacks, exports tell an equally important story. Top producers such as Saudi Arabia, Russia, Iraq and Iran ramped up their production and exports during 4Q16, in the run-up to the curbs. Since the output cuts began, however, there has been a pronounced shift in geographic trade flows along with a sharp drop in overall shipments.

It is hardly surprising that Asia, a key market for many exporters, has seen deliveries increase. Most producers placed higher volumes into China last year to meet increased demand from independent refiners. Iraq, which has achieved a compliance rate of only 41%, boosted deliveries to India to such an extent that it overtook Saudi Arabia as the biggest source of crude.

The US, still holding ample stocks and seeing impressive growth in domestic production, seems an obvious choice for Saudi cutbacks. Indeed, over the past year, shipments nearly halved. Venezuela, with

its industry in decline, has been forced to cut exports to the US, and in February they sank to around 400 kb/d versus 670 kb/d in 4Q16. Lower Venezuelan shipments have, however, been partly offset by higher Canadian flows. Still barred from selling oil into the US, Iran maintained higher sales to Europe.



Libya is ramping up short-haul sales into Europe where it is closing in on Saudi Arabia as the third biggest source of seaborne supply after Iraq and Russia. As for Russia, while cutting production by nearly 300 kb/d since October 2016, exports, including seaborne shipments to Europe, held steady during 2017. The OPEC/non-OPEC cuts have perhaps made it easier for the US to enter international markets. It, too, is shipping as much as it can to China and boosting supplies into Europe. US crude shipments, currently running at around 1.5 mb/d, are set to climb.

OPEC / Non-OPEC Output Compliance¹

(million barrels per day)

	Jan 2018 Supply	Feb 2018 Supply	Supply Baseline ²	Agreed Cut	February Actual Cut	January Compliance	February Compliance	Average Compliance	Sustainable Production Capacity ⁶	Spare Capacity vs Feb 2018
Algeria	1.02	1.04	1.09	-0.05	-0.05	138%	98%	88%	1.08	0.04
Angola	1.57	1.57	1.75	-0.08	-0.18	232%	232%	152%	1.60	0.03
Ecuador	0.52	0.51	0.55	-0.03	-0.04	108%	146%	75%	0.54	0.03
Equatorial Guinea	0.13	0.13	0.14	-0.01	-0.01	83%	83%	117%	0.13	0.00
Gabon	0.21	0.20	0.20	-0.01	0.00	-89%	22%	10%	0.21	0.01
Iran ³	3.80	3.82	3.71	0.09	0.11	103%	126%	104%	3.85	0.03
Iraq	4.48	4.48	4.56	-0.21	-0.08	39%	39%	41%	4.75	0.27
Kuwait	2.70	2.70	2.84	-0.13	-0.14	105%	105%	101%	2.94	0.24
Qatar	0.62	0.60	0.65	-0.03	-0.05	93%	160%	129%	0.64	0.04
Saudi Arabia	9.98	9.98	10.54	-0.49	-0.56	116%	116%	120%	12.10	2.12
UAE	2.85	2.80	3.01	-0.14	-0.21	117%	153%	69%	3.18	0.38
Venezuela	1.61	1.55	2.07	-0.10	-0.52	481%	544%	164%	1.60	0.05
Total OPEC 12	29.49	29.38	31.11	-1.18	-1.73	138%	147%	102%		
Libya ⁴	1.00	1.02							1.02	0.00
Nigeria ⁴	1.68	1.70							1.70	0.00
Total OPEC	32.17	32.10							35.34	3.24
Azerbaijan	0.82	0.81	0.81	-0.04	-0.01	-3%	22%	79%		
Kazakhstan	1.91	1.93	1.80	-0.02	0.12	-520%	-604%	-232%		
Mexico	2.19	2.14	2.40	-0.10	-0.26	213%	260%	176%		
Oman	0.97	0.97	1.02	-0.05	-0.05	100%	106%	93%		
Russia	11.33	11.34	11.60	-0.30	-0.26	88%	87%	81%		
Others ⁵	1.20	1.21	1.22	-0.05	-0.01	54%	25%	50%		
Total Non-OPEC	18.42	18.39	18.86	-0.55	-0.47	81%	86%	85%		

¹ OPEC figures are crude oil only, Non-OPEC figures are total oil supply (including NGLs).

² OPEC based on Oct 2016 OPEC secondary source figures, except Angola which is based on Sep 2016. Non-OPEC based on IEA Oct total supply estimates. Kazakhstan Nov estimate.

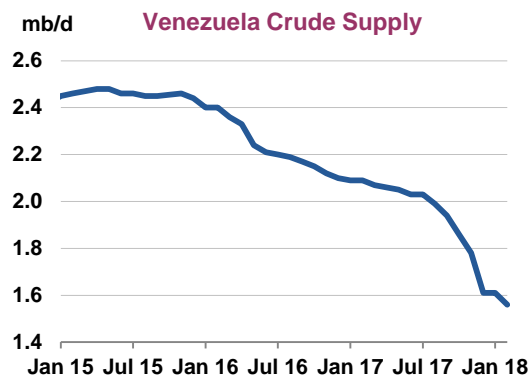
³ Iran was given a slight increase. ⁴ Libya and Nigeria are exempt from cuts. ⁵ Bahrain, Brunei, Malaysia, Sudan and South Sudan.

⁶ Capacity levels can be reached within 90 days and sustained for an extended period.

OPEC crude oil supply

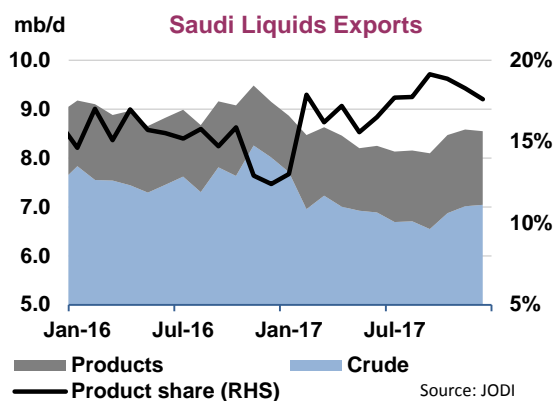
OPEC crude oil production eased to 32.1 mb/d in February, led by further losses in Venezuela and lower output from the UAE. The deepening unplanned decline in **Venezuela** knocked crude oil production 420 kb/d below its OPEC target during February and helped boost OPEC's compliance with supply cuts to the highest ever. As a worsening economic crisis took a toll on Petroleos de Venezuela (PDVSA) and its foreign joint venture partners, output slid 60 kb/d month-on-month to 1.55 mb/d, 540 kb/d below the February 2017 level. Chevron, for example, saw net production from its 30% share in the Petropiar extra-heavy crude upgrader in the Orinoco Belt drop by about 20% in 4Q17 versus the last three months of 2016.

Cash-strapped PDVSA has long struggled to pay back foreign investors as the government channels a substantial amount of export revenue into social programmes. Payment issues have prompted some international oil companies (IOCs) to give up on the country or scale down their activities. Such problems, combined with difficulties in sourcing diluent to produce crude, poor reservoir management and a deteriorating oil network, are likely to lead to further production declines. Indeed, by the end of this year, capacity could fall to 1.38 mb/d, the lowest level since the late 1940s.



The **UAE** was the other source of notable decline, with February marking the third straight month with its OPEC compliance rate above 100%. Oil field maintenance reduced output to 2.8 mb/d, down 140 kb/d year-on-year (y-o-y), and the lowest since February 2016. Scheduled work finished in early March. The Abu Dhabi National Oil Co (Adnoc) is meanwhile welcoming new participants into its restructured, 700 kb/d offshore oil concession that has been split into three separate ventures: Lower Zakum, Umm Shaif and Nasr, and Satah al-Ras Boot (Sarab) and Umm Lulu. At the time of writing, it had awarded Eni a 10% stake in Umm Shaif and Nasr and a 5% share in Lower Zakum; secured a deal with an Indian consortium led by Oil and Natural Gas Corp (ONGC) for a 10% share in Lower Zakum; and awarded a 20% stake in the Sarab and Umm Lulu fields to Cepsa. Inpex has renewed its 10% participation in Lower Zakum. Shares are still open in all three concessions and Adnoc will retain a 60% stake in each.

Saudi Arabia held output below its agreed supply target as it has done since cuts between OPEC and selected non-OPEC countries began last January. Crude supply in February held at 9.98 mb/d, flat on a year ago. The Kingdom has vowed to sustain the lower levels to help remove the remaining inventory overhang. To that end, it intends to keep crude exports below 7 mb/d in March and April even though its internal requirement will fall due to the shutdown of the Samref refinery for scheduled maintenance.

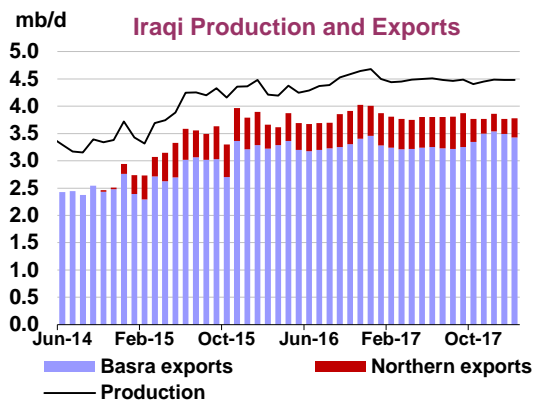
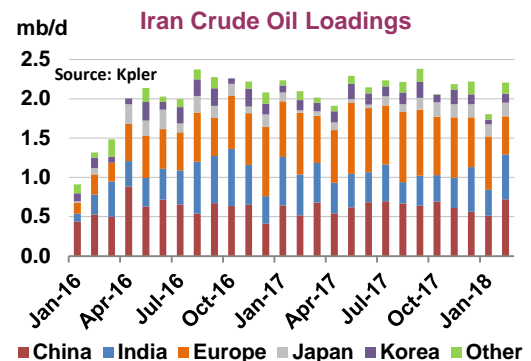


Saudi Arabia shipped an average 7 mb/d of crude oil to world markets last year, down 680 kb/d on 2016, according to the latest data from the Joint Organisations Data Initiative (JODI). While exports of crude oil have been running sharply lower, exports of refined products have trended higher with shipments up 75 kb/d to 1.44 mb/d in 2017. Overall sales, however, were 600 kb/d lower at 8.4 mb/d. On the domestic front, the amount of crude burned in power plants was a touch lower at 460 kb/d versus 500 kb/d in 2016.

Supply in neighbouring **Kuwait** and **Qatar**, which have also maintained tight compliance with supply cuts, held similarly steady during February.

Production in **Iran** crept up 20 kb/d in February to reach 3.82 mb/d. Exports of crude oil rose by 400 kb/d to 2.2 mb/d, according to tanker tracking data, although some of it may have been drawn from storage at Kharg Island. India raised purchases by 240 kb/d, while China's increased by 210 kb/d. Sales to Europe were down by 200 kb/d. Iran had no oil stored at sea at the end of February.

Iran is seeking to raise production by attracting foreign companies into its energy sector after years of under-investment due to international sanctions. It is negotiating with companies from Europe, Russia and Asia with hopes of securing new upstream contracts by the end of March. Only one deal has been signed so far with a Western major: Total for Phase 11 of the giant offshore South Pars gas field though a final investment decision is still pending.



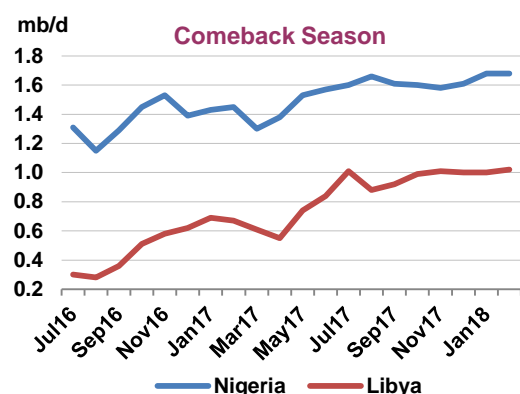
Production from **Iraq** held steady in February at 4.48 mb/d. Crude oil exports from the south, disrupted by bad weather, slipped by 60 kb/d m-o-m to 3.43 mb/d. Production from Basra-area fields has been increased in recent months to compensate for losses in the north. Iraqi forces regained control over the northern oil fields of Kirkuk in mid-October and output at core fields (over 250 kb/d) has been shut-in since then.

Sales of northern crude via the Kurdistan Regional Government (KRG) pipeline to Turkey were running at roughly 350 kb/d, up 70 kb/d on January, with the extra

volume likely to have been drawn from storage. Shipments of northern Iraqi crude could rise following an agreement by the federal government with the KRG to restart Kirkuk exports via Turkey. No further details were provided.

Libya is holding onto its recent gains, with output at or above 1 mb/d for a fourth straight month. Production of 1.02 mb/d in February stood 350 kb/d above the previous year when militant attacks and protests disrupted flows. That risk remains, although recent incidents have tended to be resolved swiftly. A shutdown at El Sharara, Libya's largest oil field, lasted less than a day. However, the latest disruption, sparked by protests at the 70 kb/d El Feel field, has dragged on since 23 February. Elsewhere in the country, Total has acquired a 16.33% stake in the Waha Oil Co from Marathon for \$450 million. Other stakeholders are Libya's National Oil Corp with 59.18%, ConocoPhillips with 16.33% and Hess with 8.16%. The crude from Waha is delivered to the Es Sider terminal for export.

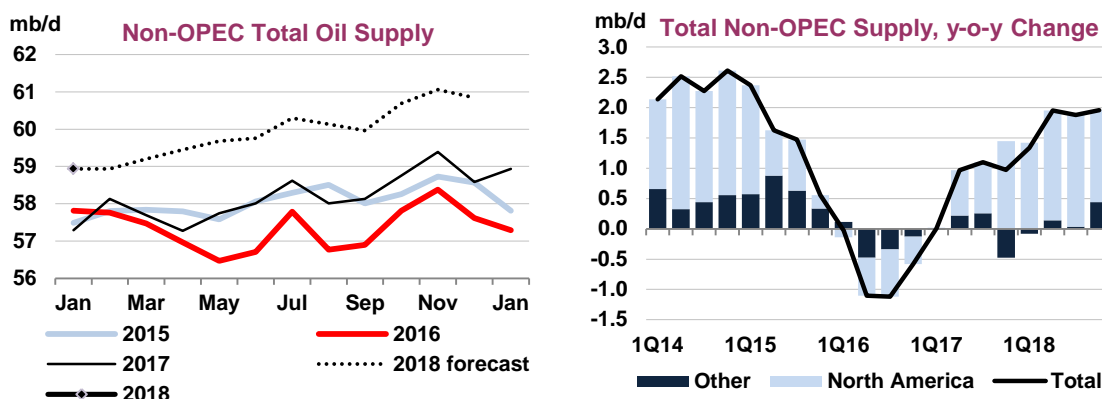
Nigeria, too, has managed to sustain higher output. Production in February inched up to 1.7 mb/d, the highest in two years. A lull in the militant attacks that cut supply in the summer of 2016 to the lowest in three decades allowed output to climb 250 kb/d above the February 2017 level. Nigeria has pledged to support fellow OPEC members that have reduced supply and is determined to fend off



renewed violence in the Niger Delta oil heartland. Output in **Angola** held in February at 1.57 mb/d, down 80 kb/d on a year ago. Production should get a small bounce later this year after the ramp up of Total's \$16 billion Kaombo project. At its peak, the ultra-deep-water field is expected to pump 230 kb/d. **Algerian** production inched up to 1.04 mb/d.

Non-OPEC

The outlook for non-OPEC oil supply is largely unchanged since last month's Report, with output set to increase by close to 1.8 mb/d during 2018. The United States dominates growth, accounting for 1.5 mb/d of the total increase. Gains will also come from Canada (290 kb/d) and Brazil (150 kb/d), as new projects ramp up. Non-OPEC oil production grew by 760 kb/d last year to 58.1 mb/d.



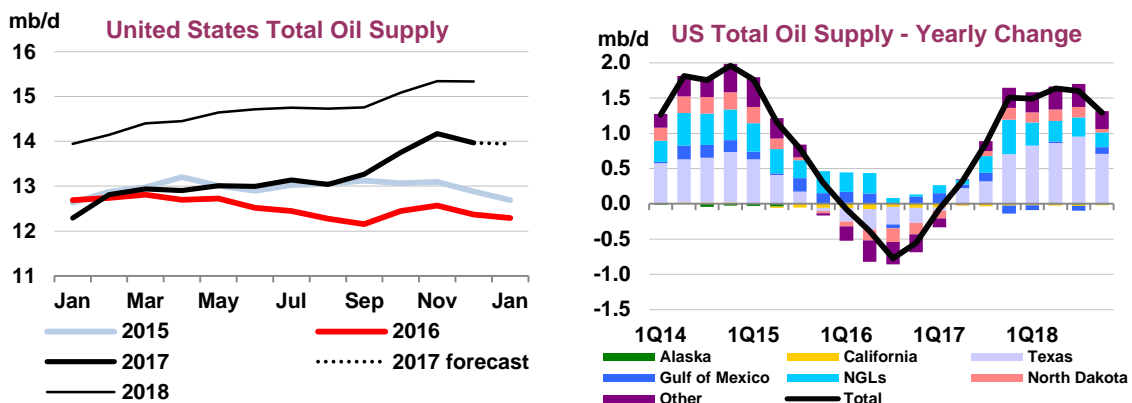
By end-2017, non-OPEC output was nearly 1 mb/d higher than a year earlier. The increase came despite extensive disruptions to North Sea production in December following the shutdown of the Forties pipeline, and as 10 non-OPEC countries implemented output cuts in alliance with OPEC. February output from the non-OPEC producer pact is estimated at 470 kb/d lower than the baseline figures, representing a compliance rate of 86%. Russia, Mexico and Oman accounted for the majority of the cuts.

Non-OPEC Supply

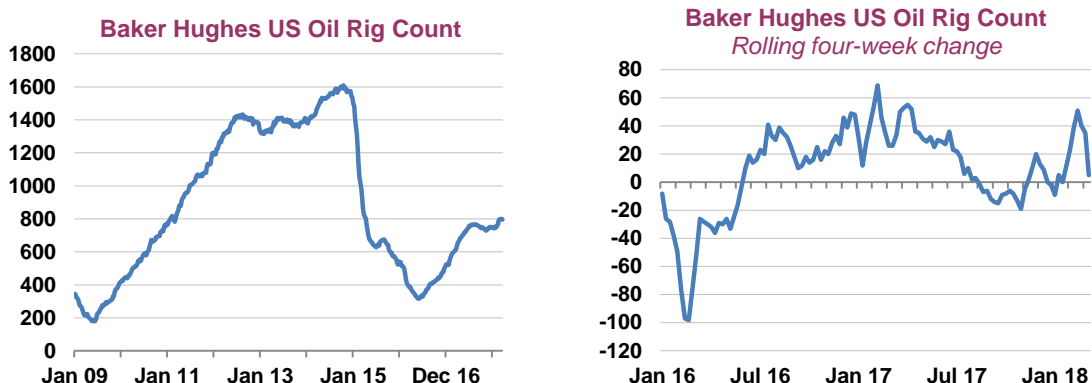
(million barrels per day)

	2016	1Q17	2Q17	3Q17	4Q17	2017	1Q18	2Q18	3Q18	4Q18	2018
Americas	19.5	19.9	19.8	20.2	21.1	20.2	21.3	21.6	22.0	22.6	21.9
Europe	3.5	3.7	3.5	3.4	3.4	3.5	3.6	3.5	3.4	3.5	3.5
Asia Oceania	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Total OECD	23.4	24.0	23.6	24.0	24.9	24.1	25.4	25.5	25.8	26.6	25.8
Former USSR	14.2	14.4	14.3	14.3	14.4	14.4	14.4	14.4	14.3	14.5	14.4
Europe	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
China	4.0	3.9	3.9	3.8	3.8	3.9	3.8	3.8	3.8	3.7	3.8
Other Asia	3.6	3.5	3.4	3.4	3.4	3.5	3.4	3.4	3.3	3.3	3.3
Latin America	4.5	4.6	4.5	4.5	4.5	4.5	4.6	4.7	4.6	4.8	4.7
Middle East	1.3	1.2	1.2	1.2	1.3	1.2	1.2	1.2	1.2	1.2	1.2
Africa	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.8	1.8	1.7	1.8
Total Non-OECD	29.3	29.5	29.3	29.2	29.3	29.3	29.3	29.3	29.2	29.4	29.3
Processing Gains	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
Global Biofuels	2.3	1.9	2.4	2.8	2.4	2.4	2.0	2.5	2.8	2.5	2.5
Total Non-OPEC	57.4	57.7	57.7	58.3	58.9	58.1	59.0	59.6	60.1	60.9	59.9
Annual Chg (mb/d)	-0.7	0.0	1.0	1.1	1.0	0.8	1.3	2.0	1.9	2.0	1.8
Changes from last OMR (mb/d)	0.0	0.0	0.0	0.0	-0.1	0.0	0.1	0.0	0.0	0.0	0.0

US crude oil production rose by an estimated 135 kb/d during February, to a record 10.2 mb/d. NGL production also increased, taking total oil supply to 14.1 mb/d. Severe weather conditions likely curbed output during January, with arctic temperatures causing shut-ins in North Dakota and as far south as Texas. In December, the latest month for which official production data is available, US crude and condensate production dropped by 110 kb/d, to 9.95 mb/d. The decline came from the Gulf of Mexico, where output slipped by 130 kb/d, following an explosion at Shell's Enchilada platform in November. The incident also forced the closure of Shell's nearby Auger platform and the Hess-operated Conger field. In contrast, onshore production inched 20 kb/d higher, the 12th consecutive monthly gain. At 7.88 mb/d, Lower-48 onshore output in December was 1.38 mb/d higher than a year earlier. More than half the increase came from Texas, increasing 780 kb/d y-o-y, with significant gains also from North Dakota (220 kb/d), Colorado (135 kb/d) and New Mexico (135 kb/d).

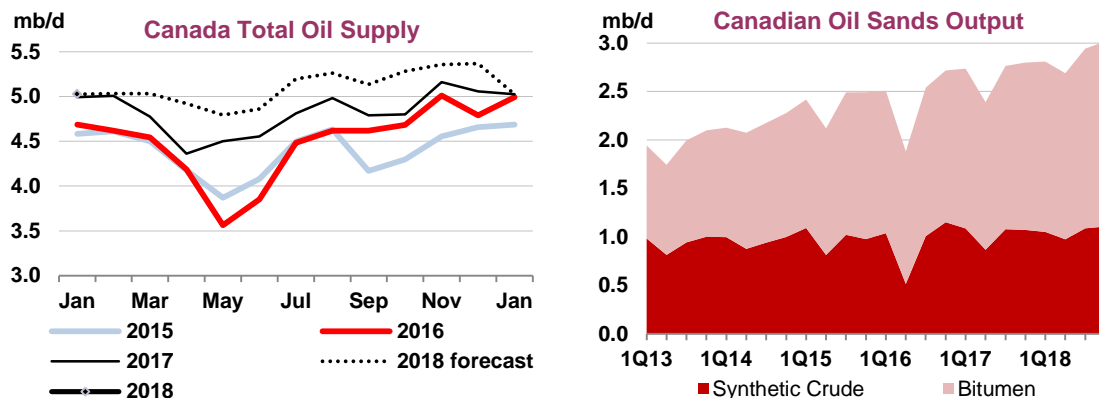


US crude output is expected to surpass 11 mb/d by year-end, adding 1.3 mb/d for the year as a whole. NGL output will also increase as natural gas output continues to rise and as new ethylene crackers come on line. Production gains will be driven by the Permian, although pipeline constraints could dampen growth during the second half of the year and until new capacity comes online towards the end of 2019 (see our five-year forecast published in *"Oil 2018, North American oil looking for a way out"*). Other bottlenecks, such as shortages of sand and labour, as well as mounting demands for investor returns, could also slow growth, but most likely beyond 2018. For now, US producers continue to ramp up activity. During February, another 35 oilrigs were brought into service, and, although the rig count dipped by four in the week ending 9 March, at 796 the count was up by 54 since the start of the year and 480 higher than the low-point reached in May 2016.



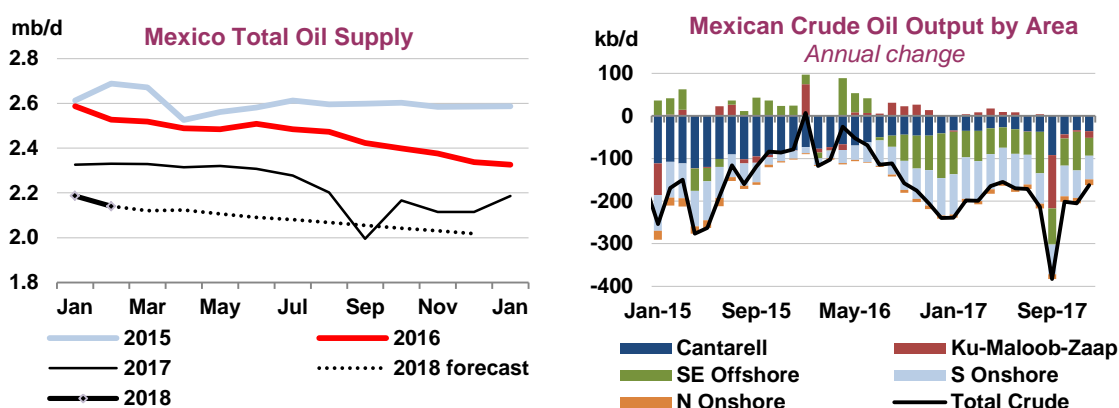
Canadian oil output fell marginally in January on lower synthetic crude oil supplies. Output from Alberta's upgraders dropped by 185 kb/d m-o-m from December's 1.23 mb/d all-time high. Un-upgraded bitumen supplies rose in contrast, and stood 80 kb/d higher than in the previous month and 160 kb/d up on a year earlier. Offshore output held steady, at around 230 kb/d as lower production from the White

Rose field was offset by a recovery in flows from Terra Nova. In January, the Canada-Newfoundland and Labrador Offshore Petroleum Board ordered Husky to suspend operations at White Rose after an investigation found that it had not followed its procedures when an iceberg came too close to the facility in March 2017. The suspension has since been lifted allowing for output to resume. At just over 5 mb/d, total oil production was marginally higher than a year earlier.



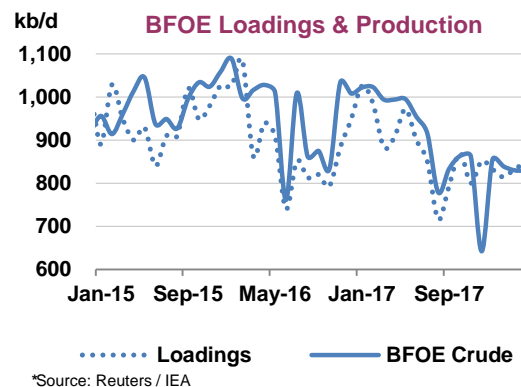
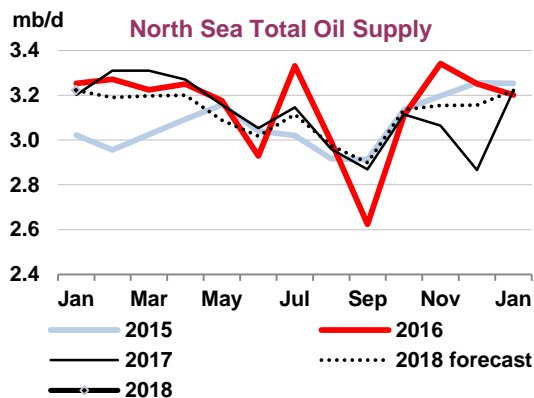
Production should see further support during 2018, as Canadian Natural Resources completed its Horizon upgrader expansion towards the end of 2017, and as the Fort Hills and Hebron projects ramp up over the course of the year. Suncor plans to increase output at its Fort Hills oil sands mine to at least 90% of capacity (195 kb/d) by the end of 2018, after having reported first oil in January. The offshore Hebron field, which started up in December, will also increase production towards its 150 kb/d nameplate capacity over the course of the year. In January, the field's production averaged 25 kb/d, only marginally higher than a month earlier.

After posting a recovery of 70 kb/d in January, **Mexican** total oil production fell back again in February by 50 kb/d. According to preliminary data published by Pemex, production was lower at the Chuc field and in the 'other projects' category. February output stood 190 kb/d lower than a year earlier, and 260 kb/d below the October reference level that is used to calculate compliance with agreed output cuts. Mexico had pledged to reduce output by 100 kb/d. During 2017, Mexican oil production declined by 235 kb/d, its highest annual fall since 2008. The rate of decline is expected to ease this year to 145 kb/d.



North Sea oil production rose sharply in January, as flows through the Forties pipeline resumed after a full shutdown in December. Total North Sea supplies surged by 355 kb/d m-o-m, to 3.2 mb/d – the highest since April 2017. The largest increase came from the **UK**, which saw output recover to pre-shutdown levels from a three-year low of 815 kb/d in December. UK oil output is expected to rise further in coming months, as new fields ramp up. Among them, Premier Oil's Catcher field, which started up in

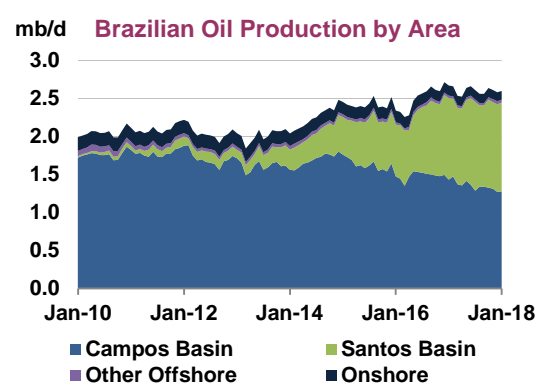
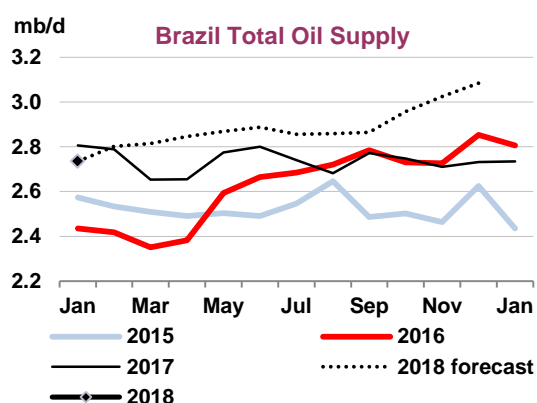
December, is on track to reach 60 kb/d by mid-April. In total, UK production is forecast to expand by 100 kb/d during 2018, to average 1.1 mb/d.



Output also rose in **Norway** during January. Production was 100 kb/d higher than a month earlier, but unchanged from the previous year. At 2.03 mb/d, supplies were nevertheless at their highest level since April of last year. In December, total output had risen by 64 kb/d m-o-m, as production from Goliat resumed after an extended shutdown. Production at Goliat averaged 39 kb/d in December, compared with output rates near 100 kb/d reached during October and November of 2016. In contrast, supply from the Troll field fell to its lowest since August 2016, possibly related to the shutdown of the Troll A platform due to a power outage. Norwegian oil production is forecast to decline by 80 kb/d on average during 2018, to 1.9 mb/d, following a drop of 25 kb/d last year.

Brazilian oil production held steady at around 2.7 mb/d in January. For the fifth time in just six months, production fell short of year earlier levels, despite the start-up of new production units in the pre-salt area. As in recent months, declines in the post-salt Campos basin (-180 kb/d) more than offset increased output from pre-salt fields in the Santos Basin (+125 kb/d), so that overall output was 70 kb/d lower than a year ago. Production at Brazil's mature fields is currently declining at around 12% on average, augmented by a number of outages. Maintenance work reportedly cut output at the Roncador field to 220 kb/d, the lowest level since September 2012. In contrast, output at the Lula field rose by 40 kb/d m-o-m, to 842 kb/d, a new record high.

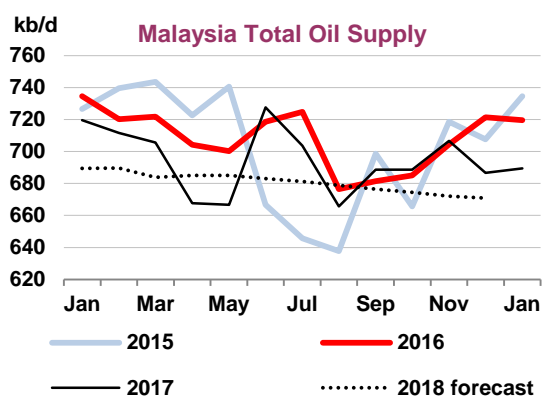
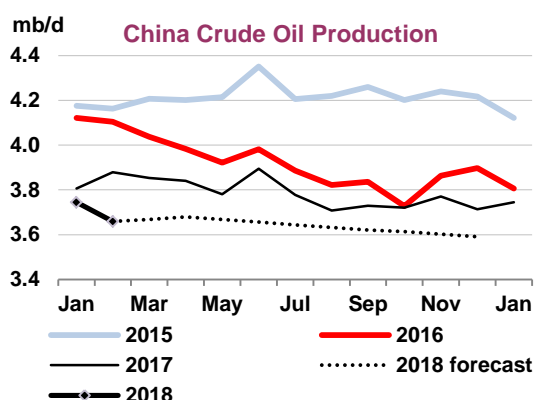
Output is expected to rise sharply over the course of 2018. Petrobras plans to start up seven production units in Brazil this year, including the P-67 in the Lula Norte and the Tartaruga Verde Mestiça floating production, storage and offloading units (FPSO) that were delayed from 2017. The Buzios field could be first out, however. The P-74 FPSO took up position at the Buzios field in early March, gearing up to start output. The unit, which has production capacity for 150 kb/d of crude and 7 million cubic metres per day of natural gas, will be the first of three very similar FPSOs scheduled for installation on field this year.



The Cidade de Campos dos Goytacazes FPSO destined for the Petrobras-operated Tartaruga Verde field will reportedly sail from the BrasFels shipyard in early April following a long delay with the issuing of requisite environmental permits. Other additions will come from Lula Extreme South (P-69) and the Berbigão field (P-68) which should start up towards year-end.

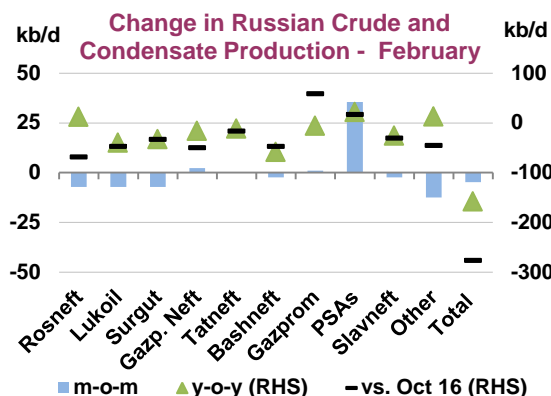
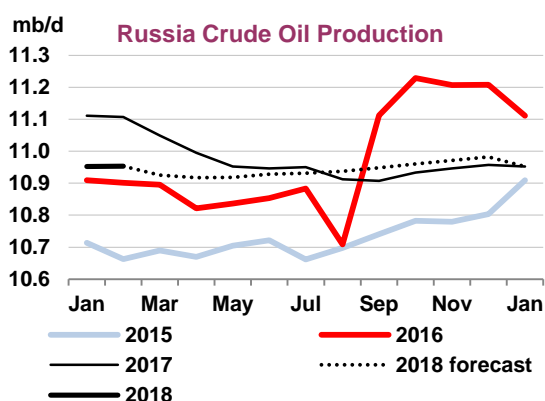
In **Colombia**, oil production dropped by 10 kb/d in January, to 860 kb/d, after a number of outages and disruptions restricted output. According to the government, the decline was due primarily to electricity and mechanical outages, sabotage on oil pipelines, as well as planned maintenance at a number of fields. Production was nevertheless largely unchanged from a year earlier.

China's crude oil output averaged 3.7 mb/d over January and February, 140 kb/d lower than a year earlier, according to data from the National Bureau of Statistics (NBS). NBS data for January and February are published combined for the two months due to the New Year holiday.

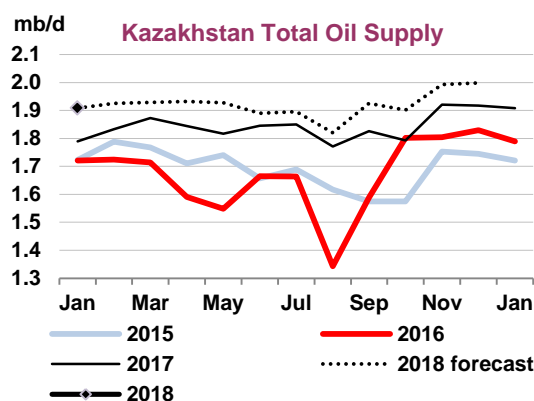
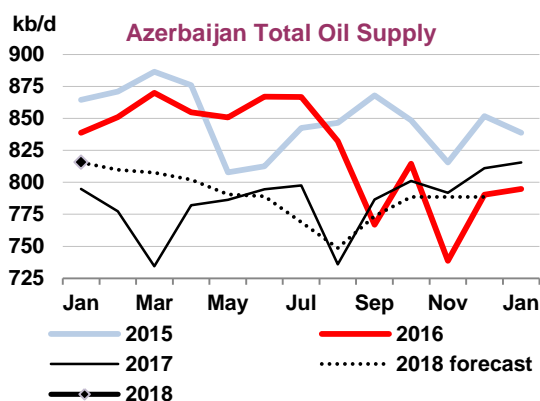


Elsewhere in Asia, **Vietnam's** crude oil output rose to 275 kb/d in February from 262 kb/d in January, according to preliminary government data. As such, output was only 5 kb/d lower than a year ago, a marked improvement from 2017's 32 kb/d average decline. **Malaysian** crude and condensate production was 640 kb/d in December, 20 kb/d below a month earlier. Output was 35 kb/d lower than the previous year, but still 2 kb/d higher than in October 2016, the baseline for the output cuts. Malaysia pledged to reduce production by 20 kb/d.

Russian crude and condensate output held steady for a third consecutive month in February, at around 10.95 mb/d. A 35 kb/d increase in production from production sharing agreement operators was offset by smaller declines from elsewhere. The IEA estimates that output stood 280 kb/d below the October 2016 baseline and was 155 kb/d lower than a year earlier. In March, Russian Energy Minister Alexander Novak told reporters that the rebalancing of the global oil market is going well, and that the current price of oil, boosted by the global deal to cut production, was acceptable. Previously Novak said that the time had not yet come to end the output agreement.



In **Azerbaijan**, oil production inched lower to 807 kb/d in February, from 816 kb/d in January. In January, output from the Azerbaijan International Operating company, which includes the Azeri-Chirag-Guneshli (ACG) complex and the Shah Deniz gas and condensate field, averaged 665 kb/d, of which 610 kb/d was attributable to ACG. This is a slight improvement on last year's production. According to operator BP, output from the ACG complex averaged 588 kb/d last year, some 8% lower than in 2016. ACG, which has been in production since 1997, is now in steady decline, but BP and its partners hope to stabilise output after obtaining a 25-year extension of the production-sharing contract that was due to expire in 2024.



In **Kazakhstan**, oil production inched lower in January, to just under 1.9 mb/d. A 30 kb/d increase in output from Tengiz was more than offset by declines elsewhere. Production from Kashagan fell by 23 kb/d to 202 kb/d, while Karachaganak output dipped by 6 kb/d to 255 kb/d. Output nevertheless stood 120 kb/d higher than a year earlier. For the year as a whole, production is set to grow by 80 kb/d.

FSU net exports:

FSU Net Exports of Crude & Petroleum Products

(million barrels per day)

	2016	2017	4Q2016	1Q2017	2Q2017	3Q2017	4Q2017	Nov 17	Dec 17	Jan 18	Feb 18	Latest month vs Month-1	Year-1
Crude													
Black Sea	1.68	1.89	1.77	1.80	2.00	1.75	2.00	2.17	1.93	1.81	1.82	0.01	0.09
Baltic	1.62	1.54	1.69	1.67	1.60	1.42	1.45	1.40	1.32	1.32	1.29	-0.03	-0.40
Arctic/FarEast	1.60	1.66	1.70	1.66	1.74	1.57	1.66	1.64	1.67	1.94	1.78	-0.17	0.08
BTC	0.67	0.71	0.61	0.67	0.70	0.73	0.72	0.79	0.73	0.64	0.73	0.08	0.02
Crude Seaborne	5.56	5.79	5.77	5.80	6.04	5.48	5.84	6.00	5.66	5.72	5.62	-0.10	-0.21
Druzhba Pipeline	1.07	1.01	1.10	0.99	0.99	1.04	1.02	0.98	0.99	0.94	1.01	0.07	0.07
Other Routes	0.19	0.26	0.20	0.23	0.28	0.25	0.28	0.29	0.24	0.25	0.21	-0.03	-0.01
Total Crude Exports	6.83	7.06	7.07	7.02	7.31	6.77	7.13	7.27	6.89	6.91	6.85	-0.06	-0.16
of which: Transneft ¹	4.39	4.31	4.45	4.34	4.42	4.21	4.28	4.30	3.98	4.17	4.14	-0.03	-0.13
of which: Russian crude ²	4.70	4.75	4.86	4.82	4.98	4.56	4.67	4.53	4.48	4.67	4.63	-0.04	-0.12
Products													
Fuel oil ³	1.41	1.38	1.42	1.53	1.40	1.21	1.39	1.27	1.66	1.44		-0.22	-0.12
of which: VGO	0.33	0.33	0.36	0.36	0.31	0.29	0.34	0.32	0.39	0.35		-0.04	0.00
Gasoil	0.98	0.96	0.88	1.12	1.02	0.83	0.88	0.84	1.06	1.13		0.07	0.06
Other Products	0.72	0.75	0.69	0.77	0.78	0.71	0.74	0.81	0.75	0.77		0.02	-0.01
Total Product	3.10	3.10	2.99	3.43	3.20	2.75	3.01	2.92	3.47	3.33		-0.14	-0.06
Total Exports	9.93	10.15	10.06	10.45	10.51	9.52	10.14	10.19	10.35	10.24		-0.11	-0.13
Imports	0.07	0.07	0.07	0.07	0.08	0.07	0.07	0.07	0.07	0.00		-0.07	-0.06
Net Exports	9.87	10.08	9.98	10.38	10.43	9.45	10.07	10.11	10.28	10.23		-0.05	-0.07

Source: Argus Media Ltd, IEA Estimates, Bloomberg, Lloyds List Intelligence, Ministry of Energy of the Russian Federation

¹Transneft data exclude Russian CPC volumes.

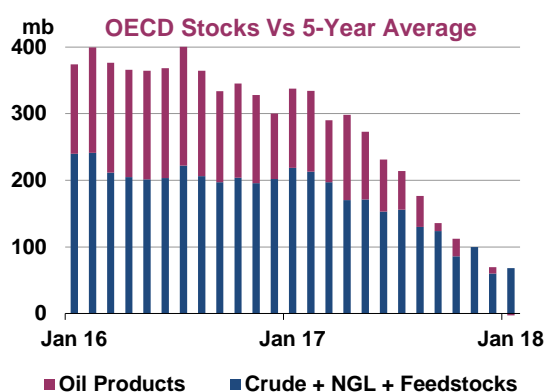
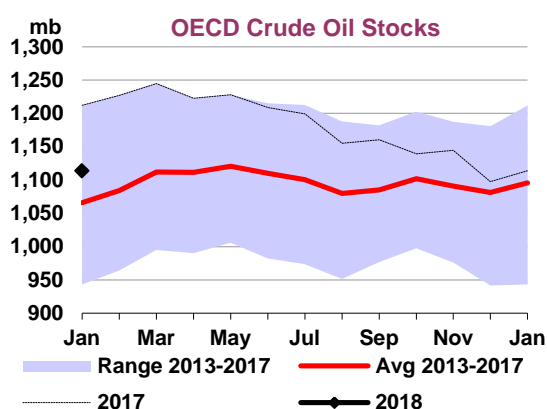
²Excludes Russian exports to Belarus, Kyrgyzstan and Uzbekistan

³Includes Vacuum Gas Oil

STOCKS

Summary

OECD commercial stocks rose in January for the first time in seven months by 18 mb (580 kb/d) to reach 2 871 mb. While this monthly increase bucks the recent downward trend, it is normal for OECD stocks to increase at the start of the year amid lower seasonal demand for motor fuels. The 18 mb build was less than the five-year average increase of 34.9 mb for the month. OECD inventories stood 53 mb above the five-year average at the end of January, down from an upwardly revised 70 mb in December. In January, crude stocks gained in line with seasonal trends by 16.6 mb to 1 114 mb, with a larger-than-usual increase in Europe driven by higher imports and reduced refinery runs. It is also likely the early return of the Forties pipeline in the North Sea following an outage boosted total holdings. Crude stocks in the OECD Americas rose by much less than usual at this time of year, mainly due to high refinery runs and steady crude exports from the US.



Oil product stocks, meanwhile, fell in January counter-seasonally by 5.1 mb to 1 439 mb, driven by large falls in 'other' product stocks (largely US LPG) linked to higher demand and below freezing temperatures in North America. Inventories of gasoline (+10.1 mb) built seasonally, but steady exports to Latin America and West Africa related to refinery issues and fuel shortages meant the increase was less than usual. Middle distillates (+11.7 mb) and fuel oil (+4.4 mb) stocks increased in line with seasonal patterns.

Preliminary Industry Stock Change in January 2018 and Fourth Quarter 2017

	January 2018 (preliminary)				(million barrels per day)				Fourth Quarter 2017			
	(million barrels)								(million barrels per day)			
	Am	Europe	As. Ocean	Total	Am	Europe	As. Ocean	Total	Am	Europe	As. Ocean	Total
Crude Oil	4.0	14.0	-1.5	16.6	0.13	0.45	-0.05	0.53	-0.49	-0.09	-0.10	-0.68
Gasoline	7.0	1.9	1.2	10.1	0.22	0.06	0.04	0.32	0.17	0.13	0.00	0.30
Middle Distillates	3.0	10.6	-1.9	11.7	0.10	0.34	-0.06	0.38	0.08	-0.24	-0.04	-0.19
Residual Fuel Oil	2.7	1.5	0.2	4.4	0.09	0.05	0.01	0.14	-0.08	0.00	0.00	-0.08
Other Products	-31.1	3.4	-3.6	-31.2	-1.00	0.11	-0.12	-1.01	-0.30	-0.03	-0.04	-0.36
Total Products	-18.4	17.3	-4.0	-5.1	-0.59	0.56	-0.13	-0.17	-0.12	-0.13	-0.08	-0.33
Other Oils ¹	4.0	1.5	1.1	6.6	0.13	0.05	0.04	0.21	-0.18	-0.03	-0.05	-0.26
Total Oil	-10.4	32.8	-4.4	18.0	-0.33	1.06	-0.14	0.58	-0.80	-0.25	-0.23	-1.27

¹ Other oils includes NGLs, feedstocks and other hydrocarbons.

In February, preliminary figures for the OECD point to renewed stock falls of around 24.8 mb, with very steep draws recorded in Japan (-18 mb) due to very cold temperatures and high kerosene consumption and also some falls in the US (-5.6 mb) and Europe (-1.1 mb). On a product category basis, crude stocks drew marginally and there were significant falls in middle distillate holdings (-9.5 mb) and other products (-15.6 mb). During the month, stocks also drew in Fujairah (-0.6 mb) and Singapore (-0.1 mb).

OECD oil inventories were revised down 3.1 mb in November and up 2 mb in December. We have also incorporated historical figures for Swedish oil stocks for the year 2016 following a change in the country's data collection methodology made at the beginning of 2017. This means Sweden's 2016 oil stocks are now around 15-17 mb higher than published last month. Stock figures prior to 2016 are still based on the previous methodology. Minor changes to Swedish stocks for the January-August 2017 period of 0-1 mb on average each month have also been incorporated.

Revisions versus February 2018 Oil Market Report

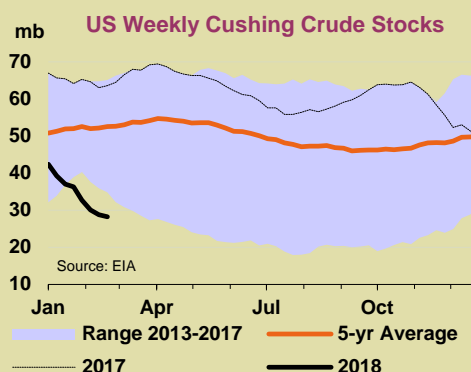
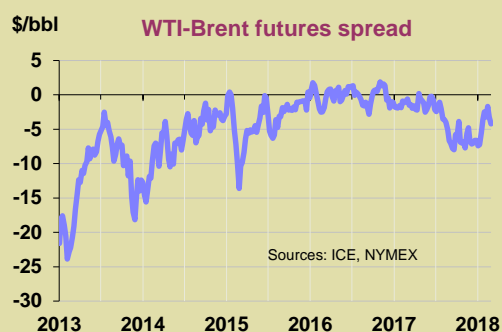
	(million barrels)							
	Americas		Europe		Asia Oceania		OECD	
	Nov-17	Dec-17	Nov-17	Dec-17	Nov-17	Dec-17	Nov-17	Dec-17
Crude Oil	-0.6	-2.6	0.0	-4.3	0.0	-1.6	-0.7	-8.5
Gasoline	-0.1	-1.4	-0.1	5.3	0.0	0.4	-0.2	4.3
Middle Distillates	-0.8	2.6	0.1	5.4	0.0	0.8	-0.8	8.9
Residual Fuel Oil	-0.3	-1.9	-0.8	-2.7	0.0	0.0	-1.1	-4.6
Other Products	-1.2	8.9	-0.2	2.3	0.0	0.6	-1.4	11.8
Total Products	-2.5	8.2	-0.9	10.3	0.0	1.9	-3.4	20.3
Other Oils ¹	0.9	-6.6	0.0	-2.8	0.0	-0.3	1.0	-9.8
Total Oil	-2.2	-1.0	-0.9	3.1	0.0	0.0	-3.1	2.0

¹ Other oils includes NGLs, feedstocks and other hydrocarbons.

Cushing stocks likely to recover from current lows

Crude oil stocks held at Cushing, Oklahoma, fell to 28 mb in early March, their lowest level in more than three years. While Cushing stocks stood apart from the overall fall in US crude stocks during most of 2017 brought about by record refinery runs and crude exports, since November they have caught up fast and fallen by 56%. Tank capacity utilisation dropped from a record 89% in April 2017 to 82% in October 2017 and just 36% in early March. This, in turn, led to a narrower WTI-Brent discount and to the WTI futures curve flipping to backwardation in January. Infrastructure developments in Canada, the Midwest and the Permian Basin, rather than broader trends in the US oil market, are largely responsible.

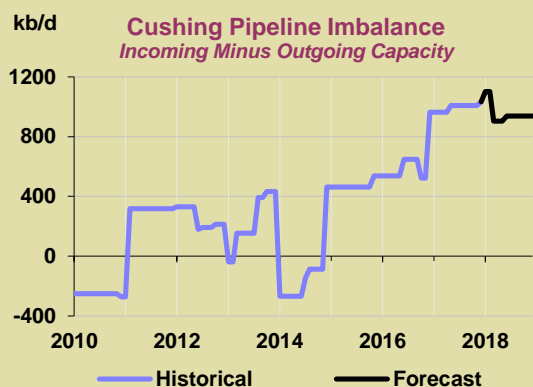
Cushing crude stocks started to decline in mid-November following the unplanned shutdown of TransCanada's 600 kb/d Keystone pipeline to Cushing due to a leak. The line was shut for three weeks and although it restarted in late November it continues to operate at reduced rates. This contributes an estimated 16 mb (or nearly half) of the overall stock fall in Cushing. Then, in December, Plains' new 200 kb/d Diamond pipeline started operations, taking crude out of Cushing towards a refinery owned by Valero in Memphis, Tennessee. The pipeline displaced volumes on the Capline from the US Gulf Coast to the East Coast and has so far led to an estimated 12 mb fall in Cushing crude stocks.



Finally, stocks have also fallen due to higher refinery runs in the Midwest and lower flows on the Basin and Centurion pipelines following the commissioning of new takeaway capacity in the Permian last year. Basin, which goes from Texas to Cushing, was reportedly flowing at under half of its capacity (200-250 kb/d) in February, as producers prioritised volumes to the more lucrative Gulf Coast market. The Centurion line, meanwhile, was affected by a leak and is reportedly running below capacity. We estimate there is currently a small surplus of pipeline capacity from the Permian Basin after the start-up of Midland to Sealy in December and upgrades to other pipelines (BridgeTex, Cactus) in 2017.

Cushing stocks likely to recover from current lows (continued)

The last time Cushing crude stocks drew this much was in 2014, when the 700 kb/d Marketlink and the 450 kb/d Seaway Twin pipelines feeding the Gulf Coast came online to relieve previous bottlenecks. While Cushing crude tank utilisation fell to just 29% in September of that year, it took a much longer period to get there than in recent months. We estimate that Cushing stocks could continue to draw in the short-term, but that they will likely fill up once again later in 2018. This is for two reasons. First, the pipeline imbalance in



Cushing – defined as the surplus of incoming over outgoing capacity – is at a near historic high above 900 kb/d and is likely to increase later this year with the expansion of a pipeline from the STACK Play, in Oklahoma. Second, rising Permian and Canadian crude production will fill pipelines aimed at Cushing, thereby overwhelming Midwest refining capacity.

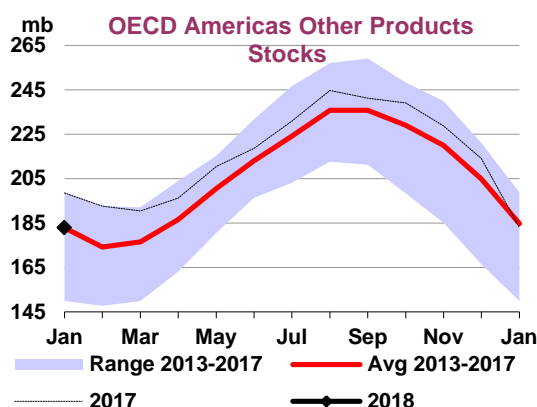
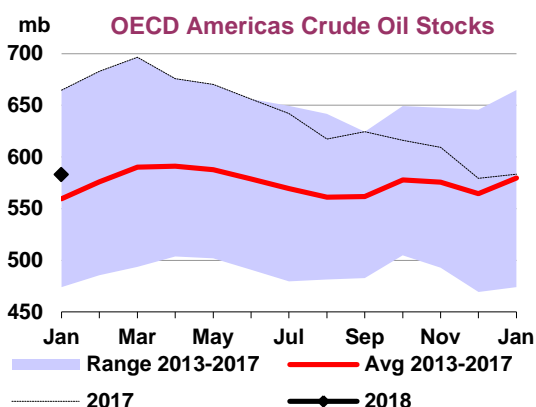
It is unclear how long Keystone will continue to operate at reduced rates, but once it returns to full capacity, it is likely to progressively help rebuild Cushing stocks. However, even with the return of Keystone, Canadian pipelines to the US are likely to fill up quickly due to lack of spare capacity. This means

that the bulk of the production increase in Canada in 2018 is unlikely to make its way into Cushing, but will rather head to the Gulf Coast on railcars. Meanwhile, we estimate that Permian takeaway pipeline capacity is likely to become insufficient by mid-year, likely forcing producers to maximise crude flows to Cushing and helping to rebuild crude stocks.

Recent OECD industry stock changes

OECD Americas

Commercial stocks in the OECD Americas dropped counter-seasonally in January by 10.4 mb to 1 488 mb. At end-month, they stood at their lowest level since April 2015 and 37 mb above the five-year average. January was marked by three major trends in the US. First, US refiners continued to process crude at very high rates, thus depleting crude stocks; second, oil product exports to Latin America continued unabated, keeping diesel and gasoline stocks in check; finally, below freezing temperatures across North America boosted LPG demand and reduced stocks.

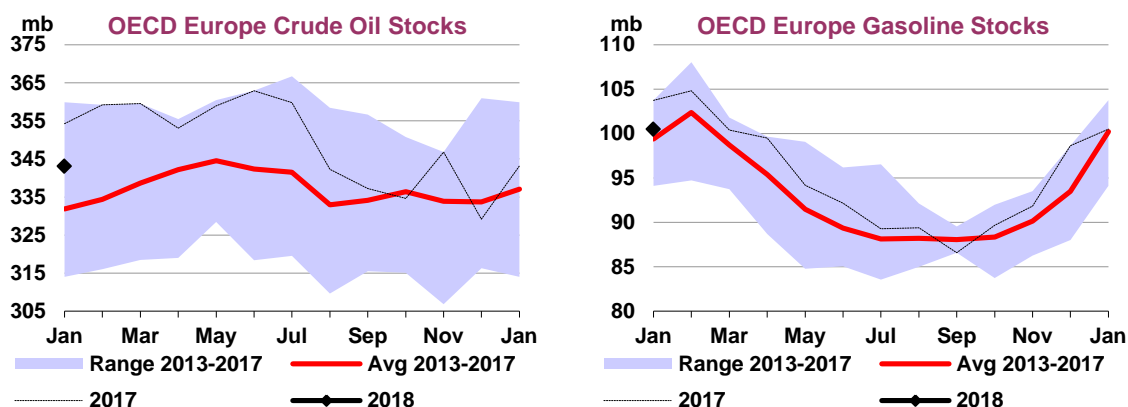


Crude stockpiles gained in January for the first time since September, when there was a temporary blip in refining runs linked to Hurricane Harvey. They reached 584 mb at end month, up 4 mb from December 2017. However, the build was much less than normal for the time of year due to high processing rates at refineries. Crude exports stayed firm at close to 1.4 mb/d on average and imports went up on the month. Oil product stocks declined by a significant 18.4 mb on the month to 718 mb, well helped by a larger-than-seasonal draw in other product stocks linked to cold temperatures. Gasoline stocks built seasonally,

while middle distillate holdings gained counter-seasonally with continuing high refinery utilisation. Preliminary data from the EIA show a continuation in February of the trends seen in January. Crude stocks built by 5.5 mb month-on-month, but once again, it was less than the five-year average build due to high refinery runs. High crude exports, at around 1.5 mb/d for the month, also contributed. Cushing crude stocks, by contrast, fell to 28.4 mb at end-February, their lowest level since November 2014 (see *Cushing stocks likely to recover from current lows*). In products, propane stocks drew a further 8.6 mb in line with seasonal norms, while diesel stocks also decreased by 3.5 mb and gasoline built 6.8 mb.

OECD Europe

Commercial stocks in OECD Europe gained significantly in January by 32.8 mb to 975 mb. The build was higher than implied by seasonal patterns. Overall, stocks in the region stood 17 mb above the five-year average at the end of the month, up from 9 mb at the end of December. Crude stocks increased by 14 mb, due to higher imports and as refinery runs in the region eased due to planned maintenance work. Seaborne crude imports – which do not account for flows via Russia's Druzhba pipeline – rose 10 mb to 345 mb in February, according to *Kpler*, possibly in anticipation of lower crude availability from the North Sea following the Forties pipeline outage in mid-December. The pipeline, which feeds a refinery and an export terminal in Scotland, restarted at the beginning of January, thus contributing to higher crude holdings. Higher exports of gasoline from Europe to the US, West Africa and the Middle East led to a smaller-than-seasonal build in gasoline stocks of 1.9 mb, while middle distillate holdings increased seasonally, by 10.6 mb to 282 mb. Overall, oil products stocks were up 17.3 mb on the month.



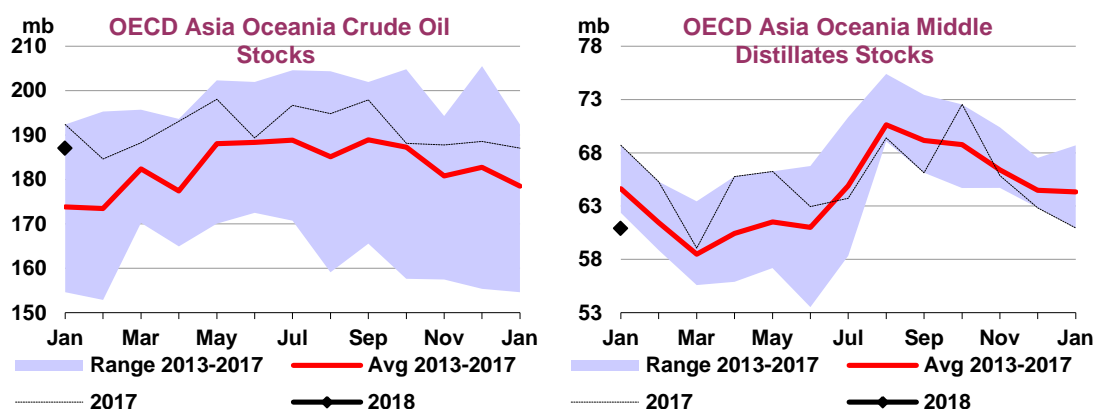
Preliminary data from Euroilstock for February indicate a further build in European crude stocks of 2.3 mb, whereas oil product stockpiles fell across the board. Fuel oil showed the steepest draw (-1.2 mb) due to significant outflows to Asia, followed by naphtha (-0.9 mb), middle distillates (-0.8 mb) and gasoline (-0.5 mb). European refineries entered regular seasonal maintenance, reducing runs by around 500 kb/d from January, so these stock movements were largely expected.

OECD Asia Oceania

Commercial stocks in OECD Asia Oceania declined seasonally by 4.4 mb to reach 408 mb at end-January. With stocks 2 mb below the five-year average, Asia Oceania was the only OECD region to show a deficit. The most noteworthy change was a reduction in middle distillate stocks (-1.9 mb) brought about by winter heating demand in Japan and Korea. Crude stocks fell 1.5 mb on the month to 187 mb, other product stocks fell 3.6 mb to 56 mb and gasoline holdings increased 1.2 mb to 24 mb.

Preliminary data from the *Petroleum Association of Japan* (PAJ) show a significant decrease in crude stocks (9.1 mb) during February, likely because of lower imports. The draw was more significant than the five-year average reduction for the month. Crude imports fell 200 kb/d, according to *Kpler*, but refining runs were little changed. Kerosene holdings also fell seasonally by 2.8 mb, even as imports rose to meet

higher consumption linked to freezing temperatures. There were also significant draws in gasoil (-2.9 mb) and fuel oil (-1 mb). Overall, total oil stocks drew 18 mb, compared with a five-year average stock fall of 6.4 mb.



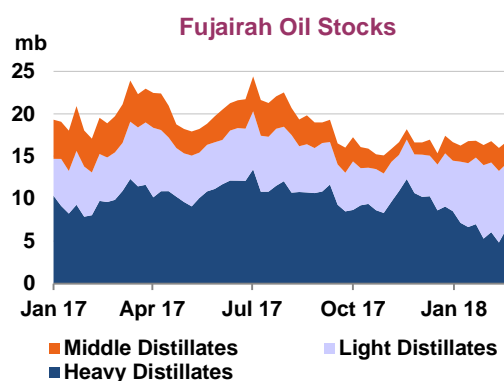
Other stock developments

Stockpiles in the 17 non-OECD countries covered by the JODI database (Saudi Arabia, Thailand, India, Angola, Iraq, Nigeria, Brunei, Azerbaijan, Slovenia, Georgia, Ecuador, Costa Rica, Hong Kong, Chinese Taipei, Bahrain, Philippines, Qatar) fell a further 14.3 mb in December to 695 mb. The largest drops were seen in Saudi Arabia (-6.8 mb), Thailand (-6.1 mb) and India (-2.9 mb). Overall, during 2017 stocks in these countries declined by 52.6 mb, or 140 kb/d, with Saudi Arabia contributing nearly two-thirds of the fall. Due to the methodology used by JODI, it is highly likely the inventory falls seen in Saudi Arabia happened both inside the Kingdom and in tank farms owned abroad or aboard oil tankers.

Short-term floating storage continued to fall at the start of 2018, reaching levels last seen in 2014, according to *EA Gibson*. It reached 12 mb in February, down 13 mb on the month and down 57.4 mb (160 kb/d) year-on-year. Alternative figures from *Kpler* for tankers idle for 12 days or more amounted to 25 mb, down from 39 mb at the end of January. Major crude benchmarks were all in backwardation (Brent, WTI) or narrow contango (Dubai) at the time of writing, a state of the market that makes it largely uneconomic for traders to hold crude offshore.

Data from *China, Oil, Gas and Petrochemicals* (China OGP) covering Chinese oil majors show commercial stocks gaining 10.9 mb to an estimated 364 mb in January, with crude, gasoline, gasoil and kerosene all building. Crude imports hit a historic high during the month, implying an overall net crude build of 34 mb (1.1 mb/d) for the month, one of the largest ever seen. However, imports fell significantly in February, implying draws of 14 mb for that month, according to preliminary data.

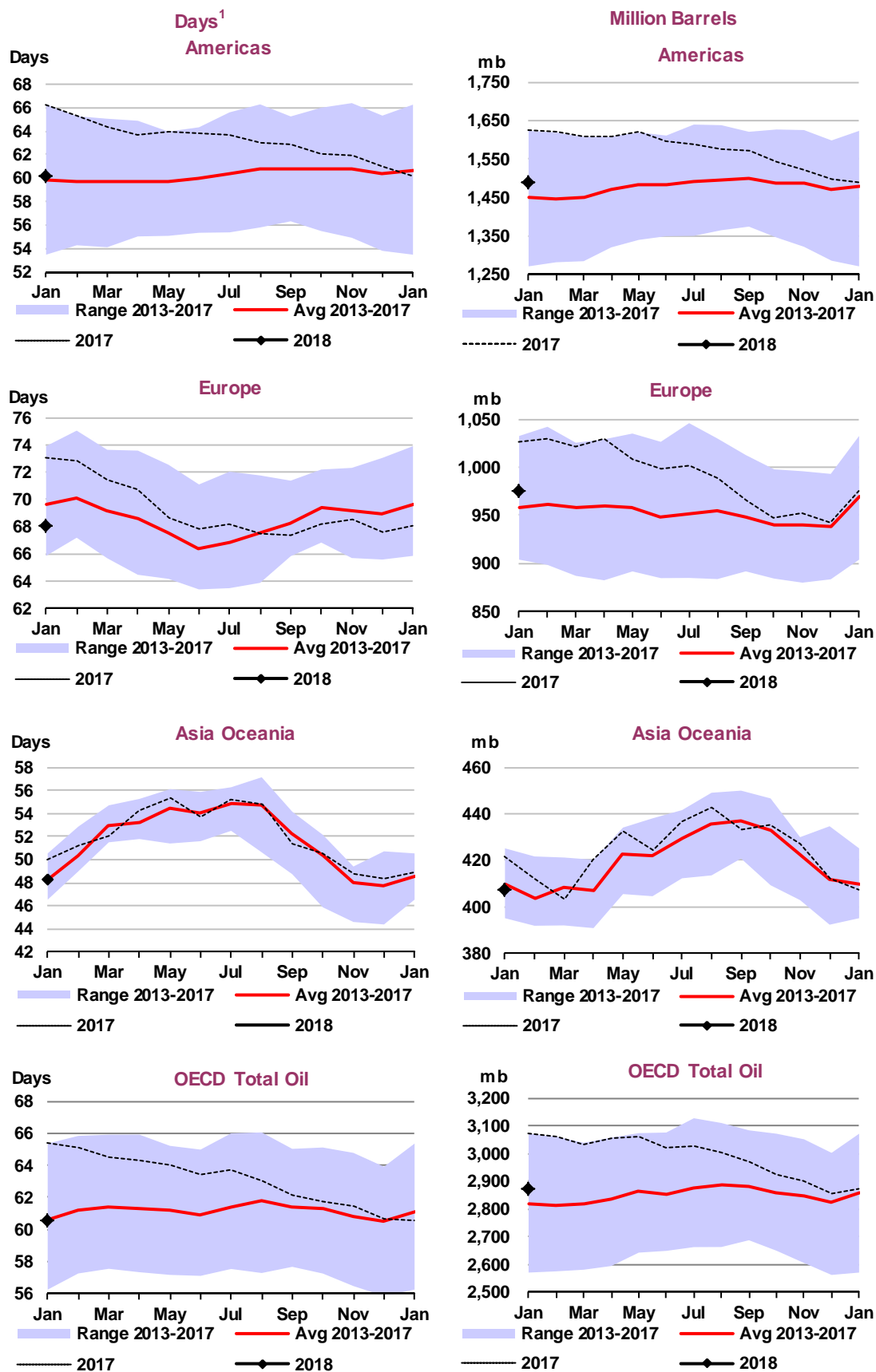
Oil inventories in Fujairah drew by a modest 0.6 mb in February to 16.2 mb, according to figures available from *FEDCom/S&P Global Platts*. Fuel oil and residual stocks fell to a mere 5.3 mb during the month to a fresh one-year low. Market sources said this was likely related to reduced bunker fuel consumption amid an ongoing diplomatic spat between Qatar and other Middle Eastern countries. Singaporean stocks were almost unchanged on the month at 44.5 mb, according to data from *International Enterprise*.



Source: FEDCom/S&P Global Platts

Regional OECD End-of-Month Industry Stocks

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

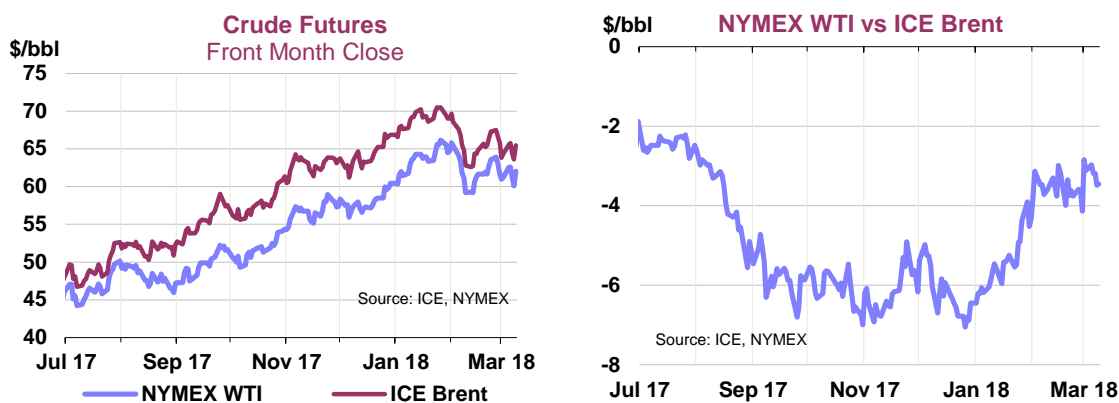


1 Days of forward demand are based on average demand over the next three months

PRICES

Summary

Outright crude oil prices fell in the first two weeks of February as the market experienced a sell-off triggered by equity market upheaval and an increasingly positive outlook for US LTO supply growth. The slide halted on 12 February as front-month ICE Brent futures reached \$62.59/bbl, with NYMEX WTI futures having fallen below \$60/bbl on 9 February. The continued high rate of compliance with the OPEC/non-OPEC production agreement provided support to markets. The ICE Brent futures curve continued to display backwardation, however the narrowing spread suggested less market tightness. Global benchmarks for physical crude prices fell but the US strengthened relative to North Sea Dated as stocks continued to fall at Cushing, Oklahoma. Cushing inventories are currently at their lowest level in three years. The rapid evolution of US midstream infrastructure is having a significant impact on the relative prices of US grades as flows increasingly bypass Cushing and head directly to the US Gulf Coast. Oil product prices also fell in February, with weak demand weighing on motor fuels in particular.



Futures markets

Front-month ICE Brent crude futures dropped \$3.35/bbl in February to \$65.73/bbl, the first monthly price fall registered in eight months. A temporary slowdown in demand, rising supplies from the US and the partial unwinding of long futures positions by financial players all played a part. Prices fell in the first half of February, before stabilising after. At the time of writing, Brent was trading at \$65/bbl. Money managers held 998 mb of net long positions in crude futures at the end of February, down 67 mb from the historic high of 1 065 mb reached at the end of January. However, this is a small decline relative to the significant builds registered in the fourth quarter of 2017. In parallel, net short positions held by swap dealers declined marginally from 350 mb at the end of January to 304 mb at the end of February, highlighting reduced hedging activity amongst oil producers.

The Month 1-Month 2 ICE Brent futures spread eased in February, thus continuing the downtrend that began after the restart of the Forties pipeline at the end of December. It stood in a backwardation of \$0.24/bbl at the beginning of March. Stronger North Sea physical premia in the second half of February have not fed into steeper backwardation of Brent futures, but could support them over the next few weeks. Farther out on the curve, Brent spreads mostly eased during February.

The Brent-WTI futures spread narrowed to \$2.84/bbl at the start of March, its lowest level since August 2017, driven by falling stock levels in Cushing, rather than any developments in the Atlantic Basin crude market. High refinery run rates in the US, the commissioning of the Diamond pipeline from Cushing to the US East Coast and the start-up of new lines from the Permian Basin to the Gulf Coast have all helped redirect crude flows away from the storage hub.

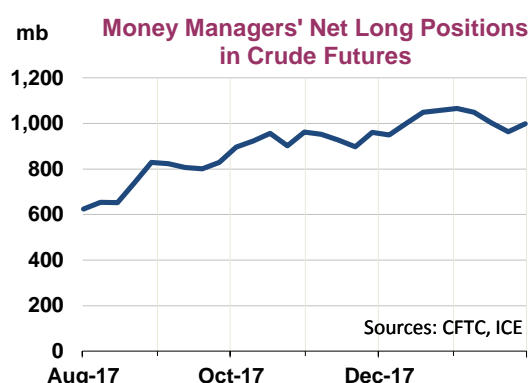
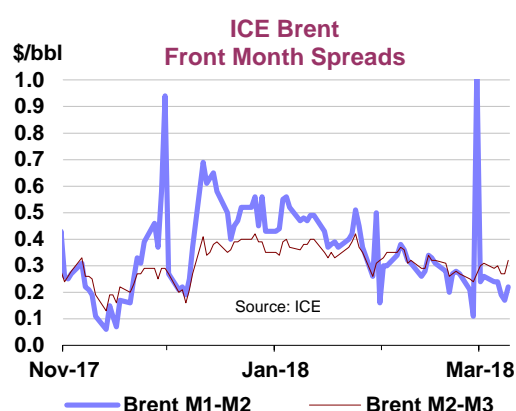
Prompt Month Oil Futures Prices

(monthly and weekly averages, \$/bbl)

	Dec	Jan	Feb	Feb-Jan Avg Chg	% Chg	Week Commencing:				
						05 Feb	12 Feb	19 Feb	26 Feb	05 Mar
NYMEX										
Light Sweet Crude Oil	57.95	63.66	62.18	-1.48	-2.3	61.94	60.42	62.48	62.16	61.70
RBOB	72.26	78.08	74.46	-3.62	-4.6	74.62	71.93	74.36	77.16	80.22
ULSD	81.85	87.27	81.49	-5.78	-6.6	81.58	78.64	81.71	80.87	79.13
ULSD (\$/mmbtu)	14.43	15.39	14.37	-1.02	-6.6	14.39	13.87	14.41	14.26	13.96
Henry Hub Natural Gas (\$/mmbtu)	2.78	3.16	2.66	-0.50	-15.8	2.70	2.57	2.63	2.68	2.74
ICE										
Brent	64.09	69.08	65.73	-3.35	-4.8	65.52	63.77	66.01	65.62	64.95
Gasoil	76.68	82.20	77.70	-4.50	-5.5	77.89	74.51	77.97	77.73	76.66
Prompt Month Differentials										
NYMEX WTI - ICE Brent	-6.14	-5.42	-3.55	1.87		-3.58	-3.35	-3.53	-3.46	-3.25
NYMEX ULSD - WTI	23.90	23.61	19.31	-4.30		19.64	18.22	19.23	18.71	17.43
NYMEX RBOB - WTI	14.31	14.42	12.28	-2.14		12.68	11.51	11.88	15.00	18.52
NYMEX 3-2-1 Crack (RBOB)	17.51	17.48	14.62	-2.86		15.00	13.75	14.33	16.24	18.16
NYMEX ULSD - Natural Gas (\$/mmbtu)	11.66	12.23	11.71	-0.52		11.69	11.30	11.78	11.59	11.21
ICE Gasoil - ICE Brent	12.59	13.12	11.97	-1.15		12.37	10.74	11.96	12.11	11.71

Source: ICE, NYMEX.

The Brent-Dubai Exchange of Futures for Physical (EFP) was largely unchanged above \$3/bbl, showing continued weakness in Middle Eastern crude grades despite ongoing production cuts from OPEC countries. In oil products, the Month 1-Month 2 ICE low sulphur gasoil futures spread stayed in contango with plentiful diesel supplies in Europe and lower seasonal demand. The NYMEX diesel futures curve also flipped to contango at the end of February.



Spot crude oil prices

Global crude oil prices fell in February following seven months of gains. Early February saw crude markets caught up in a commodities rout triggered by volatility in equity and currency markets. However, in recent weeks crude prices have strengthened again despite market concerns about the resurgence of US LTO output. US crude prices were better insulated from price falls than other benchmarks and the WTI differential to North Sea Dated more than halved since December thanks to a sustained fall in stocks at Cushing. Urals fared less well due to lower demand. The Dubai discount to North Sea Dated remained relatively wide, stifling the economics of importing Atlantic Basin crude into Asia-Pacific. Banks signalled their confidence in underlying fundamentals and raised their forecast for 2018 oil prices by approximately \$1/bbl at end of February, according to a monthly Wall Street Journal survey.

In North America, pipeline developments at Cushing have lent support to WTI against various grades including Brent, Light Louisiana Sweet (LLS), Houston, Midland and Bakken. The ramping up of Plains All American Diamond Pipeline, carrying crude from Cushing to Valero's Memphis refinery, reduced midcontinent demand for LLS via the Capline system. LLS prices fell \$3.48/bbl to \$64.04/bbl at end February, and the grade was increasingly available for export. WTI delivered at Midland, Texas is now trading at a discount to WTI Cushing of \$1.29/bbl (9 March), having fallen sharply since 18 February as Occidental Petroleum's Centurion pipeline continues to be partially shut in following the discovery of a leak. The grade had been supported earlier in the month as Enterprise Product's Midland to Sealy pipeline continued to ramp up and midstream firms confirmed additional pipeline projects from the Permian. (see *Cushing stocks likely to recover from current lows* in *Stocks*).

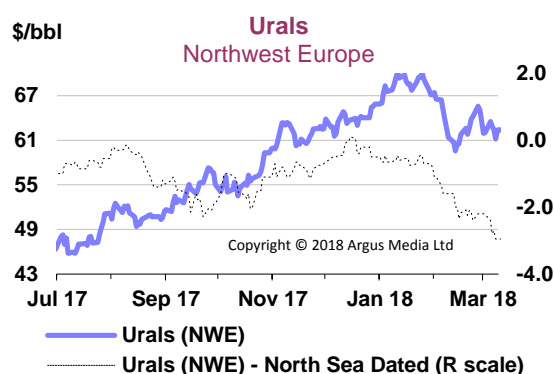
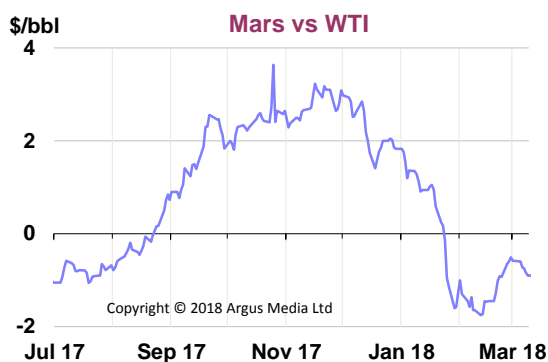
Spot crude oil prices and differentials

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Sour grades Poseidon and Mars, which have been weakening against WTI since November 2017, reversed the trend from mid-February following the successful loading of a VLCC from the Louisiana Offshore Oil Port (LOOP) in the Gulf Coast clearing the path for more regular exports at reduced shipping costs. This is the first export cargo from LOOP which is supplied with sour crude via pipeline. The Keystone pipeline that supplies West Canadian Select (WCS) to Cushing continues to operate below capacity. Although the discount of WCS to WTI has reduced by almost \$4/bbl, it was assessed at \$26.02/bbl on 9 March, still much higher than before Canada to US pipeline capacity was reached. The tightening of the spread between WTI and international crudes suggests reduced export competitiveness and preliminary tanker tracking data for March shows a m-o-m drop in seaborne exports.



North Sea Dated fell to a three month low of \$ 61.57/bbl on 13 February and all crude grades were down m-o-m. A brief shutdown of the Forties pipeline on 7 February had little impact on crude loadings. Prices picked up from the middle of the month on the back of robust demand from Asia-Pacific. The Forties differential to North Sea Dated gained significantly in the second half of February, rising from \$-0.59/bbl on 16 February to \$0.73/bbl on 27 February. The loading schedule for Forties and Ekofisk shows reduced April shipments due to maintenance and production declines from the Buzzard field.

Libya's Es Sider and Algeria's Saharan differentials to North Sea Dated fell in February due to poor demand, both regionally and outside the Mediterranean. Nigerian differentials to North Sea Dated were up by between \$0.70/bbl and \$1.00/bbl in February supported by improving gasoil and distillate margins and despite the ramp up of shipments from the offshore Bonga terminal following a maintenance shut-in. Angolan differentials to North Sea Dated, with the exception of the heavier Hungo grade, were up slightly due to better refinery margins for gasoline and diesel. Indian deliveries from West Africa were at a near three-year high in February but the coming weeks may see reduced global demand due to refinery maintenance.

Russia's Urals fell to a three month low of \$59.57/bbl on 13 February and the discount versus North Sea Dated reached \$2.40/bbl 23 February, the widest it has been since March 2017. Poor product margins, regional refinery turnarounds and increasingly stiff competition from alternative crude supplies from Iraq and the US Gulf Coast have reduced demand for the grade. During the month, shipments from Russia's Baltic and Black Sea ports were disrupted by severe weather. Upcoming refinery maintenance in Asia could continue to pressure Urals prices. CPC crude prices fell throughout February, trading at a discount of \$0.95/bbl to North Sea Dated at the end of the month due to weak regional gasoil margins. The continued ramping up of production from Kazakhstan's Kashagan field should see CPC exports hit a record high in March.

Weak fuel oil and naptha margins, along with continuing refinery maintenance in Asia, put pressure on Middle Eastern crude prices. Physical prices declined throughout the month relative to forward swap prices, indicating reduced supply tightness. Iraqi Basrah Heavy fell on the back of weak European demand and Basrah Light hit a three month low of \$57/bbl on 14 February.

Spot product prices

Global oil product prices fell across the board in February, following crude oil prices lower. Motor fuels, such as diesel, gasoil and gasoline, declined more than other products due to seasonal slowdowns in demand and plentiful supplies. However, cold temperatures in Asia boosted jet and kerosene fuel prices, while strong bunker fuel consumption limited price falls for fuel oil.

Diesel and gasoil prices fell more significantly than any other oil product in February. Rotterdam diesel barge quotes fell \$4.70/bbl on the month and US Gulf diesel pipeline prices declined \$4.18/bbl. Global diesel supplies remained adequate as refineries operated at normal margins. In Europe, strong inflows from Asia and the Middle East more than compensated for lower US shipments that had been diverted to meet high demand in Latin America. Meanwhile, Russian exports are likely to rise during March due to higher refinery output. Strong demand in North Africa incentivised imports and led to higher prices in the Mediterranean than elsewhere. Contrary to diesel, jet prices were boosted by higher Asian demand in February. Cold temperatures in Japan, on top of the refinery closures made over the last few years, pushed imports to their highest on record for the month, according to market sources. The Singapore regrade spread, defined as the difference between jet fuel and gasoil, went up to \$2.50/bbl in early March and European jet differentials to gasoil futures hit their highest in more than three years.

Gasoline prices declined in all major pricing hubs during February, weighed by lower demand. Rotterdam premium unleaded gasoline barges fell \$2.80/bbl on the month to \$73.63/bbl and Singapore premium

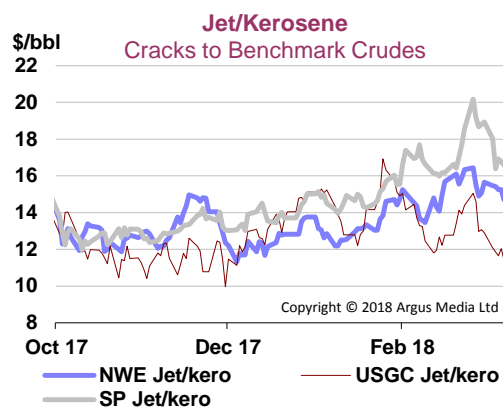
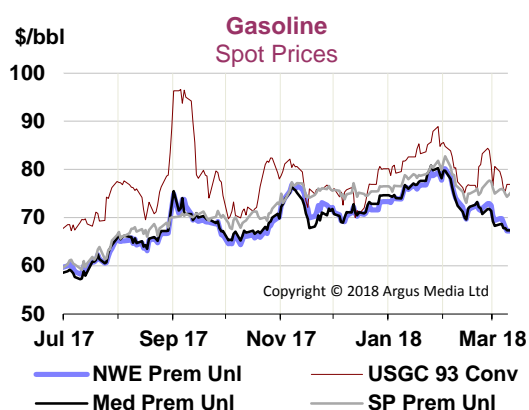
unleaded cargoes fell \$1.60/bbl to \$77.02/bbl. A seasonal slowdown in US demand meant imports from Europe remained low. Instead, Latin America and West Africa continued to require higher volumes than normal. European gasoline shipments to Nigeria reached nearly 17 mb during the month, amid ongoing fuel shortages in the country. Rotterdam barge trading volumes rose substantially ahead of the seasonal change to summer specification gasoline. In Singapore, 92 RON and 95 RON cargoes fell below their respective swaps in early March to their lowest level since August 2016 in a sign of plentiful supplies in the region.

Spot product prices

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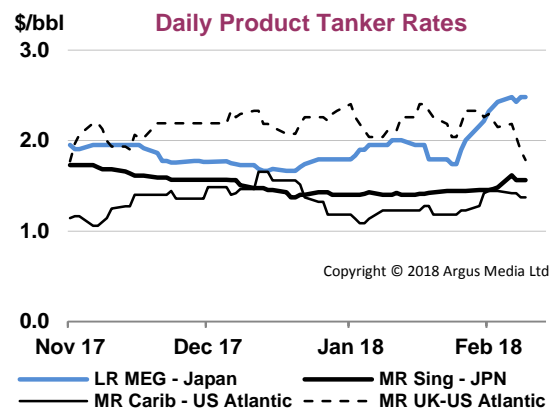
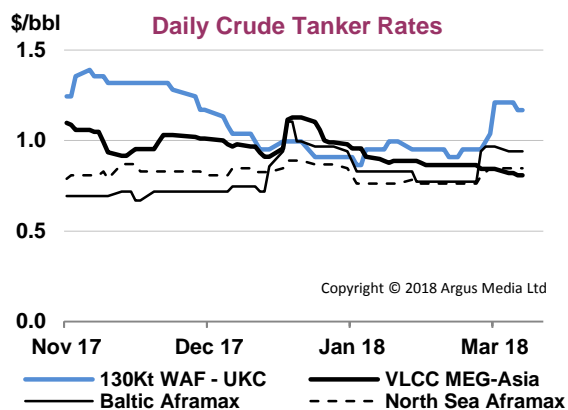
Naphtha prices came under pressure from lower gasoline and LPG requirements, which respectively cut demand for blending and raised the competition for supplies to the petrochemical sector. Benchmark Asian prices averaged \$61.41/bbl during the month, down \$4.85/bbl from January. The price of physical cargoes followed a downtrend relative to swaps during January-February, reflecting higher cargo arrivals

into Asia. However, at the start of March, Singapore naphtha cracks gained with a forecast for lower import volumes in Asia during April.

Fuel oil prices declined in February although falls were more measured than for other products. Rotterdam high sulphur fuel oil barges fell \$2.44/bbl to \$53.63/bbl and Singapore 380 centistoke fuel oil cargoes fell \$2.32/bbl to \$57.48/bbl. While demand for bunker fuel has continued to climb in Singapore in recent months, rising arbitrage volumes from the West have temporarily boosted supplies too. Fuel oil inventories in Europe and the Middle East have continued to fall in recent weeks, thus supporting prices in those regions.

Freight

Freight rates remained depressed in February despite robust demand due to excess tonnage availability. In 2017, the crude fleet grew by 85 ships net (VLCC, Suezmax, Aframax and Panamax), bringing its total size to 2 029 active vessels, while the product fleet grew by 101 to 2 737 vessels. Current freight rates are assessed to be below shippers' operating costs.



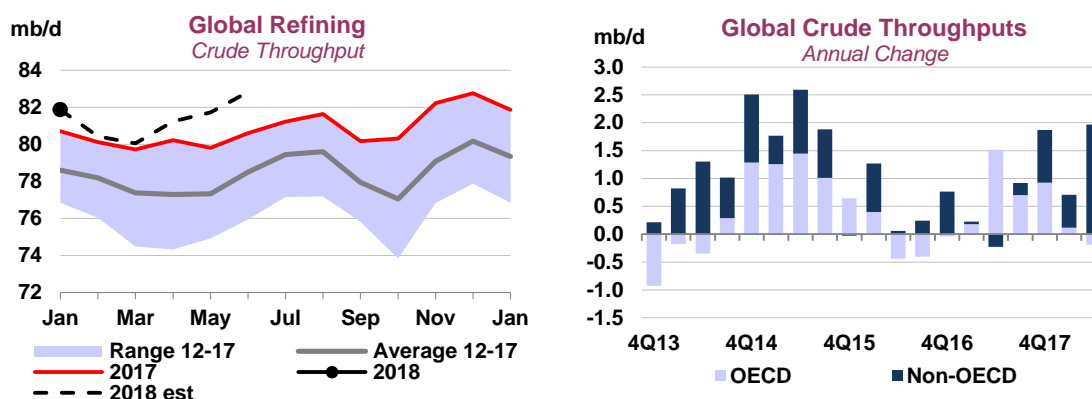
Freight rates for VLCCs on the Middle East Gulf (MEG) to Asia route stood at \$0.81/bbl in early March, the lowest level since September. Suezmax rates on the West Africa to Northwest Europe were flat at \$0.95/bbl in February as excess ship availability offset healthy demand. Baltic to UK continent and North Sea Aframax rates trended down until particularly cold weather in Europe caused an uptick at the end of the month.

Clean product freight rates on the UK Continent-US Atlantic Coast route were boosted by demand from West Africa, although chartering enquiries dried up mid-month. East of Suez, the Long Range MEG-Japan rate increased to \$2.48/bbl (8 March), its highest in five months.

REFINING

Summary

New and revised data confirm our forecast of record throughput in 4Q17. At 81.7 mb/d, runs were up by a massive 1.9 mb/d year-on-year (y-o-y). This allowed refiners to partially rebuild product stocks after two consecutive quarters of large drawdowns. However, our 1Q18 throughput estimate has been revised down by 0.4 mb/d due to unplanned outages in the US, lower than expected throughput in China and a more extensive maintenance programme in the Middle East. Runs decline by 0.9 mb/d from 4Q17. This could lead to a counter-seasonal draw in product inventories.



Almost all of the seasonal slowdown in 1Q18 comes from OECD refiners, with the US accounting for the largest share. Nevertheless, US refiners continue to operate at seasonal record levels, in order to supply Mexican and Latin American markets. Non-OECD refiners will take centre stage again, providing most of the annual gains in the first half of 2018. Indian throughput reached a record level in January, while Chinese refiners processed 360 kb/d more y-o-y in January-February. There is also momentum in the Middle East, where maintenance in 1Q18 is potentially merely a pause between two record quarters.

Not just for the Middle East, but for global refining throughput as a whole we are forecasting another record level in 2Q18, at 81.8 mb/d, up 1 mb/d quarter-on-quarter (q-o-q), with our rationale explained in *Global crude oil and products balances*.

Global Refinery Crude Throughput¹
(million barrels per day)

	Dec 17	4Q17	2017	Jan 18	Feb 18	Mar 18	1Q18	Apr 18	May 18	Jun 18	2Q18
Americas	19.8	19.2	19.3	19.2	18.6	19.1	19.0	19.5	19.7	19.8	19.7
Europe	12.5	12.4	12.3	12.3	11.8	11.5	11.9	12.1	11.8	12.2	12.1
Asia Oceania	7.5	7.2	7.0	7.3	7.4	6.9	7.2	6.9	6.5	6.5	6.6
Total OECD	39.8	38.8	38.6	38.9	37.7	37.6	38.1	38.6	38.1	38.5	38.4
FSU	7.1	6.9	6.8	7.0	7.2	6.9	7.0	6.8	6.9	7.1	6.9
Non-OECD Europe	0.6	0.6	0.5	0.6	0.6	0.5	0.6	0.5	0.6	0.6	0.6
China	11.5	11.8	11.3	11.8	11.3	12.0	11.7	11.9	11.9	12.1	12.0
Other Asia	10.5	10.4	10.3	10.6	10.6	10.1	10.4	10.2	10.5	10.7	10.5
Latin America	3.7	3.8	3.8	3.7	3.6	3.6	3.6	3.8	4.0	4.0	3.9
Middle East	7.6	7.5	7.4	7.3	7.4	7.3	7.3	7.3	7.7	7.8	7.6
Africa	1.9	1.9	1.9	2.0	2.0	1.9	2.0	1.9	2.0	1.9	2.0
Total Non-OECD	42.8	42.9	42.1	42.9	42.6	42.4	42.6	42.6	43.5	44.2	43.5
Total	82.7	81.7	80.7	81.8	80.3	80.0	80.7	81.1	81.6	82.7	81.8
Year-on-year change	1.3	1.9	1.1	1.2	0.3	0.3	0.6	1.0	1.9	2.2	1.7

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

Global crude oil and products balances

2Q18 global refinery throughput forecast is slightly above the historical record of 81.7 mb/d observed in 4Q17, and 1.7 mb/d up y-o-y. Historically, 2Q throughput tended to decline from 1Q, but in recent years, namely in 2015 and 2017, it has done the opposite. Could this be a change of a trend?

Implied refined product balances show that most of the overhang accumulated since 2013 was absorbed by end-2017. Refined products are forecast to draw in 1Q18 too, as the throughput estimate is 0.9 mb/d lower than in 4Q17, while demand is higher. Oil markets will enter 2Q18 with only a 75 mb surplus of nominal refined products, down from 320 mb in 1Q16. On the other hand, the crude oil surplus relative to 2013, excluding Chinese implied balances, is expected to reach 125 mb by 2Q18, after a build in 1Q18.

Crude Oil and Product Balances

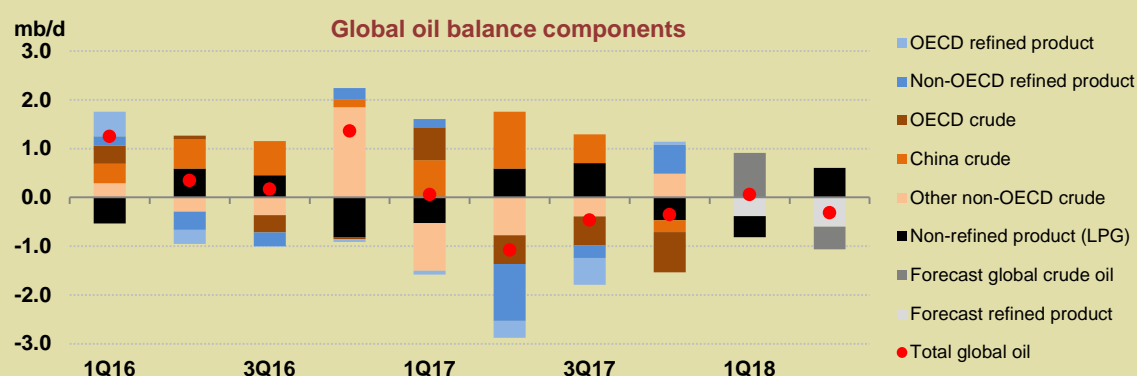
	(million barrels per day)								
	2015	2016	1Q17	2Q17	3Q17	4Q17	2017	1Q18	2Q18
World total demand	95.0	96.2	96.5	98.0	98.3	98.4	97.8	98.0	99.0
World total supply	96.5	97.0	96.6	96.9	97.8	98.1	97.4	98.1	98.7
World balance¹	1.5	0.8	0.1	-1.1	-0.5	-0.4	-0.5	0.1	-0.3
Refined product balance	0.5	0.0	0.1	-1.5	-0.8	0.7	-0.4	-0.4	-0.6
of which									
OECD refined product actual stock change ²	0.3	0.0	-0.1	-0.3	-0.5	0.1	-0.2		
Non-OECD refined product implied stock change	0.2	0.0	0.2	-1.2	-0.3	0.6	-0.2		
Crude oil balance	0.9	0.9	0.5	-0.2	-0.4	-0.6	-0.2	0.9	-0.5
of which									
OECD crude oil actual stock change	0.4	0.0	0.7	-0.6	-0.6	-0.8	-0.3		
Non-OECD crude oil implied stock change	0.4	0.8	-0.2	0.4	0.2	0.2	0.2		
China crude oil balance	0.3	0.5	0.8	1.2	0.6	-0.2	0.6		
Other Non-OECD crude oil stock change	0.2	0.4	-1.0	-0.8	-0.4	0.5	-0.4		
OECD non-refined product stock change³	0.0	-0.1	-0.5	0.6	0.7	-0.5	0.1	-0.4	0.6

¹ OPEC throughput assumed flat from February 2018 level

² Refined product inventories include gasoline, middle distillates and fuel oil. See *Stocks* for detailed discussion of observed stock changes

³ Based on OECD LPG stock changes until December 2017, and a seasonal average stock change expectation for the forecast period

Global throughput forecast for 2Q18 is thus a compromise between crude oil and refined products stock draws. A record 81.8 mb/d refinery intake would cause crude stocks to draw by 0.5 mb/d, assuming OPEC production stays flat from February 2018 onwards. At the same time, refineries would still not be able to meet the expected level of refined product demand. Some 0.6 mb/d would need to come from inventories. This was the case in 2Q17 too, when refiners ran at a historical record throughput level, but refined product stocks, nonetheless, decreased by 1.5 mb/d.

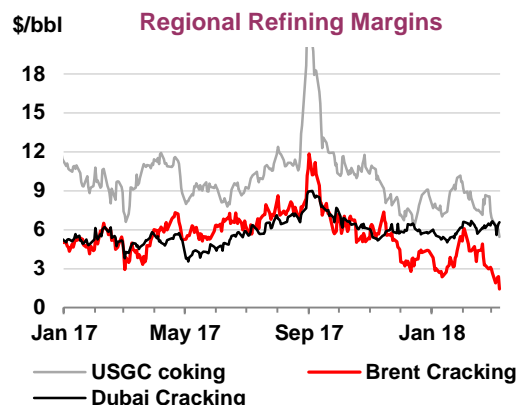


Seasonally higher refined product demand in 2Q18-3Q18 will accelerate the rebalancing of the market, regardless of the market's preference in drawing crude oil or products stocks first. The scale of the combined crude and refined product stock draws, of around 1 mb/d, however, is not evident from our headline supply-demand balances, which include LPG seasonal stock builds, primarily in North America.

Margins

With global runs estimated to have declined almost 1.4 mb/d month-on-month (m-o-m) in February, spot crude oil prices outside the US lost \$3-4/bbl on average. As the 1Q18 refined product demand was revised upwards, our balances now show inventory drawdowns instead of seasonal builds, which explains why February product prices did not follow crude all the way down. This boosted margins in Europe and Singapore.

In the US, crude price declines were smaller as the WTI-Brent spread narrowed by \$2.5/bbl. Moreover, both in the US Gulf Coast and Midcontinent distillate cracks fell in February after January's spike caused by cold weather, bringing refining margins lower m-o-m.



IEA/KBC Global Indicator Refining Margins¹

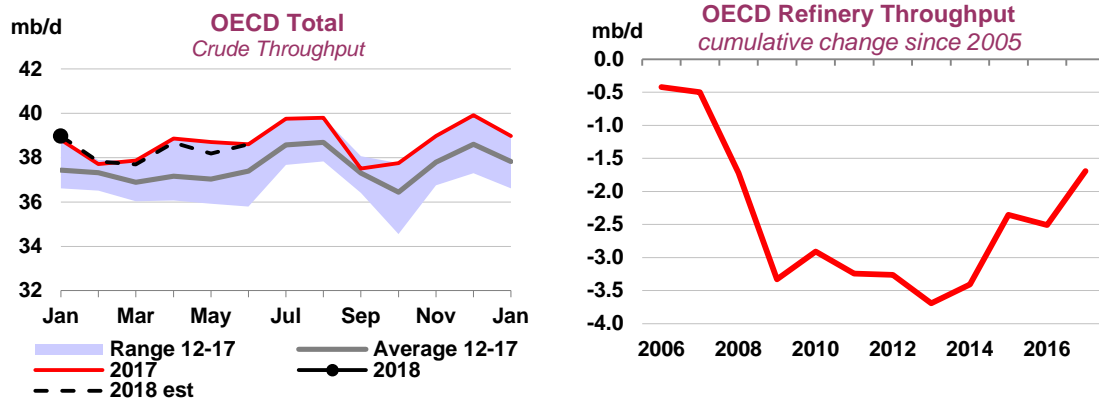
	Monthly Average				Change	Average for week ending:					
	Nov 17	Dec 17	Jan 18	Feb 18	Feb 18-Jan 18	09 Feb	16 Feb	23 Feb	02 Mar	09 Mar	
NW Europe											
Brent (Cracking)	5.77	3.80	3.49	4.26	↑ 0.77	4.65	4.24	3.96	2.95	2.04	
Urals (Cracking)	5.80	3.44	3.27	5.18	↑ 1.92	5.15	5.37	5.28	4.28	4.22	
Brent (Hydroskimming)	1.40	-0.42	-1.03	-0.19	↑ 0.84	0.02	0.02	-0.26	-1.44	-1.87	
Urals (Hydroskimming)	0.91	-1.34	-1.89	0.27	↑ 2.16	0.03	0.74	0.62	-0.55	-0.08	
Mediterranean											
Es Sider (Cracking)	6.68	5.46	5.08	5.49	↑ 0.41	5.51	5.48	5.61	4.39	4.20	
Urals (Cracking)	5.59	4.69	4.42	6.56	↑ 2.14	6.29	6.69	6.93	5.59	5.60	
Es Sider (Hydroskimming)	2.93	1.49	0.82	1.37	↑ 0.55	1.41	1.61	1.53	0.16	0.07	
Urals (Hydroskimming)	0.63	-0.54	-1.29	1.13	↑ 2.42	0.89	1.60	1.53	0.02	0.23	
US Gulf Coast											
50/50 HLS/LLS (Cracking)	8.67	7.02	7.92	7.50	↓ -0.42	7.99	6.82	7.33	6.96	5.08	
Mars (Cracking)	5.19	3.32	3.63	3.63	↑ 0.01	4.01	3.63	3.41	2.70	1.68	
ASCI (Cracking)	4.90	3.10	3.25	3.27	↑ 0.02	3.68	3.22	3.09	2.35	1.40	
50/50 HLS/LLS (Coking)	10.31	8.72	9.91	9.43	↓ -0.48	9.98	8.56	9.24	8.93	6.78	
50/50 Maya/Mars (Coking)	9.16	7.63	8.47	8.19	↓ -0.29	8.61	7.56	8.03	7.64	6.07	
ASCI (Coking)	9.42	7.97	8.89	8.55	↓ -0.34	9.08	7.98	8.38	7.68	6.06	
US Midcon											
WTI (Cracking)	17.39	13.39	11.48	7.80	↓ -3.68	8.27	7.46	6.44	8.12	9.51	
30/70 WCS/Bakken (Cracking)	15.85	16.01	14.98	12.66	↓ -2.33	13.78	12.29	11.18	12.15	13.79	
Bakken (Cracking)	16.21	14.57	13.16	10.12	↓ -3.05	11.33	10.37	7.84	10.17	11.48	
WTI (Coking)	19.43	15.33	13.57	9.67	↓ -3.90	10.23	9.17	8.17	10.06	11.43	
30/70 WCS/Bakken (Coking)	19.07	19.21	18.53	15.73	↓ -2.80	17.02	15.06	14.04	15.30	16.71	
Bakken (Coking)	17.02	15.30	13.94	10.80	↓ -3.14	12.06	10.98	8.44	10.90	12.21	
Singapore											
Dubai (Hydroskimming)	1.61	1.50	0.54	1.47	↑ 0.93	1.48	1.58	1.49	1.54	1.54	
Tapis (Hydroskimming)	2.02	1.43	0.26	2.36	↑ 2.10	2.75	2.64	1.57	2.08	1.01	
Dubai (Hydrocracking)	5.73	6.00	5.57	6.32	↑ 0.75	6.47	6.10	6.17	6.50	6.22	
Tapis (Hydrocracking)	5.59	5.26	4.50	6.29	↑ 1.79	6.84	6.30	5.33	6.00	4.69	

¹ Global Indicator Refining Margins are calculated for various complexity configurations, each optimised for processing the specific crude(s) in a specific refining centre. Margins include energy cost, but exclude other variable costs, depreciation and amortisation. Consequently, reported margins should be taken as an indication, or proxy, of changes in profitability for a given refining centre. No attempt is made to model or otherwise comment upon the relative economics of specific refineries running individual crude slates and producing custom product sales, nor are these calculations intended to infer the marginal values of crude for pricing purposes.

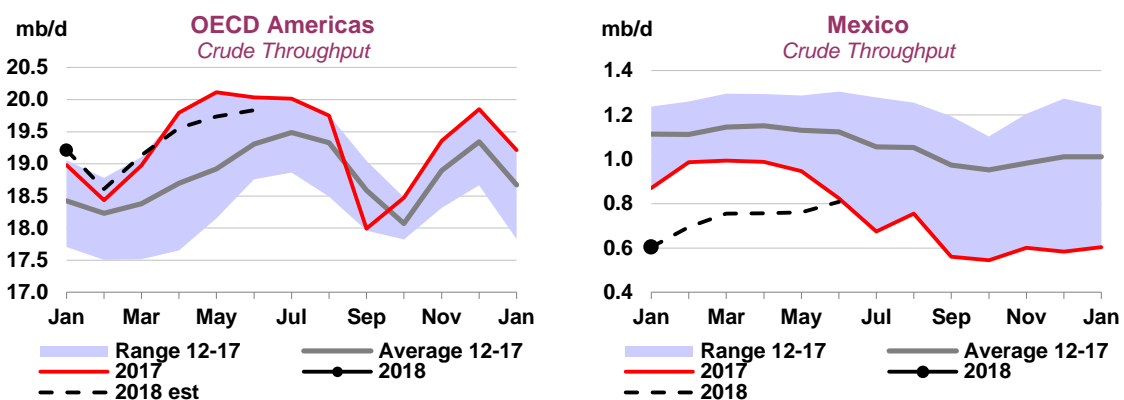
Source: IEA, KBC Advanced Technologies (KBC)

OECD refinery throughput

December throughput numbers were finalised 250 kb/d higher than in last month's *Report* on better than expected data from Canada, Netherlands, Japan and Australia. It reached the highest level in 10 years at 39.8 mb/d. In 2017, refining activity grew by 0.8 mb/d, after a y-o-y drop of 0.2 mb/d in 2016. Even so, OECD throughput remains below the 2005 peak. Preliminary January numbers show stronger than expected Asia Oceania activity, but total OECD runs were down 0.9 mb/d m-o-m.



The **US**, and especially its main engine, the Gulf Coast refining sector, contributed most to the seasonal slowdown with maintenance shutdowns peaking in February. January and February throughput were still at record seasonal levels, up 0.5 mb/d y-o-y. US refining intake is expected to recover to the symbolic 17 mb/d mark in 2Q18. In **Canada**, a new refinery reportedly started operations in December, the Northwest Redwater Partnership's 80 kb/d facility, designed to process diluted bitumen. In 2017, annual throughput growth was very strong at 150 kb/d, after two years of declines. Recovery is yet to start in **Mexico**, with December throughput falling 20 kb/d from November, to 570 kb/d, while January preliminary data were also below 600 kb/d, implying 36% utilisation. Our forecast is revised down on expectations of a slower recovery.



European refiners had a very good year in 2017, with throughput increasing 340 kb/d y-o-y. Utilisation rates were the highest since 2005, at 89%, even though this was largely due to capacity closures that amounted to 2 mb/d in the same period. Among the major refining countries with throughput above 1 mb/d – Germany, Italy, Spain, France, UK, and Netherlands – only Italy registered visible y-o-y growth, at 100 kb/d, with throughput reaching 1.4 mb/d for the first time since 2012. The rest of the increase came from countries with smaller capacities: Norway, where activity rebounded by 80 kb/d from the fall in 2016; Czech Republic and Belgium. Our 1Q18 forecast for Europe as a whole has been revised down by 260 kb/d on higher maintenance, with throughput below 12 mb/d, but recovering modestly to 12.1 mb/d in 2Q18.

Refinery Crude Throughput and Utilisation in OECD Countries

(million barrels per day)

	Aug 17	Sep 17	Oct 17	Nov 17	Dec 17	Jan 18	Change from		Utilisation rate ¹	
							Dec 17	Jan 17	Jan 18	Jan 17
US ²	16.98	15.46	16.06	16.84	17.27	16.63	-0.64	0.50	88%	85%
Canada	1.84	1.78	1.70	1.73	1.79	1.79	-0.01	0.00	89%	92%
Chile	0.18	0.19	0.17	0.19	0.20	0.19	-0.01	0.00	86%	87%
Mexico	0.75	0.55	0.53	0.59	0.57	0.59	0.02	-0.27	36%	52%
OECD Americas³	19.74	17.98	18.47	19.35	19.84	19.20	-0.64	0.23	84%	83%
France	1.23	1.24	1.23	1.25	1.21	1.17	-0.04	0.03	94%	92%
Germany	1.99	2.03	1.99	1.93	2.00	1.96	-0.04	0.04	97%	95%
Italy	1.51	1.45	1.45	1.44	1.45	1.36	-0.09	-0.04	79%	81%
Netherlands	0.96	1.10	0.97	1.03	1.06	1.03	-0.03	-0.08	80%	86%
Spain	1.43	1.41	1.30	1.30	1.37	1.41	0.04	0.12	100%	92%
United Kingdom	1.15	1.15	1.12	1.06	1.08	1.05	-0.03	-0.05	83%	87%
Other OECD Europe	4.52	4.25	4.29	4.34	4.36	4.36	0.00	0.04	0%	89%
OECD Europe	12.78	12.63	12.35	12.35	12.52	12.34	-0.18	0.05	89%	89%
Japan	3.33	3.16	2.89	3.20	3.41	3.34	-0.08	-0.10	94%	96%
South Korea	3.11	2.89	3.16	3.21	3.25	3.24	-0.01	0.05	102%	101%
Other Asia Oceania	0.74	0.75	0.79	0.76	0.79	0.75	-0.04	-0.06	0%	93%
OECD Asia Oceania	7.18	6.80	6.84	7.17	7.46	7.33	-0.13	-0.11	97%	98%
OECD Total	39.70	37.40	37.65	38.88	39.82	38.88	-0.94	0.17	88%	88%

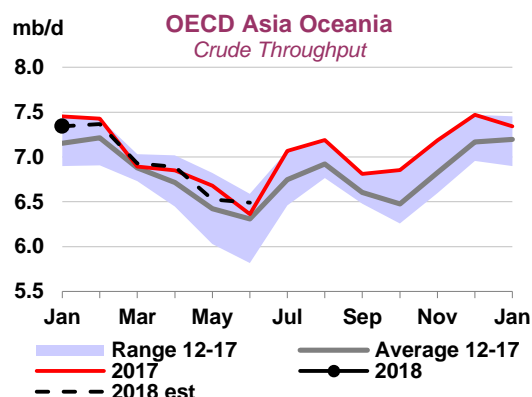
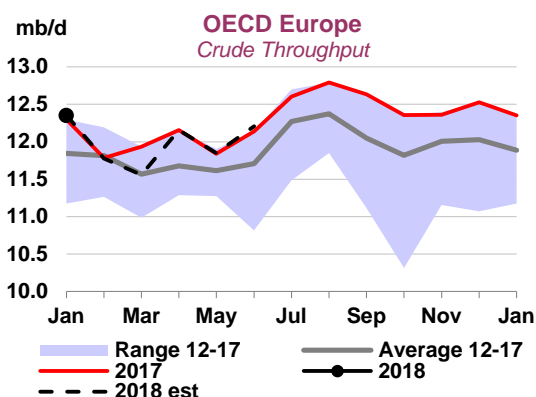
¹ Expressed as a percentage, based on crude throughput and current operable refining capacity

² US\$0

³ OECD Americas includes Chile and OECD Asia Oceania includes Israel. OECD Europe includes Slovenia and Estonia, though neither country has a refinery

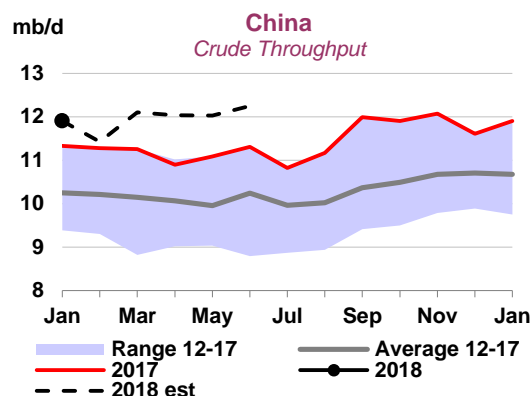
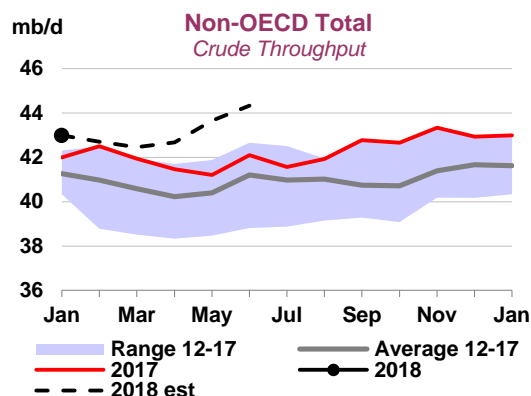
OECD Asia Oceania throughput in 2017 reached the symbolic threshold of 7 mb/d, for the first time since the 2008 financial crisis. This was largely driven by **Korea's** robust refining industry that crossed the 3 mb/d intake level for the first time. **Japan** remains the largest regional refiner, with throughput 120 kb/d higher than Korea's, but there has been a dramatic narrowing of this gap from 1.5 mb/d a decade ago. However, Korean refiners are running flat out and with no capacity additions planned in the near future, they cannot close the gap unless Japanese refiners lower their utilisation rates. **Australian** throughput has stayed relatively flat since 2015, at 420 kb/d, after 300 kb/d of capacity closed over the previous three years.

Overall, refining throughput in the region is expected to increase by a modest 60 kb/d from 4Q17, but then seasonally decline by 0.6 mb/d into 2Q18, to 6.6 mb/d.

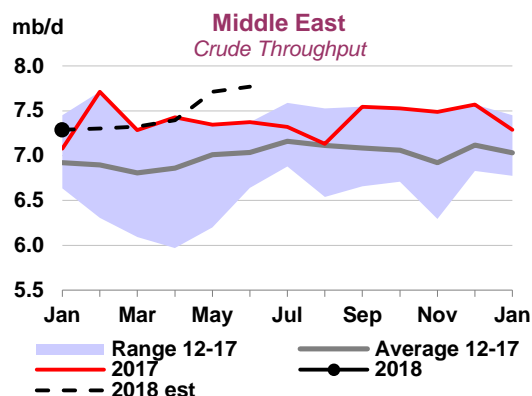
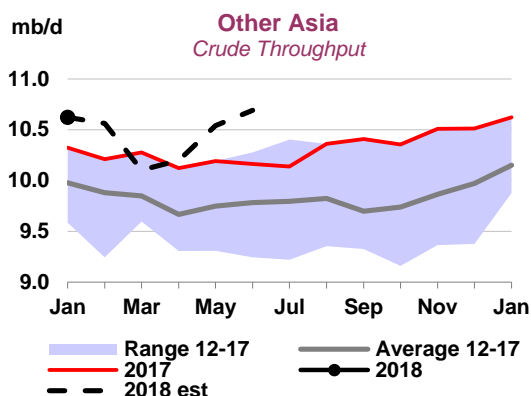


Non-OECD refinery throughput

In 4Q17, refining throughput in non-OECD countries reached a record 42.9 mb/d, and, after a small dip to 42.6 mb/d in 1Q18, it is expected to reach a new record in 2Q18 at 43.5 mb/d. As explained in *Global crude oil and products balances*, our 2Q18 global refinery forecast is based on an attempt to balance crude and product stocks draws, given the expected levels of refined product demand and crude oil supply. Non-OECD refiners are collectively contributing most to the global q-o-q increase, accounting for 0.8 mb/d out of 1.1 mb/d.



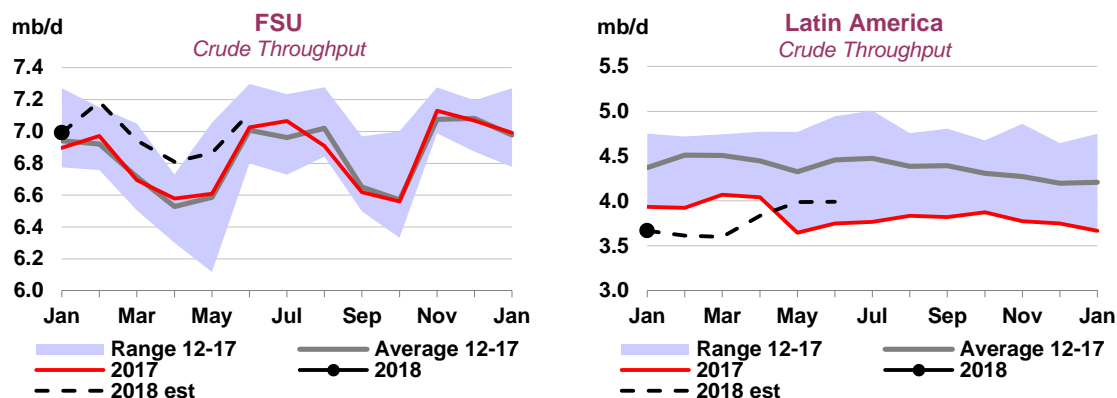
Due to Lunar New Year holidays, China's January-February throughput data are released as a cumulative number, implying 11.6 mb/d throughput on average. Using secondary indicators, such as product stock changes reported by *China Oil, Gas and Petrochemicals*, and anecdotal evidence of slower activity during the holidays we have estimated January throughput at 11.8 mb/d and February at 11.3 mb/d. Runs are expected to return to 12 mb/d in March and stay relatively flat through 2Q18.



Indian throughput reached a record 5.3 mb/d in January, up 360 kb/d y-o-y as refiners ramped up units commissioned earlier to full capacity. However, a seasonal slowdown is forecast for the rest of 1Q18, with throughput recovering later in 2Q18. **Vietnam's** new refinery is not expected to reach full capacity before 3Q18 as motor fuel production is reportedly only starting in May.

Middle East throughput data coverage has noticeably deteriorated in the last two years with only four countries out of 11 reporting in a timely manner. Our discussion of historical developments is still largely based on estimates for the missing countries. As such, 4Q17 throughput stands at 7.5 mb/d, helped by very high utilisation rates in **Saudi Arabia**, where runs reached a record 2.8 mb/d in December. **Iraq** has announced a relatively ambitious downstream development programme, both for the short-term, through building small-sized new units and repairs at war-damaged refineries, and the medium-term, through larger new projects, but we do not expect much progress before the second half of the year.

Iran's latest addition, the second condensate splitter of the Persian Gulf Star complex has been reportedly completed, but is not expected to produce on-spec products this year. Due to an extensive maintenance programme in Saudi Arabia and Kuwait in 1Q18, throughput is forecast to fall to 7.3 mb/d, and ramp up to 7.6 mb/d in 2Q18.



Finalised 2017 data for FSU countries showed throughput staying flat y-o-y, both for the group as a whole and for individual countries. **Belarus** managed to recover most of the volumes lost since mid-2016 in the crude export tariff spat with Russia, accelerating the intake in the second half of 2017. Preliminary February data for **Russia**, based on deliveries to refineries, imply throughput of 5.8 mb/d, the highest since December 2016. Total regional throughput is expected to increase y-o-y by 200 kb/d in both 1Q18 and 2Q18.

In Latin America, **Brazil's** December throughput was revised down in the recent data release, by 130 kb/d, while January throughput, at just 1.6 mb/d, was the lowest since October 2008. Petrobras continues to focus on cost management as its products are subject to intense competition from imported fuels. In a rare upward revision, **Curaçao's** refining throughput, which is part of PDVSA's system, is now estimated some 50 kb/d higher, on reports of Urals deliveries to the refinery. **Colombian** throughput in February-March has been revised down on reported maintenance at the Barrancabermeja refinery. Throughput in 2017 had already declined by 330 kb/d, and only a partial recovery is expected in 2Q18.

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

	2014	2015	1Q16	2Q16	3Q16	4Q16	2016	1Q17	2Q17	3Q17	4Q17	2017	1Q18	2Q18	3Q18	4Q18	2018
OECD DEMAND																	
Americas	24.2	24.6	24.6	24.5	25.1	24.8	24.7	24.5	25.0	25.0	25.1	24.9	24.7	25.0	25.2	25.3	25.0
Europe	13.5	13.8	13.6	13.9	14.4	14.2	14.0	13.9	14.3	14.8	14.4	14.4	14.1	14.4	14.9	14.6	14.5
Asia Oceania	8.1	8.1	8.6	7.7	7.8	8.4	8.1	8.6	7.8	7.9	8.4	8.2	8.6	7.7	7.8	8.3	8.1
Total OECD	45.8	46.4	46.8	46.1	47.3	47.4	46.9	47.0	47.0	47.6	47.9	47.4	47.3	47.1	47.9	48.3	47.7
NON-OECD DEMAND																	
FSU	4.7	4.6	4.5	4.5	4.9	4.8	4.7	4.5	4.7	4.9	4.8	4.7	4.6	4.7	5.0	4.9	4.8
Europe	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.7	0.7	0.7	0.8	0.8	0.8	0.8
China	10.8	11.6	11.8	12.0	11.6	11.9	11.8	12.5	12.6	12.2	12.6	12.4	13.0	12.9	12.6	13.0	12.9
Other Asia	11.8	12.4	13.0	13.0	12.7	13.0	12.9	13.1	13.5	13.2	13.5	13.3	13.6	13.9	13.6	14.1	13.8
Americas	6.9	6.7	6.5	6.6	6.7	6.5	6.6	6.4	6.6	6.7	6.6	6.6	6.5	6.6	6.7	6.7	6.6
Middle East	8.4	8.4	7.9	8.4	8.7	8.1	8.3	7.9	8.5	8.6	8.0	8.3	7.9	8.6	8.9	8.2	8.4
Africa	4.1	4.3	4.3	4.3	4.2	4.3	4.3	4.4	4.3	4.2	4.3	4.3	4.5	4.4	4.3	4.4	4.4
Total Non-OECD	47.4	48.6	48.6	49.6	49.4	49.4	49.3	49.6	50.9	50.7	50.5	50.4	50.7	51.8	51.9	52.1	51.6
Total Demand ¹	93.1	95.0	95.4	95.7	96.8	96.8	96.2	96.5	98.0	98.3	98.4	97.8	98.0	99.0	99.7	100.4	99.3
OECD SUPPLY																	
Americas ⁴	19.1	20.0	19.9	19.0	19.3	19.7	19.5	19.9	19.8	20.2	21.1	20.2	21.3	21.6	22.0	22.6	21.9
Europe	3.3	3.5	3.6	3.4	3.3	3.6	3.5	3.7	3.5	3.4	3.4	3.5	3.6	3.5	3.4	3.5	3.5
Asia Oceania	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Total OECD	22.9	23.9	24.0	22.9	23.1	23.7	23.4	24.0	23.6	24.0	24.9	24.1	25.4	25.5	25.8	26.6	25.8
NON-OECD SUPPLY																	
FSU	13.9	14.1	14.3	14.1	14.0	14.6	14.2	14.4	14.3	14.3	14.4	14.4	14.4	14.4	14.3	14.5	14.4
Europe	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
China	4.2	4.3	4.1	4.0	3.9	3.9	4.0	3.9	3.9	3.8	3.8	3.9	3.8	3.8	3.8	3.7	3.8
Other Asia ²	3.5	3.6	3.7	3.6	3.5	3.5	3.6	3.5	3.4	3.4	3.4	3.5	3.4	3.4	3.3	3.3	3.3
Americas ^{2,4}	4.4	4.6	4.3	4.4	4.6	4.6	4.5	4.6	4.5	4.5	4.5	4.5	4.6	4.7	4.6	4.8	4.7
Middle East	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.2	1.2	1.2	1.3	1.2	1.2	1.2	1.2	1.2	1.2
Africa ²	1.8	1.8	1.7	1.6	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.8	1.8	1.7	1.8
Total Non-OECD	29.2	29.7	29.5	29.1	29.1	29.7	29.3	29.5	29.3	29.2	29.3	29.3	29.3	29.3	29.2	29.4	29.3
Processing gains ³	2.2	2.2	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
Global Biofuels	2.2	2.3	1.9	2.5	2.7	2.3	2.3	1.9	2.4	2.8	2.4	2.4	2.0	2.5	2.8	2.5	2.5
Total Non-OPEC Supply	56.6	58.1	57.7	56.7	57.2	57.9	57.4	57.7	57.7	58.3	58.9	58.1	59.0	59.6	60.1	60.9	59.9
OPEC																	
Crude	30.7	31.8	32.3	32.5	32.9	33.4	32.8	32.1	32.3	32.7	32.3	32.3					
NGLs	6.4	6.6	6.6	6.8	6.9	6.8	6.8	6.8	6.9	6.9	6.9	6.9	6.9	6.9	7.0	7.0	7.0
Total OPEC	37.1	38.4	39.0	39.3	39.8	40.2	39.6	38.9	39.2	39.6	39.2	39.2					
Total Supply ⁴	93.6	96.5	96.6	96.1	96.9	98.2	97.0	96.6	96.9	97.8	98.1	97.4					
STOCK CHANGES AND MISCELLANEOUS																	
Reported OECD																	
Industry	0.4	0.8	0.4	0.4	0.1	-0.9	0.0	0.3	-0.2	-0.5	-1.3	-0.4					
Government	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.1					
Total	0.4	0.8	0.4	0.4	0.1	-0.8	0.0	0.3	-0.3	-0.6	-1.4	-0.5					
Floating storage/Oil in transit	0.0	0.3	0.2	0.3	-0.2	0.2	0.1	-0.3	-0.3	-0.7	0.3	-0.3					
Miscellaneous to balance ⁵	0.1	0.4	0.6	-0.4	0.3	2.0	0.6	0.0	-0.5	0.9	0.8	0.3					
Total Stock Ch. & Misc	0.5	1.5	1.2	0.3	0.2	1.4	0.8	0.1	-1.1	-0.5	-0.4	-0.5					
Memo items:																	
Call on OPEC crude + Stock ch. ⁶	30.2	30.4	31.1	32.2	32.8	32.1	32.0	32.0	33.4	33.1	32.7	32.8	32.1	32.4	32.6	32.5	32.4

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. Includes Biofuels.

2 Other Asia includes Indonesia throughout. Latin America excludes Ecuador throughout. Africa excludes Angola, Gabon and Equatorial Guinea throughout.

3 Net volumetric gains and losses in the refining process and marine transportation losses.

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

5 Includes changes in non-reported stocks in OECD and non-OECD areas.

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

Table 1a
WORLD OIL SUPPLY AND DEMAND: CHANGES FROM LAST MONTH'S TABLE 1
(million barrels per day)

	2014	2015	1Q16	2Q16	3Q16	4Q16	2016	1Q17	2Q17	3Q17	4Q17	2017	1Q18	2Q18	3Q18	4Q18	2018
OECD DEMAND																	
Americas	-	-	-	-	-	-	-	-	-	-	-	-	0.1	-	-	-	0.1
Europe	-	-	-	-	-	-	-	-	-	-	0.1	-	0.1	0.1	0.1	0.1	0.1
Asia Oceania	-	-	-	-	-	-	-	-	-	-	-	-	-	0.1	0.1	0.1	0.1
Total OECD	-	-	-	-	-	-	-	-	-	-	0.2	-	0.3	0.2	0.3	0.2	0.2
NON-OECD DEMAND																	
FSU	-	-	-	-	-0.1	-	-	-0.1	-	-0.1	-0.1	-0.1	-	-	-0.1	-	-
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-	0.1	-	0.2	-	-	-	-
Other Asia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Americas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Middle East	-	-	-	-	-	-	-	-	-	-	0.1	-	-0.2	-0.1	-0.1	-0.1	-0.1
Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Non-OECD	-	-	-	-	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0.1	-	-0.1	-0.2	-0.2	-0.1	-0.1
Total Demand	-	-	-	-	-0.1	-0.1	-0.1	-0.1	-	-0.1	0.3	-	0.2	-	0.1	0.1	0.1
OECD SUPPLY																	
Americas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Europe	-	-	-	-	-	-	-	-	-	-	-	-	0.1	-	-	-	-
Asia Oceania	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total OECD	-	-	-	-	-	-	-	-	-	-	-	-	0.1	-	-	-	-
NON-OECD SUPPLY																	
FSU	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Asia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Americas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Middle East	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Non-OECD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Processing gains	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Global Biofuels	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Non-OPEC Supply	-	-	-	-	-	-	-	-	-	-	-0.1	-	0.1	-	-	-	-
OPEC																	
Crude	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NGLs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total OPEC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Supply	-	-	-	-	-	-	-	-	-	-	-0.1	-	-	-	-	-	-
STOCK CHANGES AND MISCELLANEOUS																	
REPORTED OECD																	
Industry	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Government	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Floating storage/Oil in transit	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Miscellaneous to balance	-	-	-	0.1	0.1	0.1	0.1	0.1	-	0.1	-0.4	-	-	-	-	-	-
Total Stock Ch. & Misc	-	-	-	-	0.1	0.1	0.1	0.1	-	0.1	-0.3	-	-	-	-	-	-
Memo items:																	
Call on OPEC crude + Stock ch.	-	-	-	-	-0.1	-0.1	-0.1	-0.1	-	-0.1	0.3	-	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

	2015	1Q16	2Q16	3Q16	4Q16	2016	1Q17	2Q17	3Q17	4Q17	2017	1Q18	2Q18	3Q18	4Q18	2018
Demand (mb/d)																
Americas	24.55	24.59	24.47	25.05	24.85	24.74	24.47	24.96	24.98	25.06	24.87	24.68	24.98	25.20	25.31	25.04
Europe	13.83	13.60	13.93	14.44	14.19	14.04	13.95	14.33	14.76	14.43	14.37	14.07	14.44	14.88	14.64	14.51
Asia Oceania	8.06	8.57	7.70	7.84	8.38	8.12	8.56	7.76	7.90	8.43	8.16	8.57	7.72	7.78	8.35	8.10
Total OECD	46.44	46.76	46.10	47.33	47.42	46.91	46.98	47.05	47.64	47.93	47.40	47.31	47.14	47.86	48.29	47.66
Asia	23.96	24.76	25.05	24.29	24.87	24.74	25.57	26.11	25.40	26.04	25.78	26.55	26.77	26.21	27.11	26.66
Middle East	8.37	7.87	8.40	8.70	8.12	8.27	7.92	8.49	8.65	7.99	8.26	7.85	8.56	8.86	8.23	8.38
Americas	6.71	6.47	6.58	6.66	6.53	6.56	6.45	6.57	6.68	6.58	6.57	6.47	6.62	6.73	6.69	6.63
FSU	4.59	4.52	4.51	4.88	4.84	4.69	4.50	4.69	4.95	4.81	4.74	4.60	4.73	5.02	4.88	4.81
Africa	4.26	4.32	4.33	4.18	4.32	4.29	4.42	4.31	4.23	4.33	4.32	4.50	4.40	4.28	4.45	4.41
Europe	0.69	0.69	0.73	0.72	0.72	0.71	0.71	0.74	0.75	0.75	0.74	0.73	0.76	0.76	0.77	0.76
Total Non-OECD	48.58	48.63	49.60	49.43	49.41	49.27	49.56	50.91	50.66	50.50	50.41	50.69	51.84	51.87	52.13	51.64
World	95.02	95.39	95.71	96.76	96.82	96.18	96.54	97.96	98.30	98.43	97.82	98.00	98.98	99.74	100.42	99.30
of which: US50	19.53	19.54	19.50	19.94	19.77	19.69	19.49	20.01	19.92	20.05	19.87	19.75	20.08	20.18	20.28	20.07
Europe 5*	8.13	8.09	8.14	8.34	8.21	8.19	8.30	8.36	8.51	8.29	8.37	8.22	8.34	8.52	8.37	8.36
China	11.56	11.75	12.03	11.58	11.87	11.81	12.45	12.61	12.16	12.55	12.45	12.97	12.86	12.60	13.04	12.87
Japan	4.12	4.44	3.70	3.79	4.18	4.03	4.33	3.64	3.69	4.12	3.94	4.27	3.52	3.61	4.04	3.86
India	4.24	4.65	4.63	4.40	4.56	4.56	4.58	4.79	4.54	4.81	4.68	4.92	5.09	4.78	5.14	4.98
Russia	3.45	3.46	3.36	3.71	3.61	3.53	3.38	3.51	3.75	3.58	3.56	3.47	3.54	3.80	3.65	3.62
Brazil	3.18	3.02	3.07	3.13	3.07	3.07	3.01	3.05	3.17	3.12	3.09	3.03	3.10	3.19	3.18	3.13
Saudi Arabia	3.42	3.02	3.39	3.53	3.11	3.26	2.88	3.35	3.57	3.08	3.22	2.94	3.41	3.63	3.16	3.29
Canada	2.37	2.33	2.32	2.46	2.40	2.38	2.35	2.34	2.50	2.46	2.41	2.31	2.30	2.47	2.46	2.39
Korea	2.47	2.66	2.55	2.60	2.72	2.63	2.69	2.56	2.64	2.72	2.65	2.72	2.63	2.59	2.70	2.66
Mexico	2.01	2.05	2.02	2.01	2.03	2.03	1.96	1.98	1.90	1.88	1.93	1.95	1.95	1.90	1.89	1.92
Iran	1.84	1.84	1.82	1.79	1.82	1.82	1.84	1.85	1.81	1.82	1.83	1.86	1.92	1.88	1.89	1.89
Total	66.31	66.86	66.52	67.27	67.34	67.00	67.27	68.05	68.15	68.50	68.00	68.40	68.75	69.16	69.81	69.03
% of World	69.8%	70.1%	69.5%	69.5%	69.6%	69.7%	69.7%	69.5%	69.3%	69.6%	69.5%	69.8%	69.5%	69.3%	69.5%	69.5%
Annual Change (% per annum)																
Americas	1.6	0.7	0.5	0.4	1.5	0.8	-0.5	2.0	-0.3	0.9	0.5	0.8	0.1	0.9	1.0	0.7
Europe	2.2	0.5	1.9	1.1	2.5	1.5	2.6	2.8	2.2	1.7	2.3	0.8	0.8	0.8	1.4	1.0
Asia Oceania	0.1	-1.3	1.1	1.2	2.1	0.8	-0.1	0.8	0.8	0.6	0.5	0.1	-0.4	-1.5	-1.0	-0.7
Total OECD	1.5	0.3	1.0	0.8	1.9	1.0	0.5	2.0	0.6	1.1	1.1	0.7	0.2	0.5	0.8	0.5
Asia	5.9	5.7	3.6	1.2	2.7	3.3	3.3	4.2	4.6	4.7	4.2	3.8	2.6	3.2	4.1	3.4
Middle East	-0.6	1.1	-1.4	-1.5	-2.6	-1.2	0.6	1.1	-0.6	-1.6	-0.1	-0.8	0.7	2.5	2.9	1.4
Americas	-2.1	-2.4	-2.2	-1.8	-2.6	-2.3	-0.3	-0.1	0.3	0.7	0.2	0.3	0.8	0.8	1.7	0.9
FSU	-1.6	5.3	-2.0	2.2	3.7	2.2	-0.6	3.9	1.4	-0.7	1.0	2.2	0.9	1.4	1.4	1.5
Africa	3.0	2.8	3.7	1.1	-4.1	0.7	2.3	-0.5	1.3	0.3	0.8	1.9	1.9	1.1	2.6	1.9
Europe	3.9	4.5	6.1	3.1	2.2	4.0	1.5	2.0	4.0	4.4	3.0	3.8	3.2	1.7	2.6	2.6
Total Non-OECD	2.6	3.5	1.5	0.4	0.5	1.4	1.9	2.6	2.5	2.2	2.3	2.3	1.8	2.4	3.2	2.4
World	2.0	1.9	1.2	0.6	1.2	1.2	1.2	2.4	1.6	1.7	1.7	1.5	1.0	1.5	2.0	1.5
Annual Change (mb/d)																
Americas	0.39	0.18	0.11	0.11	0.36	0.19	-0.12	0.49	-0.07	0.22	0.13	0.20	0.02	0.23	0.24	0.17
Europe	0.29	0.07	0.26	0.16	0.35	0.21	0.35	0.40	0.32	0.25	0.33	0.12	0.11	0.12	0.20	0.14
Asia Oceania	0.01	-0.11	0.09	0.09	0.17	0.06	-0.01	0.06	0.06	0.05	0.04	0.01	-0.03	-0.12	-0.08	-0.06
Total OECD	0.69	0.14	0.46	0.36	0.88	0.46	0.22	0.94	0.31	0.51	0.50	0.33	0.09	0.23	0.36	0.25
Asia	1.33	1.34	0.87	0.29	0.64	0.79	0.81	1.06	1.11	1.17	1.04	0.98	0.67	0.81	1.08	0.88
Middle East	-0.05	0.09	-0.12	-0.13	-0.22	-0.10	0.05	0.09	-0.05	-0.13	-0.01	-0.06	0.06	0.22	0.23	0.11
Americas	-0.14	-0.16	-0.15	-0.12	-0.18	-0.15	-0.02	-0.01	0.02	0.05	0.01	0.02	0.05	0.05	0.11	0.06
FSU	-0.08	0.23	-0.09	0.10	0.17	0.10	-0.03	0.18	0.07	-0.03	0.05	0.10	0.04	0.07	0.07	0.07
Africa	0.13	0.12	0.15	0.04	-0.19	0.03	0.10	-0.02	0.05	0.01	0.04	0.08	0.08	0.05	0.11	0.08
Europe	0.03	0.03	0.04	0.02	0.02	0.03	0.01	0.01	0.03	0.03	0.02	0.03	0.02	0.01	0.02	0.02
Total Non-OECD	1.21	1.64	0.71	0.21	0.25	0.70	0.93	1.31	1.23	1.09	1.14	1.14	0.93	1.21	1.63	1.23
World	1.90	1.79	1.17	0.57	1.13	1.16	1.15	2.25	1.54	1.60	1.64	1.46	1.02	1.44	1.99	1.48
Revisions to Oil Demand from Last Month's Report (mb/d)																
Americas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.01	0.13	0.03	0.05	0.01	0.06
Europe	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.02	0.11	0.04	0.12	0.10	0.12	0.05	0.10
Asia Oceania	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.08	0.09	0.13	0.09
Total OECD	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.16	0.05	0.31	0.21	0.26	0.19	0.24
Asia	0.00	-0.04	-0.04	-0.04	-0.04	-0.04	-0.03	-0.03	-0.03	0.09	0.00	0.18	-0.03	-0.03	-0.02	0.02
Middle East	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.02	0.06	0.01	-0.24	-0.09	-0.05	-0.07	-0.11
Americas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.04	-0.04	-0.04	-0.03	-0.04
FSU	0.00	0.01	0.00	-0.05	-0.04	-0.02	-0.06	-0.04	-0.09	-0.06	-0.06	-0.03	-0.04	-0.08	-0.04	-0.05
Africa	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.02	0.03	0.03	0.01	0.02
Europe	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Non-OECD	0.00	-0.04	-0.04	-0.09	-0.08	-0.06	-0.08	-0.06	-0.13	0.09	-0.05	-0.11	-0.18	-0.18	-0.13	-0.15
World	0.00	-0.03	-0.04	-0.09	-0.08	-0.06	-0.08	-0.05	-0.11	0.25	0.00	0.20	0.04	0.08	0.06	0.09
Revisions to Oil Demand Growth from Last Month's Report (mb/d)																
World	0.00	-0.06	-0.02	-0.08	-0.08	-0.06	-0.05	-0.01	-0.02	0.34	0.07	0.28	0.09	0.19	-0.19	0.09

* France, Germany, Italy, Spain and UK

Table 2a
OECD REGIONAL OIL DEMAND¹
(million barrels per day)

										Latest month vs.	
	2016	2017	1Q17	2Q17	3Q17	4Q17	Oct 17	Nov 17	Dec 17 ²	Nov 17	Dec 16
Americas											
LPG and ethane	3.27	3.24	3.50	3.07	2.96	3.42	3.06	3.54	3.66	0.13	0.14
Naphtha	0.35	0.34	0.35	0.36	0.34	0.33	0.32	0.33	0.32	-0.01	-0.04
Motor gasoline	11.10	11.08	10.64	11.30	11.36	11.01	11.11	10.93	11.00	0.07	-0.12
Jet and kerosene	1.90	1.98	1.89	1.97	2.04	2.02	2.02	2.02	2.03	0.01	0.09
Gasoil/diesel oil	5.07	5.15	5.14	5.10	5.10	5.25	5.24	5.43	5.10	-0.34	-0.16
Residual fuel oil	0.60	0.66	0.67	0.69	0.60	0.69	0.71	0.74	0.62	-0.12	0.03
Other products	2.44	2.42	2.28	2.48	2.58	2.34	2.42	2.40	2.19	-0.20	-0.18
Total	24.74	24.87	24.47	24.96	24.98	25.06	24.87	25.39	24.93	-0.47	-0.24
Europe											
LPG and ethane	1.21	1.20	1.27	1.18	1.15	1.18	1.13	1.17	1.23	0.06	-0.08
Naphtha	1.11	1.21	1.30	1.13	1.21	1.21	1.21	1.22	1.20	-0.02	0.03
Motor gasoline	1.90	1.92	1.79	1.99	2.01	1.88	1.88	1.90	1.86	-0.04	0.00
Jet and kerosene	1.37	1.44	1.29	1.46	1.63	1.40	1.51	1.33	1.35	0.02	0.08
Gasoil/diesel oil	6.28	6.48	6.32	6.42	6.53	6.64	6.59	6.84	6.48	-0.37	0.00
Residual fuel oil	0.89	0.89	0.89	0.86	0.90	0.93	0.94	0.91	0.94	0.02	0.09
Other products	1.28	1.23	1.10	1.29	1.34	1.20	1.26	1.23	1.12	-0.11	-0.06
Total	14.04	14.37	13.95	14.33	14.76	14.43	14.53	14.60	14.18	-0.42	0.07
Asia Oceania											
LPG and ethane	0.83	0.79	0.89	0.77	0.74	0.78	0.70	0.77	0.87	0.10	-0.08
Naphtha	1.96	2.09	2.14	1.98	2.05	2.17	2.16	2.17	2.19	0.02	0.09
Motor gasoline	1.55	1.55	1.47	1.53	1.62	1.57	1.51	1.57	1.63	0.06	0.04
Jet and kerosene	0.90	0.92	1.17	0.73	0.72	1.06	0.85	1.07	1.27	0.20	0.04
Gasoil/diesel oil	1.84	1.92	1.90	1.90	1.89	1.98	1.83	2.08	2.02	-0.05	0.03
Residual fuel oil	0.65	0.56	0.64	0.51	0.52	0.56	0.48	0.56	0.63	0.06	-0.07
Other products	0.40	0.34	0.35	0.34	0.35	0.31	0.28	0.32	0.32	0.00	-0.06
Total	8.12	8.16	8.56	7.76	7.90	8.43	7.82	8.54	8.93	0.39	-0.01
OECD											
LPG and ethane	5.31	5.23	5.66	5.02	4.85	5.38	4.90	5.47	5.77	0.29	-0.01
Naphtha	3.42	3.64	3.79	3.46	3.60	3.71	3.70	3.73	3.72	-0.01	0.08
Motor gasoline	14.55	14.55	13.91	14.82	15.00	14.47	14.50	14.40	14.49	0.09	-0.08
Jet and kerosene	4.17	4.34	4.34	4.15	4.39	4.48	4.38	4.42	4.65	0.23	0.21
Gasoil/diesel oil	13.20	13.54	13.36	13.42	13.52	13.86	13.66	14.35	13.60	-0.76	-0.13
Residual fuel oil	2.15	2.11	2.20	2.06	2.01	2.18	2.12	2.22	2.19	-0.03	0.04
Other products	4.11	3.99	3.72	4.12	4.26	3.85	3.97	3.95	3.63	-0.32	-0.29
Total	46.91	47.40	46.98	47.05	47.64	47.93	47.22	48.54	48.04	-0.50	-0.18

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

North America comprises US 50 states, US territories, Mexico and Canada.

² Latest official OECD submissions (MOS).

Table 2b
OIL DEMAND IN SELECTED OECD COUNTRIES¹
(million barrels per day)

	2016	2017	1Q17	2Q17	3Q17	4Q17	Oct 17	Nov 17	Dec 17 ²	Latest month vs.	
										Nov 17	Dec 16
United States³											
LPG and ethane	2.47	2.49	2.69	2.36	2.26	2.66	2.34	2.73	2.92	0.19	0.26
Naphtha	0.22	0.23	0.24	0.24	0.21	0.22	0.22	0.23	0.22	-0.01	0.00
Motor gasoline	9.32	9.32	8.95	9.54	9.56	9.23	9.35	9.14	9.20	0.06	-0.09
Jet and kerosene	1.62	1.69	1.61	1.69	1.72	1.73	1.71	1.73	1.76	0.03	0.08
Gasoil/diesel oil	3.88	3.94	3.95	3.91	3.87	4.02	3.97	4.17	3.93	-0.23	-0.11
Residual fuel oil	0.33	0.36	0.37	0.37	0.30	0.39	0.36	0.43	0.39	-0.04	0.08
Other products	1.86	1.85	1.69	1.91	2.01	1.79	1.86	1.85	1.66	-0.19	-0.13
Total	19.69	19.87	19.49	20.01	19.92	20.05	19.81	20.28	20.08	-0.20	0.10
Japan											
LPG and ethane	0.44	0.42	0.50	0.40	0.37	0.42	0.35	0.42	0.50	0.07	-0.04
Naphtha	0.76	0.78	0.83	0.75	0.75	0.81	0.78	0.82	0.82	-0.01	-0.02
Motor gasoline	0.90	0.88	0.82	0.87	0.95	0.90	0.86	0.89	0.94	0.05	0.03
Jet and kerosene	0.50	0.51	0.73	0.36	0.33	0.61	0.44	0.61	0.79	0.18	0.03
Diesel	0.43	0.42	0.43	0.41	0.42	0.43	0.40	0.44	0.45	0.00	-0.01
Other gasoil	0.35	0.35	0.39	0.32	0.31	0.37	0.31	0.38	0.42	0.04	0.01
Residual fuel oil	0.34	0.29	0.33	0.27	0.27	0.29	0.25	0.28	0.33	0.05	-0.03
Other products	0.31	0.29	0.30	0.27	0.29	0.29	0.26	0.29	0.31	0.02	-0.02
Total	4.03	3.94	4.33	3.64	3.69	4.12	3.65	4.15	4.55	0.41	-0.04
Germany											
LPG and ethane	0.10	0.14	0.14	0.15	0.14	0.12	0.10	0.14	0.13	-0.01	0.03
Naphtha	0.38	0.40	0.46	0.39	0.39	0.37	0.34	0.38	0.37	-0.01	-0.02
Motor gasoline	0.42	0.43	0.42	0.45	0.44	0.43	0.42	0.45	0.41	-0.04	0.00
Jet and kerosene	0.20	0.21	0.20	0.21	0.23	0.20	0.22	0.20	0.20	0.00	0.01
Diesel	0.76	0.77	0.75	0.78	0.78	0.76	0.77	0.81	0.70	-0.11	-0.01
Other gasoil	0.36	0.37	0.39	0.36	0.35	0.36	0.35	0.39	0.33	-0.07	-0.07
Residual fuel oil	0.09	0.09	0.10	0.08	0.08	0.10	0.11	0.10	0.10	0.00	0.00
Other products	0.10	0.10	0.08	0.11	0.11	0.09	0.11	0.10	0.06	-0.04	-0.01
Total	2.41	2.50	2.54	2.52	2.52	2.43	2.43	2.58	2.30	-0.28	-0.08
Italy											
LPG and ethane	0.11	0.11	0.13	0.10	0.10	0.12	0.10	0.12	0.14	0.02	0.00
Naphtha	0.09	0.11	0.11	0.11	0.12	0.11	0.12	0.12	0.10	-0.02	-0.01
Motor gasoline	0.18	0.17	0.16	0.18	0.18	0.17	0.17	0.16	0.17	0.01	0.00
Jet and kerosene	0.10	0.10	0.08	0.11	0.13	0.09	0.11	0.07	0.09	0.01	0.00
Diesel	0.46	0.47	0.45	0.47	0.46	0.48	0.49	0.48	0.47	-0.01	0.01
Other gasoil	0.09	0.09	0.08	0.08	0.09	0.10	0.10	0.10	0.10	0.00	-0.01
Residual fuel oil	0.06	0.07	0.07	0.06	0.08	0.06	0.07	0.06	0.06	-0.01	-0.01
Other products	0.16	0.16	0.15	0.16	0.16	0.16	0.18	0.17	0.14	-0.02	-0.01
Total	1.25	1.28	1.23	1.28	1.32	1.30	1.34	1.29	1.27	-0.02	-0.02
France											
LPG and ethane	0.12	0.11	0.14	0.10	0.10	0.11	0.10	0.11	0.12	0.01	-0.02
Naphtha	0.10	0.10	0.12	0.10	0.11	0.07	0.07	0.08	0.08	0.00	0.00
Motor gasoline	0.17	0.18	0.16	0.19	0.20	0.18	0.17	0.18	0.18	0.01	0.01
Jet and kerosene	0.15	0.16	0.15	0.16	0.18	0.15	0.16	0.14	0.16	0.02	0.02
Diesel	0.70	0.72	0.71	0.73	0.73	0.72	0.71	0.73	0.72	-0.01	0.00
Other gasoil	0.25	0.25	0.28	0.21	0.25	0.26	0.24	0.27	0.28	0.01	0.00
Residual fuel oil	0.04	0.06	0.06	0.05	0.06	0.06	0.06	0.06	0.06	0.00	0.02
Other products	0.12	0.12	0.09	0.14	0.13	0.11	0.11	0.12	0.10	-0.02	0.01
Total	1.66	1.71	1.72	1.68	1.76	1.66	1.62	1.68	1.69	0.02	0.03
United Kingdom											
LPG and ethane	0.16	0.15	0.16	0.15	0.14	0.14	0.14	0.14	0.14	0.00	-0.03
Naphtha	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.01	0.00
Motor gasoline	0.29	0.29	0.28	0.30	0.29	0.29	0.27	0.30	0.29	-0.01	0.01
Jet and kerosene	0.31	0.32	0.32	0.31	0.33	0.32	0.32	0.32	0.33	0.01	0.03
Diesel	0.52	0.52	0.49	0.53	0.52	0.54	0.51	0.56	0.54	-0.02	0.01
Other gasoil	0.13	0.14	0.12	0.14	0.15	0.14	0.14	0.15	0.13	-0.01	0.02
Residual fuel oil	0.03	0.03	0.03	0.02	0.03	0.03	0.03	0.03	0.03	0.00	0.00
Other products	0.11	0.11	0.11	0.12	0.12	0.11	0.12	0.11	0.11	-0.01	0.00
Total	1.59	1.58	1.53	1.59	1.60	1.60	1.56	1.63	1.60	-0.03	0.04
Canada											
LPG and ethane	0.37	0.35	0.39	0.32	0.32	0.36	0.33	0.42	0.33	-0.09	-0.11
Naphtha	0.10	0.10	0.09	0.09	0.11	0.10	0.10	0.10	0.10	-0.01	-0.01
Motor gasoline	0.85	0.85	0.80	0.86	0.89	0.85	0.85	0.86	0.84	-0.02	-0.01
Jet and kerosene	0.14	0.15	0.13	0.14	0.17	0.14	0.16	0.14	0.14	-0.01	0.01
Diesel	0.30	0.29	0.30	0.29	0.29	0.29	0.28	0.29	0.29	0.00	0.01
Other gasoil	0.24	0.29	0.26	0.26	0.32	0.33	0.36	0.34	0.29	-0.05	0.01
Residual fuel oil	0.04	0.05	0.05	0.06	0.05	0.04	0.04	0.05	0.04	0.00	0.00
Other products	0.34	0.34	0.33	0.32	0.36	0.35	0.36	0.36	0.34	-0.03	-0.01
Total	2.38	2.41	2.35	2.34	2.50	2.46	2.48	2.56	2.35	-0.21	-0.12

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

² Latest official OECD submissions (MOS).

³ US figures exclude US territories.

Table 3
WORLD OIL PRODUCTION
(million barrels per day)

	2016	2017	2018	3Q17	4Q17	1Q18	2Q18	3Q18	Dec 17	Jan 18	Feb 18
OPEC											
Crude Oil											
Saudi Arabia	10.42	9.96		9.99	9.99				9.97	9.98	9.98
Iran	3.55	3.80		3.83	3.81				3.80	3.80	3.82
Iraq	4.42	4.47		4.48	4.45				4.49	4.48	4.48
UAE	3.05	2.93		2.94	2.90				2.87	2.85	2.80
Kuwait	2.88	2.71		2.70	2.70				2.70	2.70	2.70
Neutral Zone	0.00	0.00		0.00	0.00				0.00	0.00	0.00
Qatar	0.65	0.61		0.60	0.61				0.61	0.62	0.60
Angola	1.71	1.64		1.67	1.62				1.59	1.57	1.57
Nigeria	1.47	1.53		1.62	1.60				1.61	1.68	1.70
Libya	0.39	0.83		0.94	1.00				1.00	1.00	1.02
Algeria	1.11	1.05		1.06	1.02				1.04	1.02	1.04
Equatorial Guinea	0.14	0.13		0.12	0.13				0.13	0.13	0.13
Ecuador	0.55	0.53		0.54	0.53				0.52	0.52	0.51
Venezuela	2.24	1.97		1.99	1.75				1.61	1.61	1.55
Gabon	0.23	0.20		0.20	0.21				0.20	0.21	0.20
Total Crude Oil	32.80	32.35		32.68	32.31				32.14	32.17	32.10
Total NGLs ¹	6.78	6.87	6.96	6.90	6.85	6.91	6.94	6.98	6.85	6.91	6.91
Total OPEC²	39.59	39.22		39.58	39.17				38.99	39.08	39.01
NON-OPEC^{2,3}											
OECD											
Americas	19.48	20.25	21.90	20.17	21.11	21.35	21.57	22.02	21.15	21.16	21.32
United States	12.53	13.19	14.70	13.15	13.96	14.17	14.60	14.75	13.97	13.94	14.15
Mexico	2.47	2.23	2.09	2.16	2.13	2.15	2.11	2.07	2.11	2.19	2.14
Canada	4.47	4.82	5.11	4.86	5.01	5.03	4.86	5.20	5.06	5.03	5.03
Chile	0.01	0.01	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Europe	3.52	3.48	3.50	3.37	3.42	3.60	3.49	3.38	3.27	3.61	3.58
UK	1.03	1.02	1.12	0.97	0.98	1.09	1.13	1.08	0.82	1.08	1.08
Norway	1.99	1.97	1.89	1.90	1.91	2.00	1.86	1.81	1.93	2.03	2.00
Others	0.49	0.50	0.50	0.50	0.52	0.50	0.50	0.49	0.52	0.50	0.51
Asia Oceania	0.43	0.39	0.42	0.41	0.38	0.41	0.41	0.41	0.37	0.41	0.41
Australia	0.35	0.32	0.35	0.33	0.31	0.34	0.34	0.35	0.30	0.34	0.34
Others	0.08	0.07	0.07	0.08	0.07	0.07	0.07	0.07	0.07	0.07	0.07
Total OECD	23.42	24.12	25.82	23.95	24.90	25.35	25.47	25.81	24.78	25.18	25.31
NON-OECD											
Former USSR	14.24	14.36	14.40	14.26	14.37	14.42	14.38	14.33	14.44	14.43	14.44
Russia	11.34	11.36	11.33	11.30	11.33	11.33	11.30	11.32	11.34	11.33	11.34
Others	2.90	3.00	3.08	2.96	3.05	3.10	3.08	3.01	3.10	3.09	3.10
Asia²	7.57	7.33	7.12	7.27	7.26	7.19	7.14	7.10	7.22	7.25	7.16
China	3.98	3.87	3.77	3.83	3.84	3.80	3.79	3.76	3.82	3.86	3.77
Malaysia	0.71	0.69	0.68	0.69	0.69	0.69	0.68	0.68	0.69	0.69	0.69
India	0.85	0.86	0.83	0.86	0.85	0.83	0.82	0.84	0.85	0.84	0.82
Indonesia	0.88	0.85	0.82	0.84	0.84	0.83	0.83	0.82	0.84	0.83	0.83
Others	1.15	1.06	1.02	1.06	1.04	1.03	1.02	1.01	1.03	1.03	1.04
Europe	0.14	0.13	0.12	0.13	0.13	0.13	0.12	0.12	0.13	0.13	0.13
Americas²	4.48	4.54	4.67	4.54	4.55	4.58	4.67	4.64	4.57	4.55	4.57
Brazil	2.61	2.74	2.88	2.73	2.73	2.78	2.87	2.86	2.73	2.74	2.80
Argentina	0.61	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58
Colombia	0.88	0.86	0.84	0.86	0.86	0.86	0.84	0.83	0.87	0.86	0.85
Others	0.38	0.37	0.37	0.37	0.37	0.36	0.37	0.37	0.38	0.37	0.34
Middle East^{2,4}	1.27	1.25	1.24	1.25	1.25	1.24	1.24	1.24	1.26	1.24	1.24
Oman	1.01	0.98	0.97	0.98	0.98	0.97	0.97	0.97	0.99	0.97	0.97
Syria	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Yemen	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Others	0.21	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22
Africa	1.66	1.71	1.76	1.73	1.74	1.75	1.78	1.78	1.77	1.78	1.71
Egypt	0.67	0.64	0.62	0.64	0.65	0.63	0.62	0.61	0.65	0.64	0.63
Others	0.99	1.07	1.15	1.09	1.10	1.11	1.16	1.17	1.12	1.15	1.07
Total Non-OECD	29.34	29.32	29.32	29.19	29.31	29.31	29.33	29.22	29.39	29.39	29.24
Processing gains ⁵	2.27	2.29	2.32	2.29	2.29	2.32	2.32	2.32	2.29	2.32	2.32
Global Biofuels	2.34	2.40	2.46	2.82	2.40	2.04	2.51	2.78	2.13	2.05	2.06
TOTAL NON-OPEC	57.37	58.13	59.92	58.25	58.90	59.03	59.63	60.13	58.59	58.94	58.94
TOTAL SUPPLY	96.96	97.35		97.84	98.07				97.58	98.02	97.94

¹ Includes condensates reported by OPEC countries, oil from non-conventional sources, e.g. NGLs in Qatar and Nigeria and non-oil inputs to Saudi Arabian MTBE.

² Latin America excludes Ecuador throughout. Africa excludes Angola, Gabon and Equatorial Guinea throughout. Asia includes Indonesia throughout.

³ Comprises crude oil, condensates, NGLs and oil from non-conventional sources

⁴ Includes small amounts of production from Jordan and Bahrain.

⁵ Net volumetric gains and losses in refining and marine transportation losses.

Table 4
OECD INDUSTRY STOCKS¹ AND QUARTERLY STOCK CHANGES

	RECENT MONTHLY STOCKS ²					PRIOR YEARS' STOCKS ²			STOCK CHANGES			
	in Million Barrels					in Million Barrels			in mb/d			
	Sep2017	Oct2017	Nov2017	Dec2017	Jan2018*	Jan2015	Jan2016	Jan2017	1Q2017	2Q2017	3Q2017	4Q2017
OECD Americas												
Crude	624.7	616.5	609.7	579.5	583.5	544.2	632.6	665.1	0.56	-0.44	-0.34	-0.49
Motor Gasoline	252.5	248.4	253.9	268.3	275.2	281.1	292.2	293.0	0.02	-0.03	-0.18	0.17
Middle Distillate	210.7	201.3	202.0	218.5	221.5	208.6	238.7	242.1	-0.13	-0.02	-0.15	0.08
Residual Fuel Oil	42.7	38.3	37.7	35.0	37.7	41.0	50.4	47.6	0.00	-0.08	0.02	-0.08
Total Products ³	747.5	727.3	722.6	736.2	717.8	724.1	780.4	781.5	-0.43	0.19	-0.06	-0.12
Total ⁴	1571.5	1542.0	1523.8	1498.2	1487.8	1435.8	1587.1	1623.3	0.10	-0.13	-0.26	-0.80
OECD Europe												
Crude	337.5	334.9	347.1	329.5	343.5	314.3	360.2	354.5	0.18	0.04	-0.28	-0.09
Motor Gasoline	86.9	90.0	92.2	99.0	100.8	101.0	102.4	104.1	0.02	-0.09	-0.06	0.13
Middle Distillate	293.4	276.2	265.7	271.3	281.9	261.0	322.9	319.7	0.06	-0.15	-0.04	-0.24
Residual Fuel Oil	58.7	62.0	60.4	59.0	60.5	70.2	77.3	70.9	-0.02	-0.04	-0.07	0.00
Total Products ³	555.3	539.9	531.2	543.2	560.5	530.0	602.5	601.9	0.16	-0.30	-0.09	-0.13
Total ⁴	965.3	948.2	952.5	942.5	975.3	906.7	1032.5	1026.4	0.33	-0.25	-0.37	-0.25
OECD Asia Oceania												
Crude	198.2	188.4	188.1	188.9	187.4	167.4	191.6	192.7	-0.03	0.01	0.09	-0.10
Motor Gasoline	23.1	23.0	23.7	22.7	24.0	23.0	25.4	25.5	-0.01	0.02	-0.02	0.00
Middle Distillate	66.4	72.8	66.2	63.2	61.3	62.8	64.5	69.0	-0.05	0.04	0.03	-0.04
Residual Fuel Oil	18.9	20.9	21.1	19.0	19.3	19.7	18.9	18.3	0.01	0.03	-0.02	0.00
Total Products ³	172.1	182.8	176.1	164.7	160.7	167.3	167.2	167.0	-0.08	0.16	0.03	-0.08
Total ⁴	433.2	435.4	426.9	412.1	407.7	398.8	425.2	421.6	-0.13	0.23	0.10	-0.23
Total OECD												
Crude	1160.5	1139.8	1144.8	1097.8	1114.4	1025.9	1184.4	1212.3	0.71	-0.39	-0.53	-0.68
Motor Gasoline	362.5	361.4	369.8	390.0	400.0	405.0	419.9	422.5	0.03	-0.09	-0.26	0.30
Middle Distillate	570.6	550.3	533.9	552.9	564.6	532.4	626.0	630.7	-0.12	-0.13	-0.15	-0.19
Residual Fuel Oil	120.3	121.2	119.1	113.1	117.4	130.9	146.6	136.8	-0.01	-0.09	-0.08	-0.08
Total Products ³	1474.8	1450.0	1430.0	1444.1	1439.0	1421.4	1550.0	1550.3	-0.35	0.04	-0.13	-0.33
Total ⁴	2970.0	2925.6	2903.2	2852.8	2870.8	2741.3	3044.8	3071.3	0.31	-0.16	-0.53	-1.27

OECD GOVERNMENT-CONTROLLED STOCKS⁵ AND QUARTERLY STOCK CHANGES

	RECENT MONTHLY STOCKS ²					PRIOR YEARS' STOCKS ²			STOCK CHANGES			
	in Million Barrels					in Million Barrels			in mb/d			
	Sep2017	Oct2017	Nov2017	Dec2017	Jan2018*	Jan2015	Jan2016	Jan2017	1Q2017	2Q2017	3Q2017	4Q2017
OECD Americas												
Crude	673.6	669.0	661.3	662.8	664.2	691.0	695.1	695.1	-0.04	-0.14	-0.06	-0.12
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
OECD Europe												
Crude	208.0	207.4	207.0	206.0	206.1	208.6	206.8	205.8	0.00	0.03	0.00	-0.02
Products	267.2	265.0	266.7	270.6	271.6	257.8	265.9	274.9	0.02	-0.03	-0.06	0.04
OECD Asia Oceania												
Crude	385.0	385.0	385.4	384.4	384.4	385.0	383.6	384.1	0.00	0.01	0.00	-0.01
Products	38.3	38.3	38.6	38.7	38.7	32.0	34.2	37.4	0.01	0.00	0.00	0.00
Total OECD												
Crude	1266.7	1261.4	1253.7	1253.2	1254.7	1284.5	1285.5	1285.0	-0.04	-0.09	-0.06	-0.15
Products	307.5	305.3	307.4	311.3	312.3	291.7	302.1	314.2	0.03	-0.03	-0.05	0.04
Total ⁴	1577.7	1570.2	1564.6	1567.6	1569.9	1580.0	1591.4	1602.1	0.00	-0.12	-0.12	-0.11

* 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 COUNTRIES¹
('millions of barrels' and 'days')³

	End December 2016		End March 2017		End June 2017		End September 2017		End December 2017 ³	
	Stock Level	Days Fwd ² Demand	Stock Level	Days Fwd Demand	Stock Level	Days Fwd Demand	Stock Level	Days Fwd Demand	Stock Level	Days Fwd Demand
OECD Americas										
Canada	183.3	78	184.9	79	182.7	73	185.7	75	188.7	-
Chile	11.2	33	11.9	35	11.2	32	12.5	36	11.5	-
Mexico	47.3	24	47.6	24	49.3	26	46.5	25	43.8	-
United States ⁴	2031.6	104	2034.5	102	2011.2	101	1980.3	99	1897.0	-
Total⁴	2295.5	94	2301.1	92	2276.5	91	2247.2	90	2163.0	88
OECD Asia Oceania										
Australia	33.9	30	33.3	28	35.4	30	33.7	28	34.2	-
Israel	-	-	-	-	-	-	-	-	-	-
Japan	562.5	130	546.3	150	566.3	154	571.3	139	562.8	-
Korea	230.3	86	237.8	93	236.4	89	243.5	89	230.6	-
New Zealand	8.9	48	8.2	48	9.0	54	8.1	44	7.5	-
Total	835.6	98	825.6	106	847.1	107	856.6	102	835.1	97
OECD Europe⁵										
Austria	22.8	88	24.3	94	21.8	76	22.1	84	21.5	-
Belgium	47.4	71	47.8	76	46.6	72	44.1	66	41.4	-
Czech Republic	21.9	115	22.5	101	21.4	93	21.4	97	21.5	-
Denmark	30.5	201	27.2	169	27.3	172	23.6	146	23.4	-
Estonia	2.4	72	2.6	94	2.7	98	2.2	80	3.0	-
Finland	42.3	220	44.8	224	43.4	214	44.7	236	41.1	-
France	162.2	94	167.7	100	165.4	94	165.2	99	165.7	-
Germany	285.4	112	280.4	111	276.8	110	274.1	113	278.7	-
Greece	33.9	115	35.1	118	32.4	100	32.3	109	32.4	-
Hungary	24.5	151	24.3	144	25.2	145	26.2	148	25.4	-
Ireland	11.8	78	12.8	86	12.1	79	10.1	63	11.0	-
Italy	124.3	101	134.4	105	133.7	101	127.7	98	125.1	-
Latvia	2.4	69	2.4	58	3.3	77	1.5	43	2.5	-
Luxembourg	0.7	12	0.7	12	0.7	12	0.6	11	0.6	-
Netherlands	152.6	155	154.7	158	156.1	162	149.7	161	142.5	-
Norway	22.9	113	22.9	107	22.0	98	22.0	81	23.3	-
Poland	67.4	116	69.8	110	69.5	103	69.2	104	71.8	-
Portugal	22.7	101	26.5	110	24.0	96	24.1	101	22.9	-
Slovak Republic	12.1	151	12.8	151	13.0	140	12.1	122	11.4	-
Slovenia	4.5	96	4.9	94	5.1	92	4.7	88	5.2	-
Spain	129.0	101	136.5	106	128.7	98	127.2	98	119.1	-
Sweden	50.7	163	52.6	162	53.2	160	42.3	131	35.6	-
Switzerland	35.2	158	35.5	162	34.5	160	35.4	148	33.9	-
Turkey	79.1	100	81.4	83	84.0	76	83.9	81	83.2	-
United Kingdom	82.3	54	81.2	51	80.7	50	77.5	49	80.1	-
Total	1471.0	105	1505.8	105	1483.5	101	1444.0	100	1422.3	101
Total OECD	4602.1	98	4632.5	98	4607.0	97	4547.7	95	4420.4	93
DAYS OF IEA Net Imports⁶ -	200	-	203	-	196	-	192	-	187	-

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 entropot 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 2017 forward demand figures are IEA Secretariat forecasts.

⁴ US figures exclude US territories. Total includes US territories.

⁵ Data not available for Iceland.

⁶ Reflects stock levels and prior calendar year's net imports adjusted according to IEA emergency reserve definitions (see www.iea.org/netimports.asp). Net exporting IEA countries are excluded.

TOTAL OECD STOCKS

CLOSING STOCKS	Total	Government ¹ controlled Millions of Barrels	Industry	Total	Government ¹ controlled Days of Fwd. Demand ²	Industry
4Q2014	4288	1582	2706	92	34	58
1Q2015	4377	1584	2792	96	35	61
2Q2015	4467	1587	2880	95	34	61
3Q2015	4538	1581	2957	98	34	64
4Q2015	4577	1588	2989	98	34	64
1Q2016	4633	1595	3039	101	35	66
2Q2016	4668	1592	3076	99	34	65
3Q2016	4679	1596	3084	99	34	65
4Q2016	4602	1600	3002	98	34	64
1Q2017	4632	1600	3033	98	34	64
2Q2017	4607	1588	3019	97	33	63
3Q2017	4548	1578	2970	95	33	62
4Q2017	4420	1568	2853	93	33	60

¹ Includes government-owned stocks and stock holding organisation stocks held for emergency purposes.

² Days of forward demand calculated using actual demand except in 4Q2017 (when latest forecasts are used).

Table 6
IEA MEMBER COUNTRY DESTINATIONS OF SELECTED CRUDE STREAMS¹
(million barrels per day)

	2015	2016	2017	1Q17	2Q17	3Q17	4Q17	Oct 17	Nov 17	Dec 17	Year Earlier	
											Dec 16	change
Saudi Light & Extra Light												
Americas	0.63	0.69	0.58	0.70	0.75	0.44	0.46	0.43	0.46	0.48	0.76	-0.28
Europe	0.78	0.79	0.69	0.64	0.78	0.64	0.68	0.70	0.85	0.49	0.90	-0.41
Asia Oceania	1.25	1.40	1.56	1.65	1.49	1.56	1.53	1.36	1.63	1.61	1.73	-0.12
Saudi Medium												
Americas	0.37	0.44	0.33	0.43	0.35	0.28	0.27	0.18	0.36	0.28	0.41	-0.13
Europe	0.03	0.01	0.01	0.01	0.00	0.01	0.02	0.04	-	0.02	-	-
Asia Oceania	0.44	0.41	0.37	0.33	0.33	0.41	0.41	0.26	0.40	0.57	0.25	0.31
Canada Heavy												
Americas	1.90	2.04	2.23	2.31	2.25	2.21	2.16	2.13	1.99	2.37	2.17	0.20
Europe	0.01	0.01	0.02	0.01	-	0.03	0.04	0.03	0.06	0.01	0.02	-0.01
Asia Oceania	-	-	-	-	-	-	-	-	-	-	-	-
Iraqi Basrah Light²												
Americas	0.17	0.42	0.63	0.53	0.67	0.55	0.75	0.73	0.77	0.74	0.64	0.11
Europe	0.72	0.81	0.77	0.76	0.84	0.76	0.71	0.77	0.68	0.68	0.73	-0.05
Asia Oceania	0.41	0.46	0.40	0.42	0.39	0.41	0.39	0.30	0.42	0.45	0.50	-0.05
Kuwait Blend												
Americas	0.13	0.14	0.11	0.19	0.18	0.04	0.03	-	-	0.09	0.25	-0.16
Europe	0.13	0.19	0.20	0.20	0.22	0.25	0.14	0.17	0.07	0.18	0.22	-0.04
Asia Oceania	0.65	0.66	0.68	0.71	0.68	0.67	0.67	0.63	0.74	0.62	0.59	0.03
Iranian Light												
Americas	-	-	-	-	-	-	-	-	-	-	-	-
Europe	0.09	0.21	0.27	0.38	0.25	0.25	0.20	0.14	0.24	0.22	0.33	-0.10
Asia Oceania	0.01	0.01	0.01	0.01	0.00	0.02	0.01	0.02	-	0.01	-	-
Iranian Heavy³												
Americas	-	-	-	-	-	-	-	-	-	-	-	-
Europe	0.02	0.21	0.52	0.41	0.52	0.59	0.54	0.61	0.61	0.40	0.46	-0.06
Asia Oceania	0.27	0.52	0.57	0.73	0.43	0.57	0.54	0.58	0.54	0.49	0.66	-0.17
BFOE												
Americas	0.01	0.02	0.02	0.02	0.01	0.02	0.01	0.02	-	-	0.04	-
Europe	0.49	0.44	0.45	0.39	0.41	0.49	0.52	0.39	0.42	0.74	0.63	0.12
Asia Oceania	0.06	0.05	0.10	0.09	0.06	0.09	0.14	0.13	0.09	0.20	0.13	0.07
Kazakhstan												
Americas	0.00	0.01	-	-	-	-	-	-	-	-	-	-
Europe	0.64	0.70	0.75	0.76	0.78	0.74	0.72	0.64	0.71	0.82	0.73	0.09
Asia Oceania	0.06	0.03	0.10	0.05	0.09	0.15	0.13	0.10	0.14	0.14	0.12	0.02
Venezuelan 22 API and heavier												
Americas	0.67	0.63	0.48	0.52	0.61	0.41	0.39	0.43	0.37	0.37	0.61	-0.24
Europe	0.09	0.05	0.04	0.06	0.04	0.05	0.03	0.05	0.02	0.01	0.06	-0.05
Asia Oceania	-	-	-	-	-	-	-	-	-	-	-	-
Mexican Maya												
Americas	0.50	0.53	0.58	0.54	0.63	0.50	0.67	0.68	0.73	0.62	0.52	0.10
Europe	0.15	0.17	0.20	0.20	0.18	0.17	0.26	0.32	0.21	0.23	0.16	0.07
Asia Oceania	0.01	0.05	0.07	0.06	0.07	0.07	0.10	0.11	0.08	0.10	0.07	0.03
Russian Urals												
Americas	-	-	0.01	-	-	0.02	0.01	0.02	-	-	-	-
Europe	1.61	1.72	1.64	1.64	1.57	1.68	1.66	1.76	1.72	1.49	1.82	-0.32
Asia Oceania	-	-	0.01	-	0.02	0.02	-	-	-	-	-	-
Cabinda and Other Angola												
North America	0.11	0.16	0.07	0.04	-	0.17	0.07	0.08	-	0.14	0.11	0.02
Europe	0.42	0.27	0.11	0.09	0.07	0.17	0.10	0.06	0.13	0.12	0.09	0.03
Pacific	0.02	0.01	0.01	-	0.01	0.03	-	-	-	-	-	-
Nigerian Light⁴												
Americas	0.02	0.07	0.04	0.02	0.04	0.05	0.06	0.18	-	-	-	-
Europe	0.57	0.39	0.39	0.36	0.46	0.38	0.38	0.43	0.33	0.39	0.30	0.09
Asia Oceania	-	0.01	0.02	0.02	0.03	0.03	0.01	0.04	-	0.01	0.04	-0.03
Libya Light and Medium												
Americas	-	-	0.02	-	-	0.03	0.03	-	0.08	-	-	-
Europe	0.22	0.20	0.54	0.41	0.37	0.67	0.70	0.55	0.85	0.69	0.30	0.39
Asia Oceania	0.01	0.02	0.03	0.04	0.04	0.01	0.03	0.03	0.02	0.03	0.02	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 Americas includes United States and Canada. IEA Europe includes all countries in OECD Europe except Estonia, Hungary, Slovenia and Latvia. IEA Asia Oceania includes Australia, New Zealand, Korea and Japan.

² Iraqi Total minus Kirkuk.

³ Iranian Total minus Iranian Light.

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

Table 7
REGIONAL OECD IMPORTS^{1,2}
(thousand barrels per day)

	2014	2015	2016	1Q17	2Q17	3Q17	4Q17	Oct 17	Nov 17	Dec 17	Year Earlier	
											Dec 16	% change
Crude Oil												
Americas	4201	4026	4542	4558	4664	4289	3941	4130	3894	3797	4485	-15%
Europe	8679	9505	9253	9490	9632	9779	9930	9810	10464	9533	9380	2%
Asia Oceania	6366	6573	6669	7006	6450	6921	6941	6561	6953	7310	7272	1%
Total OECD	19246	20103	20464	21055	20746	20989	20812	20501	21312	20640	21137	-2%
LPG												
Americas	12	10	20	23	16	15	25	20	34	22	17	26%
Europe	433	418	445	505	425	421	400	395	387	416	495	-16%
Asia Oceania	531	518	566	603	586	467	537	529	526	557	513	9%
Total OECD	975	947	1031	1132	1028	903	962	944	947	994	1025	-3%
Naphtha												
Americas	20	14	10	19	19	18	20	31	25	3	13	-74%
Europe	352	345	348	390	372	363	389	402	349	415	378	10%
Asia Oceania	952	950	905	980	976	968	988	1054	1004	907	860	5%
Total OECD	1324	1309	1263	1389	1367	1350	1397	1486	1378	1325	1251	6%
Gasoline ³												
Americas	665	670	735	575	891	880	564	795	491	402	481	-16%
Europe	117	105	100	151	141	129	224	209	208	256	213	20%
Asia Oceania	75	93	84	119	97	94	92	94	102	81	107	-24%
Total OECD	857	868	919	845	1129	1103	880	1098	801	739	801	-8%
Jet & Kerosene												
Americas	100	141	169	148	144	181	210	279	192	158	165	-5%
Europe	455	445	504	465	469	552	535	538	611	459	371	24%
Asia Oceania	60	66	74	112	68	46	88	86	94	85	110	-23%
Total OECD	615	651	747	724	681	780	833	902	897	702	646	9%
Gasoil/Diesel												
Americas	95	76	67	81	37	48	144	75	136	221	66	234%
Europe	1043	1161	1340	1390	1375	1389	1345	1303	1326	1405	1306	8%
Asia Oceania	152	158	195	204	206	188	178	175	201	159	262	-39%
Total OECD	1291	1395	1601	1675	1617	1624	1667	1553	1663	1784	1634	9%
Heavy Fuel Oil												
Americas	132	116	149	141	103	153	128	116	154	116	125	-6%
Europe	596	537	477	271	215	299	174	225	109	188	506	-63%
Asia Oceania	200	173	153	145	180	106	154	150	124	186	141	32%
Total OECD	928	826	779	557	498	559	456	490	387	490	771	-36%
Other Products												
Americas	671	675	652	705	694	722	745	734	741	759	519	46%
Europe	692	701	774	1113	1118	827	977	833	1111	993	776	28%
Asia Oceania	399	343	344	301	244	243	253	236	287	238	285	-16%
Total OECD	1762	1719	1770	2120	2055	1792	1976	1803	2140	1990	1580	26%
Total Products												
Americas	1695	1702	1802	1692	1904	2018	1835	2050	1773	1681	1386	21%
Europe	3687	3712	3988	4286	4114	3981	4044	3903	4102	4130	4045	2%
Asia Oceania	2369	2301	2321	2464	2357	2111	2291	2322	2338	2213	2277	-3%
Total OECD	7751	7715	8110	8442	8376	8110	8170	8276	8213	8024	7709	4%
Total Oil												
Americas	5896	5728	6344	6250	6568	6307	5776	6180	5668	5478	5870	-7%
Europe	12366	13216	13241	13776	13746	13760	13974	13713	14566	13663	13426	2%
Asia Oceania	8735	8874	8990	9471	8807	9032	9232	8884	9291	9523	9550	0%
Total OECD	26997	27818	28574	29496	29121	29099	28983	28777	29525	28665	28846	-1%

¹ Based on Monthly Oil Questionnaire data submitted by OECD countries in tonnes and converted to barrels.

² Excludes intra-regional trade.

³ Includes additives.

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Oil Market Report Contacts

Editor

Neil Atkinson

+33 (0)1 40 57 65 90
✉ Neil.Atkinson@iea.org

Demand

Christophe Barret

+33 (0)1 40 57 65 16
✉ Christophe.Barret@iea.org

Non-OPEC Supply

Toril Bosoni

+33 (0)1 40 57 67 18
✉ Toril.Bosoni@iea.org

OPEC Supply

Peg Mackey

+33 (0)1 40 57 65 81
✉ Peg.Mackey@iea.org

Refining

Kristine Petrosyan

+33 (0)1 40 57 66 05
✉ Kristine.Petrosyan@iea.org

Stocks

Olivier Lejeune

+33 (0)1 40 57 67 58
✉ Olivier.Lejeune@iea.org

Prices

Anne Kloss

+33 (0)1 40 57 67 28
✉ Anne.Kloss@iea.org

Analyst

Yujiao Ma

+33 (0)1 40 57 67 78
✉ Yujiao.Ma@iea.org

Analyst

Jose Alfredo Peral

+33 (0)1 40 57 65 03
✉ JoseAlfredo.Peral@iea.org

Statistics

Nestor Abraham

+33 (0)1 40 57 65 48
✉ Nestor.Abraham@iea.org

Statistics

Pierre Monferrand

+33 (0)1 40 57 66 67
✉ Pierre.Monferrand@iea.org

Editorial Assistant

Deven Moonesawmy

+33 (0)1 40 57 65 03
✉ Deven.Moonesawmy@iea.org

Media Enquiries IEA Press Office

+33 (0)1 40 57 65 54
✉ ieapressoffice@iea.org

Subscription and Delivery Enquiries

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

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