

# Oil Market Report

9 August 2019

- Global demand fell 160 kb/d y-o-y in May, the second annual fall seen in 2019. In January to May it was up only 520 kb/d, the lowest increase for the period since 2008. Chinese oil demand was revised upwards, but India and the US show weakness. We lowered our global growth forecasts for 2019 and 2020 by 100 kb/d and 50 kb/d, to 1.1 mb/d and 1.3 mb/d, respectively.
- Global oil supply held steady in July above 100 mb/d, but fell below year earlier levels for the first time since November 2017. Robust compliance with OPEC+ supply cuts and losses from Venezuela and Iran saw OPEC oil production fall by 2 mb/d versus July 2018. Non-OPEC supply was up 1.4 mb/d y-o-y in July and is set to grow by 1.9 mb/d in 2019 and 2.2 mb/d next year.
- After a year-on-year fall in 1H19, global refining throughput is expected to pick up in the second half of the year, increasing by 0.7 mb/d. This follows the pattern of refined product demand growth, which was subdued in 1H19, but is forecast to rebound in 2H19. In 2019, China and the Middle East are alone in seeing growth in refining activity.
- OECD commercial stocks increased by 31.8 mb in June to 2 961 mb, 66.9 mb above the five-year average. Preliminary data for July showed inventories falling in the US, and rising in Japan. Floating storage of crude oil increased by 31.9 mb in July to 55.9 mb, the highest since August 2017. This is largely due to a big increase in oil held on tankers by Iran.
- ICE Brent slid below \$57/bbl in early August to the lowest level in seven months. Oil prices are swept up in stock market and commodity losses due to rising concern about trade disputes, the health of the global economy and weak oil demand. In July, product markets strengthened following refinery run cuts and outages.



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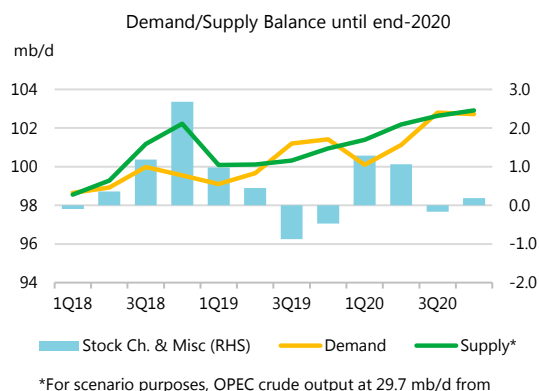
# Economic woes hold sway over geopolitics

While geopolitical tensions in the Middle East Gulf remain high, with US sanctions recently extended to more Iranian officials and a Chinese oil importer, as well as another tanker seizure, oil prices (Brent) have eased back from the most recent high of \$67/bbl. Shipping operations are at normal levels, albeit with higher insurance costs. The messages from various parties that vessels will be protected to the greatest extent possible, and the IEA's recent statement that it is closely monitoring the oil security position in the Strait of Hormuz will have provided some reassurance.

There have been concerns about the health of the global economy expressed in recent editions of this *Report* and shown by reduced expectations for oil demand growth. Now, the situation is becoming even more uncertain: the US-China trade dispute remains unresolved and in September new tariffs are due to be imposed. Tension between the two has increased further this week, reflected in heavy falls for stock and commodity markets. Oil prices have been caught up in the retreat, falling to below \$57/bbl earlier this week. In this *Report*, we took into account the International Monetary Fund's recent downgrading of the economic outlook: they reduced by 0.1 percentage points for both 2019 and 2020 their forecast for global GDP growth to 3.2% and 3.5%, respectively.

Oil demand growth estimates have already been cut back sharply: in 1H19, we saw an increase of only 0.6 mb/d, with China the sole source of significant growth at 0.5 mb/d. Two other major markets, India and the United States, both saw demand rise by only 0.1 mb/d. For the OECD as a whole, demand has fallen for three successive quarters. In this *Report*, growth estimates for 2019 and 2020 have been revised down by 0.1 mb/d to 1.1 mb/d and 1.3 mb/d, respectively. There have been minor upward revisions to baseline data for 2018 and 2019 but our total number for 2019 demand is unchanged at 100.4 mb/d, incorporating a modest upgrade to our estimate for 1Q19 offset by a decrease for 3Q19. The outlook is fragile with a greater likelihood of a downward revision than an upward one.

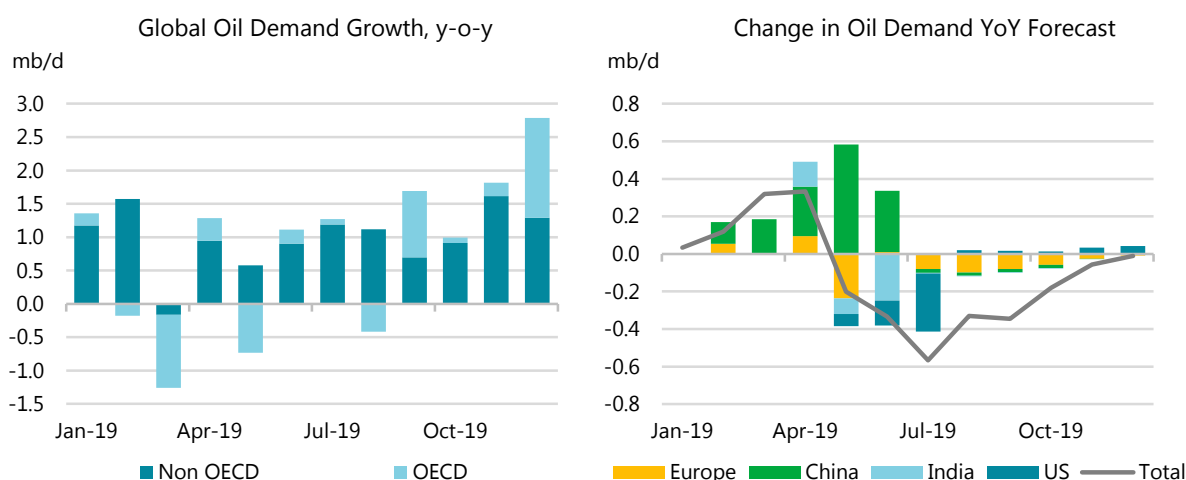
In the meantime, the short term market balance has been tightened slightly by the reduction in supply from OPEC countries. Production fell in July by 0.2 mb/d, and it was backed up by additional cuts of 0.1 mb/d by the ten non-OPEC countries included in the OPEC+ agreement. In a clear sign of its determination to support market re-balancing, Saudi Arabia's production was 0.7 mb/d lower than the level allowed by the output agreement. If the July level of OPEC crude oil production at 29.7 mb/d is maintained through 2019, the implied stock draw in 2H19 is 0.7 mb/d, helped also by a slower rate of non-OPEC production growth. However, this is a temporary phenomenon because our outlook for very strong non-OPEC production growth next year is unaltered at 2.2 mb/d. Under our current assumptions, in 2020, the oil market will be well supplied.



# Demand

## Overview

Global oil demand growth has been very sluggish in the first half of 2019. In January-May, for which we have complete data for most of the major oil consumers, oil demand increased by only 520 kb/d year-on-year (y-o-y), the slowest pace for this period since 2008. There is growing evidence of an economic slowdown with many large economies reporting weak gross domestic product (GDP) growth in 1H19 linked to lower trade and manufacturing output. Meanwhile, the prospects for a political agreement between China and the United States on trade have worsened. This could lead to reduced trade activity and less oil demand growth.



This month, we have revised our 2019 oil demand growth forecast down by 0.1 mb/d to 1.1 million b/d. Our forecast takes into account the recent downgrade to the global GDP outlook published by the International Monetary Fund. For both 2019 and 2020 the Fund reduced their growth estimate by 0.1% point to 3.2% and 3.5%, respectively. New data this month show downward revisions to oil demand figures for India, Saudi Arabia, Korea and several European countries. Also preliminary data for the US for June and July show lower y-o-y demand for motor fuels, particularly gasoline, at the start of the peak driving season. By contrast, we have raised our apparent consumption figures in China for 1H19 due to higher refinery output and steeper oil product stock draws. We now show that OECD demand has fallen for three quarters in a row for the first time since 2014. Fuel oil and naphtha have shown significant falls due to lower deliveries to the power sector in Korea and Japan and reduced demand for petrochemicals. Several months before the implementation in 2020 of the new International Maritime Organisation rules for bunker fuel quality, OECD demand for fuel oil appears to have fallen to its weakest level in more than a decade.

We have also made a very small (50 kb/d) reduction to our 2020 oil demand forecast, reflecting the weaker economic outlook.

Global Oil Demand (2018-2020)															
(million barrels per day)*															
	1Q18	2Q18	3Q18	4Q18	2018	1Q19	2Q19	3Q19	4Q19	2019	1Q20	2Q20	3Q20	4Q20	2020
Africa	4.3	4.2	4.1	4.3	4.2	4.3	4.3	4.2	4.3	4.3	4.4	4.4	4.3	4.4	4.4
Americas	31.5	31.6	32.3	32.0	31.9	31.5	31.8	32.5	32.3	32.0	31.6	32.1	32.9	32.6	32.3
Asia/Pacific	35.5	35.0	34.6	35.4	35.1	35.8	35.5	35.4	36.6	35.8	36.6	36.3	36.2	37.4	36.6
Europe	14.8	15.0	15.5	14.9	15.0	14.7	15.0	15.5	15.1	15.1	14.8	15.1	15.6	15.2	15.2
FSU	4.5	4.6	4.9	4.8	4.7	4.6	4.7	5.0	5.0	4.8	4.7	4.8	5.1	5.0	4.9
Middle East	8.1	8.4	8.7	8.2	8.3	8.1	8.3	8.7	8.2	8.3	8.0	8.3	8.7	8.1	8.3
World	98.6	98.9	100.0	99.5	99.3	99.1	99.7	101.2	101.4	100.4	100.1	101.1	102.8	102.7	101.7
Annual Chg (%)	2.0	0.6	1.4	0.6	1.1	0.5	0.7	1.2	1.9	1.1	1.0	1.5	1.6	1.3	1.3
Annual Chg (mb/d)	1.9	0.6	1.3	0.6	1.1	0.5	0.7	1.2	1.9	1.1	1.0	1.5	1.6	1.3	1.3
Changes from last OMR (mb/d)	0.1	0.1	0.2	0.2	0.2	0.3	0.1	-0.2	0.1	0.1	0.3	-0.1	-0.1	0.0	0.0

\* Including biofuels

Finally, we have incorporated into our models new annual statistics for the years 2008-2017 for many non-OECD countries. This has increased our baseline oil consumption figures by around 150 kb/d net, with most of the data changes for the Middle East, Africa and Russia.

Global Demand by Product							
(thousand barrels per day)							
	Demand			Annual Chg (kb/d)		Annual Chg (%)	
	3Q18	4Q18	1Q19	4Q18	1Q19	4Q18	1Q19
LPG & Ethane	12 127	12 462	13 086	297	209	2.4	1.6
Naphtha	6 493	6 628	6 803	- 113	41	-1.7	0.6
Motor Gasoline	26 632	26 259	25 669	366	105	1.4	0.4
Jet Fuel & Kerosene	8 091	7 825	8 007	126	167	1.6	2.1
Gas/Diesel Oil	28 293	28 867	28 286	105	286	0.4	1.0
Residual Fuel Oil	6 764	6 515	6 591	- 188	- 170	-2.8	-2.5
Other Products	11 583	10 989	10 666	47	- 171	0.4	-1.6
<b>Total Products</b>	<b>99 983</b>	<b>99 545</b>	<b>99 108</b>	<b>641</b>	<b>467</b>	<b>0.6</b>	<b>0.5</b>

## Fundamentals

The IMF published at the end of July an update to its April World Economic Outlook. The Fund once again downgraded its global GDP growth forecast by 0.1% point for both 2019 and 2020 to 3.2% and 3.5%, respectively. The downward revision was triggered by disappointing economic indicators in recent months, largely due to lower investment and consumer durable demand. Uncertainties regarding world trade agreements, Brexit and the geopolitical environment may have delayed business and household decisions.

The IMF nevertheless revised some countries higher. In the US, for example, growth is expected to reach 2.6% in 2019, versus 2.3% in the April forecast, although for 2020 growth is set to slow to 1.9% as the impact of the current fiscal stimulus vanishes. In Europe, growth has been revised downward in Germany, due to weak demand for its exports, and in Italy due to fiscal uncertainty. By contrast, Spain has been revised up and France has been left unchanged. Eurozone GDP is set to increase by 1.3% in 2019 and 1.6% in 2020, versus 1.2% and 1.5% in the April forecast. UK GDP is projected to increase by 1.3% in 2019 and 1.4% in 2020, assuming an orderly Brexit. Japan is set to grow by 0.9% in 2019, slowing to 0.4% in 2020.

Growth in China and India was revised down, reflecting the impact of weaker trade and escalating tariffs. The IMF forecasts Chinese GDP growth of 6.2% in 2019 and 6% in 2020, down by 0.1% point versus April. The Indian forecast was revised down by rather more for both 2019

and 2020. The cut was 0.3% points for both years due to weak domestic demand. Middle East growth is expected at 1% in 2019, rising to 3% in 2020. Iranian economic growth has been revised down due to tighter US sanctions. The largest revisions were for Latin America, where recent economic activity was particularly weak. The region is now expected to grow by 0.6% versus the 1.4% expected in the April forecast. Downgrades were also made for Brazil and Argentina. The Venezuelan economy is now expected to contract by 35% in 2019, although the situation there is so chaotic that accurate data is hard to compile.

The car market provides a good illustration of the fall in sales of durable goods. According to a study by Germany's Center for Automotive Research, car sales worldwide could drop by 5% this year, from 83.7 million in 2018 to 79.5 million in 2019. The decline is particularly pronounced in China, which represents a third of world car sales, India and Europe. In China, passenger and commercial vehicles sales dropped by 12.4% y-o-y in 1H19. European car sales fell by 3% in 1H19, while light vehicle sales in the US dropped by 2%. The impact of lower car sales on gasoline demand is not yet apparent, even in countries where car ownership is far from saturation levels such as China or India.

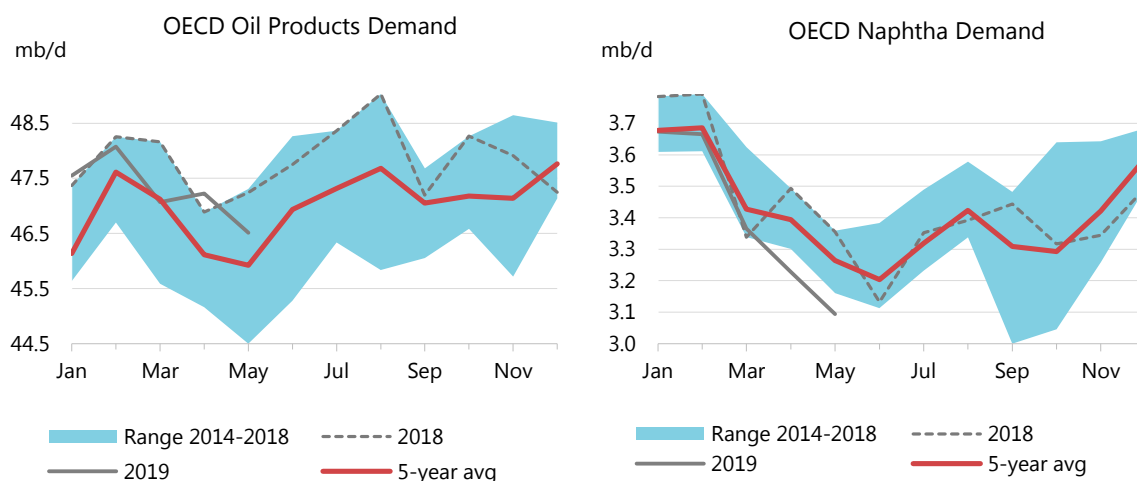
Together with a strong increase in production capacity and a general slowdown in economic activity, the sharp drop in automobile sales explains part of the difficulties currently experienced by the petrochemical sector. Car makers use a lot of plastic and petrochemical products. Petrochemical feedstock demand has been particularly weak in recent months, with the exception of ethane demand in the US, supported by the start-up of new crackers, even if growth has weakened after a strong start to the year. Naphtha demand worldwide has been declining since March and plunged in Europe in May. LPG/ethane demand, after a solid start, is now back to last year's levels.

The price assumptions for our demand model have been updated with the ICE Brent futures curve as at the start of August. This shows 2H19 prices 11% lower than in our July *Report* and 7% lower in 2020. Relatively weak prices should support demand in the forecast period.

## OECD

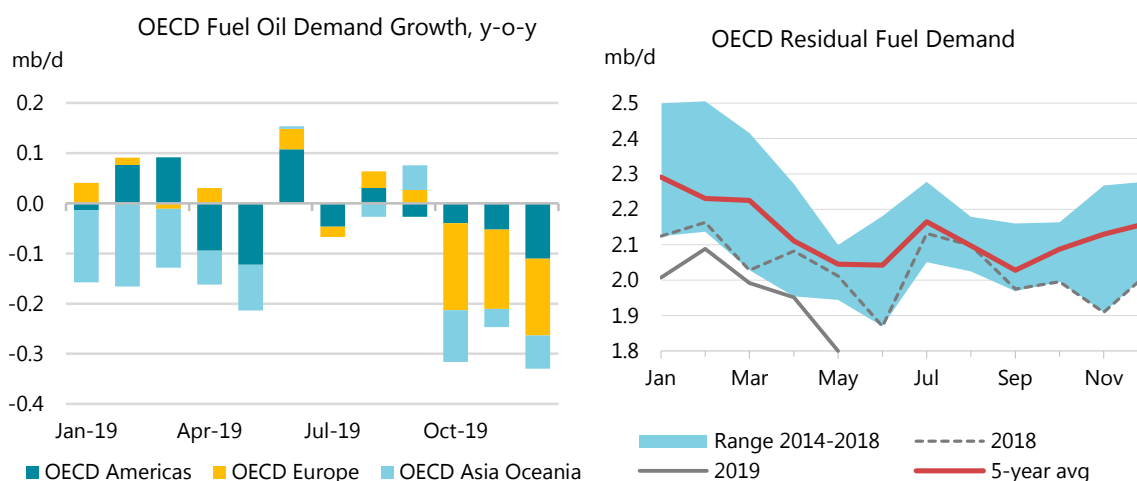
Oil consumption fell in the OECD by 730 kb/d y-o-y in May. This was the third y-o-y reduction registered this year. The drop was split between Asia Oceania (-400 kb/d y-o-y), Europe (-200 kb/d) and the Americas (-130 kb/d y-o-y). In Asia and Europe, naphtha fell by the most, whereas in the Americas lower motor fuels demand brought down the total.

The petrochemical industry in Europe is slowing down with lower demand growth since the start of the year and strong competition from plants in the US and China. In July, German petrochemical company BASF cut its earnings forecast for 2019 by 30%, blaming reduced deliveries to the automotive industry and higher import tariffs between China and the US.



Combined LPG/ethane and naphtha consumption in OECD Europe has fallen for nine months in a row by, on average, 215 kb/d y-o-y. We expect this to continue during the rest of the year. Over the same period, demand has fallen by 80 kb/d on average in Asia Oceania. However, it has risen 205 kb/d in the Americas thanks to booming output in the US.

OECD fuel oil demand has fallen since the start of the year, as world trade has declined and in advance of the International Maritime Organisation's 2020 cap on sulphur emissions from bunker fuel. Demand was 1.9 mb/d in 2Q19, its lowest level in more than a decade. The bulk of the slowdown occurred in Korea and Japan, both of which use fuel oil in the power sector.



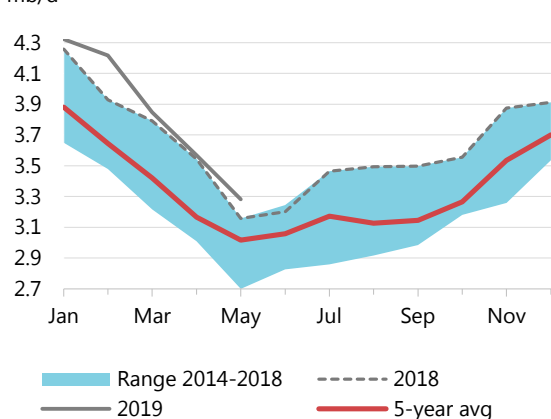
Oil demand in OECD countries fell marginally in 2Q19, by 70 kb/d y-o-y, although complete data for June are not available. If this is confirmed, it would mean that demand in the bloc has fallen for three quarters in a row, the first time this has happened since 2014. OECD consumption is expected to grow by 410 kb/d in the second half of 2019 and by 370 kb/d in 2020, helped by higher GDP growth and lower oil prices.

OECD Demand based on Adjusted Preliminary Submissions - June 19														
(million barrels per day)														
	Gasoline		Jet/Kerosene		Diesel		LPG/Ethane		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
<b>OECD Americas</b>	<b>11.50</b>	<b>-1.2</b>	<b>2.16</b>	<b>-0.8</b>	<b>4.69</b>	<b>-0.4</b>	<b>3.50</b>	<b>8.4</b>	<b>0.65</b>	<b>19.9</b>	<b>3.46</b>	<b>-0.4</b>	<b>25.95</b>	<b>0.8</b>
US*	9.76	-1.0	1.87	-1.4	3.90	0.2	2.75	8.1	0.40	18.4	2.46	-1.4	21.14	0.6
Canada	0.89	0.8	0.18	4.8	0.26	-1.2	0.33	22.5	0.06	-10.3	0.74	1.5	2.47	3.2
Mexico	0.76	-5.7	0.08	0.7	0.35	-7.1	0.36	2.1	0.18	43.1	0.23	5.6	1.97	0.0
<b>OECD Europe</b>	<b>2.12</b>	<b>0.3</b>	<b>1.62</b>	<b>2.6</b>	<b>5.23</b>	<b>-0.7</b>	<b>1.10</b>	<b>0.4</b>	<b>0.92</b>	<b>4.6</b>	<b>3.62</b>	<b>2.7</b>	<b>14.61</b>	<b>1.1</b>
Germany	0.53	1.3	0.25	-1.1	0.76	-4.0	0.13	-6.8	0.06	-8.5	0.62	10.6	2.35	0.7
United Kingdom	0.30	-2.3	0.31	7.7	0.54	-1.1	0.15	1.1	0.03	4.2	0.30	-1.6	1.63	0.4
France	0.20	1.4	0.18	2.7	0.69	-5.9	0.11	-0.5	0.05	22.1	0.50	2.5	1.73	-0.9
Italy	0.18	-4.0	0.12	3.3	0.45	-5.7	0.08	1.9	0.08	-1.1	0.34	-4.2	1.25	-3.5
Spain	0.13	-0.4	0.16	-0.5	0.50	-0.9	0.06	-20.3	0.15	5.7	0.32	1.5	1.33	-0.6
<b>OECD Asia &amp; Oceania</b>	<b>1.48</b>	<b>-2.3</b>	<b>0.77</b>	<b>9.5</b>	<b>1.43</b>	<b>-1.7</b>	<b>0.66</b>	<b>-9.4</b>	<b>0.43</b>	<b>1.2</b>	<b>2.63</b>	<b>-3.0</b>	<b>7.40</b>	<b>-1.8</b>
Japan	0.80	-5.8	0.36	10.6	0.47	-0.7	0.29	-17.2	0.24	17.3	1.14	7.5	3.30	1.1
Korea	0.24	4.0	0.18	13.3	0.41	1.2	0.28	-3.5	0.16	-15.9	1.20	-12.1	2.46	-6.5
Australia	0.31	0.1	0.17	4.3	0.50	-5.1	0.07	0.6	0.01	-5.0	0.14	-5.2	1.19	-2.3
<b>OECD Total</b>	<b>15.10</b>	<b>-1.1</b>	<b>4.55</b>	<b>2.0</b>	<b>11.35</b>	<b>-0.7</b>	<b>5.26</b>	<b>4.1</b>	<b>2.00</b>	<b>8.3</b>	<b>9.71</b>	<b>0.0</b>	<b>47.96</b>	<b>0.4</b>

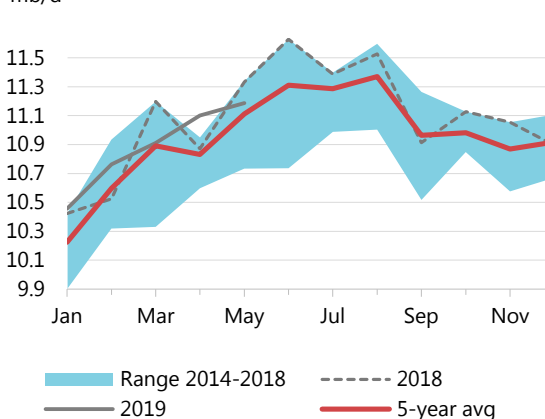
\* Including US territories

## OECD Americas

mb/d OECD Americas LPG/Ethane Demand



mb/d OECD Americas Gasoline Demand



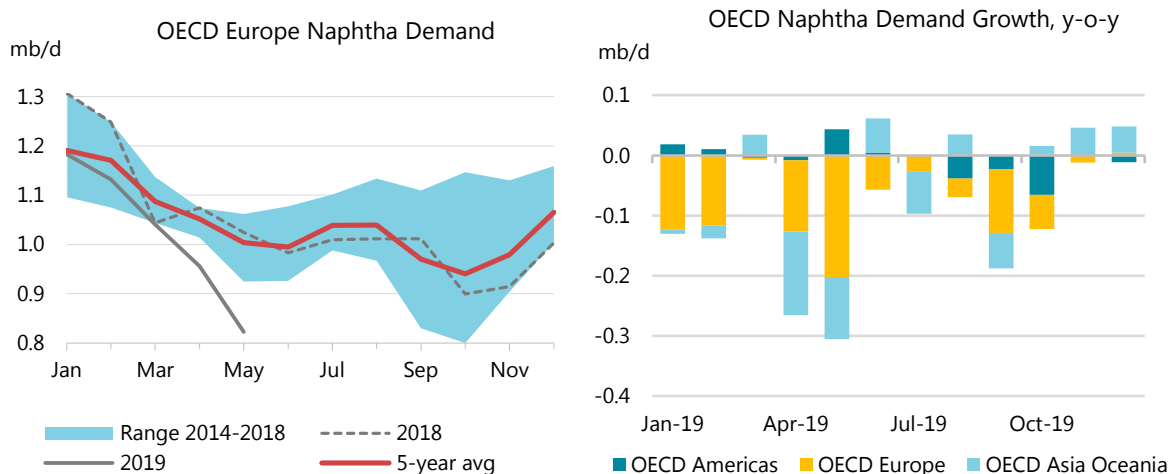
Oil demand in the OECD Americas fell 130 kb/d y-o-y in May, to 25.3 mb/d. Growth was lower than expected, mainly due to weak LPG/ethane and fuel oil data. Gasoline demand fell 145 kb/d y-o-y, the second annual decline registered since the start of the year. We estimate that total oil products demand increased by 170 kb/d in 2Q19, up from 100 kb/d y-o-y growth in 1Q19. As in other regions, growth has been less than in the first half of 2018, due to the deceleration in the stellar growth of US petrochemical output and due to lower gasoline consumption. Jet fuel demand, by contrast, has continued to rise strongly and was up 60 kb/d in 2Q19. On a country by country basis, oil demand fell by 100 kb/d in the **US** in May, but it increased by 50 kb/d in **Chile**. Recent data for Mexico and Canada require clarification.

There remains a significant question mark about the region's gasoline demand during the northern hemisphere summer. Preliminary figures for the US indicate that consumption may have fallen slightly y-o-y in both June and July. This is significant as July is in the midst of the summer driving season.

OECD Americas oil demand is likely to grow more strongly during the second half of 2019 (by 275 kb/d), with the planned commissioning of several petrochemical crackers in the US. Gasoline demand (+60 kb/d) and jet fuel consumption (+50 kb/d) are also both likely to rise, helped by stronger economic activity.

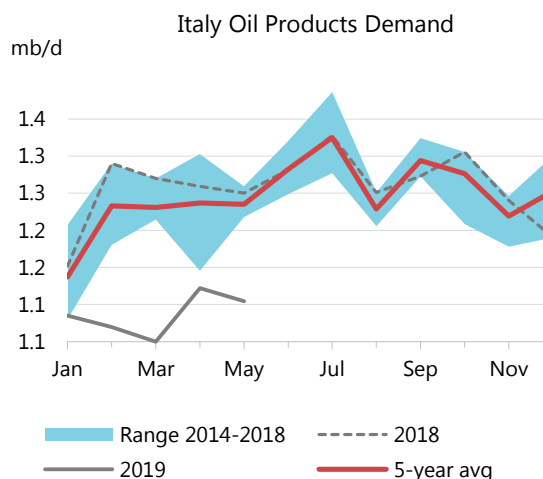
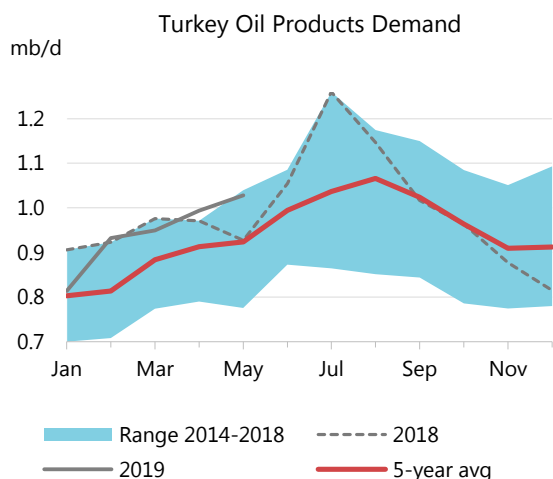
## OECD Europe

Oil demand in OECD Europe declined in May by 200 kb/d y-o-y, to 13.8 mb/d. This was the third annual fall since the start of 2019 and the eighth in the past year. Demand for naphtha and LPG/ethane has declined sharply in the past few months as European crackers have struggled in the face of tough competition and reduced demand. Cefic, the European petrochemical association, noted in a July update that “EU industry confidence posted a sharp decline which is considered to be the most significant decrease in eight years. Rising protectionism all over the world is negatively impacting industrial and economic activity.” However, it also noted that European petrochemical output was up 1.7% quarter-on-quarter in 1Q19 and that total sales were up y-o-y.



Overall, OECD Europe oil demand was more or less unchanged in 2Q19 after it fell (on a y-o-y basis) for four quarters in a row from 2Q18. In **Italy**, the economy stagnated in 2Q19, following a mere 0.1% GDP gain in 1Q19. Oil demand has reflected the weak economy with a 170 kb/d y-o-y fall in 1Q19 followed by 110 kb/d fall in 2Q19. The decline was broad-based across all products. Naphtha (-40 kb/d y-o-y) saw the largest fall and transport fuels such as gasoline, jet fuel and diesel also dropped. We expect Italy's demand to decline by around 70 kb/d y-o-y in the second half of 2019 and to ease further in 2020.

During 2Q19, oil demand also fell in **France**, the **Netherlands**, **Norway** and the **UK** while it increased 60 kb/d y-o-y in **Turkey** marking an end to four straight quarters of y-o-y demand declines. The country's GDP is likely to fall by 2.5% this year, according to the IMF, following a currency crisis accompanied by steep inflation in 2018. We forecast Turkish oil demand to grow by just 10 kb/d in 2019, following a fall of 30 kb/d in 2018.



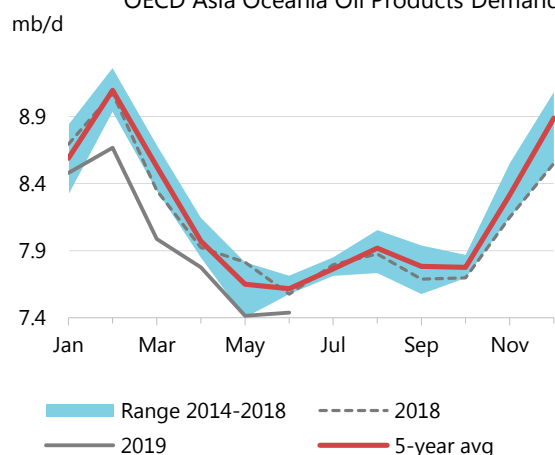
OECD Europe oil demand is forecast to rise by 100 kb/d y-o-y during the second half of 2019 with gains in middle distillates (diesel and jet fuel) more than offsetting falls in petrochemical feedstocks, such as naphtha and LPG, and fuel oil. Overall growth is likely to be limited in 2019 (+10 kb/d), but it is expected to accelerate to 70 kb/d in 2020 due to higher economic activity and with some support from lower oil prices.

## OECD Asia Oceania

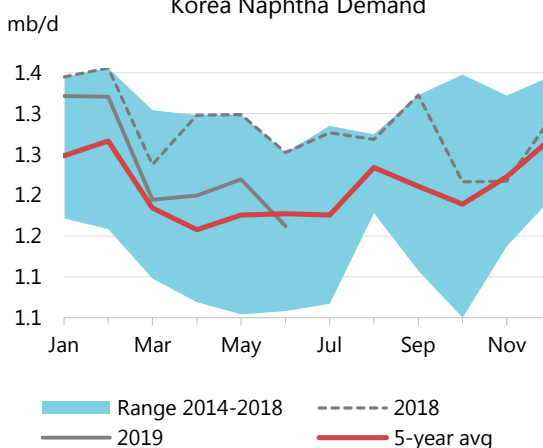
Oil consumption in OECD Asia Oceania fell by a significant 400 kb/d y-o-y in May, marking the 12<sup>th</sup> consecutive annual reduction, and reached 7.4 mb/d. Declines have steepened over the last few months as fuel oil demand fell significantly, likely as a result of lower requirements in the power sectors of Korea and Japan as well as lower bunker fuel consumption linked to a global slowdown in trade. There was also a significant fall in naphtha and LPG/ethane consumption comparable to what has happened in Europe. In May, the region's naphtha demand fell by 100 kb/d y-o-y while LPG/ethane deliveries were down 30 kb/d. Japanese and Korean petrochemical companies have historically been big consumers of Iranian condensate and have had to replace this feedstock at a higher cost due to US sanctions. The South Korean government has said it plans to unveil measures including tax breaks and infrastructure investments to support the industry.

Overall, oil demand fell by 230 kb/d y-o-y in 2Q19, more than in any other OECD region. **Korean** consumption decreased by 160 kb/d, due to reduced deliveries of naphtha (-90 kb/d), other products (-70 kb/d) and fuel oil (-40 kb/d), and despite higher transport fuel demand. **Japanese** demand was down 50 kb/d y-o-y overall, with falls in LPG/ethane (-40 kb/d), gasoline (-30 kb/d) and other products (-20 kb/d). **Australian** consumption also fell 20 kb/d y-o-y due to reduced diesel deliveries, whereas demand picked up marginally in **New Zealand**.

OECD Asia Oceania Oil Products Demand



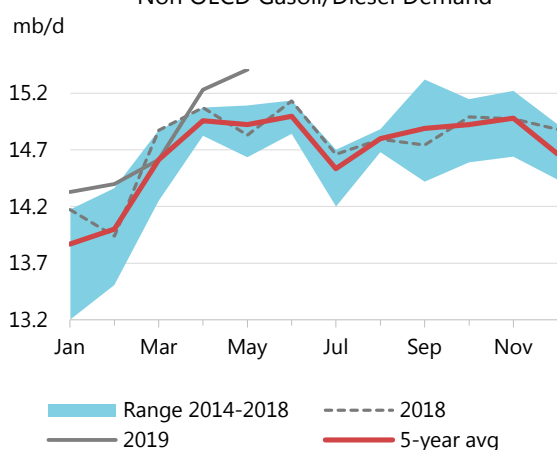
Korea Naphtha Demand



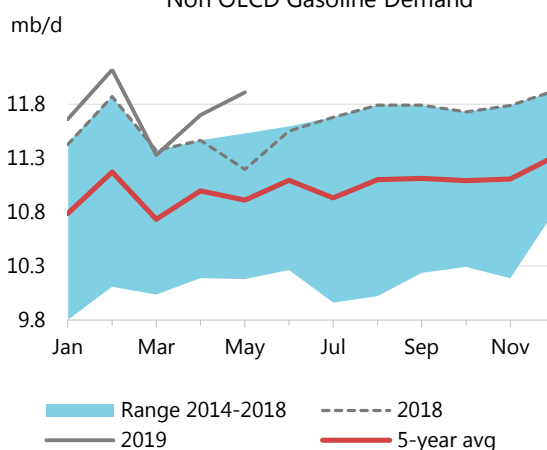
OECD Asia Oceania oil demand is forecast to rise by 30 kb/d y-o-y during the second half of 2019. For the year as a whole demand will be down 120 kb/d. In 2020, we expect the region's demand to rise by 30 kb/d y-o-y.

## Non-OECD

Non OECD Gasoil/Diesel Demand



Non OECD Gasoline Demand

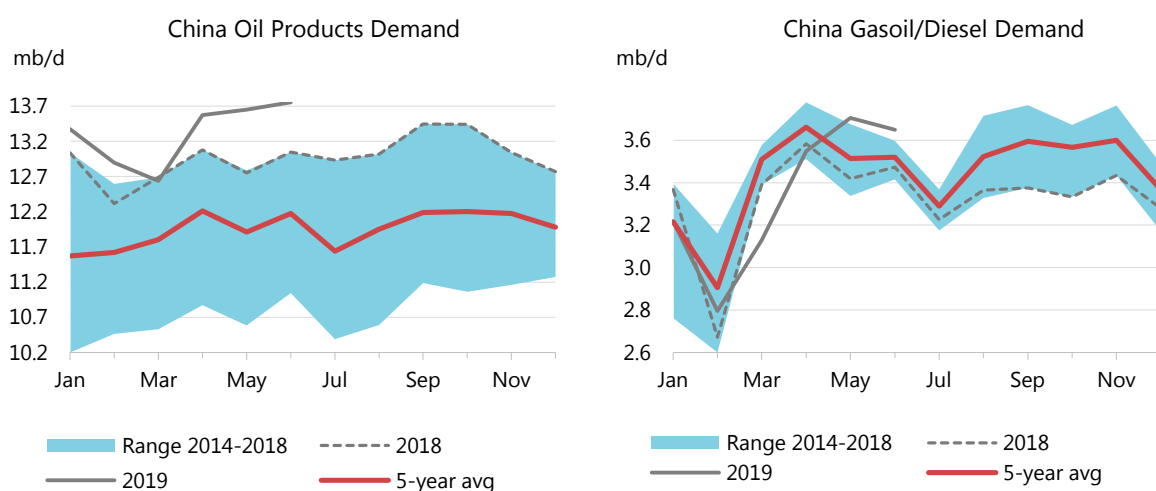


This month, we have included new annual data for non-OECD countries for 2017 (World Energy Statistics, 2019 edition) in our models. As a result, the baseline for our forecasts switches to the year 2017 and has been increased by 150 kb/d. Africa demand has been cut by 45 kb/d due to small revisions in Egypt and South Africa. China has also been revised down by 90 kb/d, while India was revised up by a similar amount. Indonesia was revised up by 40 kb/d. Singapore's naphtha demand was revised by a large 140 kb/d. The Former Soviet Union was revised up by 70 kb/d. Latin America was left unchanged, as an upward revision in Brazil was offset by a downward revision in Argentina. The Middle East was cut by 100 kb/d due to downward revisions in Iran, Iraq and Kuwait. By contrast, Saudi Arabia, the UAE and Qatar were revised up.

Oil demand in non-OECD countries was robust in the last few months. The main surprises in the monthly data we received in July are: a large upward revision to Chinese oil demand for 1H19; low demand in Saudi Arabia in May 2019; and slowing growth in India.

## China

China's demand for the first half of the year was revised up significantly, because the National Bureau of Statistics (NBS) published cumulative refinery runs for January-June that are significantly higher than the sum of monthly data reported each month (see *Refining*). Year to date refinery runs for the period were 3.8 million tonnes (190 kb/d) above the initial monthly reported data. NBS refinery intakes are used in the computation of apparent demand, and this fed directly into our calculation. In addition, a revised estimate of stock draws in 2Q19 led to a further increase in demand. As a result, growth is now estimated at 495 kb/d y-o-y in 1H19, a very significant revision from the 245 kb/d reported in last month's *Report*. Also, China's 2017 baseline was revised down by 90 kb/d.



China's economic environment continues to be weak, although July data show some stabilisation. The official manufacturing PMI for July was up slightly at 49.7, although still in negative territory. Gasoil demand, closely related to industrial activity, is believed to have increased by 50 kb/d in 1H19.

Chinese vehicle sales posted a y-o-y decline in June for the 12<sup>th</sup> consecutive month. Passenger and commercial vehicles sales declined 9.6% and 12.4%, respectively, in 1H19. The drop is in part due to tighter credit policies and slowing economic activity. In addition, changes to emissions regulations implemented in July may have led some buyers to delay purchases in anticipation of price discounts for the existing stock of cars. The new regulations will require cars to meet tighter "China 6" standards. Gasoline demand is estimated to have increased by 185 kb/d in 1H19; but this is based on corrected runs and gasoline yields, and is subject to revision. Growth of 65 kb/d y-o-y is projected for gasoline demand in 2H19.

Chinese air passenger traffic rose by 7.6% y-o-y in May, after weak growth of 4.3% in April. Air traffic is being impacted to some extent by increased use of fast trains. The number of Bullet train passenger trips increased by 17% y-o-y in July. The May rebound in Revenue Passenger Kilometres (RPKs) has been supported by lower airfares. Jet/kerosene demand expanded by 45 kb/d on average in the first half of 2019, down from 90 kb/d in 2018. Growth is projected to accelerate to 75 kb/d in 2H19, supported by higher passenger traffic.

Overall, China's oil demand is set to increase by 495 kb/d in 2019, roughly unchanged from the pace seen in 2018. Growth is expected to slow to 285 kb/d in 2020.

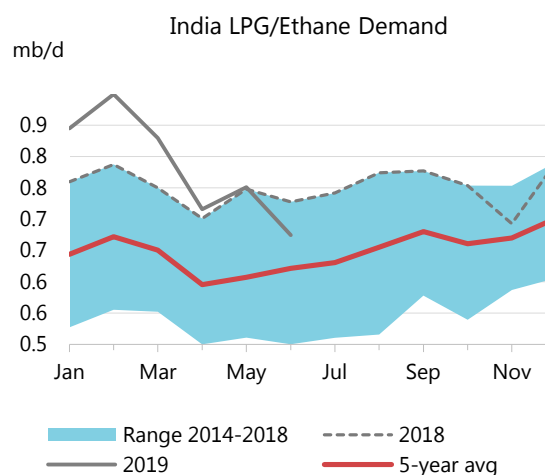
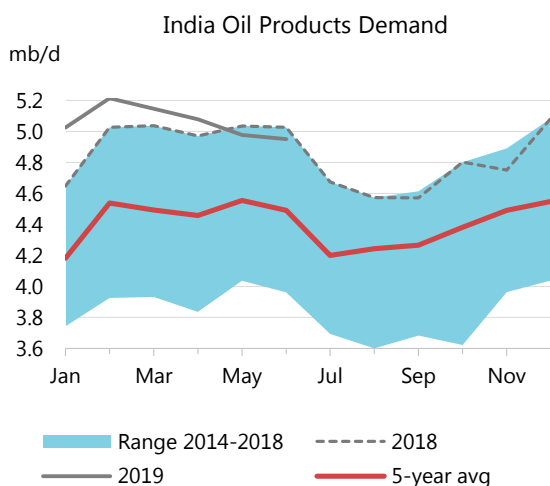
### China: Demand by Product

(thousand barrels per day)

	Demand			Annual Chg (kb/d)		Annual Chg (%)	
	2018	2019	2020	2019	2020	2019	2020
LPG & Ethane	1 620	1 703	1 799	83	97	5.1	5.7
Naphtha	1 268	1 323	1 375	56	52	4.4	3.9
Motor Gasoline	2 984	3 111	3 151	126	41	4.2	1.3
Jet Fuel & Kerosene	812	874	937	61	63	7.5	7.2
Gas/Diesel Oil	3 355	3 425	3 501	70	76	2.1	2.2
Residual Fuel Oil	432	393	344	- 39	- 49	-9.0	-12.5
Other Products	2 503	2 640	2 645	137	5	5.5	0.2
<b>Total Products</b>	<b>12 975</b>	<b>13 468</b>	<b>13 752</b>	<b>493</b>	<b>284</b>	<b>3.8</b>	<b>2.1</b>

## India

The latest Indian data were weak, with demand posting a small decline y-o-y in both May and June. The weakness comes from LPG and other products. This may in turn be linked to reduced petroleum coke usage, which declined by 15% on average in 1H19. For environmental reasons, India placed restrictions on the import and use of petroleum coke in 2018. Baseline data were revised up by 90 kb/d following the release of the WES annual update.



LPG demand has grown fast, supported by a social welfare program (the Ujjwala Scheme) started in 2016 that has provided 72 million low-income households with new connections. Access to LPG rose from 56% of households in 2016 to 80% at the end of 2018, and 94% currently. LPG demand is slowing, however, and even declined y-o-y in the past two months. Consumers enrolled under the Ujjwala Scheme use less LPG, and the refill rate of bottles has fallen. Prices have been raised several times since the start of the year in certain locations, which could be impacting demand. The government subsidy depends on international LPG prices and foreign exchange rates but applies only to the first 12 cylinders purchased in the year. LPG demand grew on average by 40 kb/d in 1H19 and we are projecting a similar pace in 2H19.

Gasoline demand remains strong in India, in spite of the sharp fall in car sales. Sales of both passenger vehicles and commercial vehicles fell by 18.4% y-o-y in 2Q19. Even sales of two wheelers saw a drop of 16.6%. In July, passenger vehicle sales reportedly fell by a huge 31%, with a credit squeeze and lower consumer confidence as important factors. Customers may also have delayed their purchases in anticipation of a fall in sales tax rates or the implementation of

new environmental standards in January-March 2020. Gasoline demand growth is expected to slow from 60 kb/d in 1H19 to 30 kb/d in 2H19, as lower vehicle sales start to have an impact. Gasoil demand growth is expected to remain strong in 2H19, at 85 kb/d.

Indian passenger air traffic (RPKs) bounced back in May to grow 6% y-o-y versus a contraction of 2% in April. The market has largely adjusted to the demise of Jet Airways and the outlook for air traffic appears positive. After a slight drop in 1H19 (-5 kb/d), an increase in fuel demand of 20 kb/d y-o-y is expected for 2H19. Overall, Indian oil demand is set to increase by 170 kb/d in 2019, slowing from 200 kb/d in 2018. Growth is expected to accelerate to 225 kb/d in 2020.

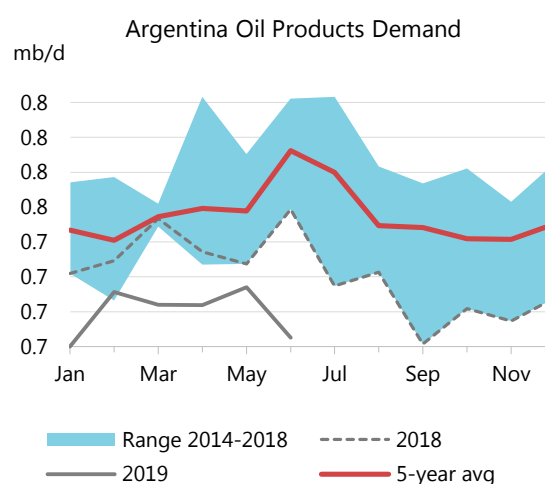
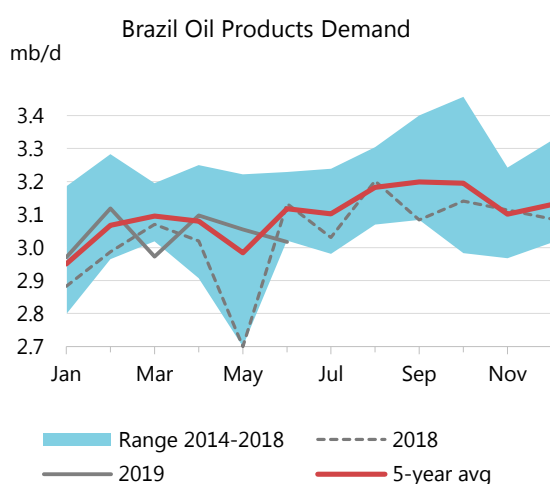
### India: Demand by Product

(thousand barrels per day)

	Demand			Annual Chg (kb/d)		Annual Chg (%)	
	2018	2019	2020	2019	2020	2019	2020
LPG & Ethane	782	823	857	40	34	5.2	4.2
Naphtha	324	319	333	- 6	14	-1.7	4.5
Motor Gasoline	676	724	757	47	34	7.0	4.7
Jet Fuel & Kerosene	252	258	275	6	17	2.4	6.7
Gas/Diesel Oil	1 728	1 796	1 874	68	78	3.9	4.3
Residual Fuel Oil	150	148	146	- 3	- 1	-1.7	-0.9
Other Products	949	968	1 018	19	50	2.0	5.2
<b>Total Products</b>	<b>4 863</b>	<b>5 035</b>	<b>5 261</b>	<b>172</b>	<b>227</b>	<b>3.5</b>	<b>4.5</b>

## Other Non-OECD

**Brazilian** demand in June showed a contraction of 115 kb/d y-o-y. This partly results from a base effect, as June 2018 saw a very strong rebound in gasoil demand after a sharp drop due to a strike by truck drivers. This factor also impacted gasoline demand, which grew by only 10 kb/d in June. Brazilian oil demand is projected to increase by 65 kb/d in 2019.



**Argentinian** oil demand contracted by 75 kb/d in June and for 1H 19 it fell by 40 kb/d on weaker deliveries of most products. Demand is projected to remain stagnant in 2H19, assuming that the economic environment stabilises.

**Russian** oil demand rose by 50 kb/d in June. Fuel oil and gasoline posted the strongest growth. For the year as a whole, demand is expected to increase by 90 kb/d in 2019, supported by strong fuel oil and gasoil deliveries.

Non-OECD: Demand by Product							
(thousand barrels per day)							
	Demand			Annual Chg (kb/d)		Annual Chg (%)	
	3Q18	4Q18	1Q19	4Q18	1Q19	4Q18	1Q19
LPG & Ethane	6 781	6 819	6 964	155	206	2.3	3.0
Naphtha	3 135	3 280	3 275	158	110	5.1	3.5
Motor Gasoline	11 706	11 767	11 641	399	144	3.5	1.2
Jet Fuel & Kerosene	3 543	3 354	3 490	145	157	4.5	4.7
Gas/Diesel Oil	14 766	14 981	14 480	86	106	0.6	0.7
Residual Fuel Oil	4 721	4 566	4 589	- 25	- 94	-0.5	-2.0
Other Products	7 120	6 968	7 119	141	210	2.1	3.0
<b>Total Products</b>	<b>51 773</b>	<b>51 735</b>	<b>51 559</b>	<b>1 059</b>	<b>838</b>	<b>2.1</b>	<b>1.7</b>

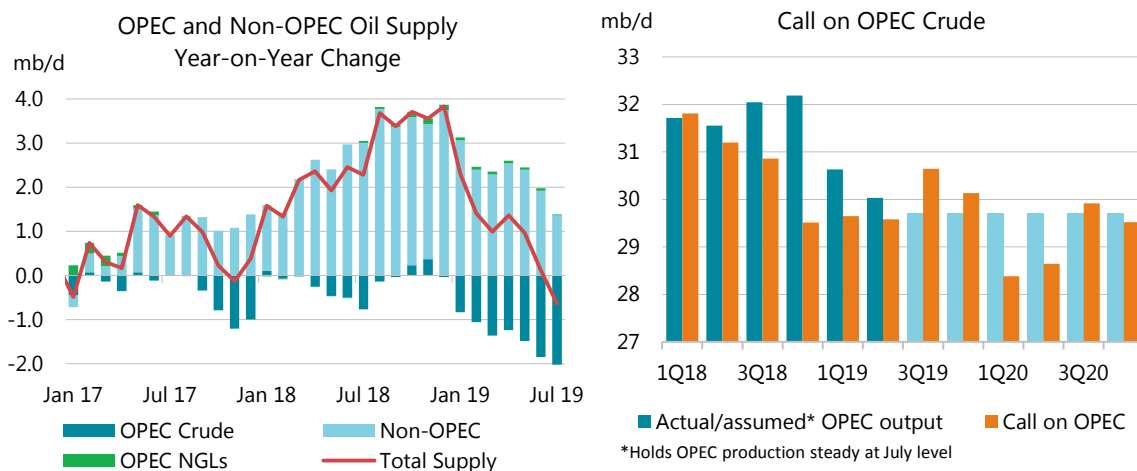
**Saudi Arabian** oil demand posted a huge drop of 420 kb/d y-o-y in May. Fuel oil demand declined by 285 kb/d y-o-y, and gasoline, gasoil and crude oil also posted significant declines. This can largely be attributed to the earlier Ramadan period, which is typically associated with lower economic activity. Overall, we project a fall of 50 kb/d in Saudi oil demand in 2019, followed by a further decline of 100 kb/d in 2020. Part of the drop will be due to a switch to natural gas in the power sector which will reduce the volumes of crude oil burned. However, there will be a partial offset from an expected increase in fuel oil use after the implementation in 2020 of the new IMO regulations.

# Supply

## Overview

The start of the third quarter saw global oil supply holding broadly steady above 100 mb/d, but down 580 kb/d year-on-year (y-o-y). This was the first annual decline since November 2017 due to OPEC oil output trailing 2 mb/d below July 2018. Non-OPEC supply was up 1.4 mb/d y-o-y.

During July, world oil supply eased 60 kb/d month-on-month (m-o-m) to 100.2 mb/d after platforms in the US Gulf were shut due to Hurricane Barry and Saudi Arabia turned down the taps. Lower Saudi production and further losses in Venezuela and Iran due to sanctions pushed OPEC crude supply down 190 kb/d month-on-month (m-o-m) to 29.71 mb/d. As for non-OPEC, oil output climbed 160 kb/d to 64.9 mb/d as the North Sea returned from maintenance and Brazil staged a comeback.



Although 3Q19 has begun from a position of relatively abundant supply, continued restraint from OPEC and non-OPEC members of the OPEC+ pact could see global inventories draining by a significant amount. July marked the fifth consecutive month of OPEC+ countries outperforming on their deal to remove 1.2 mb/d from world oil markets. Compliance rose to 134% during July from 118% the previous month.

Our current balances show that the requirement for OPEC crude during the third quarter will surge to 30.6 mb/d, 940 kb/d more than the group is pumping. The fourth quarter sees the call on OPEC easing to 30.1 mb/d, but that is still 400 kb/d above what the group produced in July. However, the market faces potential oversupply in early 2020 when the call on OPEC crude oil tumbles to 28.4 mb/d.

OPEC / Non-OPEC Output <sup>1</sup>								
(million barrels per day)								
	Jun 2019 Supply	Jul 2019 Supply	Supply Baseline <sup>2</sup>	Agreed Cut	July Compliance	Average Compliance	Sustainable Production Capacity <sup>5</sup>	Spare Capacity vs July Supply <sup>6</sup>
Algeria	1.01	1.03	1.06	0.032	84%	102%	1.05	0.02
Angola	1.42	1.40	1.53	0.047	272%	218%	1.50	0.10
Congo	0.35	0.34	0.33	0.010	-150%	-221%	0.35	0.01
Ecuador	0.53	0.54	0.52	0.016	-100%	-38%	0.54	0.00
Equatorial Guinea	0.11	0.12	0.13	0.004	175%	425%	0.12	0.00
Gabon	0.22	0.20	0.19	0.006	-217%	-383%	0.20	0.00
Iraq	4.72	4.78	4.65	0.141	-90%	-39%	4.90	0.12
Kuwait	2.68	2.69	2.81	0.085	140%	127%	2.93	0.24
Nigeria <sup>3</sup>	1.77	1.75	1.65	0.053	-189%	-111%	1.79	0.04
Saudi Arabia	9.77	9.65	10.63	0.322	305%	236%	12.02	2.37
UAE	3.05	3.07	3.17	0.096	102%	117%	3.39	0.32
<b>Total OPEC 11</b>	<b>25.63</b>	<b>25.57</b>	<b>26.66</b>	<b>0.812</b>	<b>134%</b>	<b>119%</b>		
Iran <sup>4</sup>	2.28	2.23					3.85	-
Libya <sup>4</sup>	1.12	1.10					1.10	0.00
Venezuela <sup>4</sup>	0.87	0.81					0.81	0.00
<b>Total OPEC</b>	<b>29.90</b>	<b>29.71</b>					<b>34.55</b>	<b>3.22</b>
Azerbaijan	0.77	0.75	0.80	0.020	218%	140%		
Kazakhstan	2.01	1.97	2.03	0.040	140%	278%		
Mexico	1.91	1.90	1.99	0.040	220%	198%		
Oman	0.98	0.98	1.00	0.025	100%	99%		
Russia	11.49	11.48	11.75	0.230	116%	77%		
Others <sup>7</sup>	1.25	1.20	1.23	0.028	109%	-46%		
<b>Total Non-OPEC</b>	<b>18.42</b>	<b>18.28</b>	<b>18.79</b>	<b>0.383</b>	<b>133%</b>	<b>107%</b>		
<b>Total OPEC+</b>	<b>44.05</b>	<b>43.85</b>	<b>45.46</b>	<b>1.195</b>	<b>134%</b>	<b>115%</b>		

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

2 Based on Oct-2018 production, except for Azerbaijan and Kuwait based on Sept-2018 and Kazakhstan Nov-2018. Non-OPEC supply baseline based on IEA estimates

3 Nigeria supply based on IEA estimates, which exclude Akpo and Agbami condensates.

4 Iran, Libya, Venezuela exempt from cuts.

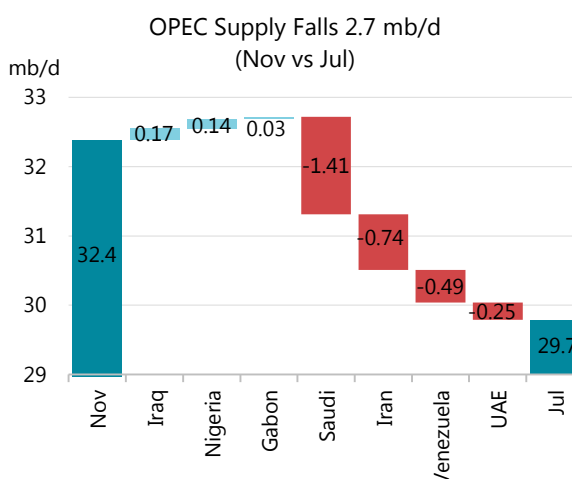
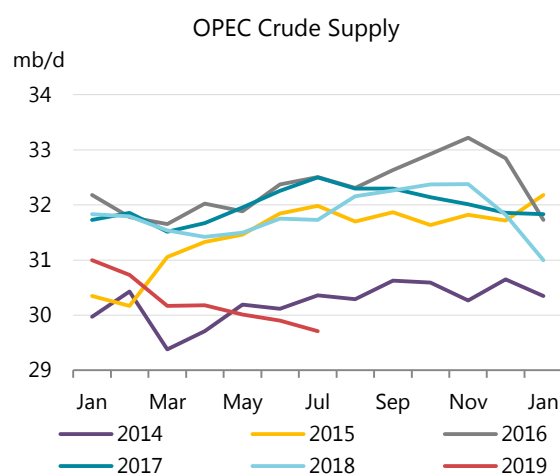
5 Capacity can be reached in 90 days and sustained for extended period.

6 Spare capacity excludes Iranian crude offline due to sanctions.

7 Bahrain, Brunei, Malaysia, Sudan and South Sudan

## OPEC crude oil supply

OPEC crude output remained at a five-year low in July, falling 190 kb/d m-o-m as Saudi Arabia pumped less while Iran and Venezuela lost more to sanctions. At 29.71 mb/d, output was down more than 2 mb/d on a year ago. For five straight months, OPEC members subject to the OPEC+ supply deal have cut more than agreed. Robust compliance is due to the continued outperformance of Saudi Arabia, whose output fell to the lowest since February 2015.



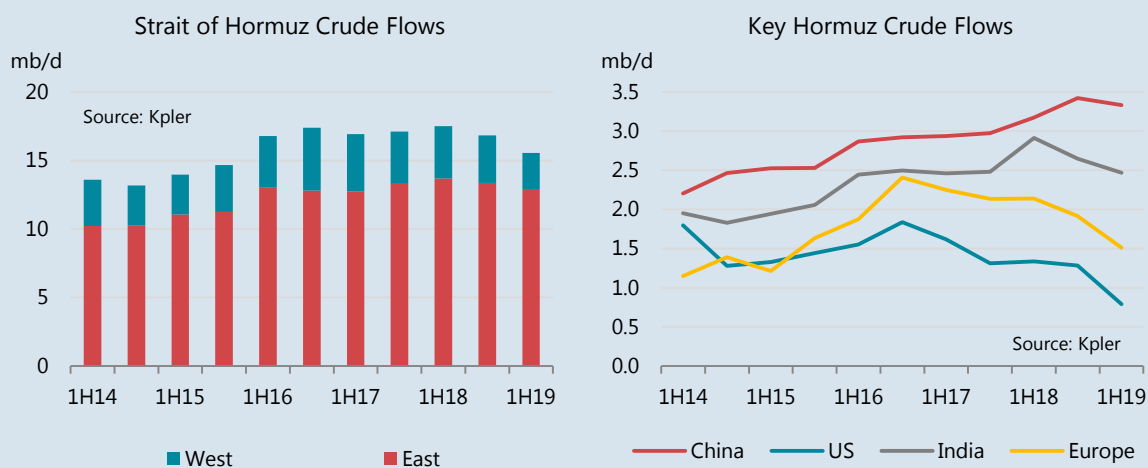
Since November, when Saudi Arabia, the UAE and Iraq were pumping at or near record rates, OPEC crude supply has fallen 2.7 mb/d. Saudi Arabia has lowered output by more than 1.4 mb/d, while sanctions along with production problems in Venezuela have cut more than 1.2 mb/d from Iran and Venezuela. Iraq and Nigeria have increased production compared to November, leaving them above their supply targets. Compliance in July from OPEC members taking part in cuts rose to 134% versus 127% the previous month. OPEC's effective spare capacity in July was 3.2 mb/d, with Saudi Arabia holding nearly 2.4 mb/d, or 74%.

### Box 1. Skirting the Strait

Rising tension in the Gulf after a series of ship attacks and tanker seizures has led the region's core producers to evaluate strategies to lessen dependence on the Strait of Hormuz, a vital route for world energy trade. Around 20 mb/d of crude, condensates and products, or 20% of global oil supply, transit the Strait.

To allow more of its shipments to bypass the Strait, Saudi Arabia, the world's largest crude exporter, plans to boost the capacity of its 5 mb/d East-West pipeline to 7 mb/d in the coming months. It currently ships around 2 mb/d of crude oil using a 1 200 km pipeline that links the Eastern Province oil heartland with the Red Sea port of Yanbu. Around 600 kb/d of that westbound volume is exported with the remainder used by Saudi Aramco's domestic refining and petrochemical operations. When the expansion is finished, Riyadh could divert an additional 5 mb/d of crude to the west coast if there were a disruption in the Strait of Hormuz.

Iraq, the region's second biggest exporter, intends to ship more oil to the Turkish Mediterranean port of Ceyhan and to build new pipelines to ports in Lebanon and Syria. Baghdad and Riyadh have also reportedly discussed the potential re-opening of the Iraq Pipeline in Saudi Arabia (IPSA) that has been closed for almost three decades. IPSA, which runs from Basra in southern Iraq to Saudi Arabia's East-West pipeline, had the capacity to ship 1.6 mb/d.



Much of the oil exported by Saudi Arabia, Iraq, the UAE, Iran, Kuwait and Qatar is shipped through the Strait, which saw 15.5 mb/d of crude transit during 1H19, according to Kpler data. That volume is down 2 mb/d from the first six months of 2018 due to sanctions on Iran and OPEC+ supply cuts.

Gulf producers are shipping considerably more oil to buyers in energy-hungry Asia, particularly

China. In 1H19, crude sales to Asia stood at 12.9 mb/d, or 83% of total loadings, a new high compared to 75% in the first six months of 2014.

During 1H19, China received roughly 3.3 mb/d of crude oil via the Strait, up more than 1 mb/d over the past five years. India increased its loadings from the Gulf by about 0.5 mb/d over the same period, to 2.5 mb/d in 1H19.

In contrast, exports to the west, particularly the US, have fallen sharply because of the relentless growth in shale production. Refiners in the US lifted only 0.8 mb/d from the region in 1H19, down by 1 mb/d versus the same period in 2014.

Only Saudi Arabia, the UAE and Iraq have functional bypass pipelines to move oil to terminals outside of the Gulf. In addition to the 2 mb/d that Saudi Arabia now pumps through the East-West pipeline, Iraq ships 500 kb/d via a northern route through Turkey with capacity of around 700 kb/d. The UAE moves around 600 kb/d through the 1.5 mb/d Habshan-Fujairah pipeline.

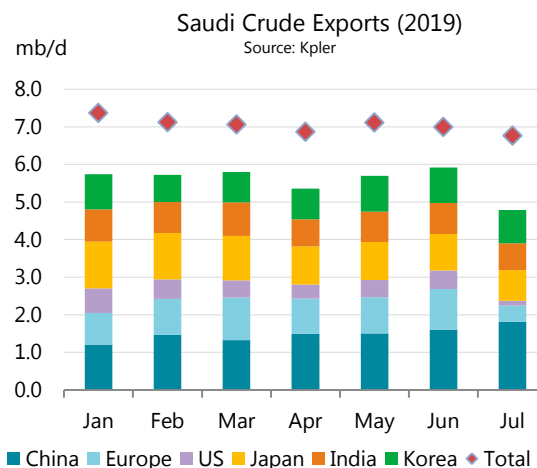


*Note: These maps are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.*

*Source: IEA 2019. All rights reserved.*

Saudi Arabia delivered the biggest production decrease in July, with output dropping 120 kb/d to 9.65 mb/d. Supply was 660 kb/d below its OPEC+ target and down 700 kb/d on July 2018. To help drain global inventories, Saudi Arabia has indicated that it plans to hold its production below 10 mb/d and exports below 7 mb/d through September.

Shipments of crude to world markets fell by 230 kb/d to below 6.8 mb/d during July, according to *Kpler* data. The Saudi export disposition for July highlights the major shift in trade flows due to China's insatiable energy appetite and a shale boom that has lessened US reliance on imports. With the notable exception of China, which lifted record rates of 1.8 mb/d during July, Saudi Arabia's major customers loaded fewer barrels. At just 130 kb/d, the US lifted the lowest amount of Saudi crude since the mid-1980s.



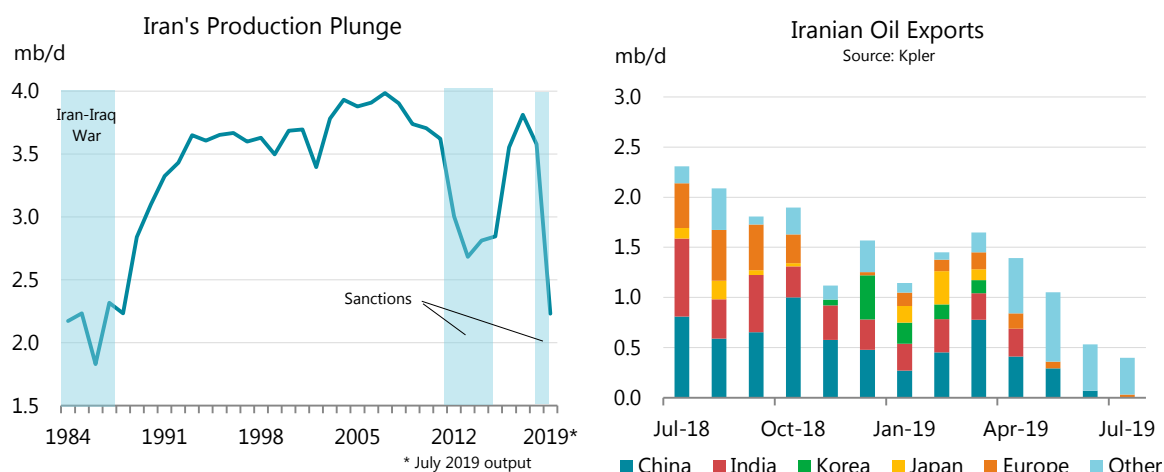
Elsewhere in the Gulf, supply from **Kuwait** increased by 10 kb/d to 2.69 mb/d, while output in the **UAE** edged up to 3.07 mb/d.

**Iraq** was the only country among OPEC to post a significant increase during July, with output returning to record rates as exports accelerated. Production rose 60 kb/d m-o-m to 4.78 mb/d, including the Kurdistan Regional Government (KRG), and was up 170 kb/d on a year ago. On the export front, total shipments to world markets rose by 85 kb/d to 3.96 mb/d. Southern exports increased by 45 kb/d to 3.4 mb/d. Oil sales from the north via Kurdistan rose 40 kb/d to around 520 kb/d.

Separately, the KRG's natural resources minister, Ashti Hawrami, will take on an advisory role in Prime Minister Masrour Barzani's recently-formed cabinet. Hawrami, who served as Kurdistan's natural resources minister since 2006, is regarded as the driving force behind the region's plans for an energy industry independent of Baghdad.

Crude production in **Iran** dropped 50 kb/d in July to 2.23 mb/d, the lowest since the late 1980s, as the US seeks to cut exports to zero. Shipments of oil fell 130 kb/d m-o-m to 400 kb/d although it is widely reported that significant volumes are moving under-the-radar. By comparison, exports were running at 2.3 mb/d a year ago. Iran was also storing oil on 23 tankers at the end of July, up from 10 ships at the end of June, according to *EA Gibson* data. That is close to an historic high of 28 vessels in 2016.

In the two months since the US ended waivers to eight of Iran's major customers, China appears to be the only one of them still buying. So far, July liftings have been tagged with "unknown" destinations. Some of that crude may be destined for China, where it is reportedly being sold at discounted prices and may be moving into bonded storage. The US blacklisted Chinese oil trader Zhuhai Zhenrong at the end of July for allegedly flouting sanctions.



Supply in **Angola** edged down 20 kb/d in July to 1.4 mb/d, 70 kb/d below a year ago. Although output has been on the decline for several years, rising production from the ultra-deepwater Kaombo field has prevented steeper losses. The \$16 billion development is due to reach its plateau rate of 230 kb/d in 3Q19, according to operator Total. Production from Kaombo has been rising since 2Q19 after a second floating production, storage and offloading unit started up and is now around 200 kb/d.

Production in **Algeria** crept up to 1.03 mb/d during July after the Hassi Berkine field returned to normal rates once a brief technical issue was resolved. Supply in **Congo** dipped to 340 kb/d while production in **Gabon** eased 20 kb/d to 200 kb/d. Output in **Equatorial Guinea** edged up to 120 kb/d in July.

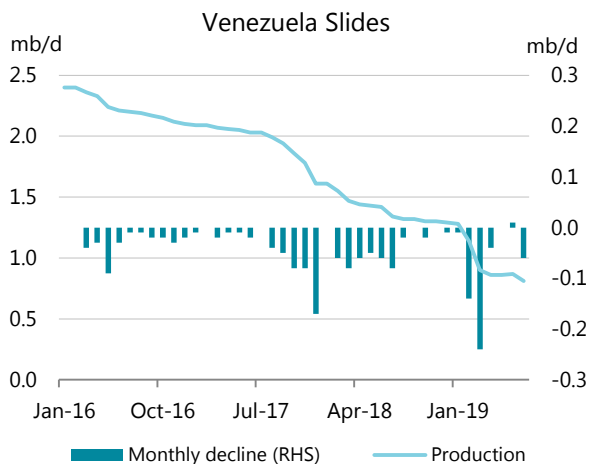
Crude supply in **Libya** dipped 20 kb/d to 1.1 mb/d after the El Sharara field was shut twice during the month following the closure of valves by an unidentified group. The shutdown of the 300 kb/d field resulted in *force majeure* on loadings from the Zawiya terminal. El Sharara also supplies the 120 kb/d Zawiya refinery, but it has been closed for weeks due to power supply problems. The closure of the core El Sharara oil field underscores the vulnerability of Libyan supply amid its ongoing civil conflict. Despite the setbacks, the National Oil Corp (NOC) is still officially targeting production of 1.4 mb/d by year-end and 2.1 mb/d by 2023.

Production in **Nigeria** eased 20 kb/d during July to 1.75 mb/d. However, supply was up 220 kb/d on a year ago as the offshore Egina field has reached its plateau of 200 kb/d. Separately, Nigerian National Petroleum Corp has secured a \$3.15 billion credit facility to fund development of an onshore Niger Delta oil block that could pump more than 90 kb/d. First oil is expected in April 2020, with peak production expected within four years.

Supply in **Venezuela** fell 60 kb/d in July to 810 kb/d after power outages hit the oil sector and cut into export flows. Shut out of the US market by sanctions, Petroleos de Venezuela (PDVSA) is adopting a new blending strategy to optimise crude exports. Upgraders in the vast Orinoco belt are being converted to crank out heavy Merey 16 rather than the synthetic crude previously produced. PDVSA announced on 29 July that Petropiar, its joint venture with Chevron, had started blending operations and was expected to produce 130 kb/d of 16° API Merey crude. Previously Petropiar was able to produce around 200 kb/d of 24° API synthetic crude.

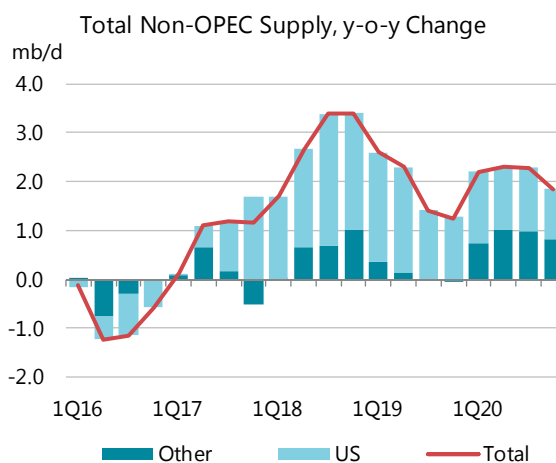
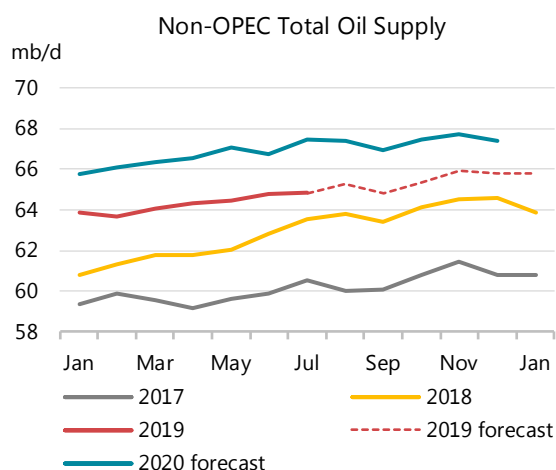
PDVSA has yet to state publicly that its other upgraders - Petrocedeno, part owned by Total and Equinor and Petromonagas, part-owned by Rosneft - would be, or already are, converted to blending operations. The Petrosanfelix upgrader, wholly owned by PDVSA, has been out of operation for months. Merey-16 shipments are primarily destined for China to repay substantial loans to Venezuela.

The US on 26 July extended for three months a license for Chevron and four US oil service companies to continue working in Venezuela. It was set to expire on 27 July. Chevron is partnered with PDVSA in four joint ventures that produce a combined 200 kb/d – or a quarter of Venezuelan supply. Washington also sharply tightened sanctions on 5 August, imposing a freeze on all Venezuelan assets in the US. Production in **Ecuador** inched up to 540 kb/d in July.



## Non-OPEC supply

Non-OPEC oil supply rose by 160 kb/d in July to 64.9 mb/d, as a rebound in North Sea and Brazilian output more than offset lower production in the US. North Sea supplies surged by an estimated 340 kb/d m-o-m after maintenance had slashed Norwegian output to a 30-year low in June. Brazilian production also increased sharply after a disappointing performance in June, when unscheduled outages and problems with the commissioning of new units slashed flows. The passing of Hurricane Barry in early July forced operators to shut in more than 1.3 mb/d of oil production in the Gulf of Mexico at one point, curbing offshore crude output by roughly 300 kb/d for the month. Chinese production also likely retreated after a seasonal June spike.



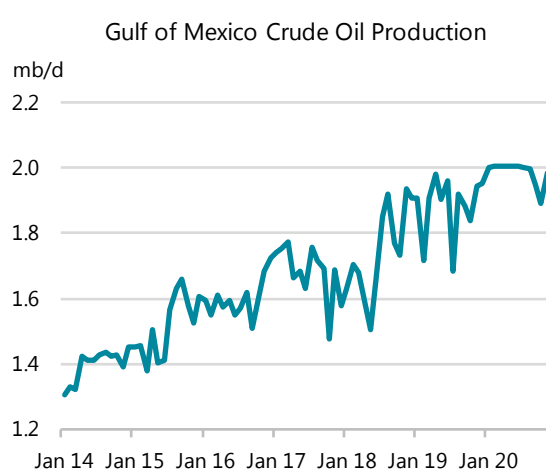
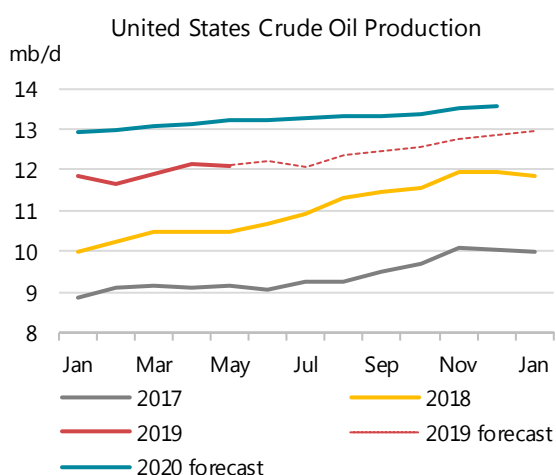
Annual non-OPEC supply gains slipped to an estimated 1.4 mb/d in July compared with 2.4 mb/d on average in 1H19 and 3.4 mb/d during 2H18. Despite hurricane shut-ins, the US dominated total growth - contributing 1.5 mb/d. High compliance by non-OPEC countries participating in the OPEC+ deal reduced production by 510 kb/d from its stated baseline. The

rate of compliance was 133% with output down 340 kb/d from a year ago. Mexico accounted for 190 kb/d of the y-o-y fall and saw the largest non-OPEC decline, followed by Norway where output slipped 180 kb/d.

Non-OPEC Supply											
(million barrels per day)											
	2018	1Q19	2Q19	3Q19	4Q19	2019	1Q20	2Q20	3Q20	4Q20	2020
Americas	22.98	24.01	24.50	24.72	25.34	24.65	25.62	25.83	26.11	26.40	25.99
Europe	3.47	3.46	3.21	3.26	3.46	3.35	3.59	3.56	3.62	3.90	3.67
Asia Oceania	0.41	0.43	0.47	0.50	0.52	0.48	0.54	0.56	0.57	0.57	0.56
<b>Total OECD</b>	<b>26.9</b>	<b>27.9</b>	<b>28.2</b>	<b>28.5</b>	<b>29.3</b>	<b>28.5</b>	<b>29.7</b>	<b>29.9</b>	<b>30.3</b>	<b>30.9</b>	<b>30.2</b>
Former USSR	14.56	14.80	14.40	14.43	14.53	14.54	14.63	14.60	14.46	14.57	14.56
Europe	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.11	0.11	0.11	0.11
China	3.85	3.92	3.95	3.90	3.88	3.91	3.89	3.89	3.85	3.85	3.87
Other Asia	3.36	3.33	3.26	3.23	3.23	3.26	3.22	3.18	3.15	3.11	3.16
Latin America	4.51	4.51	4.58	4.83	4.93	4.71	5.00	5.09	5.13	5.15	5.09
Middle East	3.27	3.26	3.27	3.26	3.26	3.26	3.27	3.27	3.27	3.27	3.27
Africa	1.45	1.46	1.48	1.47	1.47	1.47	1.49	1.49	1.49	1.49	1.49
<b>Total Non-OECD</b>	<b>31.1</b>	<b>31.4</b>	<b>31.1</b>	<b>31.2</b>	<b>31.4</b>	<b>31.3</b>	<b>31.6</b>	<b>31.6</b>	<b>31.5</b>	<b>31.5</b>	<b>31.6</b>
Processing Gains	2.32	2.35	2.35	2.35	2.35	2.35	2.38	2.38	2.38	2.38	2.38
Global Biofuels	2.62	2.21	2.91	3.01	2.63	2.69	2.36	2.93	3.20	2.82	2.83
<b>Total Non-OPEC</b>	<b>62.9</b>	<b>63.9</b>	<b>64.5</b>	<b>65.1</b>	<b>65.7</b>	<b>64.8</b>	<b>66.1</b>	<b>66.9</b>	<b>67.3</b>	<b>67.6</b>	<b>67.0</b>
Annual Chg (mb/d)	2.82	2.56	2.30	1.48	1.22	1.88	2.22	2.38	2.27	1.91	2.19
Changes from last OMR (mb/d)	0.07	0.02	0.04	-0.21	-0.07	0.07	-0.09	0.12	0.01	0.00	0.00

For the year as whole, non-OPEC supply growth has been revised marginally lower, to 1.9 mb/d, on a slightly weaker forecast for Brazil. However, growth accelerates to 2.2 mb/d in 2020 as Brazil picks up speed and new projects start up in Norway and Guyana. The US nevertheless remains the largest source of growth, contributing a total of 1.7 mb/d in 2019 and 1.3 mb/d in 2020.

So far this year, **US** crude oil supply growth has been lacklustre. Over the first five months of 2019, output rose only 75 kb/d. In May, US crude oil production dropped by 25 kb/d m-o-m, to 12.1 mb/d, largely in line with expectations, as an 80 kb/d decline in Gulf of Mexico output more than offset a marginal increase in onshore supplies.



The biggest gain came from New Mexico, where production increased by 33 kb/d to 900 kb/d, a new high and 255 kb/d (or 40%) up on a year earlier. Texas registered a 16 kb/d increase, but at 4.97 mb/d was still 755 kb/d (or 18%) above a year ago. Production in Colorado rose by 12 kb/d,

in Oklahoma it dropped by the same amount and in North Dakota output was essentially unchanged. In contrast, natural gas liquids production rose by 50 kb/d m-o-m, to 4.8 mb/d, up 515 kb/d y-o-y and 360 kb/d higher than end-2018 levels.

Output likely fell further in July, as Hurricane Barry shut in more than 1.3 mb/d at one point and reduced Gulf of Mexico crude oil production by roughly 300 kb/d for the month on average. Supply should recover sharply in August and subsequently unless storms force further shut-ins. The start-up of Shell's 175 kb/d Appomattox project, ahead of schedule in May, is expected to take Gulf of Mexico production to new records next year.

As for the onshore, the imminent start-up of more than 2 mb/d of new pipeline capacity in the Permian, and a strong uptick in fracking activity in June, is expected to spur further growth in output and exports from the Gulf Coast. However, producers are being cautious, with few signs of an acceleration in drilling activity. During July, operators reduced the number of rigs targeting oil by a further 18, so that in early August there were 770 rigs in operation, 115 fewer than at end-2018. Slowing activity is taking its toll on US service companies. Schlumberger and Halliburton both reported sharp declines in North American revenues so far this year and presented a weaker outlook for exploration and production for the remainder of 2019 as independents continue to put greater emphasis on capital discipline rather than output growth.

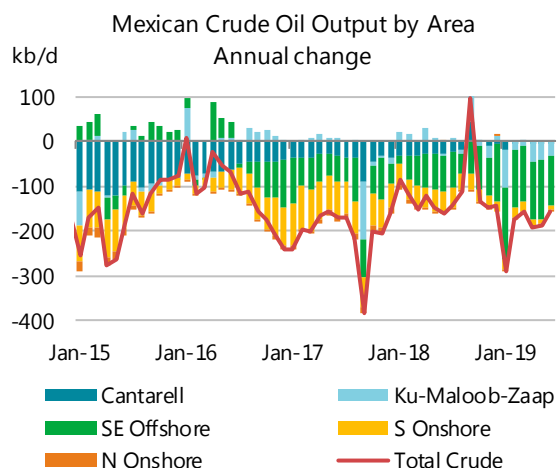
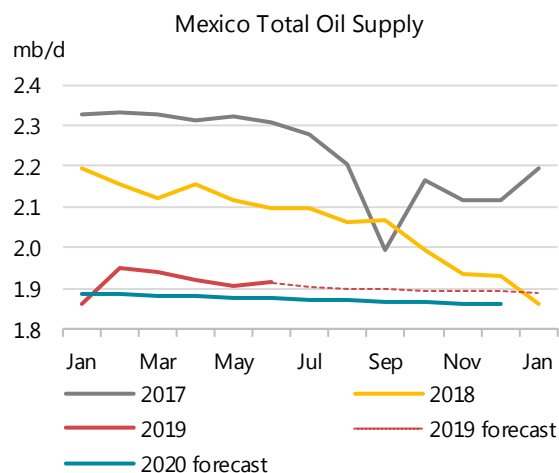
With many of the independents scaling back, the majors, led by Exxon and Chevron and to a lesser extent Shell and BP, are using their scale and deep pockets to shore up their shale footprint. Exxon Mobil has become the Permian's most active driller with more than 50 rigs operating in the West Texas oil field, increasing production there by nearly 90% in 12 months. Chevron, one of the largest producers in the Permian, reported 2Q19 output of 420 kboe/d, up from 270 kboe/d a year earlier.

Earlier this year, Exxon and Chevron both pledged to increase their Permian output to close to 1 mboe/d by 2024. During its latest investor call, Exxon said it was "making outstanding progress. Permian production is strong and on schedule". Chevron said Permian production is "on track with steady rig count". Both companies said they are using a manufacturing approach, meaning drilling more wells with longer laterals using repeatable methods to save time and money.

**Mexican** total oil supply held steady in June, at around 1.9 mb/d, down 185 kb/d on a year earlier. Crude production, at 1.7 mb/d, was 155 kb/d below the previous year, led by declines at the Xanab field in the Southeast offshore region (-90 kb/d y-o-y) and from the Ku-Maloob-Zaap complex (-60 kb/d). In contrast, output at the legacy Cantarell field held steady at around 150 kb/d, a fraction of the peak rate of more than 2.2 mb/d seen in 2004.

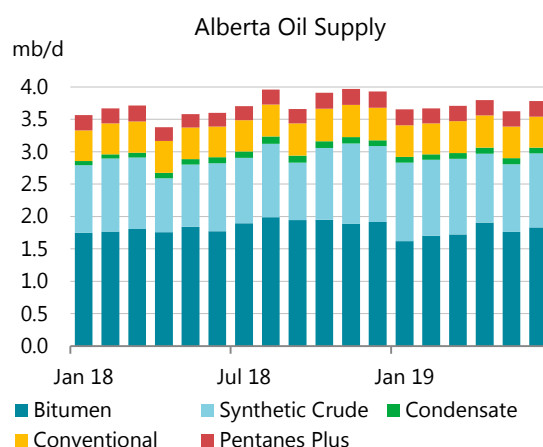
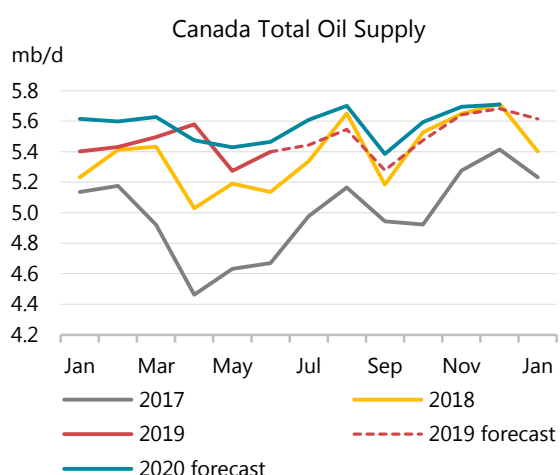
Pointing to unchanged crude production in 2Q19 compared with 1Q19, Pemex claimed in its latest investor update that the strategy of its new business plan has started to deliver results. The company hopes to show increased production next year, raising output from a target of 1.7 mb/d this year to 1.87 mb/d. By 2024, the aim is to produce nearly 2.7 mb/d, a 65% increase from the most recent historic low of 1.625 mb/d hit in January 2019. To do so, Pemex will increase investments to 347 billion pesos (\$18.2 billion) next year, while in 2021 it plans to spend 411 billion pesos (\$21.6 billion). The main focus will be exploration efforts in shallow waters and onshore areas.

Private investments will also be required to achieve Mexico's output goals, and the start-up of Eni's 15 kb/d Mitzón field in July will offer some support. In all, Mexico's total oil production is expected to decline by 170 kb/d this year, with a smaller fall of 30 kb/d in 2020.



**Canadian** oil production rose by 125 kb/d in June, to 5.4 mb/d, as Albertan producers pushed oil sands output higher. Synthetic crude oil supplies increased 100 kb/d from a month earlier while raw bitumen output rose by 65 kb/d. Offshore production inched up 20 kb/d on higher flows from the Hibernia field. Canadian production was 265 kb/d above a year ago, but 310 kb/d below December 2018 levels, before mandatory production curtailments were implemented.

In recognition of lower oil storage levels and more volume being shipped by rail, Alberta eased its crude oil curtailment program for September by an additional 25 kb/d, reducing the required cuts to 125 kb/d compared with 325 kb/d mandated at the start of the year. Companies can thus produce 3.76 mb/d from September, an increase of 135 kb/d from June levels. Even though production has fallen short of maximum allowed levels since the start of the year, several producers have recently called for a further relaxation of the curtailments.

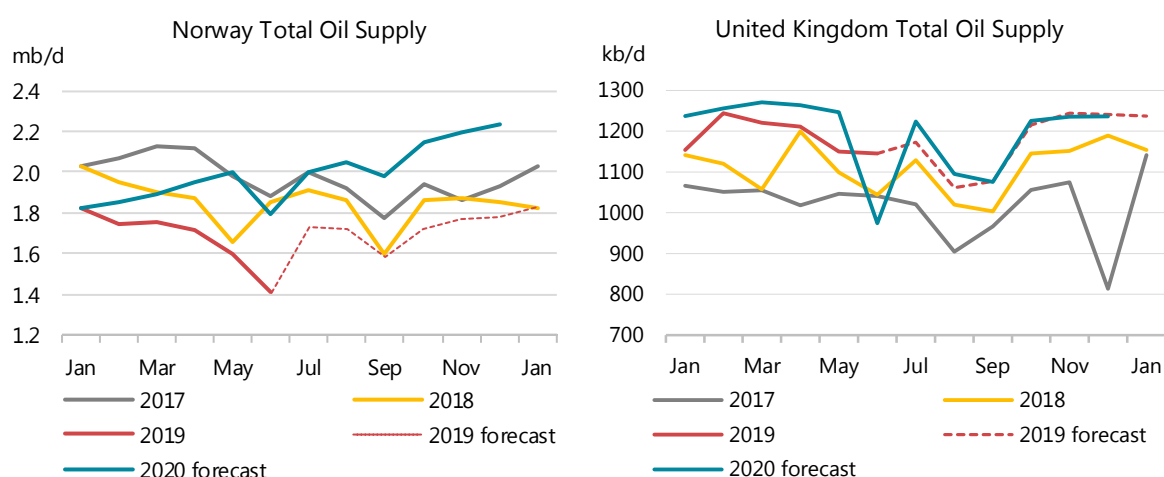


Source: Alberta Energy Regulator

Heavy maintenance in the Greater Ekofisk Area saw **Norwegian** output fall 185 kb/d m-o-m in June to 1.4 mb/d, the lowest in over 30 years, according to the Norwegian Petroleum Directorate. Following the planned turnarounds, which occur every three years, production is thought to have rebounded in July but still came in 180 kb/d below year-ago levels. Equinor started production from the Trestakk field in mid-July, announcing that the project was delivered ahead of schedule and 10% below budget. Trestakk is expected to ramp up to plateau rates of 40 kb/d and help output return to growth next year, after declining by 155 kb/d in 2019.

In 2020, gains of 300 kb/d are underpinned by the Johan Sverdrup project. In its 2Q19 results presentation, operator Equinor confirmed that first oil will be produced in November 2019 and that capital costs will be lower than previously advised. In addition, a more ambitious production ramp-up is envisioned, with the Phase 1 plateau peak of 440 kb/d reached within six months. Phase 2 of the project was approved in April and will add another 220 kb/d. Meanwhile, Lundin Petroleum plans further investment in the Edvard Grieg development that will extend the production plateau of around 90 kb/d by two years.

In its review of 1H19 activity, NPD noted that the level of exploration activity in Norway in 2019 is similar to 2018 but a much higher proportion of exploration wells, as opposed to appraisal wells, have been drilled (22 out of 30 completed in 1H19). So far there have been six discoveries; the largest is Aker BP's Froskelår prospect, which has an estimated 60 to 130 mmbbl of gross recoverable reserves.



**UK** oil production was flat m-o-m at 1.1 mb/d in June. Output was 100 kb/d above a year ago and likely gained 40 kb/d y-o-y in July largely due to growth from West of Shetlands fields but also thanks to better than expected performance at Premier Oil's Catcher development.

Data from the Oil and Gas Authority (OGA) show that the 50 kb/d m-o-m output fall in May was due to scheduled maintenance at the Magnus field, and a shut in at the Flotta Terminal while emergency repairs were made to the pipeline from the Claymore platform. Additional maintenance at the Flotta Terminal is believed to have taken place in July. Flows along the Forties pipeline were also disrupted for one week in early July, during which production fell by around 150 kb/d, as repairs were made to a processing unit.

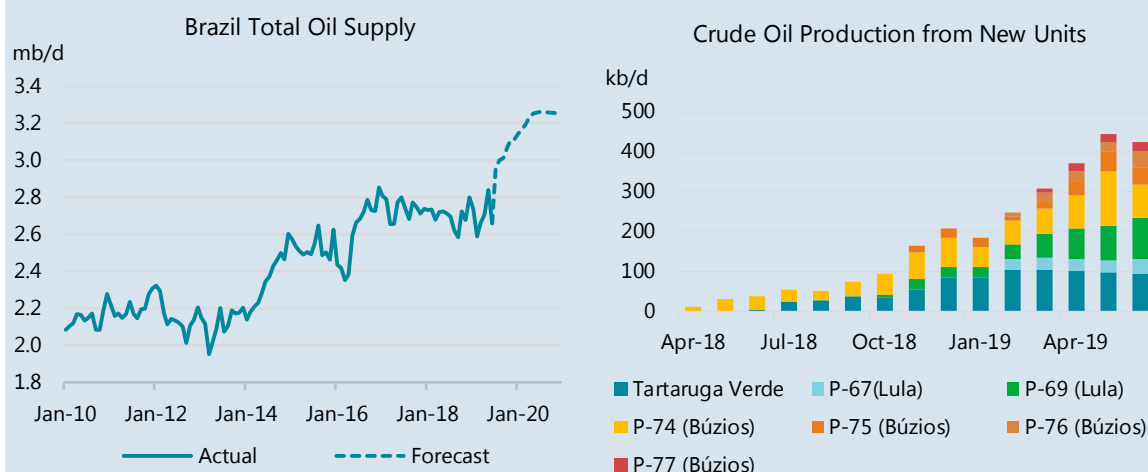
For 2019 as a whole, production is expected to gain 70 kb/d, slowing to 20 kb/d in 2020 when only one significant project, Equinor's Mariner field, is due to start up. In July, the OGA launched the 32<sup>nd</sup> offshore licensing round which is offering blocks in mature offshore areas. The results are expected in 2020.

## Box 2. Record July primes Brazil for growth spurt

After a disappointing start to the year, Brazil's oil output reached a record high estimated at nearly 3 mb/d in July. The main driver was growth from the offshore Búzios field, which saw output soar to around 350 kb/d from 190 kb/d in June as problems that had delayed the expansion were resolved. By the end of the year output could reach 600 kb/d.

According to Petrobras, the P-75 floating production and storage (FPSO) vessel reached capacity of 150 kb/d, less than 9 months after commissioning, having pumped only 45 kb/d in June. One well alone produced up to 60 kb/d, beating the previous record set by the Mero field by a wide margin. Two other units (P-76 and P-77) that started operations earlier this year are still ramping up.

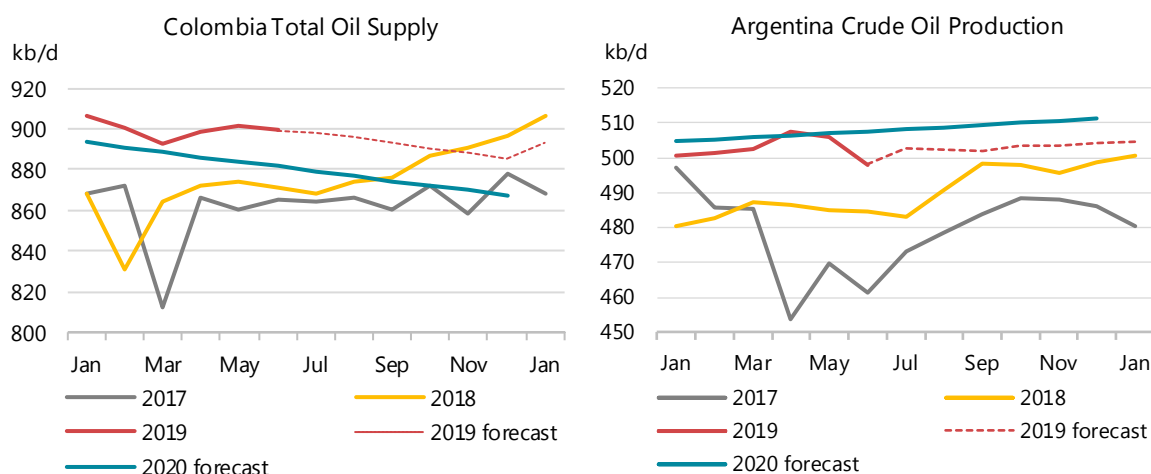
Over the past 18 months, Brazil's production growth failed to live up to expectations. From less than 2 mb/d in 2013, output reached 2.8 mb/d at the start of 2017, but steep declines at mature fields, heavy maintenance and unplanned outages offset underwhelming output from new units. As a result, in 2018 Brazil's oil production fell by 40 kb/d versus 2017.



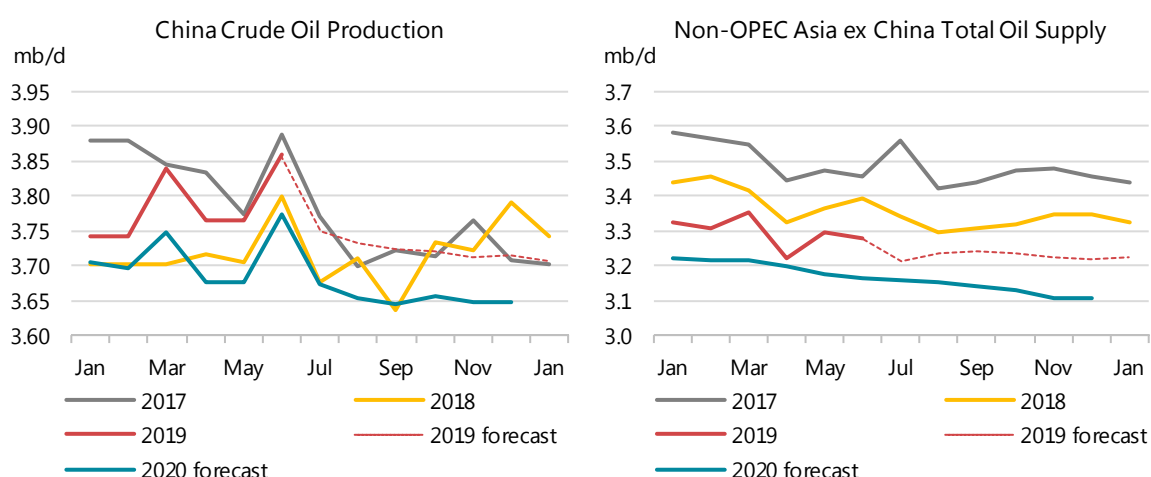
Before July's dramatic growth, June saw crude oil production slump by 175 kb/d to 2.6 mb/d due to unscheduled maintenance and technical issues at Búzios. According to Petrobras data, output from the Lula field dropped 110 kb/d m-o-m to 800 kb/d. The weak June data capped a lacklustre performance in 1H19 that led Petrobras, which accounts for 75% of Brazil's total oil supply, to cut its 2019 oil and gas output guidance from 2.8 million barrels of oil equivalent per day (mboe/d) to 2.7 mboe/d. Compared with June output of 2.4 mboe/d, that allows for significant gains during the rest of the year.

Our expectation is that overall, Brazilian total oil output will grow by 175 kb/d this year, to 2.87 mb/d, with a further gain of 360 kb/d in 2020. In addition to the Búzios field, output gains will come from the P-67 and P-69 units recently installed at the Lula field and from the start-up of the 150 kb/d Berbigão and Atapu fields.

While Brazilian production has disappointed so far in 2019, oil supply in other Latin American countries has exceeded expectations. During 1H19, production in **Colombia** averaged 900 kb/d, 35 kb/d higher than the same period a year earlier. Ecopetrol, which accounts for the bulk of Colombia's output, stepped up spending and activity last year, reversing output declines in place since 2015. Gains have come from Ecopetrol's Akacias field, which rose from 6 kb/d at the start of 2018 to 20 kb/d in May. Increases from Geopark's Tigana development have also contributed. **Argentinian** production is equally on the rise with increased investments in shale prospects. While dipping marginally in June, to 500 kb/d, crude oil production was up 4% on average during 1H19 compared with the same period a year earlier.

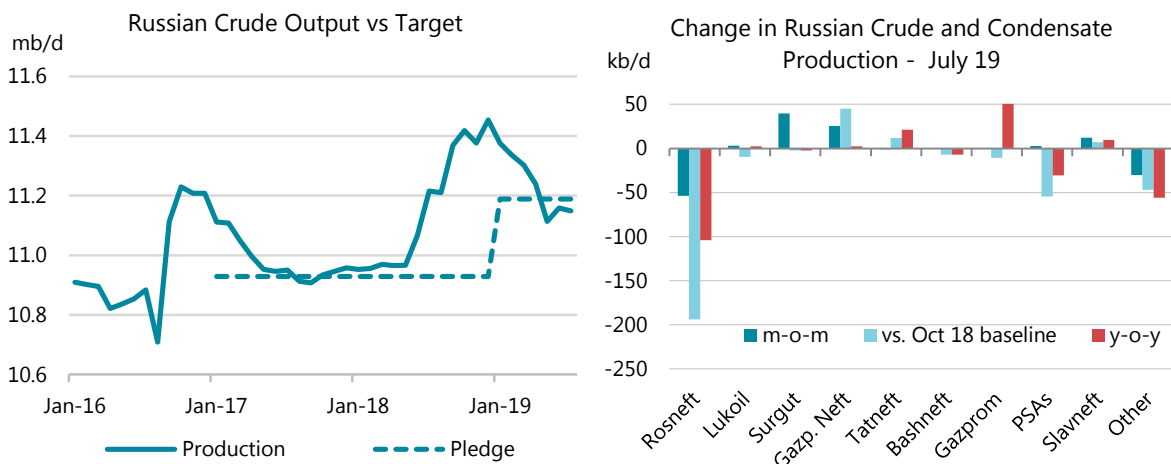


**Chinese** crude oil production surged 95 kb/d in June, to 3.86 mb/d. The increase came from the Shaanxi province, where the Yangchang and Changqing fields are located, Xinjiang and Tianjin. It is likely that the increase reflects a reporting adjustment, rather than a real increase in output. In June, total crude production was 60 kb/d higher than a year earlier. Output is expected to have fallen back in July, as has been the case in recent years.

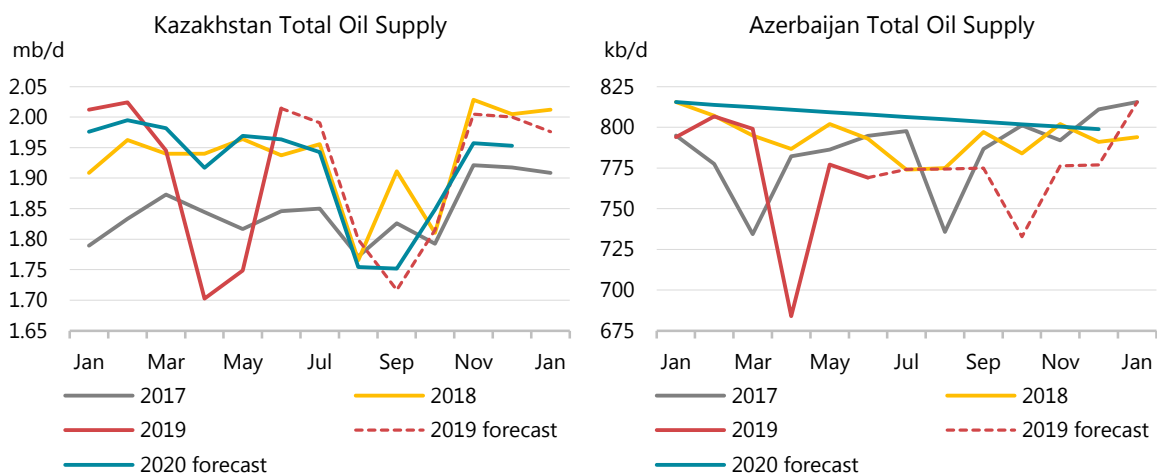


Elsewhere in Asia, oil supply continues to decline. In June, **Indian** oil production, including natural gas liquids, fell below 800 kb/d for the first time since January 2009, and was 50 kb/d below a year earlier. **Indonesian** production was down 30 kb/d y-o-y, to 780 kb/d, while **Malaysian** output is estimated to have fallen by 25 kb/d, to around 700 kb/d.

**Russian** crude oil production held largely steady in July, at around 11.15 mb/d, despite news of output slumping to 10.9 mb/d during the first half of the month when contamination issues along the Druzhba pipeline forced some companies to shut in production. Most notably, Rosneft's largest subsidiary, Yuganskneftegaz, saw its output drop by 70 kb/d m-o-m to 1.27 mb/d, 130kb/d below the year earlier. Rosneft's production was down 55 kb/d from June but this was mostly offset by higher output from Surgutneftegaz (+40 kb/d) and Gazpromneft (+25 kb/d). Russia's output was 270 kb/d below the October 2018 baseline, compared with a pledge of a 230 kb/d reduction, and 65 kb/d below a year ago.



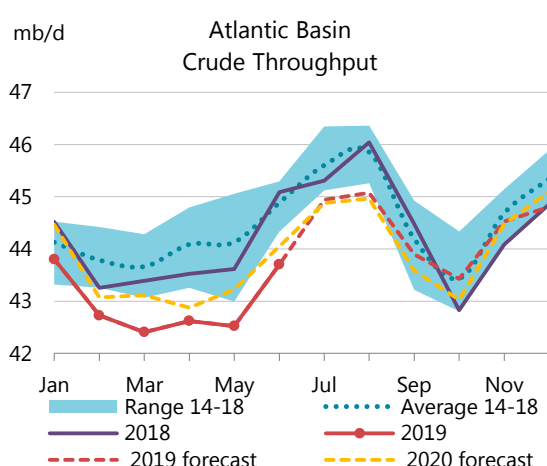
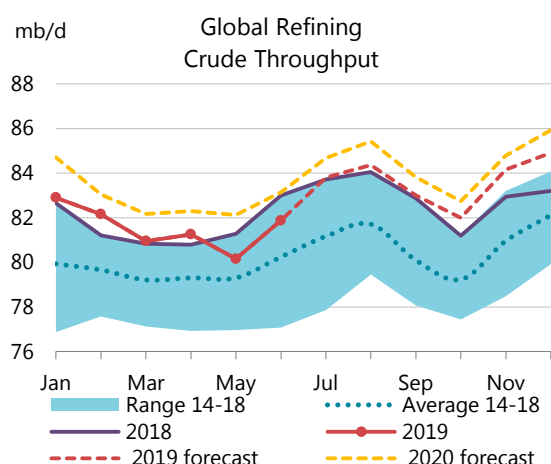
Oil production in **Kazakhstan** surged by 265 kb/d in June, to more than 2 mb/d, as maintenance at the Kashagan field was completed. Following the month-long shutdown, Kashagan flowed at a record 360 kb/d, compared with 90 kb/d in April and May. Output at the country's other large fields, Tengiz and Karachaganak held steady at around 660 kb/d and 250 kb/d, respectively. Total oil output was 75 kb/d higher than a year ago. Supply is likely to have remained elevated in July, but will fall in August as Tengiz and Karachaganak undergo maintenance. CPC loadings eased by 50 kb/d in July, to 1.45 mb/d, with lower shipments of Tengiz crude (-30 kb/d), Kashagan (-30 kb/d) and Karachaganak (-24 kb/d). **Azerbaijan** produced 770 kb/d in June, 25 kb/d less than a year earlier.



# REFINING

## Overview

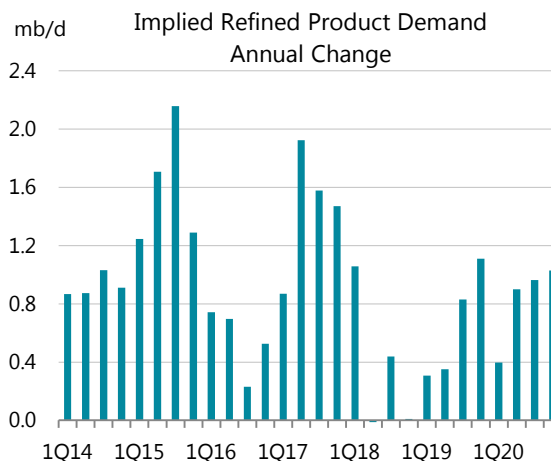
With June data now largely complete, global refining throughput fell 90 kb/d year-on-year (y-o-y) in 1H19, despite the large 720 kb/d gain in China, where we have revised up historical throughput estimates. Middle East and European refining activity was also stronger y-o-y, by 260 kb/d and 50 kb/d, respectively. European growth could have been higher if not for the impact of the Druzhba pipeline contamination. The rest of the world produced a combined 1.1 mb/d decline. Latin America led with a 550 kb/d loss in throughput from Venezuela and the closure of refineries in Trinidad and Curaçao. North American runs declined by 245 kb/d on lower activity in the US. The Former Soviet Union, Africa, South-East Asia (incl. India) also contributed to the global decline.



Global Refinery Crude Throughput <sup>1</sup>											
	(million barrels per day)										
	2018	1Q19	Apr 19	May 19	Jun 19	2Q19	Jul 19	3Q19	4Q19	2019	2020
Americas	19.4	18.7	18.7	19.1	19.9	19.2	19.9	19.9	19.7	19.4	19.6
Europe	12.2	12.3	12.2	11.7	11.7	11.9	12.6	12.5	12.3	12.2	12.3
Asia Oceania	7.0	7.1	7.1	6.3	6.5	6.6	7.0	7.1	6.8	6.9	6.9
Total OECD	38.6	38.1	37.9	37.2	38.0	37.7	39.5	39.5	38.8	38.5	38.7
FSU	6.8	6.8	6.4	6.2	6.7	6.4	7.0	6.8	6.8	6.7	6.7
Non-OECD Europe	0.6	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
China	12.1	12.7	12.9	12.6	13.0	12.8	12.7	12.8	13.0	12.8	13.1
Other Asia	10.6	10.8	10.4	10.5	10.3	10.4	10.5	10.6	10.8	10.7	11.0
Latin America	3.6	3.1	3.2	3.2	3.1	3.2	3.2	3.2	3.2	3.2	3.1
Middle East	7.8	7.9	7.8	7.9	8.1	7.9	8.1	8.1	8.3	8.0	8.4
Africa	2.1	2.0	2.1	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0
Total Non-OECD	43.6	43.8	43.3	42.9	43.8	43.3	44.2	44.1	44.8	44.0	44.9
Total	82.2	81.9	81.2	80.1	81.8	81.0	83.7	83.6	83.6	82.5	83.6
Year-on-year change	0.7	0.4	0.5	-1.1	-1.1	-0.6	0.1	0.2	1.2	0.3	1.1

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

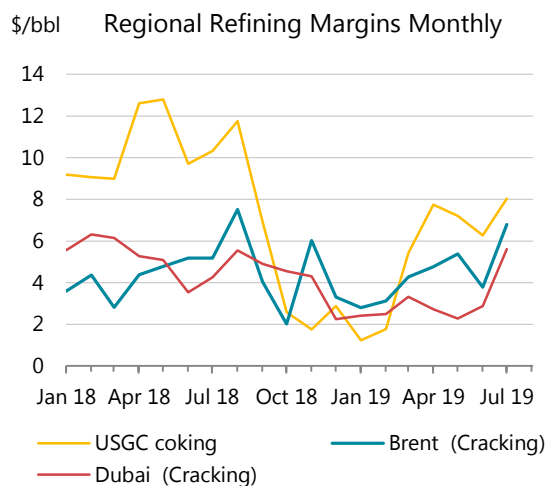
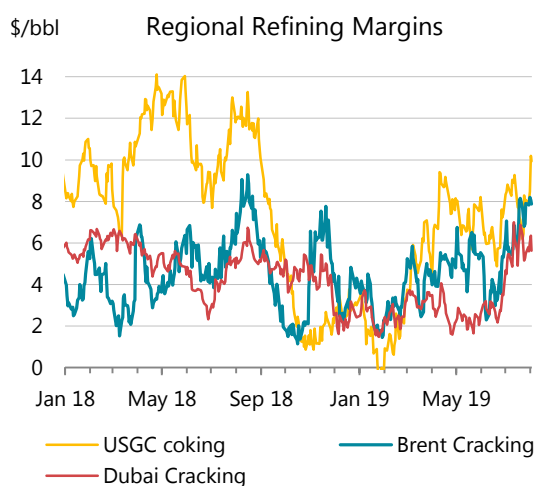
Demand growth for refined products was also subdued in 1H19, amounting to just 0.3 mb/d, essentially flat y-o-y, but it is expected to triple in the second half of the year. Refining throughput losses in 1H19 were largely contained within the Atlantic Basin, where throughput declined by 0.9 mb/d. The region is a net importer of premium fuels such as diesel and kerosene, although it exports fuel oil and naphtha.



## Margins

Global refining margins rebounded strongly in July as three consecutive months of poor refining performance finally resulted in upward pressure on product cracks. The largest increases were registered in Singapore, which is considered a benchmark for the wider Asian region. In Asia, refining activity outside China was very weak due to extensive maintenance in India, refinery issues in Vietnam and the Philippines, and run cuts in India and Japan related to water usage restrictions caused by drought conditions. In addition, Korean product exports were reported lower as domestic consumers increased purchases of transport fuels prior to the expiry of tax breaks in August. Higher product output in China was mostly absorbed by the domestic system, as exports are subject to quotas, currently only allocated to state-owned refiners.

Singapore high-sulphur fuel oil cracks surged to positive levels, averaging \$3.35/bbl in the month. Low-sulphur fuel oil cracks remained above gasoline for the second consecutive month. Despite the gains, Singapore margins remained the worst performing amongst the global hubs, indicating the underlying issue of regional overcapacity.



Margin support in Europe also came from lower activity. In June, combined runs in Europe and the US East Coast (PADD 1), the main US product importing region, were down by about 510 kb/d y-o-y. In July, European runs were estimated flat y-o-y, while PADD 1 showed a decline of 260 kb/d due to the shutdown of the Philadelphia refinery damaged by fire at end-June.

IEA/KBC Global Indicator Refining Margins <sup>1</sup>											
(\$/bbl)											
	Monthly Average				Change		Average for week ending:				
	Apr 19	May 19	Jun 19	Jul 19	Jul 19-Jun 19	05 Jul	12 Jul	19 Jul	26 Jul	02 Aug	
<b>NW Europe</b>											
Brent (Cracking)	4.76	5.38	3.78	6.79	↑	3.00	6.05	6.01	7.09	7.30	7.96
Urals (Cracking)	4.08	4.50	4.67	6.55	↑	1.89	7.01	6.60	6.90	6.01	5.87
Brent (Hydroskimming)	1.09	1.41	1.52	4.18	↑	2.66	3.58	3.76	4.11	4.39	5.30
Urals (Hydroskimming)	-0.06	-0.70	0.81	2.46	↑	1.65	3.07	2.96	2.77	1.46	1.23
<b>Mediterranean</b>											
Es Sider (Cracking)	5.03	4.54	4.58	7.93	↑	3.35	7.04	7.19	8.07	8.51	9.18
Urals (Cracking)	3.99	3.18	4.97	6.62	↑	1.64	6.40	6.36	7.15	6.59	6.22
Es Sider (Hydroskimming)	1.76	1.28	2.44	5.62	↑	3.17	4.91	5.31	5.45	5.76	6.80
Urals (Hydroskimming)	-0.35	-1.94	0.69	2.30	↑	1.60	2.34	2.68	2.87	1.54	1.30
<b>US Gulf Coast</b>											
Mars (Cracking)	5.24	4.11	4.65	6.01	↑	1.36	9.09	8.28	4.30	3.64	6.39
50/50 HLS/LLS (Coking)	11.49	10.64	11.12	13.73	↑	2.61	14.75	14.74	12.47	13.00	14.46
50/50 Maya/Mars (Coking)	7.74	7.21	6.27	8.03	↑	1.76	8.54	8.88	7.55	7.30	8.92
ASCI (Coking)	8.26	8.03	8.36	9.59	↑	1.23	11.85	11.21	8.45	7.68	10.11
<b>US Midwest</b>											
30/70 WCS/Bakken (Cracking)	19.72	23.27	18.87	18.76	↓	-0.11	19.47	19.72	18.26	19.21	15.87
Bakken (Cracking)	22.32	25.34	20.50	20.40	↓	-0.10	20.13	21.55	20.35	20.75	17.10
WTI (Coking)	22.03	24.97	21.12	21.01	↓	-0.11	20.43	22.63	20.86	21.39	18.41
30/70 WCS/Bakken (Coking)	21.86	26.22	21.07	20.87	↓	-0.20	20.70	21.53	20.65	21.66	18.00
<b>Singapore</b>											
Dubai (Hydroskimming)	-0.78	-1.57	-0.07	3.56	↑	3.63	2.79	4.29	3.78	3.28	3.77
Tapis (Hydroskimming)	0.00	-0.93	-0.62	3.78	↑	4.40	2.95	3.14	4.25	4.16	4.69
Dubai (Hydrocracking)	2.72	2.28	2.87	5.61	↑	2.74	5.08	5.76	5.92	5.59	5.89
Tapis (Hydrocracking)	2.15	0.60	-0.55	3.48	↑	4.03	2.51	2.38	4.21	4.12	4.55

<sup>1</sup> 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)

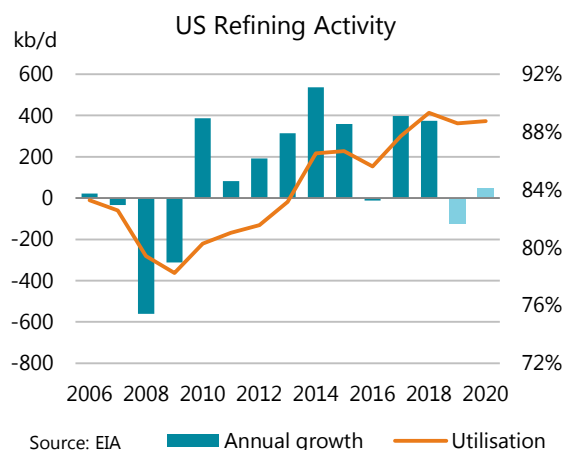
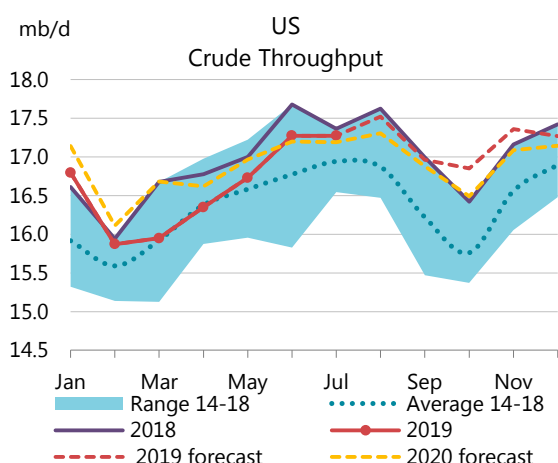
This month, we have changed the petroleum coke price assessment used in our US margins calculations from an aggregated average to *Argus Media's* 4.5% quote. This resulted in changes of around \$0.1/bbl in the US Gulf Coast and US Midwest coking margins compared to previously published values.

## OECD refinery throughput

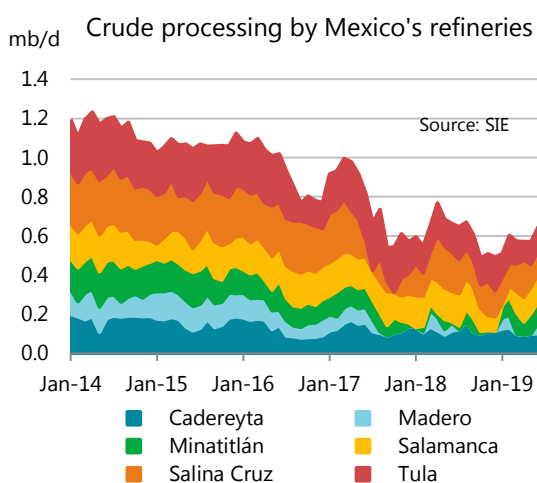
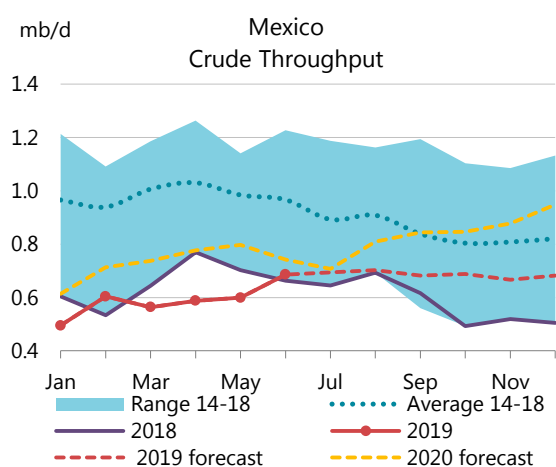
OECD refining throughput in June increased 0.9 mb/d m-o-m, starting the ramp-up towards summer peak rates in August. Activity was, however, 0.6 mb/d lower y-o-y, on outages in the US and Europe. In 2019, runs are expected to decline for the second consecutive year but they will rebound next year.

In July, throughput in the **US** was flat month-on-month at 17.27 mb/d, and down 90 kb/d y-o-y. Combined throughputs in PADDs 1, 3 and 5 (US Northeast, Gulf Coast and West Coast), which are seaborne trade regions and important hubs for global refined products markets, were 320 kb/d lower y-o-y, while the landlocked PADDs 2 and 4 increased runs by 150 kb/d. An agreement reached in July with retailers in Pennsylvania granted PADD 2 refiners access to

40 kb/d of eastbound capacity on the Laurel pipeline to transport gasoline and other products. This will further support PADD 2 refining activity and provide some relief to the tight PADD 1 product markets.



Lower activity in seaborne regions helped propel refining margins to the highest levels in 10 months. With the exception of sour cracking margins, Gulf Coast refining margins remain higher than in any other trading hub. Unplanned outages or extended maintenance, together with weather-related disruptions, are the main reasons for lower runs, rather than economic cuts. In the past two years the US refining system has seen record high utilisation rates of around 89%. Since the start of the acceleration of US shale oil production growth in 2010, refining throughput has increased by 2.1 mb/d, second only to China's 4.4 mb/d growth, and ahead of the Middle East's 1.7 mb/d and India's 1.2 mb/d. US refineries have very high gasoline yields (46-48%), and above average rates of residual fuel upgrading. Both require more secondary units and more complex processing, resulting in a greater risk of equipment failure and industrial accidents, especially after periods of high utilisation. After a 120 kb/d decline this year, throughput is expected to increase by 50 kb/d in 2020.



Several of **Mexico's** six refineries are undergoing extensive repairs to increase utilisation rates. In June, refining throughput climbed 90 kb/d m-o-m, to 680 kb/d, up by a marginal 25 kb/d y-o-y. In a rare occurrence, all six refineries were in operation, though mostly at utilisation rates below 50%. The energy secretary announced the intention to increase processing to 1.4 mb/d at

some point next year, but in reality this is likely to be lower. We forecast runs reaching 940 kb/d by end-2020. Any further acceleration would impact our US forecast as Mexico is a major importer of Gulf Coast products.

**Canadian** throughput gained 140 kb/d m-o-m in June. For April, throughput was revised lower by 70 kb/d to 1.55 mb/d.

### Refinery Crude Throughput and Utilisation in OECD Countries

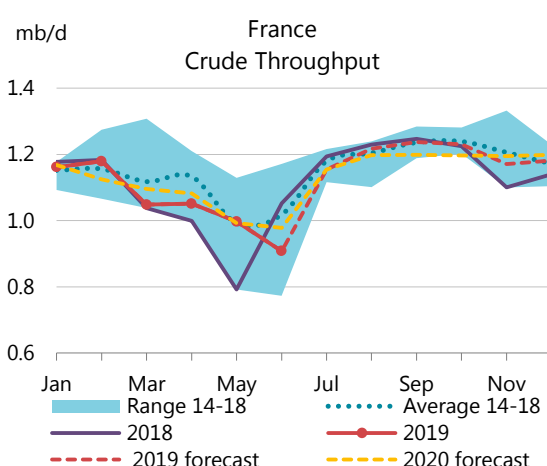
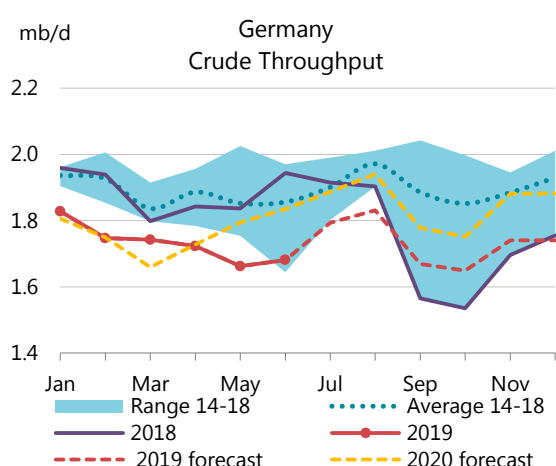
(million barrels per day)

	Jan 19	Feb 19	Mar 19	Apr 19	May 19	Jun 19	Change from		Utilisation rate <sup>1</sup>	
							May 19	Jun 18	Jun 19	Jun 18
US <sup>2</sup>	16.79	15.86	15.94	16.34	16.72	17.26	0.54	-0.40	91%	93%
Canada	1.72	1.74	1.75	1.55	1.57	1.72	0.14	0.01	85%	85%
Chile	0.21	0.20	0.19	0.20	0.22	0.20	-0.01	0.02	90%	80%
Mexico	0.49	0.59	0.55	0.58	0.59	0.68	0.09	0.02	41%	40%
<b>OECD Americas<sup>3</sup></b>	<b>19.20</b>	<b>18.40</b>	<b>18.43</b>	<b>18.67</b>	<b>19.09</b>	<b>19.86</b>	<b>0.77</b>	<b>-0.35</b>	<b>87%</b>	<b>89%</b>
France	1.15	1.17	1.04	1.04	0.99	0.90	-0.09	-0.14	73%	84%
Germany	1.82	1.74	1.73	1.71	1.65	1.67	0.02	-0.26	83%	96%
Italy	1.28	1.20	1.24	1.30	1.33	1.27	-0.07	-0.02	73%	74%
Netherlands	1.19	1.12	1.16	1.09	1.04	1.00	-0.04	-0.07	77%	83%
Spain	1.39	1.29	1.37	1.38	1.29	1.21	-0.08	0.00	86%	86%
United Kingdom	1.13	1.09	1.02	1.08	1.03	1.00	-0.03	-0.07	79%	85%
Other OECD Europe	4.51	4.59	4.54	4.56	4.40	4.66	0.26	0.19	89%	88%
<b>OECD Europe</b>	<b>12.47</b>	<b>12.20</b>	<b>12.10</b>	<b>12.16</b>	<b>11.73</b>	<b>11.71</b>	<b>-0.02</b>	<b>-0.38</b>	<b>82%</b>	<b>86%</b>
Japan	3.24	3.19	3.14	3.08	2.72	2.81	0.09	0.28	79%	71%
South Korea	3.04	3.20	2.97	3.15	2.82	2.82	0.00	-0.21	84%	92%
Other Asia Oceania	0.85	0.86	0.86	0.82	0.79	0.83	0.04	0.02	96%	93%
<b>OECD Asia Oceania</b>	<b>7.13</b>	<b>7.25</b>	<b>6.98</b>	<b>7.06</b>	<b>6.33</b>	<b>6.46</b>	<b>0.13</b>	<b>0.09</b>	<b>83%</b>	<b>83%</b>
<b>OECD Total</b>	<b>38.79</b>	<b>37.84</b>	<b>37.52</b>	<b>37.89</b>	<b>37.16</b>	<b>38.03</b>	<b>0.87</b>	<b>-0.64</b>	<b>85%</b>	<b>87%</b>

<sup>1</sup> Expressed as a percentage, based on crude throughput and current operable refining capacity

<sup>2</sup> US50

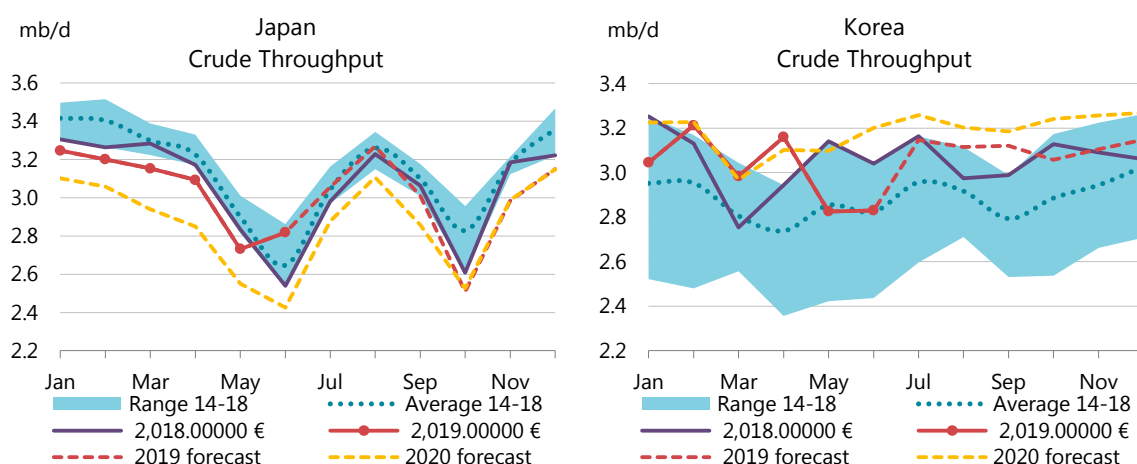
<sup>3</sup> OECD Americas includes Chile and OECD Asia Oceania includes Israel. OECD Europe includes Slovenia and Estonia, though neither country has a refinery



Preliminary data for June show European runs trending lower m-o-m, and 385 kb/d lower y-o-y. Germany and France were responsible for most of the decline. Coincidentally, refiners in both countries suffered from pipeline-related outages. In **Germany**, Leuna and Schwedt refineries were reported operating at lower rates due lack of alternatives to Druzbha pipeline deliveries. At 1.67 mb/d, runs were 260 kb/d lower y-o-y.

In **France**, June runs dropped 90 kb/d m-o-m to just under 0.9 mb/d, and 145 kb/d lower y-o-y. Total's 93 kb/d Grandpuits refinery was shut down between February and July due to a leak on the pipeline supplying crude from the port of Le Havre. Total's Feyzin refinery in the south of the country suffered a three-week outage in June due to the shutdown of the Southern European Pipeline Company's crude pipeline. **Lithuania's** refining activity is now counted in our OECD statistics, increasing the baseline throughput by about 200 kb/d

In OECD Asia, preliminary numbers for June throughput showed runs increasing 130 kb/d m-o-m, and gaining 90 kb/d y-o-y, mostly on better than expected **Japanese** performance which increased counter-seasonally m-o-m. Korean throughput was reported flat m-o-m, and down 210 kb/d y-o-y. Runs in the region are expected to increase 470 kb/d in 3Q19.



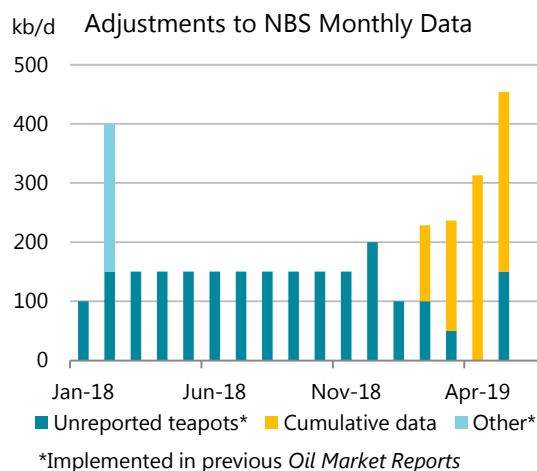
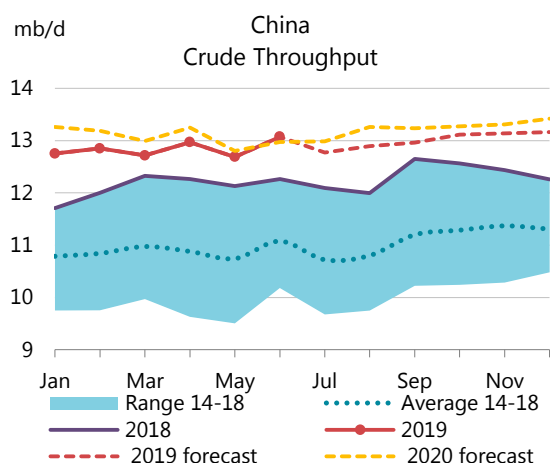
## Non-OECD refinery throughput

Non-OECD refining throughput has been revised up for Feb-May on higher Chinese historical estimates. In June, much higher than expected Chinese runs were more than offset by lower activity in India and Latin America. Throughput data for 2Q19, now largely finalised, showed a decline of 310 kb/d y-o-y, the first quarterly decline in 10 years.

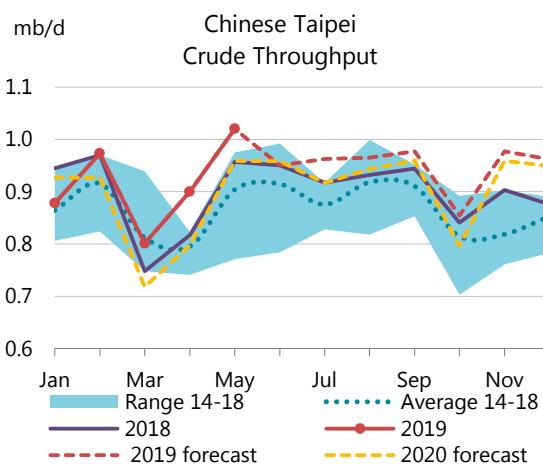
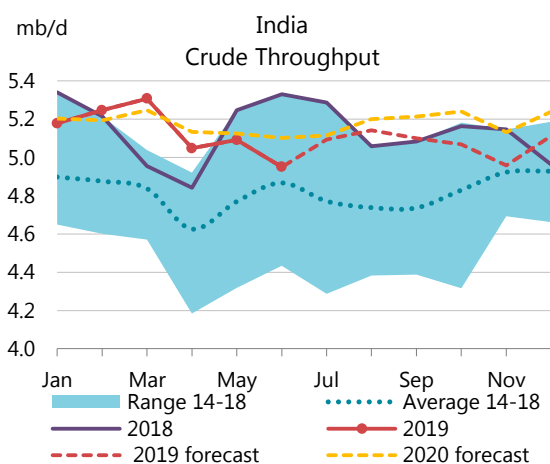
**China's** refining activity surged to a new record level of 13 mb/d in June, up 800 kb/d y-o-y. Based on additional information from the National Bureau of Statistics (NBS), we have revised up monthly throughput since February. NBS does not publish revised monthly data. Instead, revisions can be derived from the year-to-date numbers that are published with the monthly data. The difference between the published year-to-date and the sum of the monthly data reveals the extent of the revisions. The downside is that it is not possible to derive directly the extent of revisions for each of the proceeding months. Instead, allocating the incremental volumes on a monthly basis requires its own methodology.

In the latest set of Chinese data, the logic of allocating incremental volumes was relatively straightforward. We have suspected in the past that there is some delay between the start-up of new refineries and their inclusion in the statistics. This was notably the case with the Yunnan refinery, where the provincial data started reflecting the operations of its sole refinery later than the reported start-up of product sales. In the June data update, the difference of about 4 million tonnes between the cumulative statistics and the sum of monthly throughputs was mostly due to the Liaoning province (3 million tonnes), with a smaller volume coming from the Hebei province (700 kt). Hengli Petrochemical's 400 kb/d refinery is located in Liaoning. The refinery

had reportedly reached full capacity in May, but monthly data did not reflect major changes in the provincial output until June, when the runs showed a jump of 300 kb/d m-o-m. We revised up April and May throughput by about 300 kb/d, March by 190 kb/d and February by 130 kb/d. Previously, we did not make provisions for the potentially missing volumes of the new refinery, assuming that its operations forced other refiners in the region to run at lower rates.

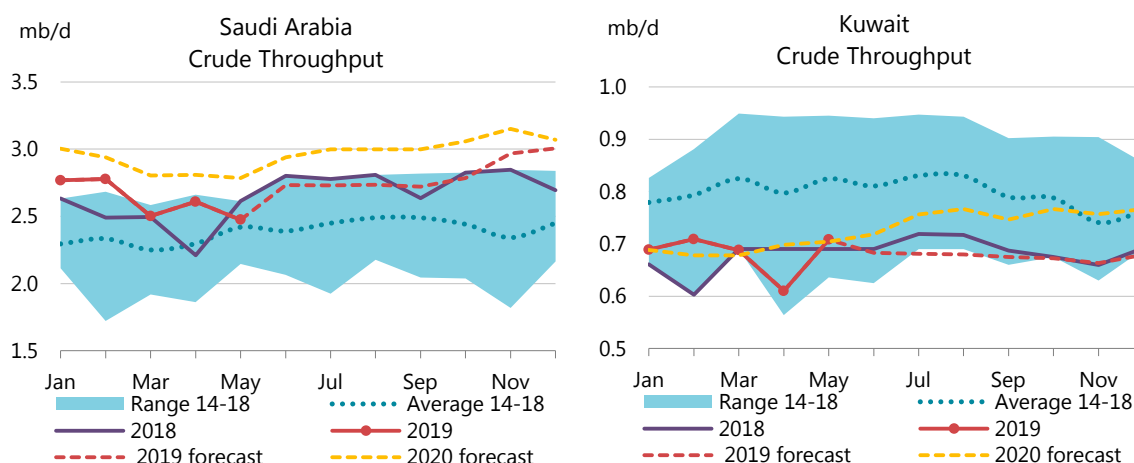


This has effectively re-based our China forecast, resulting in an upward revision to crude runs of 245 kb/d in 2019 and 440 kb/d in 2020. It is possible that in the future the increased competition from the Hengli and Rongsheng refineries will result in lower runs among traditional independents and state-owned refiners, but we are not yet incorporating this scenario into our forecast.



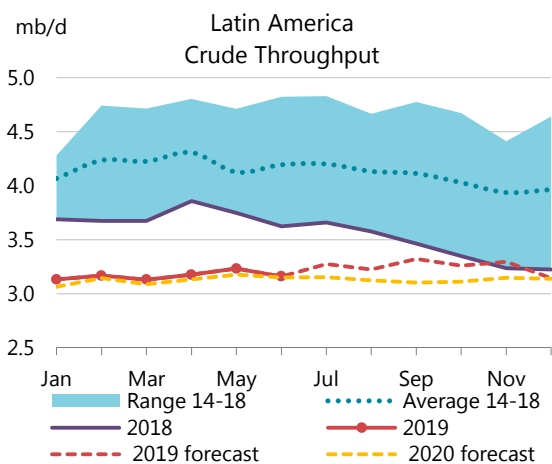
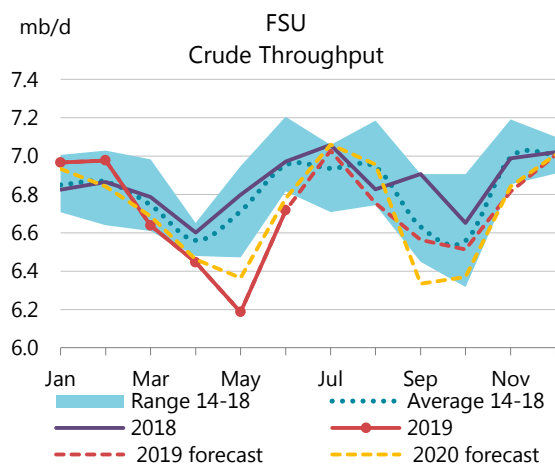
**Indian** throughput plunged 380 kb/d y-o-y in June, and was lower by 140 kb/d versus May, due to planned shutdowns and an unplanned outage at a refinery in Mangalore in the west of the country caused by drought conditions. Lower refining activity has coincided with the expiry of waivers on imports of Iranian crude oil. Throughput is not expected to see a strong y-o-y recovery until December. In **Chinese Taipei**, May throughput moved above 1 mb/d for the first time since 2013. At the end of 2015, the state-run refining corporation CPC permanently shut the 220 kb/d Kaohsiung refinery, and in 2017 increased the capacity of the nearby Dalin refinery by 100 kb/d. Throughputs are now back to historical levels.

In May, **Saudi Arabia's** throughput was finalised at under 2.5 mb/d, down 140 kb/d y-o-y on a partial shutdown at Ras Tanura. There has been no recent news on the likely start-up date of the new 400 kb/d Jazan refinery. It is assumed to be in 4Q19 in our forecast. The start-up of **Kuwait's** clean fuels project is proving equally elusive. The project envisages the integration, expansion and upgrade of the Mina Abdullah and Mina al Ahmadi refineries. Mechanical completion is expected at the end of this year, but we forecast full operations only in 3Q20. While overall refining capacity will be boosted by about 100 kb/d, the primary objective of the project is to increase the quality of the refined products, to conform to Euro 4 (50 ppm sulphur) specifications for road transport fuels and reduce the output of high sulphur fuel oil. Overall, the Middle East is the only region outside China to see a significant growth in throughput in 2019, by about 215 kb/d.



**Russian** throughput continued recovering in July, reaching 5.9 mb/d, slightly below year ago levels. After an increase of 130 kb/d in 2018, runs are expected to decline by 100 kb/d this year, as fiscal changes have resulted in lower profitability for domestic processing compared to crude export netbacks. The 180 kb/d Antipinsky refinery was idled for two months from end-April. The plant owes \$5 bn to a range of suppliers and financial institutions and is currently undergoing bankruptcy proceedings. It resumed operations at the end of July, reportedly working under a tolling arrangement.

In **Belarus**, refining throughput for April was updated, showing the expected 40 kb/d m-o-m reduction due to the Druzhba pipeline contamination. We estimated a larger impact for May, with runs down almost 170 kb/d from their average levels, but data are not yet available. Naftan, the smaller of the country's two refineries, started receiving normal volumes of crude supplies at the end of July. In an unusual development, **Ukraine** imported a 585 kb parcel of US crude through its Black Sea port to process at the 200 kb/d Kremenchug refinery, the country's largest. In the last 15 years, Ukrainian throughput has declined from 490 kb/d to an estimated 50-60 kb/d. The country's refining industry has suffered from political disputes with Russia, once the main oil supplier, and a general deterioration of the industrial sector. More than 90% of nameplate capacity is idled. With Lithuania's data now grouped with OECD Europe, the FSU's runs are lower by about 200 kb/d.

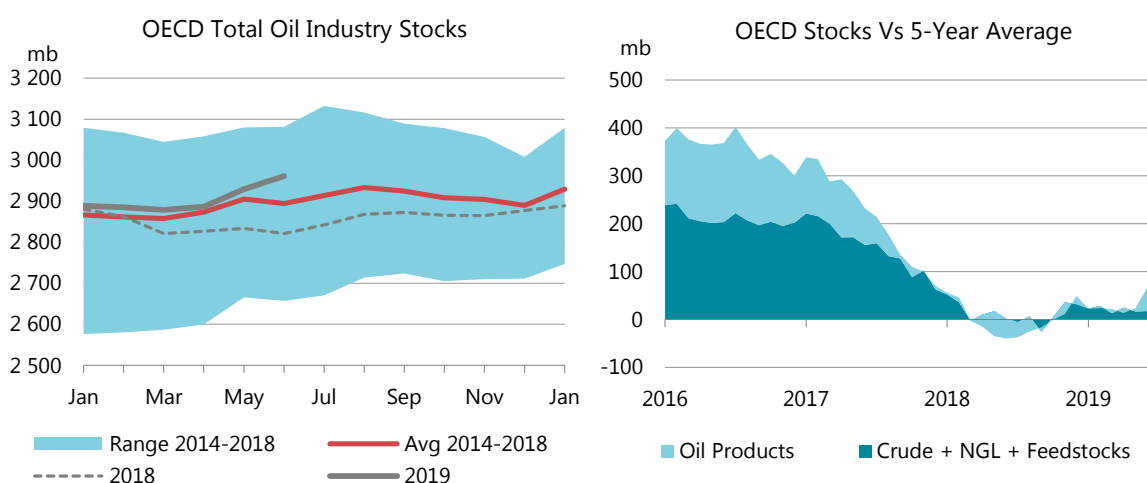


**Brazil's** throughput in June was almost unchanged at 1.7 mb/d and lower y-o-y by 110 kb/d. **Argentina's** numbers were weaker m-o-m, down to 460 kb/d. We have revised down the regional forecast by 170 kb/d in 3Q19 on lower estimates for **Venezuela** and **Brazil**.

# STOCKS

## Overview

OECD total industry stocks gained by a significant 31.8 mb month-on-month (m-o-m) in June to 2 961 mb, the third straight monthly increase. The gain was counter-seasonal; usually there is a reduction of 11.2 mb. A key factor was a large increase in stocks of oil products in the OECD Americas region. Total stocks were 66.9 mb above the five-year average at end-month. Stocks in terms of days of forward demand rose to 60.9 days, which is 0.3 days below the average.



Crude oil stocks declined by 9.2 mb to 1 127 mb, largely in line with the five-year average fall for June of 11.1 mb. OECD Europe showed a counter-seasonal gain of 5.2 mb while crude inventories in Americas and Asia Oceania decreased by 13.6 mb and 0.7 mb, respectively. Oil products stocks rose by 40 mb, which is attributable to a large increase in other products category and counter-seasonal gains in middle distillates and fuel oil. Other products in the OECD Americas region (mainly LPG stocks in the US) increased by 27.9 mb, which is more than twice as much as usual. The OECD middle distillates stockpile increased by 7.1 mb.

Preliminary data for July showed stocks falling in the US, while inventories gained in Japan. US oil stocks decreased by 7.9 mb as large draws in crude oil (-29.2 mb) and other oils (-1.5 mb, including unfinished products and ethanol) were partly offset by an increase in oil products (+22.9 mb). Japanese preliminary data showed a 6.4 mb increase in total stocks. Crude oil inventories rose by 2.6 mb and total products increased by 4.2 mb.

2Q19 v 1Q19 Stock Estimate (Preliminary)		
	mb	mb/d
OECD Americas	82.5	0.9
OECD Europe	-11.7	-0.1
OECD Asia Oceania	11.1	0.1
<b>Total OECD Commercial Stocks</b>	<b>81.8</b>	<b>0.9</b>
OECD Government Stocks	-10.9	-0.1
Oil in Transit incl. Floating Storage (Refinitiv)	-44.8	-0.5
Non-OECD Crude (JODI, Mar - May)	-14.5	-0.2
Non-OECD Products (JODI, Mar - May)	4.3	0.1
Fujairah (FEDCom/S&P Global Platts)	-4.6	-0.1
Singapore (Enterprise Singapore)	-4.0	0.0
<b>Total excl. China Balance</b>	<b>7.3</b>	<b>0.1</b>
China Crude Balance	58.4	0.6
<b>Total</b>	<b>65.8</b>	<b>0.7</b>

During 2Q19, OECD industry stocks gained by 81.8 mb (900 kb/d). OECD Americas led the way with a build of 82.5 mb, mainly due to higher LPG production in the US which boosted other product inventories. Outside the OECD, crude and NGL stocks decreased by 14.5 mb according to data available from *JODI* for 14 economies, excluding China. The implied crude stocks build in China was 58.4 mb (640 kb/d) during 2Q19. This is lower than the 59.9 mb (665 kb/d) we saw in 1Q19, partly due to higher refinery runs. Seaborne oil in transit decreased by 44.8 mb in 2Q19 due to lower exports by OPEC countries and the increasing impact of sanctions against Iran and Venezuela.

Preliminary Industry Stock Change in June 2019 and Second Quarter 2019												
	June 2019 (preliminary)				Second Quarter 2019							
	(million barrels)				(million barrels per day)				(million barrels per day)			
	Am	Europe	As.Ocean	Total	Am	Europe	As.Ocean	Total	Am	Europe	As.Ocean	Total
<b>Crude Oil</b>	<b>-13.6</b>	<b>5.2</b>	<b>-0.7</b>	<b>-9.2</b>	<b>-0.5</b>	<b>0.2</b>	<b>0.0</b>	<b>-0.3</b>	<b>0.1</b>	<b>-0.1</b>	<b>0.0</b>	<b>0.0</b>
Gasoline	-0.1	-0.8	-1.5	-2.5	0.0	0.0	-0.1	-0.1	0.0	-0.1	0.0	-0.1
Middle Distillates	4.4	1.4	1.2	7.1	0.1	0.0	0.0	0.2	0.0	0.1	0.0	0.1
Residual Fuel Oil	0.5	1.1	-0.6	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other Products	27.9	2.3	4.1	34.4	0.9	0.1	0.1	1.1	0.6	0.0	0.1	0.7
<b>Total Products</b>	<b>32.8</b>	<b>4.0</b>	<b>3.2</b>	<b>40.0</b>	<b>1.1</b>	<b>0.1</b>	<b>0.1</b>	<b>1.3</b>	<b>0.6</b>	<b>-0.1</b>	<b>0.1</b>	<b>0.7</b>
Other Oils <sup>1</sup>	-1.5	-0.2	2.7	1.0	-0.1	0.0	0.1	0.0	0.2	0.0	0.1	0.2
<b>Total Oil</b>	<b>17.6</b>	<b>9.1</b>	<b>5.2</b>	<b>31.8</b>	<b>0.6</b>	<b>0.3</b>	<b>0.2</b>	<b>1.1</b>	<b>0.9</b>	<b>-0.1</b>	<b>0.1</b>	<b>0.9</b>

<sup>1</sup> Other oils includes NGLs, feedstocks and other hydrocarbons.

OECD stocks were revised up by 23.1 mb in May due to a large revision in Europe, where total product inventories increased by 13.6 mb (mainly in the middle distillates category). Other oils in Americas also increased by 6.9 mb due to increased NGL stocks. March stock figures were also increased by 3.1 mb.

Revisions versus July 2019 Oil Market Report									
	Americas		Europe		Asia Oceania		OECD		
	Apr-19	May-19	Apr-19	May-19	Apr-19	May-19	Apr-19	May-19	
<b>Crude Oil</b>	<b>-1.5</b>	<b>1.8</b>	<b>1.2</b>	<b>-2.2</b>	<b>0.0</b>	<b>-3.9</b>	<b>-0.3</b>	<b>-4.3</b>	
Gasoline	0.0	0.4	0.4	2.9	0.0	0.6	0.4	3.9	
Middle Distillates	0.0	0.6	1.3	8.4	0.0	0.4	1.3	9.4	
Residual Fuel Oil	0.0	1.7	0.7	1.7	0.0	-0.3	0.7	3.1	
Other Products	0.0	-1.0	0.1	0.6	0.0	0.2	0.2	-0.2	
<b>Total Products</b>	<b>0.0</b>	<b>1.7</b>	<b>2.5</b>	<b>13.6</b>	<b>0.0</b>	<b>0.9</b>	<b>2.5</b>	<b>16.3</b>	
Other Oils <sup>1</sup>	0.0	6.9	0.9	4.2	0.0	0.0	0.9	11.0	
<b>Total Oil</b>	<b>-1.5</b>	<b>10.4</b>	<b>4.6</b>	<b>15.7</b>	<b>0.0</b>	<b>-3.0</b>	<b>3.1</b>	<b>23.1</b>	

<sup>1</sup> Other oils includes NGLs, feedstocks and other hydrocarbons.

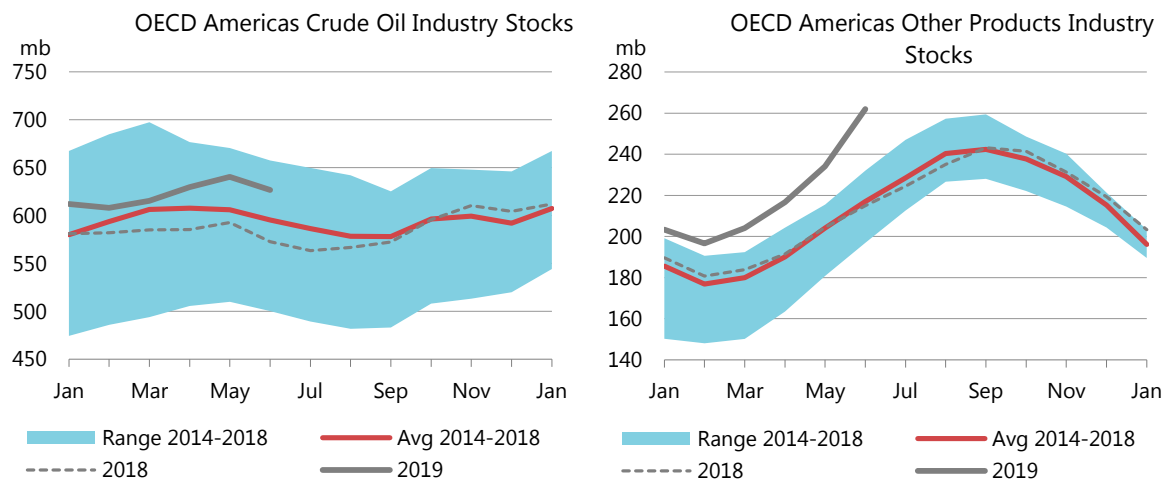
## Recent OECD industry stock changes

### OECD Americas

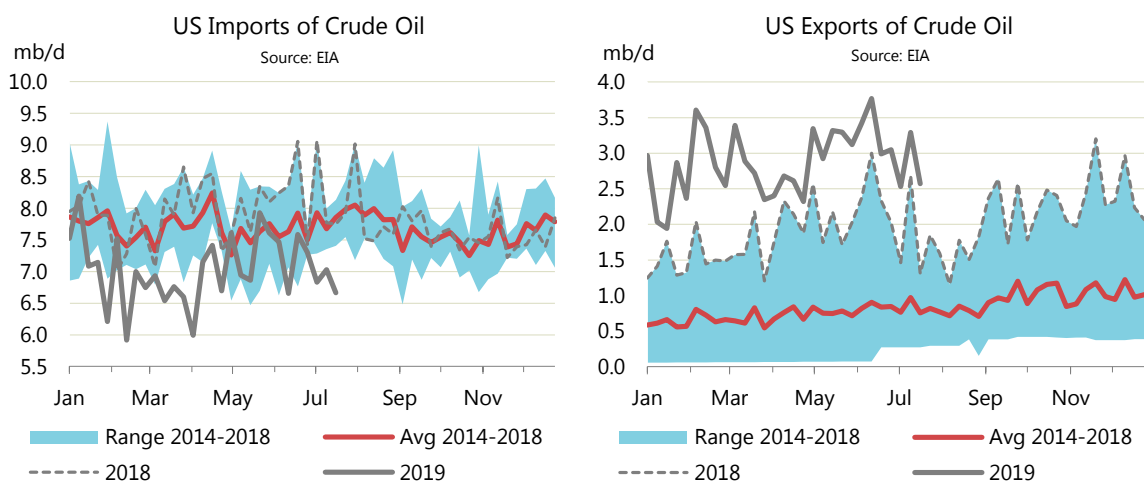
Commercial inventories in OECD Americas increased counter-seasonally by 17.6 mb m-o-m in June to 1 591 mb, which is 82.5 mb above the five-year average. Against the forward demand metric, they stood 0.9 days above the average. The large gains were attributable to more than double the usual increase in the other products category and counter-seasonal builds for distillates.

Crude stocks fell by 13.6 mb after three consecutive monthly increases and stood at 627 mb. The draws were largely in line with the usual decrease of 10.5 mb. Higher US crude exports in June (+260 kb/d to 3.2 mb/d on average in June according to the US Census Bureau) explained larger draws in the region.

Stocks of oil products increased by 32.8 mb, which is significantly larger than the usual June gain of 6.5 mb. Middle distillates and fuel oil increased counter-seasonally by 4.4 mb and 0.5 mb, respectively. Other product inventories rose by 27.9 mb (more than twice the average of 12.8 mb), which is attributable to increased US LPG availability in June (205 kb/d y-o-y and 45 kb/d higher m-o-m). Gasoline stocks fell by a mere 0.1 mb.



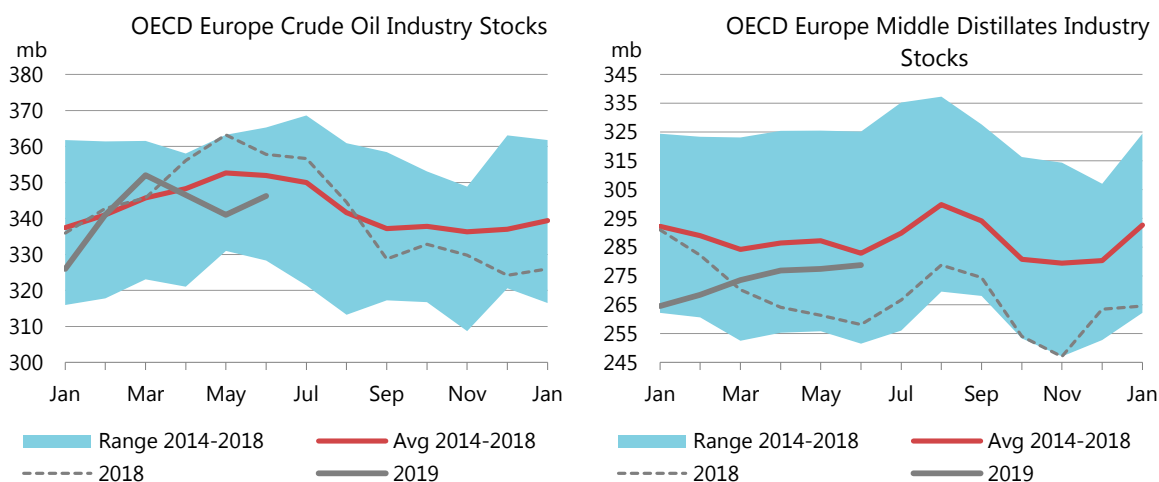
Preliminary July data from the *Energy Information Administration* show a large crude stock fall of 29.2 mb due to lower m-o-m crude imports (-370 kb/d) and production shut-ins in the Gulf of Mexico caused by Hurricane Barry. By contrast, total oil products inventories gained by 22.9 mb. Other products increased by 11.5 mb (mainly LPG inventories). Middle distillates also rose by 10.2 mb while gasoline and residual fuel oil increased by a modest 0.5 mb and 0.6 mb, respectively.



## OECD Europe

In June, total commercial inventories in OECD Europe increased counter-seasonally by 9.1 mb m-o-m to 979 mb, which is 10.5 mb above the five-year average. Crude stocks gained by 5.2 mb versus a normal decline in June of 0.7 mb owing to counter-seasonal builds in France (2.1 mb) and Italy (2.9 mb). These gains are attributable to lower refinery throughput in these countries (-90 kb/d in France and -65 kb/d in Italy m-o-m).

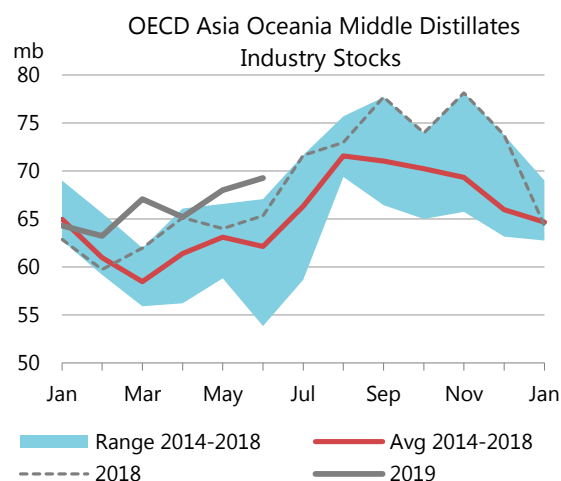
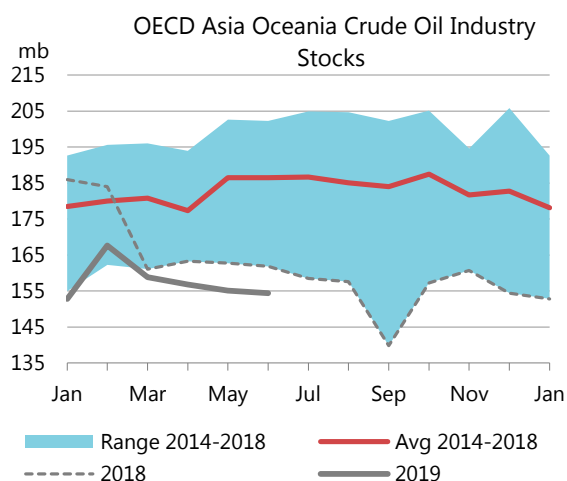
For products, total stocks increased by 4 mb with all categories showing counter-seasonal gains or smaller-than-usual falls. Middle distillates and fuel oil gained by 1.4 mb and 1.1 mb, respectively. Other products increased by 2.3 mb, while gasoline declined by 0.8 mb (smaller than the usual fall of 2.9 mb).



## OECD Asia Oceania

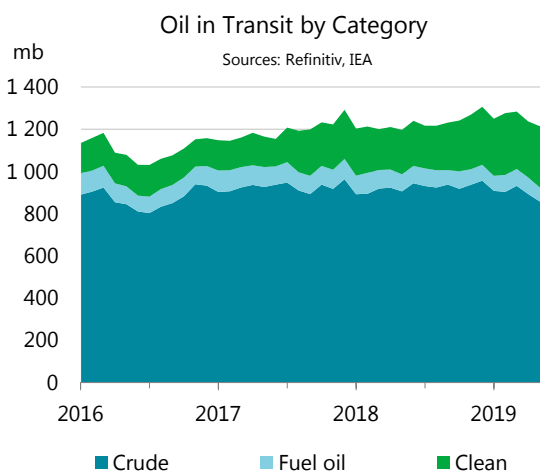
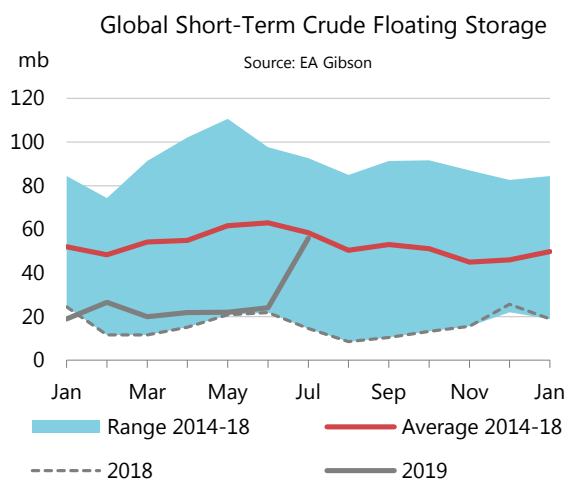
Industry stocks in the Asia Oceania region increased in June by 5.2 mb to 391 mb, which is 26.1 mb lower than the five-year average. The gain was counter-seasonal as oil products rose by 3.2 mb compared with the usual decrease of 1.1 mb during the month. Middle distillates (+1.2 mb) and other products (+4.1 mb) led the gains. Motor gasoline and fuel oil were down largely in line with the five-year average by 1.5 mb and 0.6 mb, respectively. Crude oil inventories fell by 0.7 mb to 154 mb.

Preliminary data for July from the *Petroleum Association of Japan* show total inventories increasing by 6.4 mb m-o-m, more than double the five-year average gains of 3 mb. Crude stocks rose by 2.6 mb, much larger than the usual gain of 0.7 mb. Total products also gained by 4.2 mb with increases in middle distillates (3.3 mb) and other products (0.4 mb). Gasoline inventories increased counter-seasonally by 0.5 mb. Residual fuel oil stocks were unchanged.

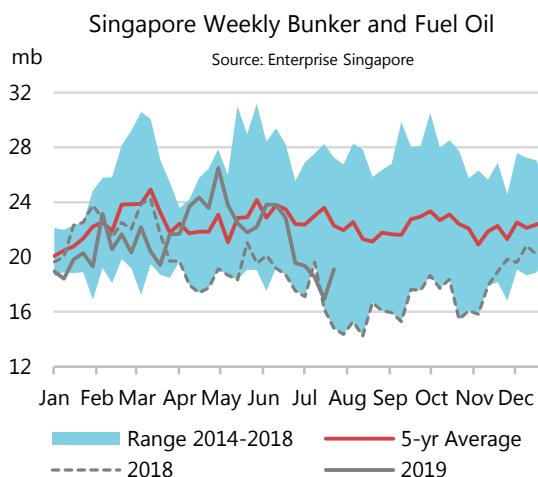
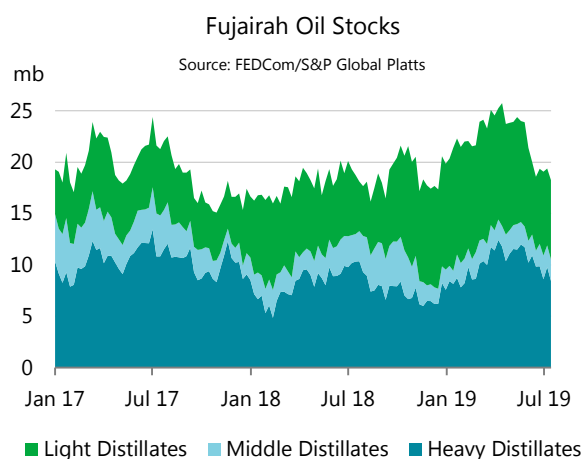


## Other stock developments

Short-term floating storage of crude oil significantly increased by 31.9 mb in July to 55.9 mb, the highest since August 2017, according to *EA Gibson* data. Storage in the Middle East Gulf rose by 29.8 mb to 49.8 mb, due a large increase in volumes held by Iran. Storage in the Mediterranean increased by 2.1 mb.



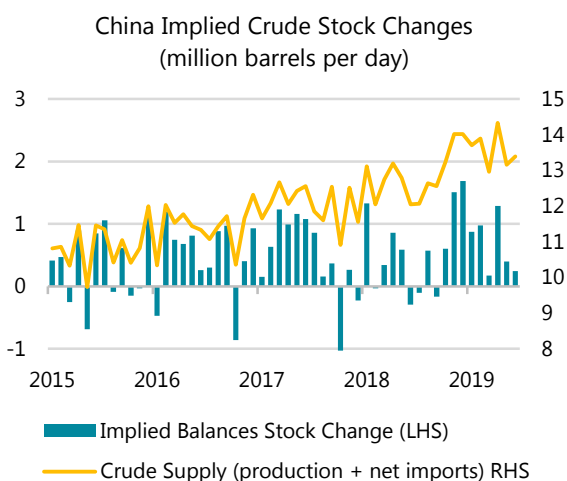
Seaborne oil in transit volumes based on data from *Refinitiv* rose by 24.2 mb m-o-m in June. Crude oil and fuel oil increased by 21.2 mb and 4.6 mb, respectively. Clean products fell by a modest 1.6 mb during the month. In comparison with the end of 1Q19, total oil on water showed a large contraction of 44.8 mb. Due to lower crude exports from OPEC+ producers and the impact of sanctions against Iran and Venezuela, crude oil in transit fell by 52.5 mb during 2Q19. Total products increased by 7.7 mb in the quarter.



Oil stocks in major bunkering hubs fell in July. In Fujairah, they decreased by 0.5 mb m-o-m according to data from *FEDCom and S&P Global Platts*. Heavy distillates inventories fell by 1.6 mb while both light and middle distillates gained by 0.5 mb during the month. Fuel stocks in Singapore, the world's largest bunkering hub, drew by 4.2 mb in the month based on data from *Enterprise Singapore*. Light distillates and middle distillates fell by 1.8 mb and 0.5 mb, respectively. Bunker and fuel oil stocks recorded the lowest inventory level in late June (16.9 mb) since November 2018 and stood 1.9 mb lower m-o-m.

Chinese implied crude stocks built by 7.3 mb (240 kb/d) in June according to figures derived from reported crude production, refinery runs and crude import data. Increased refinery runs, which reached nearly 13 mb/d (+385 kb/d m-o-m), helped deplete crude stocks.

Stockpiles in the 18 non-OECD economies covered by the JODI database fell 2.6 mb m-o-m in May to 556 mb. Crude stocks in Chinese Taipei and Gabon gained by 2.2 mb and 2 mb, respectively. By contrast, Nigerian crude inventories decreased by 10.5 mb. The large fall in Nigeria could be explained as a counter-draw to a combined 10.8 mb increase observed in March and April. Saudi Arabia also drew their crude inventories, by 5.8 mb. For oil products, Chinese Taipei and Hong Kong increased their stocks by 1.4 mb and 1.1 mb, respectively.

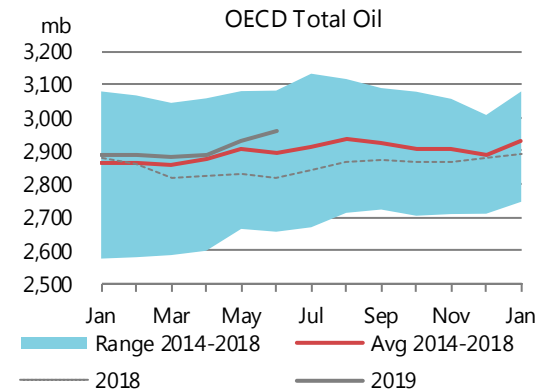
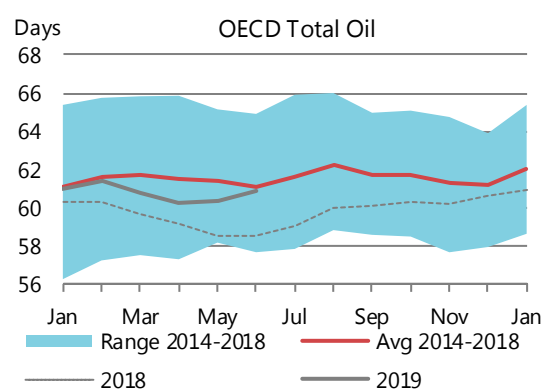
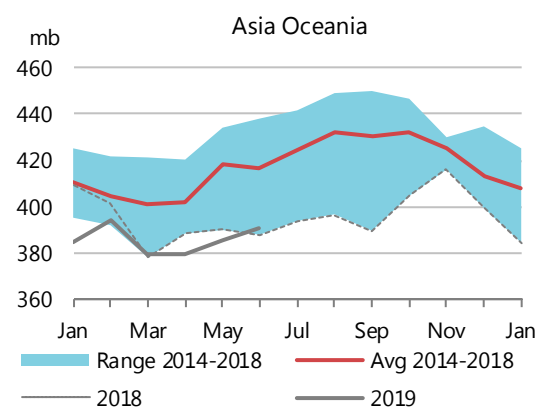
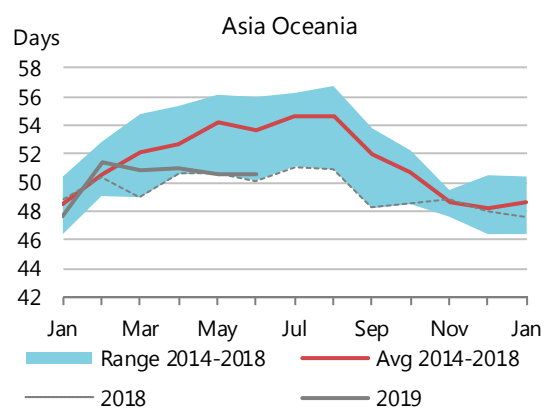
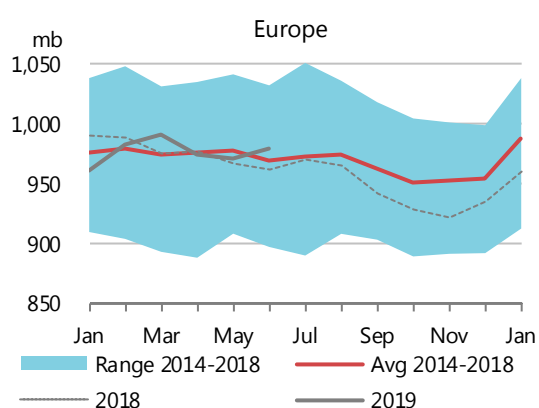
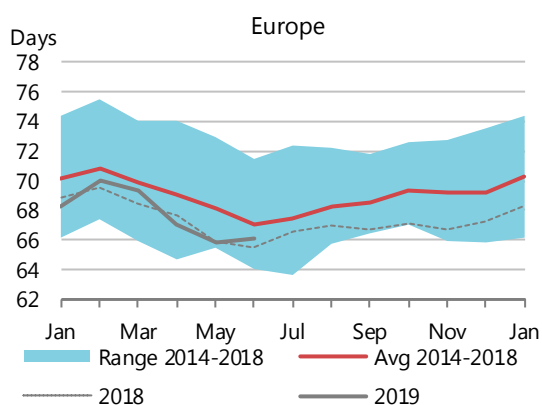
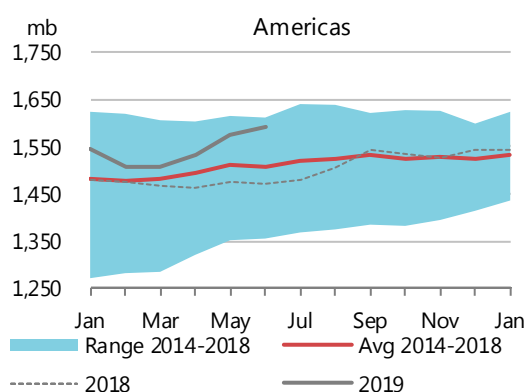
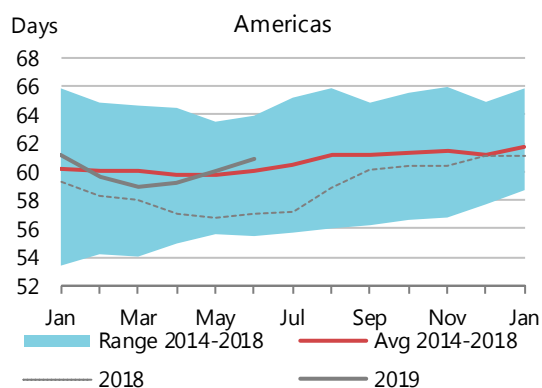


## Regional OECD End-of-Month Industry Stocks

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

Days<sup>1</sup>

Million Barrels

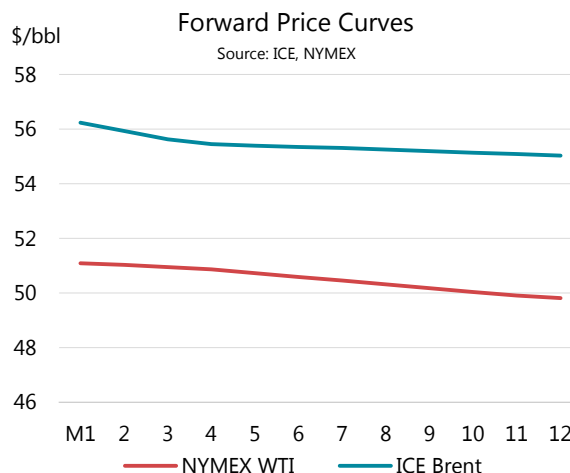
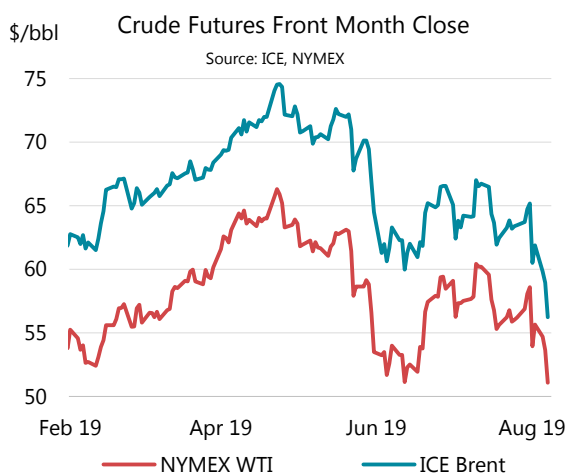


<sup>1</sup> Days of forward demand are based on average demand over the next three months

# PRICES

## Overview

Escalating global trade tensions and concerns that these will impact oil demand growth weighed on prices in early August and Brent fell to below \$60/bbl, the lowest since 3 January. Prices had fluctuated by \$5/bbl over the course of July with a storm in the Gulf of Mexico and heightened tension in the Strait of Hormuz providing support, even as demand growth sentiment weakened. In July, there was a reversal of fortunes for products with cracks gaining month-on-month (m-o-m) in all major markets. Previous weakness had prompted run cuts in Asia Pacific and this, along with unplanned outages, helped prices to recover. In particular, strong demand for fuel oil and tight sour crude markets pushed fuel oil cracks in Singapore to record highs just months before the International Maritime Organisation (IMO) introduces new marine fuel standards that should slash high sulphur fuel oil (HSFO) demand.



## Futures markets

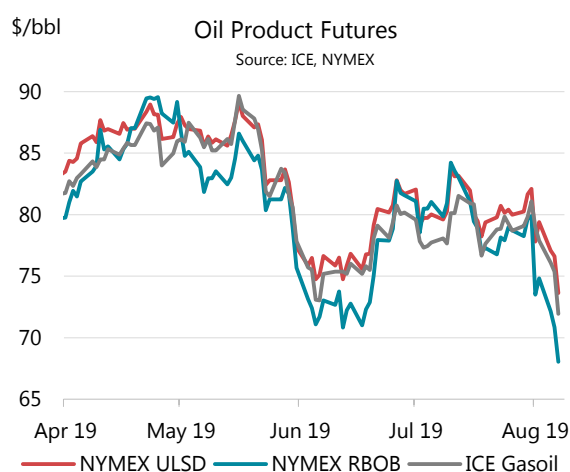
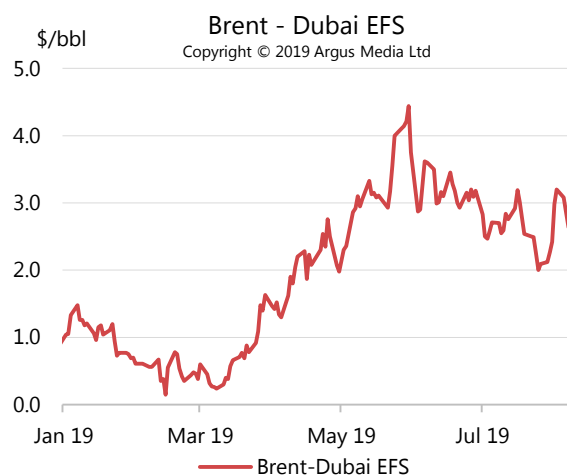
In July, ICE Brent gained \$1.17/bbl m-o-m to \$64.21/bbl on average, while NYMEX WTI strengthened by almost \$3/bbl to average \$57.55/bbl. The precautionary shut-in of some US Gulf of Mexico production due to a storm caused prices to surge by over \$2/bbl on 10 July. However, the gains were not maintained as the storm abated and output resumed soon after. Also, indications that oil demand growth is slowing dominated market sentiment, despite an escalation of tension in the Middle East. On 1 August, benchmark futures prices plunged by over \$4/bbl on the announcement that additional tariffs would be applied on Chinese imports to the US.

As we publish this *Report*, the Brent forward curve is in backwardation with the premium of prompt supplies (October) to those delivered three months later at \$0.60/bbl. The 12-month spread has narrowed to \$1.20/bbl, from \$2.52/bbl one month ago, as prompt prices have fallen further than the price of crude delivered in later months.

Prompt Month Oil Futures Prices										
(monthly and weekly averages, \$/bbl)										
	May	Jun	Jul	Jul-Jun Avg Chg	% Chg	Week Commencing:				
						01 Jul	08 Jul	15 Jul	22 Jul	29 Jul
<b>NYMEX</b>										
Light Sweet Crude Oil	60.87	54.71	57.55	2.84	5.2	57.55	59.27	56.98	56.22	56.62
RBOB	83.06	74.78	79.77	4.98	6.7	80.29	82.32	78.75	78.10	77.23
ULSD	85.44	77.75	80.68	2.93	3.8	80.26	81.95	79.81	80.21	80.24
ULSD (\$/mmbtu)	15.07	13.71	14.23	0.52	3.8	14.16	14.45	14.08	14.15	14.15
Henry Hub Natural Gas (\$/mmbtu)	2.59	2.33	2.30	-0.03	-1.2	2.30	2.43	2.31	2.25	2.17
<b>ICE</b>										
Brent	70.30	63.04	64.21	1.17	1.9	63.76	65.70	63.78	63.42	63.20
Gasoil	84.70	76.30	78.71	2.41	3.2	77.67	79.18	78.62	78.78	79.06
<b>Prompt Month Differentials</b>										
NYMEX WTI - ICE Brent	-9.43	-8.33	-6.66	1.67		-6.21	-6.43	-6.80	-7.20	-6.58
NYMEX ULSD - WTI	24.57	23.04	23.13	0.09		22.71	22.68	22.83	23.99	23.62
NYMEX RBOB - WTI	22.19	20.07	22.22	2.14		22.74	23.05	21.77	21.88	20.61
NYMEX 3-2-1 Crack (RBOB)	22.98	21.06	22.52	1.46		22.73	22.93	22.13	22.59	21.61
NYMEX ULSD - Natural Gas (\$/mmbtu)	12.48	11.38	11.93	0.54		11.85	12.02	11.76	11.90	11.99
ICE Gasoil - ICE Brent	14.40	13.26	14.50	1.24		13.91	13.48	14.84	15.36	15.86

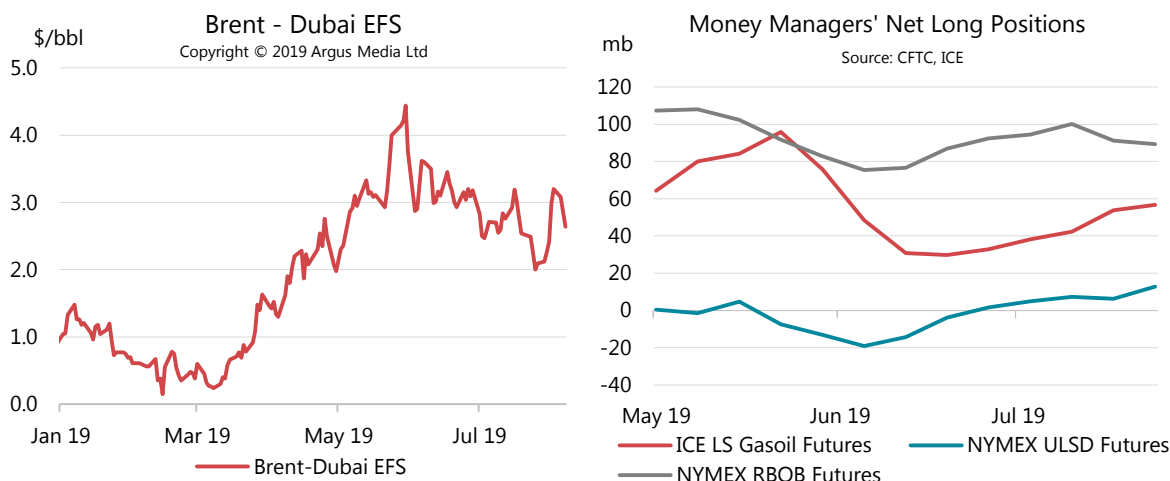
Source: ICE, NYMEX.

The discount of WTI to Brent narrowed for the third consecutive month as easing bottlenecks boosted the US benchmark. At \$5.12/bbl on 5 August, the discount was the narrowest in one year. The Brent-Dubai Exchange of Futures for Swaps (EFS) fell to \$2.42/bbl at the end of July, having peaked at \$4.44/bbl at the end of May. As a result, the competitiveness of Brent-linked crudes for Asia Pacific consumers improved although they are still relatively expensive. In early August, and outage in Libya and tighter sweet crude markets caused the EFS to rebound to a six-week high.



Oil product futures spiked on 10 July, on concerns that a tropical storm in the US Gulf Coast could hamper refining activity and supplies. In the end, the impact was limited and prices swiftly retreated. Product futures prices also tumbled as US-China trade tensions heightened. NYMEX RBOB plunged \$11.83/bbl in the first week of August as production and stocks increased. The ICE gasoil futures curve is flat, with prompt prices at a premium of only \$5.25/tonne to contracts priced 12 months out. This suggests that market tightness will ease slightly, which is surprising, given the strong increase in demand for gasoil forecast in 2020 when new IMO shipping fuel regulations come into effect. It is possible that the market considers the efforts being made by refiners to increase the availability of compliant fuels, along with slowing diesel/gasoil demand in other sectors, will be sufficient to meet the new market demand structure. As the date for the

new regulations nears a number of new price assessments, including forward prices, for compliant marine fuels in various trading hubs have been launched. ICE and NYMEX have introduced 0.5% contracts but, with uncertainty surrounding how the transition will play out, trading activity has been muted.

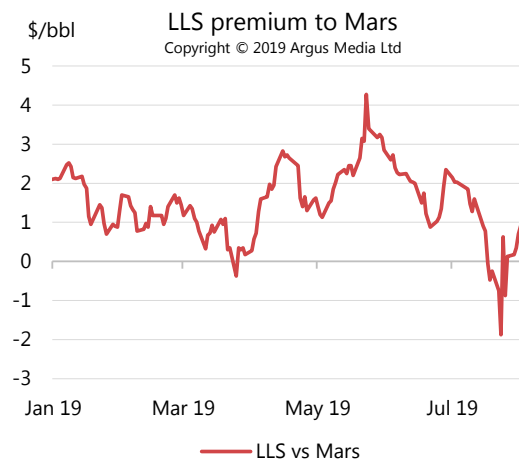
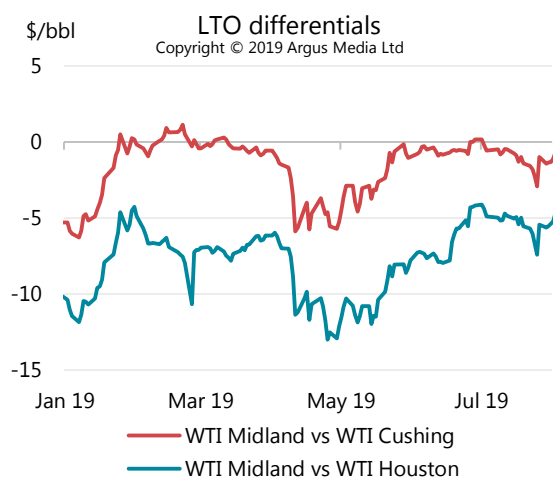


Money manager's net length in crude oil futures was 456 mb at the end of July, having increased a modest 29 mb over the month. Hedge funds are currently holding net length of 159 mb in combined product futures, having increased by 25% over the month, driven by larger ICE low-sulphur gasoil and NYMEX ultra-low sulphur diesel positions. Meanwhile, net length in NYMEX RBOB gasoline futures declined in July.

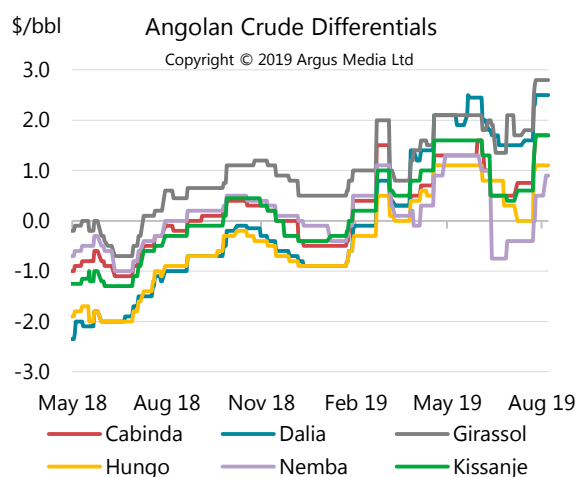
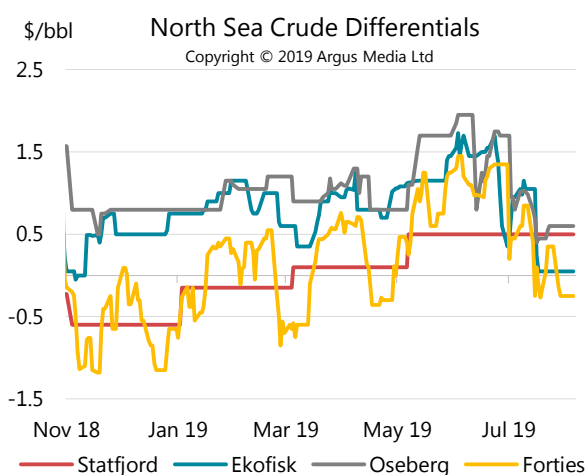
## Spot crude oil prices

WTI Midland's discount to WTI Houston widened slightly in July, by \$1.20/bbl, due to regional refinery issues. At just over \$5/bbl on average, it has narrowed significantly in recent months as new pipeline capacity to carry crude from the Permian Basin to the Gulf Coast comes into operation. By the end of 2019 an additional 2 mb/d of infrastructure will be operating, with further expansions due next year. These investments will allow US exports to grow, and the anticipation of increased availability has weighed on WTI Houston which fell by \$1.94/bbl m-o-m, against Cushing. Tighter sour supplies from the Gulf of Mexico, due to storm-related production shut-ins, saw the premium of Louisiana Light Sweet (LLS) to Mars plummet by around \$3/bbl and temporarily move into negative territory.

Despite the relaxation of production cuts in Alberta, Western Canadian Select (WCS) in Hardisty gained by \$0.33/bbl m-o-m, against Cushing. The discount has been sufficient to allow rail exports to the US, and these have been increasing. Meanwhile, as more supplies arrived by rail on the US Gulf Coast, WCS priced in Houston fell against Cushing, by \$2.16/bbl m-o-m. Since mid-June WCS in Houston has traded at a discount to Cushing, having been at a premium between January and June.



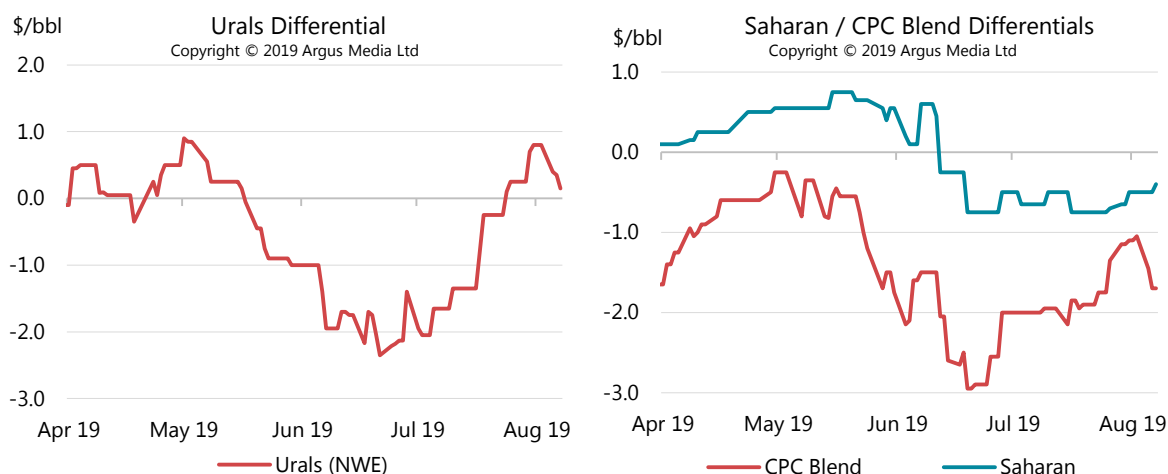
In July, weaker demand for North Sea crudes pressured the differentials for grades underpinning the North Sea Dated benchmark. Forties declined by \$0.90/bbl m-o-m against North Sea Dated, Ekofisk fell by \$0.95/bbl m-o-m, while Oseberg was down \$0.84/bbl m-o-m. Asia Pacific demand continues to be supportive but was pressured by the relatively high Brent-Dubai EFS which is making competing grades, such as Murban, more attractive. Loading programmes suggest that North Sea exports will dip in September but supplies are expected to pick up later in the year. Flows on the Forties pipeline system were disrupted for a week in early July while unscheduled repairs to a processing unit took place, but have since returned to normal.



Differentials for key Nigerian crudes stumbled in July due to waning demand and abundant supplies. Having reached five-year highs in June, Qua Iboe and Bonny Light both fell by \$0.28/bbl against North Sea Dated. Loading programmes that show higher availability in September, and faltering demand, weighed on the price of Angolan crude. However, at the beginning of August, stronger product cracks incentivised Chinese and Indian buyers and differentials for several grades were propelled to record highs. Girassol's premium to North Sea Dated reached \$2.80/bbl, and Kissanje's premium was \$1.70/bbl. Dalia and Hungo rose to match the record highs seen in May at \$2.50/bbl and \$1.10/bbl above North Sea Dated, respectively.

Several factors boosted the price of Urals, which gained \$0.93/bbl m-o-m in North West Europe and \$1.37/bbl m-o-m in the Mediterranean, against North Sea Dated. These included strong fuel oil margins, which have risen on higher summer demand for power generation in the Middle

East, and tightness in sour crude markets. Furthermore, logistical challenges related to the Druzhba pipeline contamination continue to hamper exports. Urals prices jumped up in late June following a tanker collision at the Novorossiysk port, and it was three weeks before normal operations resumed.



Healthy demand for CPC Blend, from Europe, the US and East of Suez, caused the differential to North Sea Dated to gain by \$0.46/bbl in July. In June, it was pressured as the Kashagan field returned from maintenance but loading programmes suggest that supplies will be tighter in August. BTC Blend exports are also scheduled to fall in August and its differential gained by \$0.31/bbl m-o-m. Plentiful supplies of Es Sider and Saharan Blend caused differentials to fall by \$0.24/bbl and \$0.40/bbl, respectively, against North Sea Dated.

Stronger product cracks in Asia Pacific and tight sour crude markets supported Middle East crude differentials. Chinese refiners increased purchases of Murban, a light sour crude, as gasoline margins improved. Iraqi crude was in strong demand in Europe and Asia Pacific and this, along with rising fuel oil margins, helped Basra Light to gain \$0.17/bbl m-o-m against Dubai. Despite seasonal bitumen production demand, Basra Heavy fell \$0.80/bbl m-o-m against Dubai in July.

Spot crude oil prices and differentials

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## Spot product prices

Gasoline markets have held on to the gains seen following the closure of Philadelphia Energy Solutions' 335 kb/d refinery after a fire and explosion on 21 June. This tightened supplies in the US, where US Gulf Coast cracks for super unleaded and unleaded gasoline rose by \$4.61/bbl m-o-m and \$3.70/bbl m-o-m, respectively, in July. At \$28.18/bbl on 2 July, cracks for super unleaded were the highest since September 2017. Support also came as a Hurricane Barry caused minor disruptions at a refinery in Louisiana and as demand for gasoline from Latin America picked up. Cracks for premium unleaded gasoline in Rotterdam (barges FOB) gained \$4.07/bbl m-o-m due to strong export demand, particularly to the US following the refinery fire but also from West Africa. In Singapore, premium unleaded gasoline prices rose by \$4.59/bbl m-o-m, as supplies tightened on refinery outages in the Middle East and easing Chinese exports. This strength may be short-lived, however, as Asia Pacific refining activity is due to pick up and new capacity is coming online later in the year.

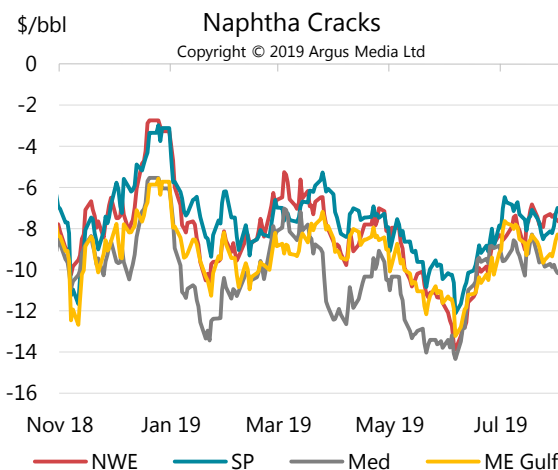
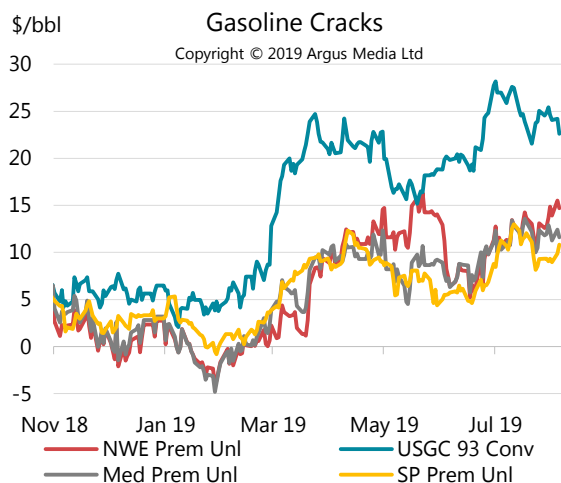
### Spot product prices

## Table Unavailable

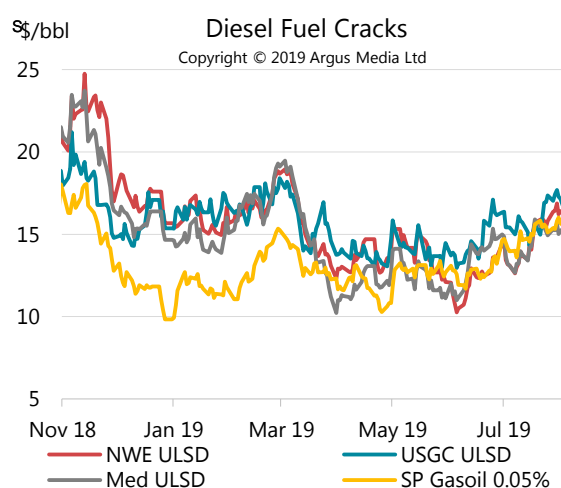
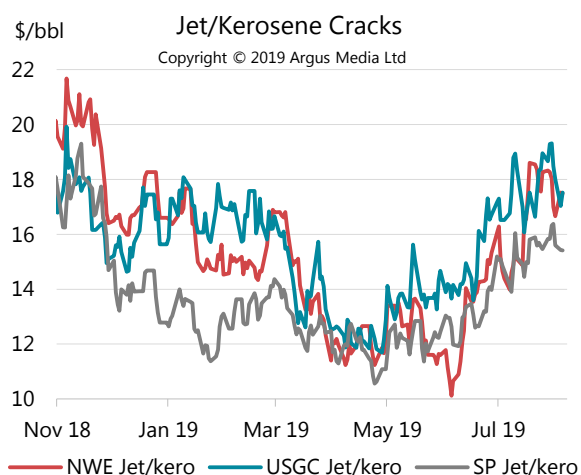
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The strength in gasoline markets lent support to naphtha as blending demand picked up, particularly in Europe and West Africa. In Rotterdam, naphtha cracks rose by \$3.55/bbl m-o-m, however, prices faltered later in the month as European petrochemical facilities begin seasonal turnarounds. In Singapore, naphtha cracks gained \$2.37/bbl m-o-m, due to healthy petrochemical demand from Korea, Taiwan, Indonesia and Malaysia coming while regional outages hampered availability. In Asia Pacific, buyers turned to alternative supplies from the Mediterranean, helping cracks there to gain \$2.02/bbl m-o-m. Late in July, the return of naphtha exports from Kuwait and India helped to ease market tightness and cracks in Singapore came down from the three-month high of -\$6.47/bbl on the 4 July.

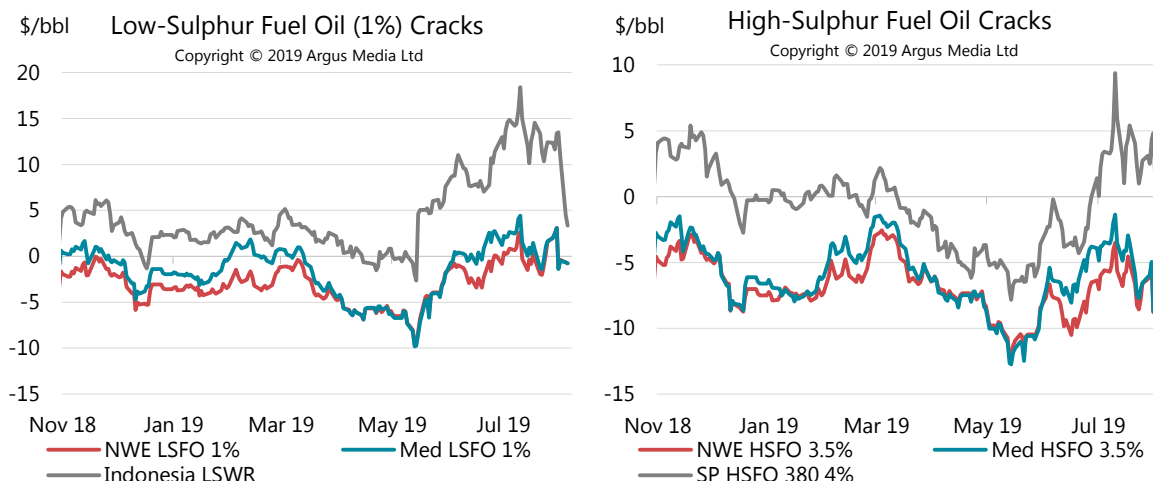


Global jet markets continued to rally in July with strong demand in Europe, where it is the peak travel season, and in the Middle East ahead of the Hajj pilgrimage. Supplies are tight in Europe and cracks rose \$3.59/bbl m-o-m in Rotterdam and \$2.11/bbl m-o-m in the Mediterranean. An extension to refinery maintenance in the Philippines has tightened the market in Singapore where cracks gained by \$2.24/bbl m-o-m. However, market indicators suggest slowing demand for jet fuel, in particular for cargo freight in Asia Pacific, possibly due to weaker economic activity.



Having stumbled in recent months, diesel cracks ticked up in July. On the US Gulf Coast, they gained by \$1.45/bbl but the market continues to be well supplied as refinery output is increasing and bad weather has hampered agricultural demand. Furthermore, gains were capped as a Hurricane Barry impeded US diesel exports. In North West Europe and the Mediterranean, cracks for ultra-low sulphur diesel rose by \$2.53/bbl and \$1.22/bbl m-o-m, respectively, with tighter supplies due to weather-related delays to deliveries via the Turkish straits and lower availability from Asia Pacific. It is likely that the upcoming change to shipping fuel specifications being introduced by the IMO is providing some support to diesel prices as the market anticipates a large increase in demand in 2020. In addition, agricultural and heating demand should pick up in coming months. In Asia Pacific, healthy export demand for gasoil saw cracks in Singapore increase by \$2.23/bbl m-o-m. Furthermore, lower Chinese exports and refinery outages in the Middle East and Vietnam have tightened prompt markets. The spot price in

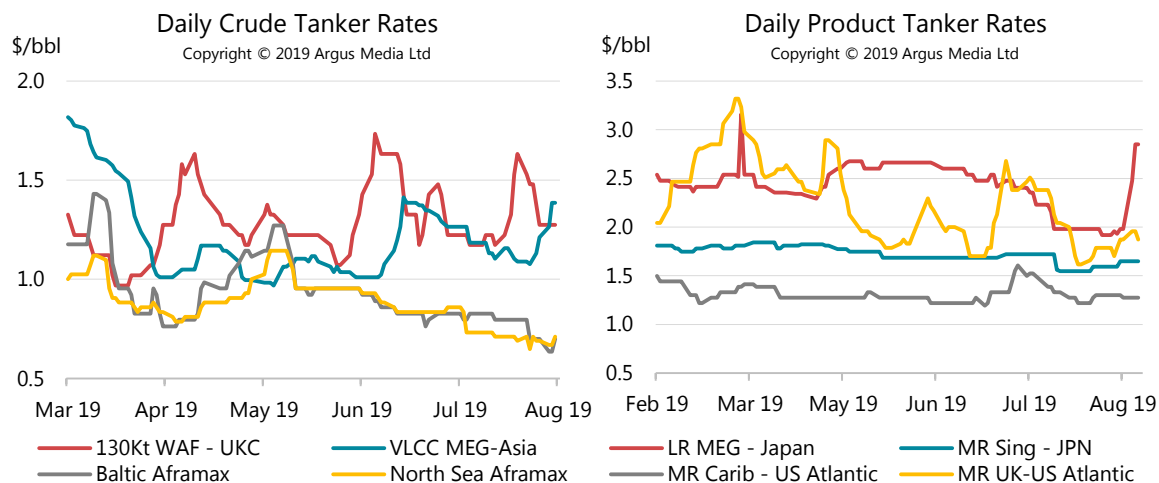
Singapore rose to a premium of \$0.25/bbl above swaps on 17 July, having traded at a discount during June.



On 11 July cracks for 380-centistoke HSFO in Singapore spiked up to \$9.37/bbl. They have since eased but overall prices gained 12.4% in July. Supportive factors for fuel oil markets have not changed; global sour crude supplies are tight due to sanctions and OPEC+ cuts and demand is high, particularly from the Middle East for power generation to meet summer air conditioning demand. Prices in Singapore received additional support from higher shipping demand as charterers avoided Fujairah due to regional security issues. Furthermore, ahead of the 2020 IMO regulations refiners produced less HSFO and some storage providers cleaned tanks so they are ready to store compliant fuel. Fuel oil markets are displaying increasing volatility as IMO 2020 nears. While it seems counter-intuitive for fuel oil cracks to rise to multi-year highs when demand is set to drop next year, it is largely due to the recent supply issues and is not expected to persist. Indeed, the premium of prompt HSFO supplies to M2 rose to over \$6/bbl in Singapore, and the steep backwardation suggests that market tightness is set to ease. In Europe and the Mediterranean, HSFO and LSFO cracks also gained in July but not to the same extent as in Asia Pacific.

## Freight

Heightened tension in the Middle East Gulf (MEG) has caused insurance premia to increase dramatically. However, the impact on underlying rates to ship crude on Very Large Crude Carriers (VLCCs) from the MEG to Asia has been muted. While they had surged to an almost three-month high in June, in July they eased by \$0.24/bbl to \$1.10/bbl on plentiful ship availability. Rates for Suezmaxes travelling between West Africa and the UK-Continent fell \$0.12/bbl m-o-m, also due to high availability, but demand from charterers picked up towards the end of the month. Rates for Baltic and North Sea Aframaxes continued to slide in July, down \$0.10/bbl and \$0.12/bbl, respectively. With rates for both at around \$0.70/bbl, they are the lowest since 2017 for Baltic Aframaxes and in ten years for North Sea Aframaxes.



Having risen \$1/bbl on the back of higher US imports following the Philadelphia refinery fire in June, rates to ship products on Medium Range (MR) vessels between the UK and US Atlantic fell by \$0.60/bbl over July as the market adjusted to the higher demand. Rates for Long Range (LR) vessels travelling between the MEG and Japan declined by \$0.45/bbl m-o-m, to the lowest since May 2018, due to muted demand, but have rebounded in early August.

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

	2016	2017	1Q18	2Q18	3Q18	4Q18	2018	1Q19	2Q19	3Q19	4Q19	2019	1Q20	2Q20	3Q20	4Q20	2020
<b>OECD DEMAND</b>																	
Americas	24.9	25.1	25.2	25.3	25.8	25.6	25.5	25.3	25.5	26.0	25.9	25.7	25.3	25.8	26.5	26.2	25.9
Europe	14.0	14.4	14.1	14.3	14.7	14.1	14.3	13.9	14.2	14.7	14.3	14.3	13.9	14.3	14.8	14.3	14.4
Asia Oceania	8.1	8.1	8.7	7.7	7.8	8.1	8.1	8.3	7.5	7.8	8.2	8.0	8.4	7.5	7.8	8.3	8.0
Total OECD	47.1	47.6	47.9	47.3	48.2	47.8	47.8	47.5	47.2	48.5	48.4	47.9	47.7	47.6	49.1	48.8	48.3
<b>NON-OECD DEMAND</b>																	
FSU	4.4	4.5	4.5	4.6	4.9	4.8	4.7	4.6	4.7	5.0	5.0	4.8	4.7	4.8	5.1	5.0	4.9
Europe	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
China	12.0	12.5	12.7	13.0	13.1	13.1	13.0	13.0	13.7	13.5	13.7	13.5	13.3	13.9	13.9	13.9	13.8
Other Asia	13.2	13.7	14.1	14.3	13.7	14.2	14.1	14.5	14.3	14.2	14.7	14.4	15.0	14.9	14.6	15.2	14.9
Americas	6.5	6.4	6.3	6.3	6.5	6.4	6.4	6.2	6.3	6.4	6.4	6.3	6.2	6.4	6.5	6.4	6.4
Middle East	8.4	8.4	8.1	8.4	8.7	8.2	8.3	8.1	8.3	8.7	8.1	8.3	8.0	8.3	8.7	8.1	8.3
Africa	4.2	4.2	4.3	4.2	4.1	4.3	4.2	4.3	4.3	4.2	4.3	4.3	4.4	4.4	4.3	4.4	4.4
Total Non-OECD	49.3	50.6	50.7	51.6	51.8	51.7	51.5	51.6	52.4	52.8	53.0	52.4	52.4	53.5	53.8	53.9	53.4
<b>Total Demand<sup>1</sup></b>	<b>96.4</b>	<b>98.2</b>	<b>98.6</b>	<b>98.9</b>	<b>100.0</b>	<b>99.5</b>	<b>99.3</b>	<b>99.1</b>	<b>99.7</b>	<b>101.3</b>	<b>101.4</b>	<b>100.4</b>	<b>100.1</b>	<b>101.1</b>	<b>102.8</b>	<b>102.7</b>	<b>101.7</b>
<b>OECD SUPPLY</b>																	
Americas	19.6	20.5	22.0	22.3	23.4	24.2	23.0	24.0	24.5	24.7	25.3	24.6	25.6	25.8	26.1	26.4	26.0
Europe	3.5	3.5	3.6	3.4	3.3	3.5	3.5	3.5	3.2	3.3	3.5	3.3	3.6	3.6	3.6	3.9	3.7
Asia Oceania	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6
Total OECD <sup>4</sup>	23.5	24.4	25.9	26.1	27.2	28.2	26.9	27.9	28.2	28.5	29.3	28.5	29.7	29.9	30.3	30.9	30.2
<b>NON-OECD SUPPLY</b>																	
FSU	14.2	14.3	14.4	14.4	14.6	14.8	14.6	14.8	14.4	14.4	14.5	14.5	14.6	14.6	14.5	14.6	14.6
Europe	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
China	4.0	3.9	3.8	3.9	3.8	3.9	3.8	3.9	4.0	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
Other Asia	3.6	3.5	3.4	3.4	3.3	3.3	3.4	3.3	3.3	3.2	3.2	3.3	3.2	3.2	3.2	3.1	3.2
Americas	4.5	4.5	4.5	4.5	4.4	4.6	4.5	4.5	4.6	4.8	4.9	4.7	5.0	5.1	5.1	5.1	5.1
Middle East	3.3	3.2	3.2	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
Africa	1.4	1.4	1.4	1.5	1.5	1.4	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Total Non-OECD <sup>4</sup>	31.0	31.0	30.9	31.1	31.0	31.5	31.1	31.4	31.1	31.2	31.4	31.3	31.6	31.6	31.5	31.5	31.6
Processing gains <sup>3</sup>	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.4	2.4	2.4	2.4	2.4
Global Biofuels	2.4	2.5	2.1	2.8	3.1	2.5	2.6	2.2	2.9	3.0	2.6	2.7	2.4	2.9	3.2	2.8	2.8
Total Non-OPEC Supply	59.2	60.1	61.3	62.2	63.6	64.5	62.9	63.9	64.5	65.1	65.7	64.8	66.1	66.9	67.3	67.6	67.0
<b>OPEC<sup>2</sup></b>																	
Crude	32.4	32.0	31.7	31.6	32.0	32.2	31.9	30.6	30.0								
NGLs	5.4	5.5	5.5	5.5	5.5	5.5	5.5	5.6	5.6	5.5	5.5	5.6	5.6	5.6	5.6	5.6	5.6
Total OPEC	37.8	37.5	37.2	37.1	37.6	37.7	37.4	36.2	35.6								
<b>Total Supply</b>	<b>97.0</b>	<b>97.6</b>	<b>98.6</b>	<b>99.3</b>	<b>101.2</b>	<b>102.2</b>	<b>100.3</b>	<b>100.1</b>	<b>100.1</b>								
<b>STOCK CHANGES AND MISCELLANEOUS</b>																	
<b>Reported OECD</b>																	
Industry	0.0	-0.4	-0.5	0.0	0.6	0.1	0.0	0.1	0.9								
Government	0.0	-0.1	0.1	-0.1	0.0	-0.2	-0.1	0.0	-0.1								
Total	0.0	-0.5	-0.4	-0.1	0.5	-0.1	0.0	0.1	0.8								
Floating storage/Oil in transit	0.2	0.4	-1.0	0.3	-0.3	0.6	0.0	-0.3	-0.5								
Miscellaneous to balance <sup>5</sup>	0.4	-0.4	1.3	0.2	1.0	2.2	1.1	1.1	0.2								
<b>Total Stock Ch. &amp; Misc</b>	<b>0.6</b>	<b>-0.6</b>	<b>-0.1</b>	<b>0.4</b>	<b>1.2</b>	<b>2.7</b>	<b>1.0</b>	<b>1.0</b>	<b>0.5</b>								
<b>Memo items:</b>																	
Call on OPEC crude + Stock ch. <sup>6</sup>	31.8	32.6	31.8	31.2	30.9	29.5	30.8	29.7	29.6	30.6	30.1	30.0	28.4	28.6	29.9	29.5	29.1

<sup>1</sup> 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.

<sup>2</sup> OPEC data based on today's membership throughout the time series.

<sup>3</sup> Net volumetric gains and losses in the refining process and marine transportation losses.

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

<sup>5</sup> Includes changes in non-reported stocks in OECD and non-OECD areas.

<sup>6</sup> 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)

	2016	2017	1Q18	2Q18	3Q18	4Q18	2018	1Q19	2Q19	3Q19	4Q19	2019	1Q20	2Q20	3Q20	4Q20	2020
<b>OECD DEMAND</b>																	
Americas	-	-	-	-	-	-	-	0.1	-0.1	-0.1	-	-	0.1	-0.1	0.1	-	-
Europe	-	-	-	-	-	-	-	-	-0.1	-0.1	-	-	0.1	-0.1	-	-	-
Asia Oceania	-	-	-	-	-	-	-	-	-	0.1	0.1	-	-	-	-	-	-
Total OECD	-	-	-	-	-	-	-	0.1	-0.2	-0.1	0.1	-	0.2	-0.2	-	0.1	-
<b>NON-OECD DEMAND</b>																	
FSU	-	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-	0.3	-0.1	-0.1	-	-	0.2	-0.1	-0.1	-
Other Asia	0.1	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.3
Americas	-	-	-	-	-	-	-	-	-0.1	-	-	-	-	-0.1	-	-	-
Middle East	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.2	-0.2	-0.2	-0.2	-0.2	-0.3	-0.3	-0.2	-0.2
Africa	-0.1	-	-	-	-	-	-	-	-	-0.1	-0.1	-0.1	-0.1	-	-0.1	-0.1	-0.1
Total Non-OECD	-0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	-	-	0.1	0.1	0.1	-0.1	-0.1	-
<b>Total Demand</b>	<b>-</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	<b>0.3</b>	<b>0.1</b>	<b>-0.2</b>	<b>0.1</b>	<b>0.1</b>	<b>0.3</b>	<b>-0.1</b>	<b>-0.1</b>	<b>-</b>	<b>-</b>
<b>OECD SUPPLY</b>																	
Americas	-	-	-	-	-	0.1	-	-	0.1	-	-	-	-	0.1	-	0.1	0.1
Europe	-	-	-	-	-	-	-	-	-	-0.1	-	-	-	-	-	-	-
Asia Oceania	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total OECD	-	-	-	-	-	0.1	-	-	0.1	-0.1	-	-	-	0.1	-	-	-
<b>NON-OECD SUPPLY</b>																	
FSU	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-0.1	-0.1	-
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Asia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Americas	-	-	-	-	-	-	-	-	-0.1	-0.1	-0.1	-	-0.1	-	-	-	-
Middle East	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Non-OECD	-	-	-	-	-	-	-	-	-	-0.1	-0.1	-	-0.1	-	-	-	-
Processing gains	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Global Biofuels	-	-	-	-	-	-	-	-	-	-	0.1	-	-	-	-	-	-
Total Non-OPEC Supply	-	-	0.1	-	-	0.1	0.1	-	-	-0.2	-0.1	-0.1	-0.1	0.1	-	-	-
<b>OPEC</b>																	
Crude	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NGLs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total OPEC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Supply</b>	<b>-</b>	<b>-</b>	<b>0.1</b>	<b>-</b>	<b>-</b>	<b>0.1</b>	<b>0.1</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>STOCK CHANGES AND MISCELLANEOUS</b>																	
<b>REPORTED OECD</b>																	
Industry	-	-	-	-	-	-	-	0.1	-	-	-	-	-	-	-	-	-
Government	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	0.1	-	-	-	-	-	-	-	-	-
Floating storage/Oil in transit	-	-	-	-	-	-	-	0.1	-	-	-	-	-	-	-	-	-
Miscellaneous to balance	-	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.4	-	-	-	-	-	-	-	-	-
<b>Total Stock Ch. &amp; Misc</b>	<b>-</b>	<b>-0.1</b>	<b>-0.1</b>	<b>-0.1</b>	<b>-0.2</b>	<b>-0.1</b>	<b>-0.1</b>	<b>-0.3</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Memo items:</b>																	
Call on OPEC crude + Stock ch.	-	0.1	0.1	0.1	0.2	0.1	0.1	0.3	-	-	0.2	0.1	0.4	-0.2	-0.1	-	-

When submitting their monthly oil statistics, OECD Member countries periodically update data for prior periods. Similar updates to non-OECD data can occur. Changes do not reflect move from Non-OECD to OECD by Lithuania

**Table 2**  
**SUMMARY OF GLOBAL OIL DEMAND**

	2017	1Q18	2Q18	3Q18	4Q18	2018	1Q19	2Q19	3Q19	4Q19	2019	1Q20	2Q20	3Q20	4Q20	2020
<b>Demand (mb/d)</b>																
Americas	25.07	25.20	25.31	25.78	25.61	25.48	25.31	25.48	26.02	25.91	25.68	25.32	25.80	26.47	26.19	25.95
Europe	14.38	14.06	14.25	14.68	14.11	14.28	13.91	14.25	14.71	14.28	14.29	13.95	14.31	14.82	14.34	14.36
Asia Oceania	8.15	8.66	7.73	7.75	8.10	8.06	8.33	7.50	7.68	8.23	7.94	8.38	7.51	7.71	8.26	7.97
<b>Total OECD</b>	<b>47.60</b>	<b>47.92</b>	<b>47.30</b>	<b>48.21</b>	<b>47.81</b>	<b>47.81</b>	<b>47.55</b>	<b>47.23</b>	<b>48.42</b>	<b>48.41</b>	<b>47.91</b>	<b>47.65</b>	<b>47.62</b>	<b>49.01</b>	<b>48.79</b>	<b>48.27</b>
Asia	26.20	26.80	27.26	26.83	27.26	27.04	27.45	27.99	27.73	28.35	27.88	28.24	28.79	28.49	29.15	28.67
Middle East	8.38	8.08	8.42	8.69	8.16	8.34	8.13	8.26	8.65	8.16	8.30	8.04	8.35	8.70	8.11	8.30
Americas	6.45	6.32	6.34	6.48	6.44	6.39	6.24	6.33	6.43	6.38	6.34	6.24	6.35	6.47	6.43	6.37
FSU	4.55	4.50	4.62	4.89	4.82	4.71	4.63	4.75	4.96	4.96	4.83	4.73	4.83	5.06	4.99	4.90
Africa	4.23	4.29	4.24	4.11	4.26	4.23	4.31	4.33	4.21	4.34	4.29	4.38	4.39	4.26	4.41	4.36
Europe	0.75	0.73	0.74	0.77	0.80	0.76	0.80	0.78	0.79	0.81	0.80	0.81	0.78	0.80	0.84	0.81
<b>Total Non-OECD</b>	<b>50.56</b>	<b>50.72</b>	<b>51.63</b>	<b>51.77</b>	<b>51.73</b>	<b>51.47</b>	<b>51.56</b>	<b>52.44</b>	<b>52.78</b>	<b>53.00</b>	<b>52.45</b>	<b>52.44</b>	<b>53.50</b>	<b>53.78</b>	<b>53.93</b>	<b>53.42</b>
<b>World</b>	<b>98.16</b>	<b>98.64</b>	<b>98.93</b>	<b>99.98</b>	<b>99.55</b>	<b>99.28</b>	<b>99.11</b>	<b>99.66</b>	<b>101.20</b>	<b>101.41</b>	<b>100.35</b>	<b>100.10</b>	<b>101.12</b>	<b>102.79</b>	<b>102.72</b>	<b>101.69</b>
of which: US\$0	19.96	20.24	20.33	20.63	20.60	20.45	20.31	20.42	20.83	20.84	20.60	20.35	20.74	21.26	21.10	20.86
Europe 5*	8.32	8.23	8.28	8.37	8.19	8.27	8.12	8.16	8.31	8.21	8.20	8.06	8.15	8.36	8.22	8.20
China	12.49	12.70	12.96	13.14	13.09	12.97	12.98	13.67	13.54	13.68	13.47	13.27	13.93	13.89	13.92	13.75
Japan	3.92	4.31	3.46	3.56	3.92	3.81	4.09	3.40	3.53	3.92	3.73	4.02	3.35	3.50	3.88	3.69
India	4.66	4.91	5.03	4.62	4.89	4.86	5.14	5.02	4.85	5.14	5.03	5.34	5.28	5.03	5.39	5.26
Russia	3.39	3.36	3.43	3.68	3.60	3.52	3.47	3.54	3.74	3.67	3.61	3.53	3.59	3.80	3.69	3.65
Brazil	3.03	2.97	2.94	3.10	3.11	3.03	3.01	3.05	3.16	3.15	3.09	3.04	3.09	3.19	3.19	3.13
Saudi Arabia	3.30	2.96	3.21	3.35	2.99	3.13	2.96	3.07	3.28	3.01	3.08	2.80	3.05	3.22	2.86	2.98
Canada	2.42	2.34	2.37	2.58	2.51	2.45	2.37	2.39	2.59	2.51	2.47	2.37	2.37	2.60	2.51	2.46
Korea	2.63	2.73	2.64	2.58	2.53	2.62	2.63	2.48	2.52	2.65	2.57	2.72	2.52	2.57	2.70	2.63
Mexico	2.02	1.91	1.94	1.89	1.80	1.89	1.91	1.97	1.91	1.85	1.91	1.88	1.98	1.93	1.87	1.91
Iran	1.92	1.98	1.98	1.98	1.98	1.98	1.99	1.95	1.94	1.93	1.95	2.01	1.95	1.95	1.93	1.96
<b>Total</b>	<b>68.07</b>	<b>68.65</b>	<b>68.58</b>	<b>69.48</b>	<b>69.22</b>	<b>68.99</b>	<b>68.98</b>	<b>69.12</b>	<b>70.21</b>	<b>70.56</b>	<b>69.72</b>	<b>69.40</b>	<b>70.01</b>	<b>71.28</b>	<b>71.26</b>	<b>70.49</b>
% of World	69.3%	69.6%	69.3%	69.5%	69.5%	69.5%	69.6%	69.4%	69.4%	69.6%	69.5%	69.3%	69.2%	69.3%	69.4%	69.3%
<b>Annual Change (% per annum)</b>																
Americas	0.7	2.3	0.7	2.4	1.0	1.6	0.4	0.7	1.0	1.2	0.8	0.1	1.3	1.7	1.1	1.0
Europe	2.5	1.2	-0.7	-0.8	-2.5	-0.7	-1.1	0.0	0.2	1.2	0.1	0.3	0.4	0.7	0.5	0.5
Asia Oceania	0.1	1.2	-0.4	-1.6	-3.6	-1.1	-3.7	-3.0	-0.9	1.6	-1.5	0.6	0.1	0.4	0.4	0.4
<b>Total OECD</b>	<b>1.1</b>	<b>1.8</b>	<b>0.1</b>	<b>0.8</b>	<b>-0.9</b>	<b>0.4</b>	<b>-0.8</b>	<b>-0.1</b>	<b>0.4</b>	<b>1.3</b>	<b>0.2</b>	<b>0.2</b>	<b>0.8</b>	<b>1.2</b>	<b>0.8</b>	<b>0.8</b>
Asia	4.1	3.5	2.6	3.9	2.8	3.2	2.4	2.7	3.3	4.0	3.1	2.9	2.9	2.7	2.8	2.8
Middle East	0.1	-0.2	-1.5	-0.7	0.6	-0.5	0.6	-1.9	-0.4	0.0	-0.4	-1.1	1.0	0.6	-0.6	0.0
Americas	-0.3	0.1	-1.6	-1.5	-0.5	-0.9	-1.3	-0.1	-0.7	-0.9	-0.8	0.1	0.4	0.6	0.9	0.5
FSU	2.5	4.2	2.2	3.0	5.0	3.6	2.9	2.8	1.6	3.0	2.5	2.1	1.9	1.9	0.6	1.6
Africa	1.5	-0.6	-0.2	-0.8	0.9	-0.2	0.4	1.9	2.3	1.8	1.6	1.7	1.5	1.4	1.7	1.6
Europe	3.2	2.4	-1.0	1.3	5.2	2.0	9.5	4.3	2.7	2.1	4.6	1.4	0.9	0.8	2.7	1.5
<b>Total Non-OECD</b>	<b>2.5</b>	<b>2.2</b>	<b>1.1</b>	<b>1.9</b>	<b>2.1</b>	<b>1.8</b>	<b>1.7</b>	<b>1.6</b>	<b>1.9</b>	<b>2.4</b>	<b>1.9</b>	<b>1.7</b>	<b>2.0</b>	<b>1.9</b>	<b>1.8</b>	<b>1.8</b>
<b>World</b>	<b>1.8</b>	<b>2.0</b>	<b>0.6</b>	<b>1.4</b>	<b>0.6</b>	<b>1.1</b>	<b>0.5</b>	<b>0.7</b>	<b>1.2</b>	<b>1.9</b>	<b>1.1</b>	<b>1.0</b>	<b>1.5</b>	<b>1.6</b>	<b>1.3</b>	<b>1.3</b>
<b>Annual Change (mb/d)</b>																
Americas	0.18	0.58	0.18	0.61	0.25	0.41	0.10	0.17	0.25	0.30	0.21	0.02	0.32	0.45	0.28	0.27
Europe	0.35	0.16	-0.10	-0.12	-0.37	-0.11	-0.15	0.00	0.03	0.17	0.01	0.04	0.06	0.11	0.07	0.07
Asia Oceania	0.01	0.10	-0.03	-0.13	-0.31	-0.09	-0.32	-0.23	-0.07	0.13	-0.12	0.05	0.01	0.03	0.03	0.03
<b>Total OECD</b>	<b>0.54</b>	<b>0.84</b>	<b>0.05</b>	<b>0.37</b>	<b>-0.42</b>	<b>0.21</b>	<b>-0.37</b>	<b>-0.07</b>	<b>0.21</b>	<b>0.60</b>	<b>0.10</b>	<b>0.11</b>	<b>0.39</b>	<b>0.59</b>	<b>0.38</b>	<b>0.37</b>
Asia	1.04	0.91	0.68	1.01	0.74	0.84	0.65	0.73	0.89	1.09	0.84	0.79	0.80	0.76	0.79	0.78
Middle East	0.01	-0.02	-0.12	-0.06	0.05	-0.04	0.05	-0.16	-0.03	0.00	-0.04	-0.09	0.08	0.05	-0.05	0.00
Americas	-0.02	0.01	-0.10	-0.10	-0.03	-0.06	-0.08	-0.01	-0.05	-0.06	-0.05	0.00	0.02	0.04	0.06	0.03
FSU	0.11	0.18	0.10	0.14	0.23	0.16	0.13	0.13	0.08	0.14	0.12	0.10	0.09	0.09	0.03	0.08
Africa	0.06	-0.03	-0.01	-0.04	0.04	-0.01	0.02	0.08	0.09	0.08	0.07	0.07	0.07	0.06	0.08	0.07
Europe	0.02	0.02	-0.01	0.01	0.04	0.01	0.07	0.03	0.02	0.02	0.03	0.01	0.01	0.01	0.02	0.01
<b>Total Non-OECD</b>	<b>1.22</b>	<b>1.07</b>	<b>0.54</b>	<b>0.97</b>	<b>1.06</b>	<b>0.91</b>	<b>0.84</b>	<b>0.81</b>	<b>1.00</b>	<b>1.27</b>	<b>0.98</b>	<b>0.88</b>	<b>1.07</b>	<b>1.01</b>	<b>0.93</b>	<b>0.97</b>
<b>World</b>	<b>1.76</b>	<b>1.91</b>	<b>0.59</b>	<b>1.33</b>	<b>0.64</b>	<b>1.12</b>	<b>0.47</b>	<b>0.74</b>	<b>1.21</b>	<b>1.87</b>	<b>1.08</b>	<b>0.99</b>	<b>1.46</b>	<b>1.60</b>	<b>1.31</b>	<b>1.34</b>
<b>Revisions to Oil Demand from Last Month's Report (mb/d)</b>																
Americas	0.00	0.00	0.00	0.00	0.00	0.00	0.06	-0.11	-0.09	0.03	-0.03	0.06	-0.11	0.05	0.05	0.01
Europe	0.06	0.06	0.07	0.08	0.07	0.07	0.06	0.02	-0.01	0.04	0.03	0.11	-0.04	0.02	0.04	0.03
Asia Oceania	0.01	0.01	0.01	0.01	0.01	0.01	0.01	-0.01	-0.02	0.06	0.01	0.04	-0.02	-0.03	0.04	0.01
<b>Total OECD</b>	<b>0.07</b>	<b>0.08</b>	<b>0.08</b>	<b>0.09</b>	<b>0.08</b>	<b>0.08</b>	<b>0.13</b>	<b>-0.10</b>	<b>-0.12</b>	<b>0.13</b>	<b>0.01</b>	<b>0.22</b>	<b>-0.17</b>	<b>0.05</b>	<b>0.12</b>	<b>0.05</b>
Asia	0.21	0.21	0.20	0.20	0.20	0.20	0.31	0.48	0.17	0.21	0.29	0.33	0.42	0.18	0.18	0.28
Middle East	-0.10	-0.10	-0.10	-0.07	-0.05	-0.08	-0.07	-0.22	-0.19	-0.12	-0.15	-0.18	-0.31	-0.27	-0.21	-0.24
Americas	0.00	-0.01	-0.01	0.02	0.02	0.00	-0.04	-0.07	-0.03	-0.03	-0.04	-0.03	-0.06	-0.04	-0.03	-0.04
FSU	0.01	0.01	0.00	0.00	-0.01	0.00	0.00	0.01	0.00	-0.01	0.00	0.01	0.02	0.01	-0.01	0.01
Africa	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.04	-0.06	-0.06	-0.05	-0.06	-0.04	-0.06	-0.06	-0.06
Europe	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.01	0.00	0.00	0.01	0.04	0.01	0.00	0.01	0.01
<b>Total Non-OECD</b>	<b>0.07</b>	<b>0.07</b>	<b>0.05</b>	<b>0.10</b>	<b>0.12</b>	<b>0.09</b>	<b>0.17</b>	<b>0.17</b>	<b>-0.11</b>	<b>-0.01</b>	<b>0.05</b>	<b>0.11</b>	<b>0.05</b>	<b>-0.18</b>	<b>-0.12</b>	<b>-0.04</b>
<b>World</b>	<b>0.14</b>	<b>0.14</b>	<b>0.14</b>	<b>0.19</b>	<b>0.20</b>	<b>0.17</b>	<b>0.30</b>	<b>0.07</b>	<b>-0.23</b>	<b>0.12</b>	<b>0.06</b>	<b>0.33</b>	<b>-0.13</b>	<b>-0.13</b>	<b>0.00</b>	<b>0.02</b>
<b>Revisions to Oil Demand Growth from Last Month's Report (mb/d)</b>																
World	0.18	0.04	0.01	0.03	0.02	0.02	0.16	-0.07	-0.41	-0.08	-0.10	0.02	-0.19	0.10	-0.12	-0.05

\* France, Germany, Italy, Spain and UK

**Table 2a**  
**OECD REGIONAL OIL DEMAND<sup>1</sup>**  
(million barrels per day)

										Latest month vs.	
	2017	2018	2Q18	3Q18	4Q18	1Q19	Mar 19	Apr 19	May 19 <sup>2</sup>	Apr 19	May 18
<b>Americas</b>											
LPG and ethane	3.39	3.67	3.33	3.51	3.81	4.15	3.87	3.60	3.31	-0.29	0.12
Naphtha	0.31	0.30	0.28	0.32	0.33	0.29	0.28	0.29	0.31	0.02	0.04
Motor gasoline	11.08	11.08	11.28	11.28	11.03	10.71	10.91	11.11	11.19	0.09	-0.15
Jet and kerosene	1.98	2.03	2.04	2.12	2.01	1.97	2.03	2.07	2.08	0.01	0.06
Gasoil/diesel oil	5.15	5.31	5.30	5.23	5.39	5.45	5.37	5.15	5.26	0.12	-0.23
Residual fuel oil	0.66	0.62	0.62	0.66	0.61	0.62	0.63	0.58	0.53	-0.06	-0.12
Other products	2.51	2.47	2.46	2.66	2.43	2.10	2.21	2.41	2.62	0.21	0.14
<b>Total</b>	<b>25.07</b>	<b>25.48</b>	<b>25.31</b>	<b>25.78</b>	<b>25.61</b>	<b>25.31</b>	<b>25.31</b>	<b>25.19</b>	<b>25.29</b>	<b>0.11</b>	<b>-0.13</b>
<b>Europe</b>											
LPG and ethane	1.15	1.16	1.13	1.15	1.11	1.12	1.08	1.08	1.04	-0.04	-0.07
Naphtha	1.13	1.05	1.04	1.02	0.95	1.13	1.05	0.97	0.83	-0.13	-0.20
Motor gasoline	1.99	1.97	2.05	2.05	1.95	1.84	1.88	2.04	2.00	-0.03	-0.04
Jet and kerosene	1.45	1.51	1.52	1.69	1.44	1.40	1.44	1.58	1.56	-0.03	0.04
Gasoil/diesel oil	6.48	6.45	6.35	6.46	6.57	6.42	6.29	6.45	6.25	-0.20	0.03
Residual fuel oil	0.89	0.86	0.87	0.89	0.83	0.88	0.86	0.91	0.86	-0.05	0.00
Other products	1.29	1.28	1.29	1.42	1.26	1.12	1.21	1.28	1.31	0.03	0.04
<b>Total</b>	<b>14.38</b>	<b>14.28</b>	<b>14.25</b>	<b>14.68</b>	<b>14.11</b>	<b>13.91</b>	<b>13.81</b>	<b>14.30</b>	<b>13.84</b>	<b>-0.46</b>	<b>-0.20</b>
<b>Asia Oceania</b>											
LPG and ethane	0.76	0.75	0.75	0.68	0.73	0.85	0.78	0.76	0.73	-0.03	-0.03
Naphtha	2.08	2.04	1.97	2.02	2.07	2.10	1.99	1.94	1.91	-0.02	-0.10
Motor gasoline	1.54	1.53	1.50	1.59	1.52	1.47	1.48	1.51	1.43	-0.08	-0.08
Jet and kerosene	0.93	0.93	0.75	0.74	1.02	1.15	0.98	0.89	0.72	-0.17	-0.05
Gasoil/diesel oil	1.89	1.89	1.87	1.84	1.92	1.94	1.93	1.95	1.80	-0.15	-0.04
Residual fuel oil	0.54	0.53	0.47	0.50	0.51	0.50	0.47	0.44	0.39	-0.05	-0.09
Other products	0.40	0.40	0.42	0.39	0.33	0.32	0.32	0.26	0.40	0.14	0.00
<b>Total</b>	<b>8.15</b>	<b>8.06</b>	<b>7.73</b>	<b>7.75</b>	<b>8.10</b>	<b>8.33</b>	<b>7.95</b>	<b>7.74</b>	<b>7.38</b>	<b>-0.36</b>	<b>-0.40</b>
<b>OECD</b>											
LPG and ethane	5.30	5.58	5.20	5.35	5.64	6.12	5.73	5.44	5.08	-0.36	0.02
Naphtha	3.52	3.40	3.29	3.36	3.35	3.53	3.33	3.19	3.06	-0.13	-0.26
Motor gasoline	14.62	14.58	14.83	14.93	14.49	14.03	14.27	14.65	14.62	-0.03	-0.27
Jet and kerosene	4.35	4.46	4.32	4.55	4.47	4.52	4.44	4.54	4.35	-0.18	0.04
Gasoil/diesel oil	13.53	13.64	13.52	13.53	13.89	13.81	13.59	13.54	13.30	-0.24	-0.24
Residual fuel oil	2.09	2.01	1.96	2.04	1.95	2.00	1.97	1.93	1.77	-0.15	-0.21
Other products	4.20	4.15	4.17	4.46	4.02	3.55	3.74	3.94	4.33	0.38	0.18
<b>Total</b>	<b>47.60</b>	<b>47.81</b>	<b>47.30</b>	<b>48.21</b>	<b>47.81</b>	<b>47.55</b>	<b>47.07</b>	<b>47.23</b>	<b>46.51</b>	<b>-0.72</b>	<b>-0.73</b>

<sup>1</sup> 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.

<sup>2</sup> Latest official OECD submissions (MOS).

**Table 2b**  
**OIL DEMAND IN SELECTED OECD COUNTRIES<sup>1</sup>**  
(million barrels per day)

	2017	2018	2Q18	3Q18	4Q18	1Q19	Mar 19	Apr 19	May 19 <sup>2</sup>	Latest month vs.	
										Apr 19	May 18
<b>United States<sup>3</sup></b>											
LPG and ethane	2.54	2.85	2.58	2.68	3.04	3.29	3.03	2.71	2.57	-0.15	0.12
Naphtha	0.23	0.23	0.20	0.24	0.24	0.21	0.21	0.22	0.21	-0.02	0.01
Motor gasoline	9.33	9.32	9.51	9.51	9.25	8.96	9.17	9.36	9.40	0.04	-0.15
Jet and kerosene	1.69	1.72	1.73	1.78	1.70	1.66	1.71	1.75	1.78	0.03	0.07
Gasoil/diesel oil	3.93	4.13	4.13	4.05	4.18	4.28	4.16	3.98	4.04	0.06	-0.23
Residual fuel oil	0.34	0.32	0.32	0.34	0.34	0.29	0.28	0.26	0.20	-0.06	-0.12
Other products	1.90	1.88	1.86	2.04	1.85	1.62	1.71	1.92	2.07	0.15	0.20
<b>Total</b>	<b>19.96</b>	<b>20.45</b>	<b>20.33</b>	<b>20.63</b>	<b>20.60</b>	<b>20.31</b>	<b>20.27</b>	<b>20.20</b>	<b>20.26</b>	<b>0.06</b>	<b>-0.10</b>
<b>Japan</b>											
LPG and ethane	0.41	0.40	0.39	0.34	0.39	0.47	0.43	0.39	0.37	-0.01	-0.02
Naphtha	0.78	0.74	0.66	0.70	0.80	0.80	0.77	0.72	0.67	-0.05	-0.02
Motor gasoline	0.87	0.86	0.85	0.92	0.85	0.81	0.82	0.84	0.80	-0.04	-0.05
Jet and kerosene	0.52	0.50	0.37	0.33	0.57	0.69	0.56	0.46	0.33	-0.14	-0.06
Diesel	0.44	0.46	0.45	0.47	0.49	0.47	0.49	0.46	0.43	-0.03	0.00
Other gasoil	0.34	0.32	0.28	0.27	0.32	0.35	0.32	0.32	0.26	-0.06	0.00
Residual fuel oil	0.28	0.28	0.23	0.26	0.27	0.26	0.24	0.22	0.20	-0.02	-0.04
Other products	0.28	0.26	0.23	0.26	0.23	0.25	0.23	0.18	0.26	0.08	0.05
<b>Total</b>	<b>3.92</b>	<b>3.81</b>	<b>3.46</b>	<b>3.56</b>	<b>3.92</b>	<b>4.09</b>	<b>3.85</b>	<b>3.59</b>	<b>3.32</b>	<b>-0.27</b>	<b>-0.14</b>
<b>Germany</b>											
LPG and ethane	0.13	0.11	0.13	0.11	0.09	0.12	0.12	0.13	0.12	-0.01	0.00
Naphtha	0.30	0.27	0.28	0.24	0.23	0.33	0.29	0.22	0.24	0.02	-0.07
Motor gasoline	0.50	0.49	0.51	0.50	0.48	0.47	0.48	0.49	0.51	0.02	0.00
Jet and kerosene	0.22	0.22	0.23	0.25	0.22	0.22	0.24	0.28	0.26	-0.03	0.03
Diesel	0.78	0.76	0.78	0.79	0.77	0.75	0.75	0.80	0.79	-0.01	0.03
Other gasoil	0.35	0.32	0.25	0.28	0.35	0.41	0.32	0.28	0.30	0.02	0.07
Residual fuel oil	0.07	0.06	0.07	0.06	0.05	0.06	0.06	0.06	0.05	-0.01	-0.02
Other products	0.10	0.11	0.10	0.14	0.13	0.08	0.08	0.10	0.09	-0.01	0.00
<b>Total</b>	<b>2.45</b>	<b>2.35</b>	<b>2.35</b>	<b>2.37</b>	<b>2.32</b>	<b>2.44</b>	<b>2.35</b>	<b>2.37</b>	<b>2.35</b>	<b>-0.03</b>	<b>0.03</b>
<b>Italy</b>											
LPG and ethane	0.10	0.10	0.09	0.08	0.10	0.09	0.07	0.08	0.07	-0.01	-0.02
Naphtha	0.12	0.13	0.12	0.13	0.11	0.08	0.08	0.08	0.08	0.00	-0.04
Motor gasoline	0.17	0.17	0.17	0.18	0.16	0.12	0.13	0.15	0.13	-0.02	-0.04
Jet and kerosene	0.10	0.11	0.11	0.13	0.10	0.08	0.08	0.10	0.11	0.01	0.00
Diesel	0.45	0.46	0.46	0.46	0.47	0.45	0.45	0.46	0.45	-0.01	-0.01
Other gasoil	0.08	0.08	0.07	0.08	0.08	0.06	0.06	0.06	0.05	0.00	-0.01
Residual fuel oil	0.07	0.07	0.08	0.07	0.07	0.06	0.06	0.07	0.07	0.00	-0.01
Other products	0.15	0.16	0.16	0.17	0.17	0.14	0.14	0.15	0.16	0.01	-0.01
<b>Total</b>	<b>1.24</b>	<b>1.27</b>	<b>1.28</b>	<b>1.30</b>	<b>1.26</b>	<b>1.08</b>	<b>1.06</b>	<b>1.13</b>	<b>1.12</b>	<b>-0.02</b>	<b>-0.15</b>
<b>France</b>											
LPG and ethane	0.12	0.13	0.12	0.11	0.12	0.15	0.13	0.13	0.12	-0.01	0.00
Naphtha	0.12	0.12	0.14	0.13	0.09	0.14	0.13	0.13	0.11	-0.02	-0.03
Motor gasoline	0.18	0.19	0.20	0.20	0.19	0.18	0.18	0.21	0.20	-0.01	0.00
Jet and kerosene	0.16	0.17	0.17	0.19	0.16	0.16	0.16	0.18	0.17	0.00	0.00
Diesel	0.72	0.71	0.72	0.71	0.72	0.68	0.68	0.74	0.70	-0.04	-0.01
Other gasoil	0.25	0.24	0.20	0.24	0.26	0.26	0.22	0.22	0.18	-0.04	-0.01
Residual fuel oil	0.05	0.05	0.05	0.05	0.05	0.05	0.04	0.06	0.05	0.00	0.00
Other products	0.12	0.13	0.13	0.14	0.13	0.10	0.11	0.12	0.11	0.00	0.00
<b>Total</b>	<b>1.74</b>	<b>1.74</b>	<b>1.72</b>	<b>1.77</b>	<b>1.71</b>	<b>1.72</b>	<b>1.67</b>	<b>1.77</b>	<b>1.65</b>	<b>-0.12</b>	<b>-0.04</b>
<b>United Kingdom</b>											
LPG and ethane	0.14	0.14	0.15	0.13	0.14	0.14	0.13	0.12	0.16	0.04	0.02
Naphtha	0.03	0.03	0.03	0.02	0.03	0.02	0.01	0.04	0.04	0.00	0.00
Motor gasoline	0.29	0.28	0.29	0.29	0.28	0.29	0.28	0.29	0.28	0.00	0.00
Jet and kerosene	0.32	0.32	0.31	0.33	0.31	0.33	0.33	0.34	0.30	-0.04	0.00
Diesel	0.52	0.52	0.53	0.52	0.52	0.51	0.52	0.54	0.49	-0.06	-0.01
Other gasoil	0.14	0.14	0.15	0.16	0.14	0.12	0.12	0.13	0.13	0.00	0.00
Residual fuel oil	0.03	0.03	0.03	0.02	0.03	0.02	0.02	0.02	0.02	0.00	-0.01
Other products	0.12	0.11	0.12	0.12	0.11	0.11	0.11	0.12	0.12	0.00	0.00
<b>Total</b>	<b>1.60</b>	<b>1.57</b>	<b>1.60</b>	<b>1.60</b>	<b>1.56</b>	<b>1.55</b>	<b>1.52</b>	<b>1.60</b>	<b>1.54</b>	<b>-0.06</b>	<b>0.00</b>
<b>Canada</b>											
LPG and ethane	0.40	0.39	0.33	0.41	0.35	0.42	0.40	0.46	0.33	-0.13	0.00
Naphtha	0.05	0.05	0.05	0.05	0.05	0.05	0.04	0.05	0.05	0.00	0.01
Motor gasoline	0.84	0.88	0.87	0.92	0.91	0.85	0.83	0.87	0.87	0.01	-0.01
Jet and kerosene	0.14	0.16	0.16	0.19	0.16	0.16	0.15	0.17	0.15	-0.02	-0.01
Diesel	0.29	0.26	0.27	0.26	0.26	0.27	0.26	0.27	0.26	-0.01	0.00
Other gasoil	0.27	0.29	0.25	0.31	0.33	0.29	0.29	0.25	0.25	0.00	-0.04
Residual fuel oil	0.05	0.05	0.06	0.04	0.06	0.07	0.07	0.07	0.07	-0.01	0.01
Other products	0.37	0.38	0.38	0.40	0.38	0.26	0.27	0.27	0.33	0.06	-0.07
<b>Total</b>	<b>2.42</b>	<b>2.45</b>	<b>2.37</b>	<b>2.58</b>	<b>2.51</b>	<b>2.37</b>	<b>2.31</b>	<b>2.40</b>	<b>2.30</b>	<b>-0.10</b>	<b>-0.13</b>

<sup>1</sup> 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.

<sup>2</sup> Latest official OECD submissions (MOS).

<sup>3</sup> US figures exclude US territories.

**Table 3**  
**WORLD OIL PRODUCTION**

(million barrels per day)

	2018	2019	2020	1Q19	2Q19	3Q19	4Q19	1Q20	May 19	Jun 19	Jul 19
<b>OPEC</b>											
Crude Oil											
Saudi Arabia	10.33			10.06	9.76				9.70	9.77	9.65
Iran	3.58			2.73	2.43				2.40	2.28	2.23
Iraq	4.57			4.68	4.72				4.78	4.72	4.78
UAE	3.00			3.06	3.05				3.05	3.05	3.07
Kuwait	2.75			2.71	2.69				2.71	2.68	2.69
Neutral Zone	0.00			0.00	0.00				0.00	0.00	0.00
Angola	1.49			1.43	1.43				1.46	1.42	1.40
Nigeria	1.60			1.69	1.71				1.66	1.77	1.75
Libya	0.97			0.96	1.15				1.16	1.12	1.10
Algeria	1.04			1.03	1.02				1.03	1.01	1.03
Congo	0.32			0.34	0.36				0.36	0.35	0.34
Gabon	0.19			0.21	0.21				0.20	0.22	0.20
Equatorial Guinea	0.12			0.11	0.11				0.11	0.11	0.12
Ecuador	0.52			0.53	0.53				0.53	0.53	0.54
Venezuela	1.40			1.11	0.86				0.86	0.87	0.81
Total Crude Oil	31.88			30.63	30.03				30.01	29.90	29.71
Total NGLs <sup>1</sup>	5.53	5.56	5.59	5.58	5.57	5.54	5.53	5.59	5.57	5.57	5.54
<b>Total OPEC<sup>2</sup></b>	<b>37.40</b>			<b>36.21</b>	<b>35.60</b>				<b>35.58</b>	<b>35.47</b>	<b>35.25</b>
<b>NON-OPEC<sup>3</sup></b>											
<b>OECD</b>											
<b>Americas</b>	22.98	24.65	25.99	24.01	24.50	24.72	25.34	25.62	24.32	24.59	24.34
United States	15.52	17.26	18.53	16.64	17.16	17.38	17.84	18.11	17.12	17.26	16.98
Mexico	2.08	1.91	1.87	1.92	1.91	1.90	1.89	1.89	1.91	1.91	1.90
Canada	5.38	5.47	5.58	5.44	5.42	5.42	5.60	5.61	5.27	5.40	5.44
Chile	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
<b>Europe</b>	3.47	3.35	3.67	3.46	3.21	3.26	3.46	3.59	3.21	3.03	3.37
UK	1.11	1.18	1.20	1.20	1.17	1.10	1.23	1.25	1.15	1.14	1.17
Norway	1.85	1.69	1.99	1.77	1.57	1.68	1.75	1.86	1.59	1.41	1.73
Others	0.51	0.47	0.48	0.48	0.47	0.47	0.47	0.48	0.46	0.48	0.47
<b>Asia Oceania</b>	0.41	0.48	0.56	0.43	0.47	0.50	0.52	0.54	0.46	0.48	0.49
Australia	0.34	0.41	0.49	0.37	0.40	0.43	0.45	0.47	0.39	0.41	0.42
Others	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
<b>Total OECD</b>	<b>26.86</b>	<b>28.48</b>	<b>30.22</b>	<b>27.91</b>	<b>28.19</b>	<b>28.48</b>	<b>29.32</b>	<b>29.75</b>	<b>27.99</b>	<b>28.10</b>	<b>28.21</b>
<b>NON-OECD</b>											
<b>Former USSR</b>	14.56	14.54	14.56	14.80	14.40	14.43	14.53	14.63	14.31	14.61	14.54
Russia	11.49	11.55	11.53	11.67	11.50	11.51	11.52	11.52	11.44	11.49	11.48
Others	3.07	2.99	3.03	3.13	2.90	2.92	3.00	3.11	2.86	3.12	3.06
<b>Asia</b>	7.21	7.18	7.04	7.25	7.22	7.12	7.11	7.11	7.22	7.29	7.12
China	3.85	3.91	3.87	3.92	3.95	3.90	3.88	3.89	3.92	4.02	3.91
Malaysia	0.71	0.69	0.70	0.71	0.70	0.67	0.70	0.71	0.71	0.70	0.65
India	0.84	0.81	0.79	0.82	0.80	0.81	0.80	0.80	0.80	0.79	0.80
Indonesia	0.80	0.77	0.74	0.79	0.77	0.77	0.76	0.75	0.78	0.78	0.78
Others	1.01	0.99	0.93	1.00	1.00	0.98	0.97	0.95	1.00	1.00	0.98
<b>Europe</b>	0.12	0.12	0.11	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
<b>Americas</b>	4.51	4.71	5.09	4.51	4.58	4.83	4.93	5.00	4.69	4.50	4.80
Brazil	2.70	2.87	3.23	2.66	2.74	2.99	3.10	3.17	2.84	2.66	2.96
Argentina	0.58	0.59	0.60	0.59	0.60	0.59	0.60	0.60	0.60	0.59	0.59
Colombia	0.87	0.90	0.88	0.90	0.90	0.90	0.89	0.89	0.90	0.90	0.90
Others	0.36	0.35	0.38	0.36	0.35	0.35	0.34	0.34	0.35	0.35	0.34
<b>Middle East</b>	3.27	3.26	3.27	3.26	3.27	3.26	3.26	3.27	3.28	3.26	3.26
Oman	0.99	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Qatar	2.01	2.01	2.01	2.02	2.01	2.01	2.01	2.01	2.03	2.01	2.01
Syria	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Yemen	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
Others	0.21	0.21	0.21	0.20	0.21	0.21	0.21	0.21	0.21	0.21	0.21
<b>Africa</b>	1.45	1.47	1.49	1.46	1.48	1.47	1.47	1.49	1.47	1.47	1.47
Egypt	0.65	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64
Others	0.80	0.83	0.85	0.82	0.84	0.83	0.83	0.85	0.83	0.84	0.83
<b>Total Non-OECD</b>	<b>31.12</b>	<b>31.28</b>	<b>31.57</b>	<b>31.41</b>	<b>31.07</b>	<b>31.24</b>	<b>31.41</b>	<b>31.61</b>	<b>31.08</b>	<b>31.26</b>	<b>31.31</b>
Processing gains <sup>4</sup>	2.32	2.35	2.38	2.35	2.35	2.35	2.35	2.38	2.35	2.35	2.35
Global Biofuels	2.62	2.69	2.83	2.21	2.91	3.01	2.63	2.36	3.03	3.06	3.06
<b>TOTAL NON-OPEC</b>	<b>62.92</b>	<b>64.80</b>	<b>66.99</b>	<b>63.88</b>	<b>64.51</b>	<b>65.07</b>	<b>65.71</b>	<b>66.10</b>	<b>64.45</b>	<b>64.78</b>	<b>64.94</b>
<b>TOTAL SUPPLY</b>	<b>100.32</b>			<b>100.09</b>	<b>100.11</b>				<b>100.03</b>	<b>100.25</b>	<b>100.19</b>

<sup>1</sup> 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.

<sup>2</sup> OPEC data based on today's membership throughout the time series.

<sup>3</sup> Comprises crude oil, condensates, NGLs and oil from non-conventional sources.

<sup>4</sup> Net volumetric gains and losses in refining and marine transportation losses.

**Table 3a**  
**OIL SUPPLY IN OECD COUNTRIES<sup>1</sup>**

(thousand of barrels per day)

	2018	2019	2020	1Q19	2Q19	3Q19	4Q19	1Q20	May 19	Jun 19	Jul 19
<b>United States</b>											
Alaska	479	465	450	488	466	433	475	472	474	450	436
California	477	464	451	469	466	462	459	455	468	464	463
Texas	4409	5118	5772	4850	5001	5213	5399	5558	4972	5076	5160
Federal Gulf of Mexico <sup>2</sup>	1758	1884	1985	1848	1948	1828	1911	2004	1904	1960	1682
Other US Lower 48	3869	4333	4608	4160	4282	4387	4499	4544	4296	4292	4344
NGLs <sup>3</sup>	4349	4827	5091	4658	4823	4897	4925	4916	4838	4843	4737
Other Hydrocarbons	178	168	174	168	172	164	167	156	173	175	163
<b>Total</b>	<b>15518</b>	<b>17259</b>	<b>18532</b>	<b>16643</b>	<b>17159</b>	<b>17384</b>	<b>17836</b>	<b>18105</b>	<b>17125</b>	<b>17260</b>	<b>16985</b>
<b>Canada</b>											
Alberta Light/Medium/Heavy	489	484	481	486	486	482	481	480	484	478	485
Alberta Bitumen	1857	1803	1950	1683	1833	1824	1870	1933	1765	1830	1759
Saskatchewan	489	489	479	493	490	488	485	483	490	491	488
Other Crude	575	609	574	615	640	547	634	548	629	649	536
NGLs	909	935	940	983	884	918	954	988	863	806	891
Synthetic Crudes	1056	1152	1152	1183	1084	1165	1174	1183	1044	1147	1284
<b>Total</b>	<b>5376</b>	<b>5471</b>	<b>5576</b>	<b>5443</b>	<b>5417</b>	<b>5424</b>	<b>5599</b>	<b>5614</b>	<b>5275</b>	<b>5401</b>	<b>5443</b>
<b>Mexico</b>											
Crude	1833	1683	1660	1690	1690	1679	1673	1667	1682	1693	1682
NGLs	238	219	209	221	220	218	216	213	221	217	219
<b>Total</b>	<b>2077</b>	<b>1906</b>	<b>1874</b>	<b>1915</b>	<b>1913</b>	<b>1901</b>	<b>1893</b>	<b>1884</b>	<b>1907</b>	<b>1914</b>	<b>1905</b>
<b>UK Offshore<sup>5</sup></b>											
Brent Fields	38	37	33	39	40	32	35	37	40	41	39
Forties Fields	365	354	308	374	350	342	351	343	335	361	349
Ninian Fields	36	39	37	37	38	42	40	39	27	42	43
Flotta Fields	20	22	19	25	22	18	21	20	16	24	12
Other Fields	527	598	677	604	584	543	660	691	599	552	603
NGLs	89	99	97	98	99	100	100	99	98	97	100
<b>Total</b>	<b>1075</b>	<b>1149</b>	<b>1170</b>	<b>1178</b>	<b>1133</b>	<b>1077</b>	<b>1207</b>	<b>1229</b>	<b>1115</b>	<b>1117</b>	<b>1146</b>
<b>Norway<sup>5</sup></b>											
Ekofisk-Ula Area	193	181	200	199	161	186	179	194	190	92	180
Oseberg-Troll Area	247	247	264	257	244	238	251	257	230	247	245
Statfjord-Gullfaks Area	311	236	225	281	178	240	246	246	222	50	255
Haltenbanken Area	331	287	289	290	280	283	295	303	263	303	302
Sleipner-Frigg Area	403	378	602	387	371	363	391	455	360	375	373
NGLs	365	345	341	361	340	337	343	341	328	343	346
<b>Total</b>	<b>1850</b>	<b>1695</b>	<b>1993</b>	<b>1775</b>	<b>1575</b>	<b>1679</b>	<b>1752</b>	<b>1858</b>	<b>1594</b>	<b>1410</b>	<b>1727</b>
<b>Other OECD Europe</b>											
Other N Sea Crude/NGLs <sup>6</sup>	130	128	115	130	130	129	123	119	127	134	129
UK Onshore	18	17	15	18	17	16	16	16	16	17	17
Italy	90	87	111	86	80	87	95	103	77	83	85
Turkey	55	56	56	54	57	57	56	56	58	56	57
Other	117	114	106	117	114	113	111	108	109	115	114
NGLs (excl. North Sea)	11	9	8	10	9	9	9	8	7	10	10
Non-Conventional Oils	86	59	61	63	55	58	59	62	61	57	56
<b>Total</b>	<b>507</b>	<b>469</b>	<b>471</b>	<b>477</b>	<b>462</b>	<b>470</b>	<b>469</b>	<b>472</b>	<b>455</b>	<b>472</b>	<b>468</b>
<b>Australia</b>											
Gippsland Basin	32	20	19	21	21	20	20	19	21	20	20
Cooper-Eromanga Basin	35	38	35	39	38	38	37	36	38	38	38
Carnarvon Basin	205	195	212	201	195	192	192	197	195	194	193
Other Crude	4	10	12	9	7	12	12	12	-7	12	12
NGLs	59	61	88	49	57	65	74	83	59	59	62
<b>Total</b>	<b>342</b>	<b>412</b>	<b>491</b>	<b>368</b>	<b>402</b>	<b>427</b>	<b>449</b>	<b>469</b>	<b>388</b>	<b>413</b>	<b>420</b>
<b>Other OECD Asia Oceania</b>											
New Zealand	25	25	23	25	26	25	25	24	25	26	25
Japan	3	4	4	4	4	4	4	4	4	4	4
NGLs	13	12	11	14	11	11	11	11	12	11	11
Synthetic Fuels	29	29	31	24	32	31	31	31	32	30	31
<b>Total</b>	<b>70</b>	<b>70</b>	<b>69</b>	<b>67</b>	<b>73</b>	<b>71</b>	<b>71</b>	<b>70</b>	<b>73</b>	<b>71</b>	<b>71</b>
<b>OECD</b>											
Crude Oil	19294	20366	21824	19884	20202	20307	21058	21456	20061	20121	20085
NGLs	6011	6486	6763	6374	6422	6533	6612	6639	6404	6367	6353
Non-Conventional Oils <sup>4</sup>	1555	1624	1633	1648	1563	1636	1649	1651	1524	1613	1770
<b>Total</b>	<b>26860</b>	<b>28476</b>	<b>30220</b>	<b>27907</b>	<b>28187</b>	<b>28476</b>	<b>29320</b>	<b>29746</b>	<b>27989</b>	<b>28102</b>	<b>28208</b>

<sup>1</sup> Subcategories refer to crude oil only unless otherwise noted.<sup>2</sup> Only production from Federal waters is included.<sup>3</sup> To the extent possible, condensates from natural gas processing plants are included with NGLs, while field condensates are counted as crude oil.<sup>4</sup> Does not include biofuels.<sup>5</sup> North Sea production is grouped by area including all fields being processed through the named field complex, ie, not just the field of that name.<sup>6</sup> Other North Sea NGLs is included.

**Table 4**  
**OECD INDUSTRY STOCKS<sup>1</sup> AND QUARTERLY STOCK CHANGES**

	RECENT MONTHLY STOCKS <sup>2</sup>					PRIOR YEARS' STOCKS <sup>2</sup>			STOCK CHANGES			
	in Million Barrels					in Million Barrels			in mb/d			
	Feb2019	Mar2019	Apr2019	May2019	Jun2019*	Jun2016	Jun2017	Jun2018	3Q2018	4Q2018	1Q2019	2Q2019
<b>OECD Americas</b>												
Crude	608.1	615.2	629.6	640.2	626.6	652.4	657.5	572.6	0.00	0.35	0.12	0.12
Motor Gasoline	278.3	266.4	260.7	265.3	265.2	273.7	269.2	266.9	0.04	0.09	-0.13	-0.01
Middle Distillate	207.2	205.1	199.8	198.8	203.3	220.4	224.8	191.5	0.27	0.01	-0.12	-0.02
Residual Fuel Oil	33.5	34.1	33.5	35.0	35.5	46.8	39.1	35.3	0.00	-0.01	-0.01	0.02
Total Products <sup>3</sup>	715.5	709.6	710.7	733.2	765.9	773.0	751.8	708.7	0.61	-0.17	-0.41	0.62
Total <sup>4</sup>	1508.9	1508.3	1532.5	1573.2	1590.8	1611.2	1596.0	1471.1	0.76	0.01	-0.34	0.91
<b>OECD Europe</b>												
Crude	341.0	352.0	346.5	341.0	346.2	362.4	365.3	357.8	-0.32	-0.05	0.31	-0.06
Motor Gasoline	107.4	101.1	90.9	90.7	89.9	97.1	92.8	84.8	0.01	0.11	0.06	-0.12
Middle Distillate	268.4	273.5	276.9	277.4	278.8	325.2	298.8	258.1	0.18	-0.12	0.11	0.06
Residual Fuel Oil	62.6	62.5	62.4	64.1	65.2	77.0	66.5	60.6	-0.02	-0.02	0.06	0.03
Total Products <sup>3</sup>	558.4	555.6	545.5	546.5	550.5	599.7	566.8	521.5	0.16	-0.05	0.27	-0.06
Total <sup>4</sup>	982.0	991.2	974.2	970.4	979.5	1032.2	1004.9	962.0	-0.22	-0.06	0.61	-0.13
<b>OECD Asia Oceania</b>												
Crude	167.6	158.9	156.8	155.1	154.4	202.3	189.7	161.8	-0.24	0.16	0.05	-0.05
Motor Gasoline	25.6	25.9	25.1	26.5	24.9	26.5	25.1	24.2	0.00	0.00	0.02	-0.01
Middle Distillate	63.2	67.1	65.2	68.0	69.3	67.1	63.3	65.3	0.13	-0.04	-0.07	0.02
Residual Fuel Oil	21.2	19.7	20.5	20.3	19.7	19.2	20.9	20.8	-0.01	0.01	-0.01	0.00
Total Products <sup>3</sup>	168.2	164.4	161.7	170.1	173.3	175.2	169.7	164.5	0.22	-0.04	-0.18	0.10
Total <sup>4</sup>	394.5	379.7	379.8	385.6	390.7	438.1	424.1	387.8	0.02	0.11	-0.22	0.12
<b>Total OECD</b>												
Crude	1116.7	1126.1	1132.8	1136.3	1127.1	1217.1	1212.4	1092.1	-0.56	0.46	0.48	0.01
Motor Gasoline	411.3	393.4	376.6	382.5	380.0	397.2	387.1	375.9	0.04	0.20	-0.06	-0.15
Middle Distillate	538.9	545.7	541.9	544.3	551.4	612.7	586.8	514.9	0.58	-0.15	-0.08	0.06
Residual Fuel Oil	117.2	116.3	116.4	119.4	120.4	143.0	126.6	116.8	-0.04	-0.02	0.04	0.04
Total Products <sup>3</sup>	1442.1	1429.6	1417.8	1449.7	1489.8	1547.9	1488.3	1394.7	0.99	-0.26	-0.32	0.66
Total <sup>4</sup>	2885.4	2879.2	2886.4	2929.2	2961.0	3081.4	3025.0	2820.9	0.56	0.05	0.06	0.90

**OECD GOVERNMENT-CONTROLLED STOCKS<sup>5</sup> AND QUARTERLY STOCK CHANGES**

	RECENT MONTHLY STOCKS <sup>2</sup>					PRIOR YEARS' STOCKS <sup>2</sup>			STOCK CHANGES			
	in Million Barrels					in Million Barrels			in mb/d			
	Feb2019	Mar2019	Apr2019	May2019	Jun2019*	Jun2016	Jun2017	Jun2018	3Q2018	4Q2018	1Q2019	2Q2019
<b>OECD Americas</b>												
Crude	649.1	649.1	648.6	644.8	644.8	695.1	679.2	660.0	0.00	-0.12	0.00	-0.05
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
<b>OECD Europe</b>												
Crude	206.2	206.7	206.5	203.3	203.1	205.6	208.4	208.6	0.01	-0.01	-0.02	-0.04
Products	274.2	274.7	276.1	275.5	272.8	267.3	273.6	274.8	-0.04	-0.03	0.08	-0.02
<b>OECD Asia Oceania</b>												
Crude	379.9	378.6	378.6	378.6	378.6	385.4	385.0	383.4	0.00	-0.02	-0.03	0.00
Products	38.8	38.8	38.8	38.8	38.8	35.5	38.0	38.7	0.00	0.00	0.00	0.00
<b>Total OECD</b>												
Crude	1235.2	1234.4	1233.6	1226.7	1226.6	1286.1	1272.6	1252.0	0.01	-0.15	-0.04	-0.09
Products	315.0	315.5	316.8	316.3	313.5	304.8	313.5	315.5	-0.04	-0.03	0.08	-0.02
Total <sup>4</sup>	1553.1	1552.9	1552.7	1545.1	1542.0	1593.6	1589.8	1570.9	-0.05	-0.19	0.05	-0.12

\* estimated

1 Stocks are primary national territory stocks on land (excluding utility stocks and including pipeline and entropot 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 4a**  
**INDUSTRY STOCKS<sup>1</sup> ON LAND IN SELECTED COUNTRIES**

(million barrels)

	January			February			March			April			May		
	2018	2019	%	2018	2019	%	2018	2019	%	2018	2019	%	2018	2019	%
<b>United States<sup>2</sup></b>															
Crude	419.9	448.8	6.9	423.5	451.7	6.7	423.4	459.3	8.5	435.1	468.8	7.7	433.3	480.2	10.8
Motor gasoline	247.9	261.3	5.4	252.6	251.4	-0.5	239.6	236.1	-1.5	239.9	230.2	-4.0	242.2	235.7	-2.7
Middle distillate	185.6	183.5	-1.1	183.2	180.1	-1.7	172.4	175.7	1.9	162.9	171.1	5.0	157.9	171.4	8.5
Residual fuel oil	32.4	29.4	-9.3	32.8	27.8	-15.2	35.0	28.7	-18.0	32.3	27.9	-13.6	31.9	30.0	-6.0
Other products	169.2	182.8	8.0	160.6	176.1	9.7	162.1	183.7	13.3	168.9	195.6	15.8	180.8	214.0	18.4
Total products	635.1	657.0	3.4	629.2	635.4	1.0	609.1	624.2	2.5	604.0	624.8	3.4	612.8	651.1	6.3
Other <sup>3</sup>	160.3	164.7	2.7	157.5	166.2	5.5	163.7	165.5	1.1	161.1	173.7	7.8	164.3	181.0	10.2
Total	1215.3	1270.5	4.5	1210.2	1253.3	3.6	1196.2	1249.0	4.4	1200.2	1267.3	5.6	1210.4	1312.3	8.4
<b>Japan</b>															
Crude	101.3	90.5	-10.7	95.9	95.1	-0.8	87.3	95.5	9.4	93.4	94.1	0.7	97.5	97.2	-0.3
Motor gasoline	10.6	10.6	0.0	10.4	10.1	-2.9	10.1	10.3	2.0	10.7	9.7	-9.3	11.5	9.8	-14.8
Middle distillate	29.1	31.3	7.6	25.1	28.1	12.0	27.8	26.9	-3.2	29.8	25.8	-13.4	29.4	27.4	-6.8
Residual fuel oil	7.9	8.8	11.4	7.1	8.0	12.7	7.2	8.0	11.1	7.7	7.9	2.6	8.3	8.0	-3.6
Other products	34.7	35.9	3.5	32.9	36.2	10.0	33.8	30.6	-9.5	34.2	30.9	-9.6	33.1	33.8	2.1
Total products	82.3	86.6	5.2	75.5	82.4	9.1	78.9	75.8	-3.9	82.4	74.3	-9.8	82.3	79.0	-4.0
Other <sup>3</sup>	49.9	53.6	7.4	47.6	49.2	3.4	46.0	47.1	2.4	50.9	51.4	1.0	52.9	50.8	-4.0
Total	233.5	230.7	-1.2	219.0	226.7	3.5	212.2	218.4	2.9	226.7	219.8	-3.0	232.7	227.0	-2.4
<b>Germany</b>															
Crude	47.7	46.8	-1.9	47.6	47.8	0.4	50.8	47.8	-5.9	48.0	48.7	1.5	48.9	48.4	-1.0
Motor gasoline	11.3	12.4	9.7	11.3	12.3	8.8	10.7	10.9	1.9	10.0	9.5	-5.0	9.5	10.2	7.4
Middle distillate	28.5	25.9	-9.1	24.5	23.2	-5.3	24.3	24.1	-0.8	26.5	24.2	-8.7	25.6	22.9	-10.5
Residual fuel oil	7.9	8.0	1.3	8.2	7.9	-3.7	8.1	7.0	-13.6	8.1	7.1	-12.3	8.3	7.2	-13.3
Other products	10.9	10.4	-4.6	10.9	10.3	-5.5	10.8	10.9	0.9	10.9	10.3	-5.5	10.6	10.6	0.0
Total products	58.6	56.7	-3.2	54.9	53.7	-2.2	53.9	52.9	-1.9	55.5	51.1	-7.9	54.0	50.9	-5.7
Other <sup>3</sup>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	106.3	103.5	-2.6	102.5	101.5	-1.0	104.7	100.7	-3.8	103.5	99.8	-3.6	102.9	99.3	-3.5
<b>Italy</b>															
Crude	34.7	35.3	1.7	38.7	38.4	-0.8	36.4	42.2	15.9	42.0	43.1	2.6	40.9	40.4	-1.2
Motor gasoline	13.9	13.7	-1.4	13.8	13.6	-1.4	13.2	13.0	-1.5	11.8	11.1	-5.9	10.3	11.0	6.8
Middle distillate	30.2	28.8	-4.6	30.1	31.2	3.7	30.3	30.3	0.0	27.5	29.9	8.7	28.2	29.3	3.9
Residual fuel oil	10.2	9.5	-6.9	10.3	9.5	-7.8	9.6	8.4	-12.5	10.2	8.7	-14.7	10.4	8.6	-17.3
Other products	13.0	12.6	-3.1	13.6	12.6	-7.4	13.7	12.7	-7.3	12.9	12.1	-6.2	13.4	11.7	-12.7
Total products	67.3	64.6	-4.0	67.8	66.9	-1.3	66.8	64.4	-3.6	62.4	61.8	-1.0	62.3	60.6	-2.7
Other <sup>3</sup>	15.3	15.1	-1.3	15.9	15.0	-5.7	15.1	14.7	-2.6	15.2	14.8	-2.6	16.1	16.2	0.6
Total	117.3	115.0	-2.0	122.4	120.3	-1.7	118.3	121.3	2.5	119.6	119.7	0.1	119.3	117.2	-1.8
<b>France</b>															
Crude	12.5	10.3	-17.6	12.5	11.4	-8.8	14.3	14.9	4.2	13.6	12.9	-5.1	15.2	13.7	-9.9
Motor gasoline	4.6	5.1	10.9	4.5	4.5	0.0	3.5	4.5	28.6	3.4	3.8	11.8	3.3	4.5	36.4
Middle distillate	19.9	20.0	0.5	18.9	20.5	8.5	17.5	20.4	16.6	20.1	20.9	4.0	18.9	21.7	14.8
Residual fuel oil	1.4	1.3	-7.1	1.4	1.2	-14.3	1.2	1.4	16.7	1.0	0.9	-10.0	0.9	0.8	-11.1
Other products	4.7	3.4	-27.7	4.0	4.3	7.5	3.7	4.5	21.6	3.5	4.0	14.3	3.4	3.9	14.7
Total products	30.6	29.8	-2.6	28.8	30.5	5.9	25.9	30.8	18.9	28.0	29.6	5.7	26.5	30.9	16.6
Other <sup>3</sup>	7.8	7.7	-1.3	8.1	8.3	2.5	8.6	8.0	-7.0	8.8	7.4	-15.9	9.0	7.6	-15.6
Total	50.9	47.8	-6.1	49.4	50.2	1.6	48.8	53.7	10.0	50.4	49.9	-1.0	50.7	52.2	3.0
<b>United Kingdom</b>															
Crude	31.4	29.1	-7.3	27.8	27.9	0.4	27.8	31.3	12.6	30.3	30.6	1.0	32.7	29.1	-11.0
Motor gasoline	10.5	10.0	-4.8	11.0	10.5	-4.5	11.2	10.3	-8.0	10.5	9.8	-6.7	9.4	9.0	-4.3
Middle distillate	25.3	25.0	-1.2	24.8	24.8	0.0	23.7	24.2	2.1	23.7	25.9	9.3	23.8	24.9	4.6
Residual fuel oil	1.4	1.1	-21.4	1.6	0.9	-43.8	1.4	1.3	-7.1	1.2	1.4	16.7	1.2	1.3	8.3
Other products	5.2	5.3	1.9	5.6	4.9	-12.5	5.3	5.1	-3.8	5.3	6.2	17.0	4.7	6.1	29.8
Total products	42.4	41.4	-2.4	43.0	41.1	-4.4	41.6	40.9	-1.7	40.7	43.3	6.4	39.1	41.3	5.6
Other <sup>3</sup>	9.0	8.6	-4.4	8.7	8.8	1.1	8.4	8.6	2.4	7.6	9.7	27.6	8.5	8.8	3.5
Total	82.8	79.1	-4.5	79.5	77.8	-2.1	77.8	80.8	3.9	78.6	83.6	6.4	80.3	79.2	-1.4
<b>Canada<sup>4</sup></b>															
Crude	118.2	117.8	-0.3	117.0	120.9	3.3	120.3	122.8	2.1	115.7	125.3	8.3	123.6	127.2	2.9
Motor gasoline	17.7	16.7	-5.6	18.0	14.9	-17.2	18.9	14.8	-21.7	16.8	14.6	-13.1	14.0	14.5	3.6
Middle distillate	19.2	16.4	-14.6	19.7	16.4	-16.8	21.7	16.9	-22.1	20.1	17.1	-14.9	16.1	15.5	-3.7
Residual fuel oil	2.4	4.0	66.7	2.4	2.7	12.5	2.1	2.4	14.3	2.4	2.2	-8.3	2.1	1.6	-23.8
Other products	11.4	11.0	-3.5	11.3	11.7	3.5	12.6	11.6	-7.9	12.9	11.4	-11.6	13.7	11.2	-18.2
Total products	50.7	48.1	-5.1	51.4	45.7	-11.1	55.3	45.7	-17.4	52.2	45.3	-13.2	45.9	42.8	-6.8
Other <sup>3</sup>	17.0	21.1	24.1	15.8	18.8	19.0	16.2	17.7	9.3	18.0	18.4	2.2	20.6	18.5	-10.2
Total	185.9	187.0	0.6	184.2	185.4	0.7	191.8	186.2	-2.9	185.9	189.0	1.7	190.1	188.5	-0.8

<sup>1</sup> 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.

<sup>2</sup> US figures exclude US territories.

<sup>3</sup> Other includes NGLs, refinery feedstocks, additives/oxygenates and other hydrocarbons.

<sup>4</sup> Canadian stock information for recent months is the administration's best estimate. Data are usually finalised three months after first publication.

**Table 5**  
**TOTAL STOCKS ON LAND IN OECD COUNTRIES<sup>1</sup>**  
('millions of barrels' and 'days')

	End June 2018		End September 2018		End December 2018		End March 2019		End June 2019 <sup>3</sup>	
	Stock	Days Fwd <sup>2</sup>	Stock	Days Fwd	Stock	Days Fwd	Stock	Days Fwd	Stock	Days Fwd
	Level	Demand	Level	Demand	Level	Demand	Level	Demand	Level	Demand
<b>OECD Americas</b>										
Canada	190.3	74	195.5	78	192.3	81	186.1	-	-	-
Chile	12.3	34	11.6	32	10.4	28	10.5	-	-	-
Mexico	39.1	21	40.6	22	54.7	29	40.5	-	-	-
United States <sup>4</sup>	1869.2	91	1933.6	94	1913.5	94	1900.2	-	-	-
<b>Total<sup>4</sup></b>	<b>2133.1</b>	<b>83</b>	<b>2203.3</b>	<b>86</b>	<b>2193.0</b>	<b>87</b>	<b>2159.4</b>	<b>85</b>	<b>2237.6</b>	<b>86</b>
<b>OECD Asia Oceania</b>										
Australia	42.4	36	42.6	35	40.7	35	44.0	-	-	-
Israel	-	-	-	-	-	-	-	-	-	-
Japan	549.4	154	561.2	143	564.8	138	539.7	-	-	-
Korea	209.6	81	200.0	79	205.8	78	205.1	-	-	-
New Zealand	8.4	48	7.8	41	7.9	41	8.2	-	-	-
<b>Total</b>	<b>809.8</b>	<b>104</b>	<b>811.6</b>	<b>100</b>	<b>819.2</b>	<b>98</b>	<b>797.0</b>	<b>106</b>	<b>808.1</b>	<b>105</b>
<b>OECD Europe<sup>5</sup></b>										
Austria	21.2	73	20.2	73	20.9	80	23.0	-	-	-
Belgium	43.3	69	44.0	68	42.0	63	45.8	-	-	-
Czech Republic	21.4	96	21.5	97	22.8	110	23.0	-	-	-
Denmark	22.8	142	20.6	126	20.3	133	22.1	-	-	-
Estonia	2.6	82	2.6	84	2.9	87	2.6	-	-	-
Finland	40.8	193	40.0	196	39.9	198	38.5	-	-	-
France	168.5	95	164.6	96	160.8	94	169.0	-	-	-
Germany	278.3	118	272.6	118	271.0	111	274.7	-	-	-
Greece	32.1	99	34.4	113	32.1	110	35.3	-	-	-
Hungary	25.2	142	25.6	147	25.6	158	25.8	-	-	-
Ireland	10.0	65	9.9	61	10.2	65	10.8	-	-	-
Italy	125.4	97	124.5	99	125.1	116	130.5	-	-	-
Latvia	3.6	91	2.3	70	2.4	67	4.0	-	-	-
Lithuania	7.1	93	6.8	103	6.6	113	7.5	-	-	-
Luxembourg	0.4	7	0.5	8	0.5	8	0.5	-	-	-
Netherlands	142.4	157	143.8	165	139.2	154	155.0	-	-	-
Norway	26.4	105	24.1	121	26.7	161	23.9	-	-	-
Poland	75.7	105	74.1	108	76.8	118	77.8	-	-	-
Portugal	23.8	97	23.5	102	24.6	107	26.4	-	-	-
Slovak Republic	11.6	127	12.0	124	11.8	135	12.0	-	-	-
Slovenia	4.9	85	4.8	89	5.0	107	4.9	-	-	-
Spain	117.9	88	119.7	89	115.9	87	124.2	-	-	-
Sweden	37.7	119	34.5	108	35.8	118	38.3	-	-	-
Switzerland	33.6	158	33.0	141	30.8	137	31.6	-	-	-
Turkey	90.1	81	87.0	102	87.6	101	87.7	-	-	-
United Kingdom	82.1	51	77.5	50	76.4	49	80.7	-	-	-
<b>Total</b>	<b>1448.9</b>	<b>99</b>	<b>1423.9</b>	<b>101</b>	<b>1413.6</b>	<b>102</b>	<b>1475.6</b>	<b>104</b>	<b>1457.3</b>	<b>99</b>
<b>Total OECD</b>	<b>4391.8</b>	<b>91</b>	<b>4438.8</b>	<b>93</b>	<b>4425.8</b>	<b>93</b>	<b>4432.1</b>	<b>94</b>	<b>4503.0</b>	<b>93</b>
<b>DAYS OF IEA Net Imports<sup>6</sup></b>	<b>190</b>	<b>-</b>	<b>191</b>	<b>-</b>	<b>190</b>	<b>-</b>	<b>192</b>	<b>-</b>	<b>-</b>	<b>-</b>

<sup>1</sup> Total Stocks are industry and government-controlled stocks (see breakdown in table below). Stocks are primary national territory stocks on land (excluding utility stocks and including pipeline and entrepot stocks where known) they include stocks held by industry to meet IEA, EU and national emergency reserves commitments and are subject to government control in emergencies.

<sup>2</sup> 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.

<sup>3</sup> End June 2019 forward demand figures are IEA Secretariat forecasts.

<sup>4</sup> US figures exclude US territories. Total includes US territories.

<sup>5</sup> Data not available for Iceland.

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

## TOTAL OECD STOCKS

CLOSING STOCKS	Total	Government <sup>1</sup> controlled Millions of Barrels	Industry	Total	Government <sup>1</sup> controlled Days of Fwd. Demand <sup>2</sup>	Industry
2Q2016	4675	1594	3081	98	34	65
3Q2016	4686	1597	3089	99	34	65
4Q2016	4609	1601	3008	98	34	64
1Q2017	4638	1601	3037	98	34	64
2Q2017	4615	1590	3025	96	33	63
3Q2017	4554	1579	2975	94	33	62
4Q2017	4428	1569	2859	92	33	60
1Q2018	4398	1576	2822	93	33	60
2Q2018	4392	1571	2821	91	33	59
3Q2018	4439	1567	2872	93	33	60
4Q2018	4426	1549	2877	93	33	61
1Q2019	4432	1553	2879	94	33	61
2Q2019	4503	1542	2961	93	32	61

<sup>1</sup> Includes government-owned stocks and stock holding organisation stocks held for emergency purposes.

<sup>2</sup> Days of forward demand calculated using actual demand except in 2Q2019 (when latest forecasts are used).

**Table 6**  
**IEA MEMBER COUNTRY DESTINATIONS OF SELECTED CRUDE STREAMS<sup>1</sup>**  
(million barrels per day)

	2016	2017	2018	2Q18	3Q18	4Q18	1Q19	Mar 19	Apr 19	May 19	Year Earlier	
											May 18	change
<b>Saudi Light &amp; Extra Light</b>												
Americas	0.69	0.59	0.66	0.79	0.64	0.66	0.35	0.34	0.29	0.04	0.66	-0.62
Europe	0.79	0.69	0.69	0.70	0.76	0.73	0.70	0.64	0.70	0.79	0.73	0.05
Asia Oceania	1.40	1.56	1.45	1.42	1.36	1.50	1.62	1.58	1.50	1.40	1.35	0.04
<b>Saudi Medium</b>												
Americas	0.44	0.33	0.30	0.28	0.37	0.33	0.13	0.36	0.28	0.02	0.29	-0.26
Europe	0.01	0.01	0.01	0.01	0.01	0.01	-	-	0.01	0.01	0.02	0.00
Asia Oceania	0.41	0.37	0.41	0.42	0.41	0.39	0.24	0.13	0.24	0.22	0.44	-0.22
<b>Canada Heavy</b>												
Americas	2.04	2.23	2.41	2.48	2.39	2.43	2.29	2.47	2.16	2.07	2.40	-0.33
Europe	0.01	0.02	0.04	0.04	0.05	0.02	0.03	0.00	0.03	0.06	0.02	0.03
Asia Oceania	-	-	0.00	0.00	-	0.01	-	-	-	-	0.01	-
<b>Iraqi Basrah Light<sup>2</sup></b>												
Americas	0.42	0.63	0.50	0.63	0.41	0.32	0.46	0.45	0.14	0.18	0.61	-0.43
Europe	0.81	0.76	0.76	0.61	0.87	0.92	0.89	0.92	0.74	1.21	0.63	0.58
Asia Oceania	0.46	0.40	0.43	0.48	0.42	0.42	0.45	0.43	0.53	0.31	0.53	-0.23
<b>Kuwait Blend</b>												
Americas	0.14	0.11	0.02	0.04	-	-	-	-	-	-	-	-
Europe	0.19	0.20	0.13	0.08	0.17	0.13	0.04	0.00	0.08	0.10	0.07	0.03
Asia Oceania	0.66	0.68	0.66	0.66	0.67	0.62	0.63	0.54	0.67	0.67	0.62	0.06
<b>Iranian Light</b>												
Americas	-	-	-	-	-	-	-	-	-	-	-	-
Europe	0.21	0.27	0.16	0.26	0.13	0.03	0.01	-	-	-	0.32	-
Asia Oceania	0.01	0.01	0.01	0.01	0.01	-	0.01	0.03	-	-	0.01	-
<b>Iranian Heavy<sup>3</sup></b>												
Americas	-	-	-	-	-	-	-	-	-	-	-	-
Europe	0.21	0.52	0.35	0.44	0.41	0.11	0.09	0.12	0.10	0.09	0.43	-0.34
Asia Oceania	0.52	0.57	0.28	0.36	0.24	0.02	0.36	0.60	0.56	-	0.40	-
<b>BFOE</b>												
Americas	0.02	0.02	0.00	0.00	0.00	-	-	-	-	-	-	-
Europe	0.44	0.45	0.35	0.25	0.43	0.31	0.39	0.30	0.29	0.39	0.21	0.18
Asia Oceania	0.05	0.10	0.09	0.09	0.07	0.10	-	-	-	0.03	0.20	-0.17
<b>Kazakhstan</b>												
Americas	0.01	-	-	-	-	-	-	-	-	-	-	-
Europe	0.70	0.75	0.75	0.73	0.70	0.71	0.86	0.90	0.82	0.75	0.68	0.06
Asia Oceania	0.03	0.10	0.19	0.19	0.21	0.22	0.17	0.21	0.11	0.15	0.24	-0.09
<b>Venezuelan 22 API and heavier</b>												
Americas	0.63	0.48	0.44	0.47	0.45	0.45	0.19	-	-	-	0.47	-
Europe	0.05	0.04	0.03	0.02	0.03	0.06	0.10	0.09	0.07	0.06	0.01	0.05
Asia Oceania	-	-	-	-	-	-	-	-	-	-	-	-
<b>Mexican Maya</b>												
Americas	0.53	0.58	0.63	0.63	0.75	0.51	0.54	0.56	0.58	0.44	0.54	-0.09
Europe	0.17	0.20	0.21	0.22	0.17	0.17	0.21	0.21	0.24	0.15	0.28	-0.13
Asia Oceania	0.05	0.07	0.08	0.10	0.08	0.09	0.12	0.13	0.20	0.09	0.10	0.00
<b>Russian Urals</b>												
Americas	-	0.01	0.01	-	-	0.02	0.04	-	-	-	-	-
Europe	1.72	1.64	1.40	1.46	1.37	1.38	1.38	1.62	1.54	1.06	1.53	-0.46
Asia Oceania	-	0.01	0.00	0.01	-	-	-	-	-	-	-	-
<b>Cabinda and Other Angola</b>												
North America	0.16	0.07	0.06	0.10	0.11	0.02	-	-	-	-	-	-
Europe	0.27	0.11	0.14	0.11	0.22	0.08	0.17	0.18	0.09	0.14	0.10	0.04
Pacific	0.01	0.01	0.01	0.00	-	0.03	-	-	-	-	-	-
<b>Nigerian Light<sup>4</sup></b>												
Americas	0.07	0.04	0.01	0.01	-	-	-	-	-	0.16	0.03	0.13
Europe	0.39	0.39	0.53	0.49	0.54	0.63	0.47	0.47	0.42	0.60	0.50	0.10
Asia Oceania	0.01	0.02	0.02	0.03	0.01	0.02	0.03	0.03	0.01	-	0.05	-
<b>Libya Light and Medium</b>												
Americas	-	0.02	-	-	-	-	-	-	-	-	-	-
Europe	0.20	0.54	0.62	0.64	0.55	0.65	0.54	0.54	0.72	0.77	0.58	0.19
Asia Oceania	0.02	0.03	0.02	0.01	0.02	0.02	0.04	0.03	-	0.03	0.03	0.01

<sup>1</sup> 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.

<sup>2</sup> Iraqi Total minus Kirkuk.

<sup>3</sup> Iranian Total minus Iranian Light.

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

**Table 7**  
**REGIONAL OECD IMPORTS<sup>1,2</sup>**  
(thousand barrels per day)

	2016	2017	2018	2Q18	3Q18	4Q18	1Q19	Mar 19	Apr 19	May 19	Year Earlier	
											May 18	% change
Crude Oil												
Americas	4542	4361	3759	4085	3905	3223	2891	2663	2691	3137	3826	-18%
Europe	9437	9902	9724	9629	9924	9652	10010	9824	9954	9198	9854	-7%
Asia Oceania	6659	6846	6658	6531	6473	6821	6860	6493	6749	6082	6551	-7%
Total OECD	20639	21109	20140	20245	20303	19696	19761	18979	19393	18417	20231	-9%
LPG												
Americas	20	20	22	14	17	24	35	22	24	17	10	64%
Europe	441	432	468	463	423	497	454	420	425	365	456	-20%
Asia Oceania	567	550	556	569	504	556	587	416	504	563	447	26%
Total OECD	1028	1002	1045	1046	944	1077	1076	858	953	945	913	4%
Naphtha												
Americas	10	19	8	5	6	11	5	5	6	3	5	-42%
Europe	348	369	378	389	346	356	382	255	398	274	479	-43%
Asia Oceania	908	978	1018	955	1004	1085	918	879	978	943	1048	-10%
Total OECD	1266	1366	1405	1349	1357	1453	1304	1139	1381	1220	1532	-20%
Gasoline <sup>3</sup>												
Americas	735	727	773	1060	968	504	595	650	1036	1243	1087	14%
Europe	91	153	94	59	77	92	105	97	158	177	30	500%
Asia Oceania	87	101	107	123	91	94	108	128	123	117	156	-25%
Total OECD	913	981	974	1242	1136	691	807	875	1317	1537	1272	21%
Jet & Kerosene												
Americas	169	171	140	136	178	115	138	150	198	172	151	14%
Europe	502	504	514	536	609	478	457	471	568	545	553	-1%
Asia Oceania	73	80	88	62	55	120	81	81	72	74	80	-7%
Total OECD	744	755	742	734	842	713	677	701	838	791	784	1%
Gasoi/Diesel												
Americas	67	77	124	63	130	125	204	60	69	85	79	8%
Europe	1304	1337	1334	1347	1411	1225	1411	1296	1320	1184	1384	-14%
Asia Oceania	196	195	254	256	232	313	231	273	287	268	285	-6%
Total OECD	1566	1610	1712	1666	1772	1663	1846	1629	1677	1537	1748	-12%
Heavy Fuel Oil												
Americas	149	131	161	161	195	130	149	120	116	115	200	-43%
Europe	461	233	229	217	249	213	179	187	209	233	174	34%
Asia Oceania	153	146	162	156	151	149	103	62	52	130	167	-22%
Total OECD	762	510	552	534	596	493	430	369	377	477	541	-12%
Other Products												
Americas	652	717	679	658	699	637	520	539	798	703	666	5%
Europe	783	1012	1035	973	1125	981	996	968	934	947	849	12%
Asia Oceania	348	258	281	266	271	294	274	268	262	337	234	44%
Total OECD	1783	1987	1995	1897	2096	1912	1789	1775	1993	1987	1750	14%
Total Products												
Americas	1802	1862	1908	2095	2194	1547	1645	1546	2246	2338	2199	6%
Europe	3930	4040	4053	3985	4240	3842	3984	3693	4013	3725	3924	-5%
Asia Oceania	2332	2309	2466	2387	2308	2613	2302	2107	2277	2431	2417	1%
Total OECD	8063	8211	8427	8467	8742	8002	7930	7347	8536	8494	8540	-1%
Total Oil												
Americas	6344	6223	5666	6180	6100	4770	4536	4209	4936	5475	6025	-9%
Europe	13367	13942	13777	13614	14164	13494	13994	13517	13966	12923	13778	-6%
Asia Oceania	8991	9154	9124	8918	8781	9434	9162	8600	9026	8514	8968	-5%
Total OECD	28702	29320	28567	28712	29044	27698	27692	26326	27929	26911	28771	-6%

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

<sup>2</sup> Excludes intra-regional trade.

<sup>3</sup> Includes additives.

**Table 7a**  
**REGIONAL OECD IMPORTS FROM NON-OECD COUNTRIES<sup>1,2</sup>**  
(thousand barrels per day)

	2016	2017	2018	2Q18	3Q18	4Q18	1Q19	Mar 19	Apr 19	May 19	Year Earlier	
											May 18	% change
<b>Crude Oil</b>												
Americas	4428	4235	3606	3925	3749	3051	2790	2516	2486	2830	3732	-24%
Europe	9051	9436	8951	8786	9177	8911	9069	8938	9251	8423	9016	-7%
Asia Oceania	6429	6550	6210	6181	6004	6175	6318	6033	6148	5489	6090	-10%
Total OECD	19909	20221	18767	18892	18930	18137	18178	17487	17885	16741	18837	-11%
<b>LPG</b>												
Americas	16	16	15	11	14	16	27	22	24	17	9	100%
Europe	329	337	352	344	319	368	332	336	337	278	336	-17%
Asia Oceania	342	205	161	176	111	143	85	76	77	115	150	-24%
Total OECD	687	557	529	531	444	527	444	435	438	410	496	-17%
<b>Naphtha</b>												
Americas	5	16	4	1	2	8	1	1	1	0	0	na
Europe	329	350	348	372	324	300	359	246	390	264	461	-43%
Asia Oceania	856	931	921	880	906	1002	801	763	858	851	925	-8%
Total OECD	1189	1297	1274	1253	1232	1310	1161	1010	1249	1115	1386	-20%
<b>Gasoline<sup>3</sup></b>												
Americas	246	213	271	353	344	210	244	236	394	369	337	10%
Europe	89	149	90	56	74	88	102	94	154	169	27	529%
Asia Oceania	86	101	84	79	77	84	89	73	61	53	100	-47%
Total OECD	422	463	445	487	494	383	435	403	608	591	463	28%
<b>Jet &amp; Kerosene</b>												
Americas	72	67	56	60	49	37	45	50	23	17	52	-68%
Europe	409	436	467	492	536	437	427	401	539	507	492	3%
Asia Oceania	73	80	88	62	55	120	81	81	72	74	80	-7%
Total OECD	554	583	611	614	640	594	553	531	634	598	624	-4%
<b>Gasoil/Diesel</b>												
Americas	37	50	100	28	105	114	167	39	38	38	44	-13%
Europe	988	1086	1166	1183	1196	1065	1235	1115	1126	1015	1231	-18%
Asia Oceania	194	194	254	256	232	313	231	273	287	268	285	-6%
Total OECD	1220	1331	1520	1467	1533	1492	1633	1427	1451	1321	1560	-15%
<b>Heavy Fuel Oil</b>												
Americas	130	123	147	134	186	117	123	103	106	109	153	-29%
Europe	436	218	216	211	234	189	168	173	188	206	165	25%
Asia Oceania	152	146	162	156	151	148	101	62	52	130	167	-22%
Total OECD	718	487	524	502	570	453	392	338	346	444	485	-8%
<b>Other Products</b>												
Americas	526	542	522	511	541	481	345	397	590	534	547	-2%
Europe	516	731	744	696	877	689	737	722	681	687	547	26%
Asia Oceania	268	181	200	189	192	206	192	204	192	239	181	32%
Total OECD	1310	1454	1466	1396	1610	1376	1274	1322	1463	1460	1275	15%
<b>Total Products</b>												
Americas	1031	1026	1115	1098	1241	982	952	846	1176	1083	1140	-5%
Europe	3097	3307	3383	3353	3559	3136	3359	3087	3415	3126	3260	-4%
Asia Oceania	1970	1838	1870	1799	1724	2016	1579	1532	1599	1729	1888	-8%
Total OECD	6099	6171	6368	6249	6523	6135	5890	5465	6189	5939	6288	-6%
<b>Total Oil</b>												
Americas	5460	5261	4721	5023	4990	4033	3742	3362	3662	3913	4871	-20%
Europe	12149	12744	12333	12138	12736	12047	12428	12026	12666	11549	12275	-6%
Asia Oceania	8400	8388	8080	7980	7728	8192	7897	7565	7746	7218	7978	-10%
Total OECD	26008	26393	25134	25141	25453	24272	24068	22952	24075	22680	25125	-10%

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

<sup>2</sup> Excludes intra-regional trade

<sup>3</sup> Includes additives

**Table 7b**  
**INTER-REGIONAL OECD TRANSFERS<sup>1,2</sup>**  
(thousand barrels per day)

	2016	2017	2018	2Q18	3Q18	4Q18	1Q19	Mar 19	Apr 19	May 19	Year Earlier		
											May 18	% change	
Crude Oil													
Americas	114	126	153	160	157	172	101	147	204	307	94	225%	
Europe	386	466	773	843	747	741	941	885	702	775	838	-8%	
Asia Oceania	230	296	448	350	469	645	542	460	601	593	461	29%	
Total OECD	730	888	1374	1353	1373	1559	1584	1492	1508	1675	1393	20%	
LPG													
Americas	4	4	7	2	4	8	8	0	0	0	2	-100%	
Europe	112	95	115	120	104	129	122	84	88	87	119	-27%	
Asia Oceania	225	346	395	393	393	413	502	340	427	449	296	51%	
Total OECD	342	445	517	515	500	551	633	424	515	535	418	28%	
Naphtha													
Americas	5	3	4	4	5	4	4	5	4	3	5	-42%	
Europe	19	19	30	18	22	55	23	9	8	10	18	-43%	
Asia Oceania	52	47	97	75	98	83	117	116	120	92	123	-25%	
Total OECD	77	69	131	97	125	142	144	129	132	105	146	-28%	
Gasoline <sup>3</sup>													
Americas	489	514	502	707	624	294	351	415	642	874	751	16%	
Europe	2	5	4	4	3	4	3	3	5	8	3	211%	
Asia Oceania	0	0	23	43	14	10	19	55	63	64	56	14%	
Total OECD	491	519	529	754	642	308	373	473	709	946	809	17%	
Jet & Kerosene													
Americas	97	104	84	76	130	78	93	100	174	155	99	57%	
Europe	93	68	48	44	72	41	31	70	29	37	61	-39%	
Asia Oceania	0	0	0	0	0	0	0	0	0	0	0	na	
Total OECD	190	172	132	120	202	119	124	170	204	193	160	20%	
Gasoi/Diesel													
Americas	30	28	25	35	24	12	37	21	31	48	35	34%	
Europe	315	250	168	164	215	159	177	180	194	169	153	10%	
Asia Oceania	2	1	0	0	0	0	0	0	0	0	0	na	
Total OECD	347	279	192	199	239	171	213	202	225	216	188	15%	
Heavy Fuel Oil													
Americas	19	8	15	27	9	14	26	17	10	6	48	-87%	
Europe	25	15	13	5	16	24	10	14	20	27	9	215%	
Asia Oceania	1	0	0	0	0	2	2	0	0	0	0	na	
Total OECD	45	23	28	32	25	40	39	31	31	33	56	-41%	
Other Products													
Americas	126	175	157	147	158	156	174	142	208	169	120	41%	
Europe	266	280	291	278	249	292	259	246	253	260	303	-14%	
Asia Oceania	81	77	81	77	79	88	82	65	69	98	53	83%	
Total OECD	473	532	529	501	486	537	516	453	530	527	476	11%	
Total Products													
Americas	770	836	793	997	953	565	693	700	1070	1255	1059	18%	
Europe	833	733	670	632	681	705	625	606	598	598	665	-10%	
Asia Oceania	361	471	597	588	584	597	722	575	679	702	529	33%	
Total OECD	1964	2040	2059	2218	2218	1867	2040	1882	2346	2556	2253	13%	
Total Oil													
Americas	884	962	945	1157	1110	737	794	847	1274	1562	1154	35%	
Europe	1219	1199	1443	1475	1428	1447	1566	1491	1300	1373	1503	-9%	
Asia Oceania	591	766	1044	937	1053	1242	1264	1035	1280	1296	990	31%	
Total OECD	2694	2927	3433	3570	3591	3426	3624	3374	3854	4231	3646	16%	

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

<sup>2</sup> Excludes intra-regional trade

<sup>3</sup> Includes additives

**Table 8**  
**REGIONAL OECD CRUDE IMPORTS BY SOURCE<sup>1</sup>**  
(thousand barrels per day)

	2016	2017	2018	2Q18	3Q18	4Q18	1Q19	Mar 19	Apr 19	May 19	Year Earlier May 18	change
<b>OECD Americas</b>												
Venezuela	741	618	506	534	538	506	285	47	114	11	490	-479
Other Central & South America	1023	928	795	841	791	655	850	800	807	998	891	107
North Sea	109	124	150	157	151	172	101	147	204	285	87	198
Other OECD Europe	1	-	1	2	-	-	-	-	-	22	7	15
Non-OECD Europe	7	-	-	-	-	-	-	-	-	-	-	-
Former Soviet Union	75	121	145	179	217	94	151	189	293	249	265	-16
Saudi Arabia	1185	1043	983	1008	1084	1037	745	741	603	585	966	-382
Kuwait	209	144	78	82	60	38	84	129	60	57	48	9
Iran	-	-	-	-	-	-	-	-	-	-	-	-
Iraq	418	605	519	613	459	331	374	275	265	366	588	-222
Oman	30	14	-	-	-	-	-	-	-	-	-	-
United Arab Emirates	11	20	5	11	10	-	-	-	-	-	-	-
Other Middle East	-	2	-	-	-	-	-	-	-	-	-	-
West Africa <sup>2</sup>	451	497	317	433	232	222	165	208	184	380	331	49
Other Africa	223	214	196	172	260	134	121	94	160	166	109	57
Asia	46	26	61	52	103	34	16	33	-	19	45	-26
Other	13	4	3	-	-	-	-	-	-	-	-	-
Total	4542	4361	3759	4085	3905	3223	2891	2663	2691	3137	3826	-689
of which Non-OECD	4428	4235	3606	3925	3749	3051	2790	2516	2486	2830	3732	-902
<b>OECD Europe</b>												
Canada	32	45	88	91	104	49	65	46	40	9	73	-64
Mexico + USA	354	419	685	753	642	692	876	839	662	766	765	1
Venezuela	74	67	57	39	55	92	145	101	86	68	29	39
Other Central & South America	170	160	130	110	141	137	108	55	52	102	164	-62
Non-OECD Europe	11	9	12	14	9	11	11	10	9	14	16	-2
Former Soviet Union	4427	4437	4090	4161	3948	4019	4240	4286	4537	3533	4212	-679
Saudi Arabia	861	750	830	768	932	924	817	757	810	926	850	77
Kuwait	194	201	123	81	106	175	41	66	130	82	73	10
Iran	436	801	521	715	585	132	115	159	107	93	706	-613
Iraq	1000	995	919	737	1070	1054	1218	1264	1142	1341	688	653
Oman	-	-	-	-	-	-	-	-	-	-	-	-
United Arab Emirates	12	6	2	-	-	10	-	-	-	-	-	-
Other Middle East	12	1	-	-	-	-	2	7	12	-	-	-
West Africa <sup>2</sup>	1095	960	1113	1051	1228	1117	1179	1136	1115	1034	1071	-37
Other Africa	738	1045	1153	1129	1122	1205	1115	1048	1250	1162	1180	-18
Asia	-	2	-	-	-	-	-	-	-	-	-	-
Other	21	5	1	-17	-15	36	79	52	-	69	28	41
Total	9438	9903	9726	9630	9929	9653	10011	9825	9954	9199	9854	-655
of which Non-OECD	9051	9436	8951	8786	9177	8911	9069	8938	9251	8423	9016	-593
<b>OECD Asia Oceania</b>												
Canada	-	-	3	3	-	7	-	-	-	-	10	-
Mexico + USA	179	199	344	247	384	522	542	460	601	561	252	309
Venezuela	3	8	-	-	-	-	-	-	-	-	-	-
Other Central & South America	27	35	35	25	35	42	51	24	40	49	19	30
North Sea	51	97	100	99	85	117	-	-	-	32	199	-167
Other OECD Europe	-	-	-	-	-	-	-	-	-	-	-	-
Non-OECD Europe	-	-	-	-	-	-	-	-	-	-	-	-
Former Soviet Union	341	413	437	424	445	465	458	519	335	415	450	-35
Saudi Arabia	2078	2163	2042	1994	1879	2148	2108	1911	1965	1799	1887	-88
Kuwait	661	671	672	654	695	671	680	604	713	709	602	108
Iran	469	543	274	362	244	11	368	612	557	-	390	-
Iraq	456	402	435	477	416	422	446	428	533	308	535	-226
Oman	86	41	56	72	68	43	54	60	46	82	92	-10
United Arab Emirates	1154	1148	1094	987	1148	1119	1116	992	1117	1354	928	426
Other Middle East	475	391	450	399	464	454	430	425	277	415	483	-68
West Africa <sup>2</sup>	74	66	95	148	76	99	73	53	75	36	106	-70
Other Africa	62	92	105	73	99	122	85	79	54	95	73	22
Non-OECD Asia	340	324	320	323	296	321	263	213	200	192	351	-159
Other	205	253	196	243	140	257	185	114	234	35	176	-141
Total	6659	6846	6658	6531	6473	6821	6860	6493	6749	6082	6551	-469
of which Non-OECD	6429	6550	6210	6181	6004	6175	6318	6033	6148	5489	6090	-601
<b>Total OECD Trade</b>												
	20640	21110	20142	20246	20307	19697	19762	18980	19393	18418	20231	-1813
of which Non-OECD	19909	20221	18767	18892	18930	18137	18178	17487	17885	16741	18837	-2096

<sup>1</sup> Based on Monthly Oil Questionnaire data submitted by OECD countries in tonnes, and converted to barrels at 7.37 barrels per tonne. Data will differ from Table 6

which is based on submissions in barrels.

<sup>2</sup> West Africa includes Angola, Nigeria, Gabon, Equatorial Guinea, Congo and Democratic Republic of Congo.

**Table 9**  
**REGIONAL OECD GASOLINE IMPORTS BY SOURCE<sup>1</sup>**  
(thousand barrels per day)

	2016	2017	2018	2Q18	3Q18	4Q18	1Q19	Mar 19	Apr 19	May 19	Year Earlier	
											May 18	change
<b>OECD Americas</b>												
Venezuela	15	18	23	20	26	23	15	1	-	-	16	-
Other Central & South America	69	42	64	54	83	58	81	90	88	70	38	32
ARA (Belgium Germany Netherlands)	155	178	167	235	200	91	95	104	218	379	238	141
Other Europe	328	326	323	435	420	203	232	273	364	454	469	-14
FSU	90	84	80	108	86	52	66	76	79	95	101	-6
Saudi Arabia	-	1	11	-	14	28	19	-	11	10	-	-
Algeria	1	-	1	4	1	-	-	-	-	-	13	-
Other Middle East & Africa	32	24	19	23	22	12	10	1	8	9	29	-20
Singapore	6	10	8	14	16	4	-	-	-	19	16	3
OECD Asia Oceania	6	10	13	38	7	-	26	37	60	41	44	-3
Non-OECD Asia (excl. Singapore)	64	63	84	153	114	48	71	70	209	187	153	34
Other	3	3	0	-	-	0	-	-	-	-	-	-
Total <sup>2</sup>	769	759	794	1084	988	518	614	653	1036	1263	1117	146
of which Non-OECD	246	213	271	353	344	210	244	236	394	369	337	32
<b>OECD Europe</b>												
OECD Americas	1	4	3	2	3	4	2	2	4	7	3	4
Venezuela	0	-	-	-	-	-	-	-	-	-	-	-
Other Central & South America	1	3	1	2	-	1	6	14	4	1	2	-1
Non-OECD Europe	15	15	12	11	17	9	11	13	16	27	4	24
FSU	84	89	77	87	71	31	67	57	73	74	109	-35
Saudi Arabia	0	0	1	3	0	0	1	-	-	-	-	-
Algeria	1	1	2	0	-	-	0	-	-	0	1	-1
Other Middle East & Africa	2	5	3	3	2	3	4	2	3	1	5	-3
Singapore	1	2	2	2	2	2	2	2	9	2	4	-2
OECD Asia Oceania	1	1	1	1	0	-	1	0	1	2	-	-
Non-OECD Asia (excl. Singapore)	1	3	2	0	0	5	0	-	-	-	1	-
Other	-3	41	1	-35	-9	50	19	18	56	73	-68	141
Total <sup>2</sup>	104	163	106	78	87	105	113	108	165	188	61	127
of which Non-OECD	89	149	90	56	74	88	102	94	154	169	27	142
<b>OECD Asia Oceania</b>												
OECD Americas	0	-	4	6	5	-	5	14	-	-	-	-
Venezuela	-	-	-	-	-	-	-	-	-	-	-	-
Other Central & South America	-	0	-	-	-	-	-	-	-	-	-	-
ARA (Belgium Germany Netherlands)	-	-	13	18	9	10	8	24	49	49	16	32
Other Europe	-	-	7	20	-	-	6	18	13	15	40	-25
FSU	-	-	1	6	-	-	-	-	-	2	-	-
Saudi Arabia	0	0	0	-	-	2	3	-	-	-	-	-
Algeria	-	-	-	-	-	-	-	-	-	-	-	-
Other Middle East & Africa	-	5	1	-	5	-	-	-	-	-	-	-
Singapore	44	50	47	48	36	47	41	32	26	31	65	-35
Non-OECD Asia (excl. Singapore)	27	30	19	14	20	21	29	26	19	6	20	-13
Other	16	15	15	15	15	15	17	15	15	15	15	0
Total <sup>2</sup>	87	101	108	126	91	94	108	128	123	117	156	-39
of which Non-OECD	86	101	84	79	77	84	89	73	61	53	100	-47
<b>Total OECD Trade<sup>2</sup></b>												
	960	1023	1008	1288	1166	717	835	889	1324	1568	1334	234
of which Non-OECD	422	463	445	487	494	383	435	403	608	591	463	128

<sup>1</sup> Based on Monthly Oil Questionnaire data submitted by OECD countries in tonnes.

<sup>2</sup> Total figure excludes intra-regional trade.

**Table 10**  
**REGIONAL OECD GASOIL/DIESEL IMPORTS BY SOURCE<sup>1</sup>**  
(thousand barrels per day)

	2016	2017	2018	2Q18	3Q18	4Q18	1Q19	Mar 19	Apr 19	May 19	Year Earlier	
											May 18	change
<b>OECD Americas</b>												
Venezuela	0	2	4	-	8	7	3	-	-	-	-	-
Other Central and South America	10	13	30	15	25	46	29	9	38	28	8	20
ARA (Belgium Germany Netherlands)	3	7	6	5	4	-	-	-	-	4	12	-8
Other Europe	9	3	3	9	-	-	2	2	-	-	12	-
FSU	15	6	16	6	31	7	7	-	-	-	17	-
Saudi Arabia	1	2	17	0	20	24	13	-	-	-	-	-
Algeria	-	-	-	-	-	-	-	-	-	-	-	-
Other Middle East and Africa	3	4	8	-	10	4	8	2	-	-	-	-
Singapore	1	0	1	1	-	3	0	0	-	-	2	-
OECD Asia Oceania	18	18	15	20	21	12	35	19	31	43	12	31
Non-OECD Asia (excl. Singapore)	9	22	23	7	11	22	78	18	-	10	17	-8
Other	0	0	-	-	-	-	28	10	-	-	-	-
Total <sup>2</sup>	68	77	124	63	130	125	204	60	69	85	79	6
of which Non-OECD	37	50	100	28	105	114	167	39	38	38	44	-6
<b>OECD Europe</b>												
OECD Americas	276	222	144	141	199	136	138	147	150	132	135	-4
Venezuela	-	-	-	-	-	-	-	-	-	-	-	-
Other Central and South America	3	3	4	6	1	1	-	-	1	-	2	-
Non-OECD Europe	48	48	39	30	44	41	41	28	38	39	21	18
FSU	663	732	699	717	618	650	759	827	707	631	690	-60
Saudi Arabia	130	160	227	264	189	223	246	126	189	194	322	-127
Algeria	1	-	-	-	-	-	-	-	-	-	-	-
Other Middle East and Africa	70	72	87	76	86	130	77	78	77	118	101	17
Singapore	20	15	18	17	19	16	8	13	34	16	18	-2
OECD Asia Oceania	40	28	24	24	16	23	39	34	44	37	18	19
Non-OECD Asia (excl. Singapore)	172	125	143	136	171	125	159	207	173	97	98	-1
Other	-18	21	17	-1	123	-58	29	1	1	7	54	-47
Total <sup>2</sup>	1404	1427	1401	1410	1466	1288	1496	1460	1413	1270	1459	-189
of which Non-OECD	988	1086	1166	1183	1196	1065	1235	1115	1126	1015	1231	-216
<b>OECD Asia Oceania</b>												
OECD Americas	2	1	-	-	-	-	-	-	-	-	-	-
Venezuela	-	-	-	-	-	-	-	-	-	-	-	-
Other Central and South America	-	0	-	-	-	-	-	-	-	-	-	-
ARA (Belgium Germany Netherlands)	-	-	-	-	-	-	-	-	-	-	-	-
Other Europe	-	-	-	-	-	-	-	-	-	-	-	-
FSU	5	5	4	4	4	5	5	5	4	4	4	0
Saudi Arabia	1	-	3	-	-	9	-	-	-	-	-	-
Algeria	-	-	-	-	-	-	-	-	-	-	-	-
Other Middle East and Africa	2	1	8	-	1	32	10	28	26	-	-	-
Singapore	86	86	141	160	101	174	91	96	155	106	179	-73
Non-OECD Asia (excl. Singapore)	95	96	91	86	120	88	119	139	96	153	97	55
Other	6	7	6	6	6	6	6	6	6	6	6	0
Total <sup>2</sup>	196	195	254	256	232	313	231	273	287	268	285	-17
of which Non-OECD	194	194	254	256	232	313	231	273	287	268	285	-17
<b>Total OECD Trade<sup>2</sup></b>												
	1669	1700	1779	1729	1828	1726	1931	1793	1770	1623	1823	-200
of which Non-OECD	1220	1331	1520	1467	1533	1492	1633	1427	1451	1321	1560	-239

<sup>1</sup> Based on Monthly Oil Questionnaire data submitted by OECD countries in tonnes.

<sup>2</sup> Total figure excludes intra-regional trade.

**Table 11**  
**REGIONAL OECD JET AND KEROSENE IMPORTS BY SOURCE<sup>1</sup>**  
(thousand barrels per day)

	2016	2017	2018	2Q18	3Q18	4Q18	1Q19	Mar 19	Apr 19	May 19	Year Earlier	
											May 18	change
<b>OECD Americas</b>												
Venezuela	11	16	6	11	2	1	1	-	-	-	10	-
Other Central and South America	0	1	2	0	1	7	6	10	3	-	1	-
ARA (Belgium Germany Netherlands)	0	-	0	-	1	-	-	-	-	-	-	-
Other Europe	-	0	0	-	-	-	-	-	-	-	-	-
FSU	0	1	0	0	-	-	-	-	-	-	0	-
Saudi Arabia	1	2	1	0	-	2	9	20	2	-	-	-
Algeria	-	0	-	-	-	-	-	-	-	-	-	-
Other Middle East and Africa	1	3	2	1	1	0	4	-	-	17	2	15
Singapore	0	2	6	11	5	8	3	-	4	-	3	-
OECD Asia Oceania	97	104	84	76	129	78	93	100	174	155	99	56
Non-OECD Asia (excl. Singapore)	55	30	27	22	28	9	12	5	15	-	25	-
Other	3	13	11	15	12	11	11	15	-	-	12	-
Total <sup>2</sup>	169	171	140	136	178	115	138	150	198	172	151	21
of which Non-OECD	72	67	56	60	49	37	45	50	23	17	52	-35
<b>OECD Europe</b>												
OECD Americas	38	20	32	44	30	29	13	18	5	3	61	-58
Venezuela	6	5	5	6	5	7	16	-	-	-	2	-
Other Central and South America	1	2	2	1	2	1	3	1	-	-	-	-
Non-OECD Europe	4	3	6	-	17	6	-	-	-	9	-	-
FSU	44	33	42	38	57	37	43	37	45	59	46	13
Saudi Arabia	112	94	103	125	110	113	84	120	142	119	121	-2
Algeria	14	12	9	9	8	8	12	8	-	-	8	-
Other Middle East and Africa	178	207	210	216	243	168	201	172	203	215	208	7
Singapore	14	28	17	14	21	16	11	3	23	34	23	11
OECD Asia Oceania	55	48	16	-	42	12	18	52	24	34	-	-
Non-OECD Asia (excl. Singapore)	51	53	76	72	83	85	72	67	127	74	63	11
Other	-7	1	0	14	-5	-1	-11	0	0	0	28	-28
Total <sup>2</sup>	509	508	517	541	613	480	462	479	571	548	560	-12
of which Non-OECD	409	436	467	492	536	437	427	401	539	507	492	15
<b>OECD Asia Oceania</b>												
OECD Americas	-	-	-	-	-	-	-	-	-	-	-	-
Venezuela	-	-	-	-	-	-	-	-	-	-	-	-
Other Central and South America	-	-	-	-	-	-	-	-	-	-	-	-
ARA (Belgium Germany Netherlands)	-	-	-	-	-	-	-	-	-	-	-	-
Other Europe	-	-	-	-	-	-	-	-	-	-	-	-
FSU	-	-	-	-	-	-	-	-	-	-	-	-
Saudi Arabia	-	-	1	-	-	-	-	-	-	-	-	-
Algeria	-	-	-	-	-	-	-	-	-	-	-	-
Other Middle East and Africa	-	1	1	-	-	5	-	-	-	-	-	-
Singapore	24	23	27	23	36	19	21	25	16	23	38	-15
Non-OECD Asia (excl. Singapore)	36	34	26	22	6	42	27	31	41	23	24	-1
Other	13	22	33	17	13	54	33	24	15	28	18	10
Total <sup>2</sup>	73	80	88	62	55	120	81	81	72	74	80	-6
of which Non-OECD	73	80	88	62	55	120	81	81	72	74	80	-6
<b>Total OECD Trade<sup>2</sup></b>												
	751	758	745	738	846	715	681	710	840	794	790	3
of which Non-OECD	554	583	611	614	640	594	553	531	634	598	624	-26

<sup>1</sup> Based on Monthly Oil Questionnaire data submitted by OECD countries in tonnes.

<sup>2</sup> Total figure excludes intra-regional trade.

**Table 12**  
**REGIONAL OECD RESIDUAL FUEL OIL IMPORTS BY SOURCE<sup>1</sup>**  
(thousand barrels per day)

	2016	2017	2018	2Q18	3Q18	4Q18	1Q19	Mar 19	Apr 19	May 19	Year Earlier	
											May 18	change
<b>OECD Americas</b>												
Venezuela	17	16	42	46	65	27	27	21	-	-	35	-
Other Central and South America	49	71	72	58	80	63	56	43	46	70	88	-18
ARA (Belgium Germany Netherlands)	12	5	7	11	3	12	12	-	1	-	24	-
Other Europe	7	3	7	15	7	2	14	17	10	6	24	-18
FSU	49	24	23	28	31	15	16	12	50	36	28	8
Saudi Arabia	0	-	-	-	-	-	8	-	-	-	-	-
Algeria	4	1	-	-	-	-	10	25	8	3	-	-
Other Middle East and Africa	10	9	7	2	12	11	3	1	1	-	2	-
Singapore	1	3	-	-	-	-	4	-	-	-	-	-
OECD Asia Oceania	-	-	-	-	-	-	-	-	-	-	-	-
Non-OECD Asia (excl. Singapore)	-	1	0	-	-	1	-	-	0	-	-	-
Other	0	0	2	0	0	-	-	-	-	-	-	-
Total <sup>2</sup>	149	131	161	161	197	130	149	120	116	115	200	-86
of which Non-OECD	130	123	147	134	186	117	123	103	106	109	153	-44
<b>OECD Europe</b>												
OECD Americas	15	6	5	1	8	12	1	-	3	-	2	-
Venezuela	-	-	-	-	-	-	-	-	-	-	-	-
Other Central and South America	5	2	3	5	-	-	6	2	-	8	4	3
Non-OECD Europe	15	17	16	18	17	12	18	22	22	20	14	6
FSU	448	195	193	187	194	204	146	133	120	160	200	-40
Saudi Arabia	-	0	1	-	-	-	-	-	-	-	-	-
Algeria	3	1	1	2	2	-	1	-	-	-	7	-
Other Middle East and Africa	16	23	16	16	17	16	9	3	27	10	29	-19
Singapore	0	-	-	-	-	-	-	-	-	-	-	-
OECD Asia Oceania	10	9	8	5	8	12	10	14	18	27	6	20
Non-OECD Asia (excl. Singapore)	0	1	0	-	-	0	7	11	1	-	-	-
Other	-18	-8	-8	-2	6	-44	-8	2	18	7	-67	74
Total <sup>2</sup>	496	246	235	231	253	213	189	187	209	233	196	37
of which Non-OECD	436	218	216	211	234	189	168	173	188	206	165	41
<b>OECD Asia Oceania</b>												
OECD Americas	-	0	0	-	-	2	2	-	-	-	-	-
Venezuela	-	-	-	-	-	-	-	-	-	-	-	-
Other Central and South America	-	-	-	-	-	-	-	-	-	-	-	-
ARA (Belgium Germany Netherlands)	-	-	-	-	-	-	-	-	-	-	-	-
Other Europe	1	-	-	-	-	-	-	-	-	-	-	-
FSU	4	9	16	11	24	19	7	5	-	-	6	-
Saudi Arabia	-	-	-	-	-	-	-	-	-	-	-	-
Algeria	-	1	-	-	-	-	-	-	-	-	-	-
Other Middle East and Africa	5	18	23	30	23	16	9	-	-	49	47	2
Singapore	73	58	37	29	29	24	36	17	19	15	31	-16
Non-OECD Asia (excl. Singapore)	69	59	85	86	75	88	48	40	32	58	83	-24
Other	1	0	0	-	0	1	0	-	1	8	-	-
Total <sup>2</sup>	153	146	162	156	151	149	103	62	52	130	167	-37
of which Non-OECD	152	146	162	156	151	148	101	62	52	130	167	-37
<b>Total OECD Trade<sup>2</sup></b>												
	798	523	558	548	600	493	441	369	377	477	563	-86
of which Non-OECD	718	487	524	502	570	453	392	338	346	444	485	-41

<sup>1</sup> Based on Monthly Oil Questionnaire data submitted by OECD countries in tonnes.

<sup>2</sup> Total figure excludes intra-regional trade.

Table 13

AVERAGE IEA CIF CRUDE COST AND SPOT CRUDE AND PRODUCT PRICES

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**Table 14**  
**MONTHLY AVERAGE END-USER PRICES FOR PETROLEUM PRODUCTS**  
**July 2019**

	NATIONAL CURRENCY *						US DOLLARS					
	Total	% change from		Ex-Tax	% change from		Total	% change from		Ex-Tax	% change from	
	Price	Jun-19	Jul-18	Price	Jun-19	Jul-18	Price	Jun-19	Jul-18	Price	Jun-19	Jul-18
<b>GASOLINE <sup>1</sup> (per litre)</b>												
France	1.514	- 1.5	- 1.2	0.571	-3.2	-2.6	1.688	-2.8	-5.7	0.637	-4.5	-7.0
Germany	1.460	- 2.7	0.1	0.572	-5.6	0.2	1.628	-4.0	-4.5	0.638	-6.8	-4.4
Italy	1.593	- 0.6	- 2.3	0.578	-1.4	-4.9	1.776	-1.9	-6.7	0.645	-2.6	-9.3
Spain	1.320	- 0.1	- 0.1	0.618	-0.2	-2.1	1.472	-1.3	-4.6	0.689	-1.4	-6.5
United Kingdom	1.272	- 0.8	- 0.1	0.481	-1.4	-	1.548	-4.8	-7.6	0.585	-5.4	-7.6
Japan	145.7	- 1.5	- 4.2	78.3	-2.5	-7.0	1.342	-1.9	-1.6	0.721	-2.9	-4.5
Canada	1.269	4.0	- 7.2	0.872	5.7	-9.7	0.965	5.1	-7.4	0.663	6.8	-9.8
United States	0.724	0.8	- 3.9	0.600	1.0	-4.8	0.724	0.8	-3.9	0.600	1.0	-4.8
<b>AUTOMOTIVE DIESEL FOR NON COMMERCIAL USE (per litre)</b>												
France	1.420	- 0.9	- 1.9	0.574	-1.9	-3.7	1.583	-2.2	-6.4	0.640	-3.1	-8.1
Germany	1.248	- 1.0	- 2.0	0.579	-1.7	-3.5	1.392	-2.2	-6.4	0.646	-3.0	-7.9
Italy	1.481	- 0.9	- 1.9	0.597	-1.8	-3.7	1.651	-2.2	-6.3	0.666	-3.1	-8.1
Spain	1.209	- 0.5	- 1.3	0.620	-0.8	-3.9	1.348	-1.8	-5.8	0.691	-2.1	-8.3
United Kingdom	1.320	- 1.7	0.3	0.520	-3.7	0.6	1.607	-5.7	-7.3	0.633	-7.6	-7.0
Japan	126.7	- 1.6	- 3.0	84.8	-2.1	-4.1	1.167	-2.0	-0.4	0.781	-2.5	-1.5
Canada	1.194	- 2.4	- 8.5	0.885	-3.1	-10.7	0.908	-1.3	-8.6	0.673	-2.0	-10.8
United States	0.804	- 1.5	- 5.9	0.659	-1.8	-7.4	0.804	-1.5	-5.9	0.659	-1.8	-7.4
<b>DOMESTIC HEATING OIL (per litre)</b>												
France	0.913	0.0	0.5	0.604	0.0	0.7	1.018	-1.3	-4.1	0.674	-1.3	-3.9
Germany	0.703	- 0.0	- 2.6	0.530	-0.1	-2.9	0.784	-1.3	-7.0	0.591	-1.3	-7.3
Italy	1.299	0.9	1.0	0.661	1.4	1.7	1.448	-0.4	-3.6	0.737	0.1	-3.0
Spain	0.771	1.6	- 1.2	0.541	1.9	-2.5	0.860	0.3	-5.7	0.603	0.6	-6.9
United Kingdom	0.592	1.6	- 2.1	0.452	2.0	-2.6	0.720	-2.5	-9.5	0.550	-2.1	-10.0
Japan <sup>2</sup>	91.2	- 1.0	- 0.4	81.6	-1.1	-0.4	0.840	-1.5	2.3	0.752	-1.5	2.3
Canada	1.129	- 1.5	- 2.2	1.014	-1.6	-2.4	0.858	-0.5	-2.4	0.771	-0.6	-2.5
United States	-	-	-	-	-	-	-	-	-	-	-	-
<b>LOW SULPHUR FUEL OIL FOR INDUSTRY <sup>3</sup> (per kg)</b>												
France	0.584	2.4	- 0.9	0.444	3.1	-1.2	0.651	1.1	-5.5	0.495	1.8	-5.8
Germany	-	-	-	-	-	-	-	-	-	-	-	-
Italy	0.496	2.9	5.8	0.464	3.1	6.2	0.553	1.5	0.9	0.518	1.7	1.3
Spain	0.444	- 0.5	- 3.3	0.427	-0.5	-3.6	0.495	-1.8	-7.7	0.476	-1.8	-8.0
United Kingdom	-	-	-	-	-	-	-	-	-	-	-	-
Japan	-	-	-	-	-	-	-	-	-	-	-	-
Canada	-	-	-	-	-	-	-	-	-	-	-	-
United States	-	-	-	-	-	-	-	-	-	-	-	-

<sup>1</sup> Unleaded premium (95 RON) for France, Germany, Italy, Spain, UK; regular unleaded for Canada, Japan and the United States.

<sup>2</sup> Kerosene for Japan.

<sup>3</sup> VAT excluded from prices for low sulphur fuel oil when refunded to industry.

\* Prices for France, Germany, Italy and Spain are in Euros; UK in British Pounds, Japan in Yen, Canada in Canadian Dollars.

**Table 15**  
**IEA/KBC Global Indicator Refining Margins<sup>1</sup>**  
 (\$/bbl)

	Monthly Average					Change	Average for week ending:				
	Apr 19	May 19	Jun 19	Jul 19		Jul 19-Jun 19	05 Jul	12 Jul	19 Jul	26 Jul	02 Aug
NW Europe											
Brent (Cracking)	4.76	5.38	3.78	6.79	↑	3.00	6.05	6.01	7.09	7.30	7.96
Urals (Cracking)	4.08	4.50	4.67	6.55	↑	1.89	7.01	6.60	6.90	6.01	5.87
Brent (Hydroskimming)	1.09	1.41	1.52	4.18	↑	2.66	3.58	3.76	4.11	4.39	5.30
Urals (Hydroskimming)	-0.06	-0.70	0.81	2.46	↑	1.65	3.07	2.96	2.77	1.46	1.23
Mediterranean											
Es Sider (Cracking)	5.03	4.54	4.58	7.93	↑	3.35	7.04	7.19	8.07	8.51	9.18
Urals (Cracking)	3.99	3.18	4.97	6.62	↑	1.64	6.40	6.36	7.15	6.59	6.22
Es Sider (Hydroskimming)	1.76	1.28	2.44	5.62	↑	3.17	4.91	5.31	5.45	5.76	6.80
Urals (Hydroskimming)	-0.35	-1.94	0.69	2.30	↑	1.60	2.34	2.68	2.87	1.54	1.30
US Gulf Coast											
50/50 HLS/LLS (Cracking)	10.29	9.42	10.44	12.95	↑	2.51	14.12	13.97	11.54	12.12	13.80
Mars (Cracking)	5.24	4.11	4.65	6.01	↑	1.36	9.09	8.28	4.30	3.64	6.39
ASCI (Cracking)	5.09	3.94	4.52	5.90	↑	1.38	9.08	8.01	4.26	3.56	6.23
50/50 HLS/LLS (Coking)	11.49	10.64	11.12	13.73	↑	2.61	14.75	14.74	12.47	13.00	14.46
50/50 Maya/Mars (Coking)	7.74	7.21	6.27	8.03	↑	1.76	8.54	8.88	7.55	7.30	8.92
ASCI (Coking)	8.26	8.03	8.36	9.59	↑	1.23	11.85	11.21	8.45	7.68	10.11
US Midcon											
WTI (Cracking)	20.47	23.23	20.21	20.07	↓	-0.14	19.69	21.65	19.77	20.30	17.72
30/70 WCS/Bakken (Cracking)	19.72	23.27	18.87	18.76	↓	-0.11	19.47	19.72	18.26	19.21	15.87
Bakken (Cracking)	22.32	25.34	20.50	20.40	↓	-0.10	20.13	21.55	20.35	20.75	17.10
WTI (Coking)	22.03	24.97	21.12	21.01	↓	-0.11	20.43	22.63	20.86	21.39	18.41
30/70 WCS/Bakken (Coking)	21.86	26.22	21.07	20.87	↓	-0.20	20.70	21.53	20.65	21.66	18.00
Bakken (Coking)	22.85	25.97	20.72	20.61	↓	-0.11	20.26	21.79	20.64	21.03	17.17
Singapore											
Dubai (Hydroskimming)	-0.78	-1.57	-0.07	3.56	↑	3.63	2.79	4.29	3.78	3.28	3.77
Tapis (Hydroskimming)	0.00	-0.93	-0.62	3.78	↑	4.40	2.95	3.14	4.25	4.16	4.69
Dubai (Hydrocracking)	2.72	2.28	2.87	5.61	↑	2.74	5.08	5.76	5.92	5.59	5.89
Tapis (Hydrocracking)	2.15	0.60	-0.55	3.48	↑	4.03	2.51	2.38	4.21	4.12	4.55

<sup>1</sup> 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)

**Table 16**  
**REFINED PRODUCT YIELDS BASED ON TOTAL INPUT (%)<sup>1</sup>**

	Mar-19	Apr-19	May-19	May-18	May 19 vs Previous Month	May 19 vs Previous Year	May 19 vs 5 Year Average	5 Year Average
<b>OECD Americas</b>								
Naphtha	1.4	1.4	1.4	1.3	0.0	0.1	-0.2	1.6
Motor gasoline	44.8	44.6	44.2	44.6	-0.3	-0.4	-1.0	45.2
Jet fuel	9.5	9.5	9.3	9.6	-0.3	-0.3	0.4	8.9
Other kerosene	0.0	0.1	0.1	0.1	0.0	0.0	-0.1	0.1
Gasoil/diesel oil	28.8	28.7	28.8	27.7	0.1	1.1	0.6	28.2
Residual fuel oil	3.0	3.4	3.2	3.7	-0.2	-0.6	-0.7	3.8
Petroleum coke	4.4	4.3	4.0	4.6	-0.3	-0.5	-0.5	4.6
Other products	12.6	12.8	13.1	13.0	0.4	0.1	0.0	13.1
<b>OECD Europe</b>								
Naphtha	9.0	8.4	8.3	7.6	-0.1	0.7	0.6	7.7
Motor gasoline	19.6	20.0	20.3	20.9	0.3	-0.6	-0.6	20.9
Jet fuel	8.7	8.9	9.0	8.9	0.1	0.1	0.7	8.3
Other kerosene	2.3	2.2	2.1	2.1	-0.1	-0.1	0.1	2.0
Gasoil/diesel oil	40.2	40.2	40.5	38.9	0.3	1.6	1.1	39.4
Residual fuel oil	9.9	9.2	8.4	10.2	-0.8	-1.8	-1.4	9.8
Petroleum coke	1.3	1.3	1.4	1.2	0.1	0.1	0.1	1.2
Other products	14.3	14.9	15.0	14.9	0.1	0.1	-0.2	15.2
<b>OECD Asia Oceania</b>								
Naphtha	16.2	16.2	16.4	15.8	0.2	0.5	2.0	14.4
Motor gasoline	21.1	20.6	21.6	22.3	1.0	-0.8	-1.2	22.8
Jet fuel	15.6	14.8	15.3	15.4	0.5	-0.1	0.3	15.0
Other kerosene	4.1	2.8	2.8	2.4	0.0	0.4	0.0	2.8
Gasoil/diesel oil	30.1	29.6	30.9	29.5	1.3	1.3	1.1	29.8
Residual fuel oil	6.3	6.5	5.7	7.2	-0.9	-1.6	-1.8	7.5
Petroleum coke	0.5	0.5	0.4	0.5	-0.1	-0.2	0.0	0.4
Other products	12.4	12.9	12.9	12.7	0.0	0.2	0.2	12.7
<b>OECD Total</b>								
Naphtha	6.6	6.4	6.2	5.9	-0.2	0.3	0.4	5.8
Motor gasoline	32.2	32.2	32.7	33.2	0.6	-0.5	-0.9	33.6
Jet fuel	10.4	10.3	10.2	10.4	-0.1	-0.2	0.5	9.7
Other kerosene	1.5	1.3	1.2	1.1	-0.1	0.0	0.0	1.2
Gasoil/diesel oil	32.7	32.6	32.9	31.6	0.3	1.3	0.9	32.0
Residual fuel oil	5.8	5.8	5.3	6.4	-0.6	-1.1	-1.1	6.4
Petroleum coke	2.6	2.6	2.5	2.8	-0.1	-0.2	-0.2	2.8
Other products	13.1	13.5	13.7	13.6	0.2	0.1	0.0	13.7

<sup>1</sup> Due to processing gains and losses, yields in % will not always add up to 100%

**Table 17**  
**WORLD BIOFUELS PRODUCTION**  
(thousand barrels per day)

<b>ETHANOL</b>									
	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>4Q18</b>	<b>1Q19</b>	<b>2Q19</b>	<b>May 19</b>	<b>Jun 19</b>	<b>Jul 19</b>
<b>OECD Americas<sup>1</sup></b>	1062	1081	1064	1073	1048	1073	1083	1067	1067
United States	1032	1048	1028	1040	1012	1037	1047	1031	1031
Other	30	33	36	33	36	36			
<b>OECD Europe<sup>2</sup></b>	88	93	93	91	98	97	98	89	89
France	13	16	15	17	16	17	18	13	13
Germany	14	16	16	14	20	19	23	13	13
Spain	7	9	9	9	7	8	7	10	10
United Kingdom	11	9	8	9	12	8	8	5	5
Other	42	43	46	42	43	45			
<b>OECD Asia Oceania<sup>3</sup></b>	3	5	5	5	5	5	5	5	5
Australia	3	4	4	4	5	4	4	4	4
Other	0	1	1	1	1	1			
<b>Total OECD Ethanol</b>	1153	1179	1162	1169	1151	1174	1185	1161	1161
<b>Total Non-OECD Ethanol</b>	627	713	731	618	331	943	1079	1068	1068
Brazil	478	547	538	453	138	751	887	876	876
China	71	70	69	77	69	67			
Argentina	15	19	19	19	19	19			
Other	64	77	105	70	105	105	192	192	192
<b>Total Ethanol</b>	<b>1780</b>	<b>1892</b>	<b>1893</b>	<b>1788</b>	<b>1482</b>	<b>2117</b>	<b>2264</b>	<b>2229</b>	<b>2229</b>

<b>BIODIESEL</b>									
	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>4Q18</b>	<b>1Q19</b>	<b>2Q19</b>	<b>May 19</b>	<b>Jun 19</b>	<b>Jul 19</b>
<b>OECD Americas<sup>1</sup></b>	111	128	148	137	113	138	122	170	170
United States	104	121	140	129	110	132	118	159	159
Other	7	7	8	7	3	6			
<b>OECD Europe<sup>2</sup></b>	265	257	275	247	243	278	270	289	289
France	47	48	51	49	50	53	52	51	51
Germany	62	58	58	52	49	58	56	63	63
Italy	13	14	26	14	28	27			
Spain	34	36	35	36	29	32	29	39	39
Other	108	101	104	95	87	107	106	111	111
<b>OECD Asia Oceania<sup>3</sup></b>	12	14	15	11	10	17	16	17	17
Australia	1	1	1	1	0	1	0	1	1
Other	11	13	14	10	10	16			
<b>Total OECD Biodiesel</b>	388	399	438	394	367	433	408	475	475
<b>Total Non-OECD Biodiesel</b>	293	325	360	326	360	359	359	359	360
Brazil	74	92	93	100	93	95	91	97	93
Argentina*	56	51	53	51	53	53			
Other	163	182	214	175	215	211			
<b>Total Biodiesel</b>	<b>680</b>	<b>725</b>	<b>798</b>	<b>720</b>	<b>727</b>	<b>792</b>	<b>767</b>	<b>834</b>	<b>836</b>

<b>Global Biofuels</b>	<b>2460</b>	<b>2616</b>	<b>2691</b>	<b>2508</b>	<b>2209</b>	<b>2909</b>	<b>3031</b>	<b>3063</b>	<b>3065</b>
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<sup>1</sup> As of August 2012 OMR, OECD Americas includes Chile.

<sup>2</sup> As of August 2012 OMR, OECD Europe includes Estonia and Slovenia.

<sup>3</sup> As of August 2012 OMR, OECD Asia Oceania includes Israel.

\* monthly data not available.

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