

Oil Market Report

16 June 2020

- Oil demand in 2020 is expected to fall by 8.1 mb/d, the largest in history, before recovering by 5.7 mb/d in 2021. Reduced jet and kerosene deliveries will impact total oil demand until at least 2022. In this *Report* the forecast for 2020 oil demand has been raised by nearly 500 kb/d to 91.7 mb/d, due to stronger than expected deliveries during the Covid-19 lockdown. In China, oil demand recovered fast in March-April and India's demand rose sharply in May.
- Global oil supply plunged by 11.8 mb/d in May, driven by a record OPEC+ cut and economic shut-ins in the US, Canada and elsewhere. After tumbling by 7.2 mb/d in 2020, global oil output is set for a modest 1.7 mb/d recovery in 2021, assuming OPEC+ cuts ease, Norway, Brazil and Guyana deliver solid gains and Libya manages to sustain a rebound. US supply is poised to fall by 0.9 mb/d in 2020 and a further 0.3 mb/d next year unless higher prices unlock fresh investments in the shale patch.
- Global refining intake in April fell 6.6 mb/d month-on-month to just 68.8 mb/d, down 12.3 mb/d year-on-year and in May it was down by a further 1 mb/d. Large implied product stock builds set the stage for a subdued margin environment for the near future. After a 5.4 mb/d decline this year, refining activity is set to gain 5.3 mb/d in 2021, nearly recovering to 2019 levels, but below the 2018 historical peak.
- OECD data for April show that industry stocks rose by 148.7 mb (4.9 mb/d) to 3 137 mb, and were 208.3 mb above the five-year average. In the US, preliminary data show that commercial stocks in early June were at record highs, having built by about 1 mb/d in 2020. In 1Q20, government held stocks increased by nearly 2 mb, mainly product stocks in Europe. In May, floating storage of crude oil fell by 6.4 mb from its all-time high (172.2 mb in April) to 165.8 mb.
- Crude prices rose in May to the highest in three months as demand began to recover and global supply fell sharply. Rising prices squeezed product cracks, in particular diesel and jet/kerosene due to concerns about the global economy and the weak outlook for the aviation industry. Freight rates plummeted as OPEC+ cuts took effect. In early June, both WTI and Brent traded close to \$40/bbl for several days before easing back slightly.

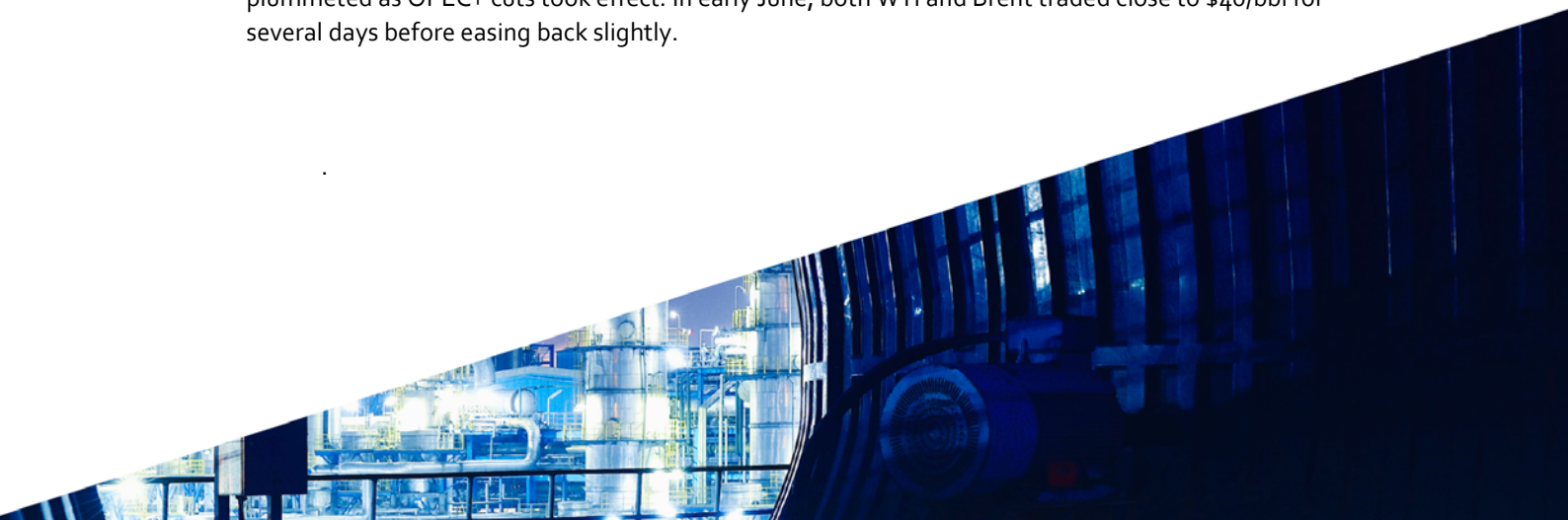


Table of contents

End of the first half	3
Demand	4
Overview	4
Fundamentals	5
OECD	8
Non-OECD	12
Supply	15
Overview	15
World's top producers slash output	17
Other key developments	24
Refining	26
Overview	26
Margins	29
Regional refining outlook	31
Stocks	37
Overview	37
Storage capacity assessment	39
Recent OECD industry stock changes	41
OECD Americas	41
OECD Europe	42
OECD Asia Oceania	42
Other stock developments	43
Prices	46
Overview	46
Futures markets	46
Spot crude oil prices	48
Spot product prices	51
Freight	54
Tables	56

List of boxes

Box 1.	Jet fuel lags behind oil demand recovery	7
Box 2.	Global crude oil and product balances – quarterly breakdown	28
Box 3.	Alternative solutions for missing data	35

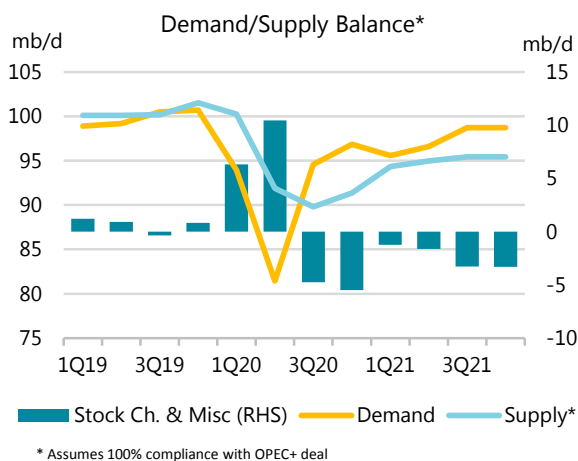
End of the first half

While the oil market remains fragile, the recent modest recovery in prices suggests that the first half of 2020 is ending on a more optimistic note. New data show that demand destruction in the early part of the year was slightly less than expected, although still unprecedented. On the supply side, record output cuts from OPEC+ and steep declines from other non-OPEC producers saw global oil production fall by a massive 12 mb/d in May. In addition to a 9.4 mb/d decline in OPEC+ supply last month, output from non-OPEC countries outside the deal has fallen by 4.5 mb/d since the start of the year. To further speed up the market rebalancing, OPEC+ decided on 6 June to extend their historic output cut of close to 10 mb/d through July.

For demand, increased mobility indicators in the March-May period provided support: in particular, China's strong exit from lockdown measures has seen demand in April almost back to year-ago levels. We have also seen a strong rebound in India in May, although demand is still well below year-ago levels. In the second half of the year the easing of lockdown measures in many countries should provide a boost. Even so, demand in 2020 is expected to be 8.1 mb/d lower than in 2019, with the biggest declines seen in the first half of the year. Our first forecast for 2021 as a whole shows demand growing by 5.7 mb/d, which, at 97.4 mb/d, will be 2.4 mb/d below the 2019 level.

This 2.4 mb/d gap between 2021 and 2019 is largely explained by the dire situation of the aviation sector. Data from the International Air Transport Association show that passenger traffic in 2020 will be nearly 55% lower than in 2019. The industry will continue to be a drag on oil demand through 2021, with our first estimate showing that, having fallen by 3 mb/d in 2020, jet/kerosene demand will rebound by only 1 mb/d in 2021, leaving it below the pre-crisis level.

Global oil supply is set to tumble by a massive 7.2 mb/d on average in 2020, and stage only a 1.8 mb/d increase in 2021 assuming 100% compliance with OPEC+ cuts. The recent improvement in oil prices that saw WTI trading for a few days close to \$40/bbl is not enough to allow a significant increase in US output, which in June is estimated to have fallen to 10.5 mb/d, down by 2.4 mb/d from a record high seen in November. In the meantime, high crude and product stocks will limit the scope for producers in many countries to sell more to refiners. In the case of the US, data from the Energy Information Administration show that commercial stocks of crude oil and products have increased by about 1 mb/d since the start of the year and are at an all-time record high.

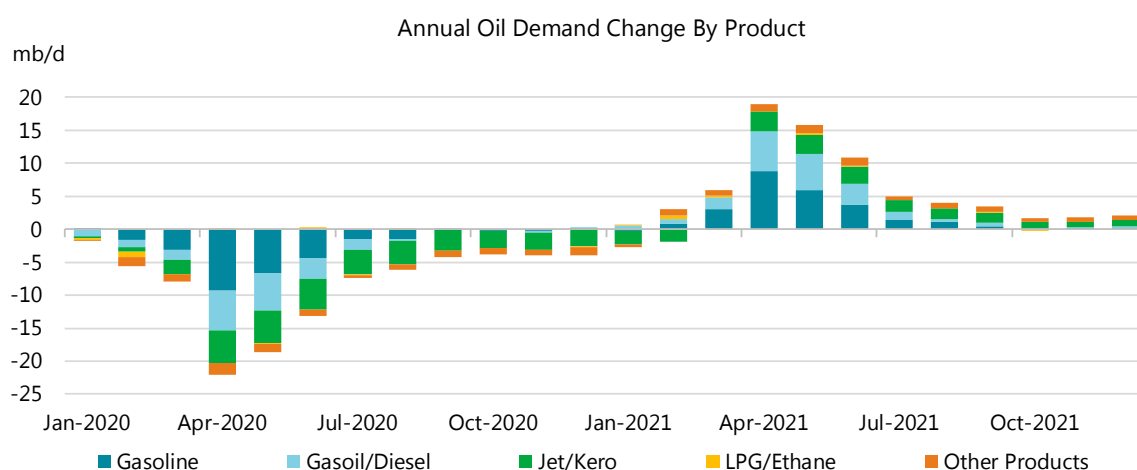


In sporting terms, the 2020 oil market is now close to the half time mark. So far, initiatives in the form of the OPEC+ agreement and the meeting of G20 energy ministers have made a major contribution to restoring stability to the market. If recent trends in production are maintained and demand does recover, the market will be on a more stable footing by the end of the second half. However we should not underestimate the enormous uncertainties.

Demand

Overview

In 2020, oil demand is forecast to be 91.7 mb/d, about 500 kb/d above the estimate in the *May Report*, due to higher-than-expected consumption during the Covid-19 lockdowns. Estimates for 1Q20 and 2Q20 are revised higher by 400 kb/d and 2.1 mb/d, respectively.



For 2020 as a whole, oil demand will fall by a record 8.1 mb/d year-on-year (y-o-y), with most of the decline occurring in the first half of the year (-11.4 mb/d) and in particular 2Q20 (-17.8 mb/d), which saw the greatest impact from lockdown measures. From a trough of -21.8 mb/d in “Black April”, the y-o-y global contraction in global oil consumption narrows progressively to -18.6 mb/d in May, -12.9 mb/d in June and -7.4 mb/d in July. In 4Q20, oil demand will still be 3.8 mb/d down from the level at the end of 2019.

Based on the most recent data, we revised up our estimated demand by 400 kb/d in 1Q20 and 2.1 mb/d in 2Q20 compared with last month. The most noteworthy changes were seen in China (+180 kb/d in 1Q20 and +790 kb/d in 2Q20), where oil demand recovered fast in March and April and could overtake last year’s level in 3Q20. India’s demand also increased sharply in May versus April. We have also upgraded our oil demand figure for several OECD economies (Canada, France, Germany, Korea and the Netherlands) due to improving mobility data.

This *Report* sees the first release of the Agency’s oil market outlook for 2021. We forecast demand will rise by 5.7 mb/d y-o-y, the largest one-year jump ever recorded, as activity begins to return to normal across vast swathes of the economy. However, consumption will still be 2.4 mb/d below 2019 levels, mostly because of the ongoing weakness in jet and kerosene demand.

The aviation industry is facing an existential crisis: jet and kerosene demand will remain under pressure well beyond this year (See *Jet fuel lags behind oil demand recovery*) even while other fuels are likely to recover to pre-Covid-19 levels. Overall demand is bound to be impacted by the tough economic situation (See *Fundamentals*).

The outlooks for 2020 and 2021 assume that the gradual re-emergence of the global economy from lockdown continues. However, we acknowledge that there are places where the number of new Covid-19 cases reported each day remains high and economic activity and thus oil demand could remain subdued for longer than elsewhere.

Global Oil Demand (2019-2021)															
(million barrels per day)*															
	1Q19	2Q19	3Q19	4Q19	2019	1Q20	2Q20	3Q20	4Q20	2020	1Q21	2Q21	3Q21	4Q21	2021
Africa	4.3	4.3	4.1	4.3	4.2	4.2	3.2	3.9	4.1	3.9	4.1	4.0	3.9	4.1	4.0
Americas	31.5	31.6	32.2	31.9	31.8	30.2	24.7	30.0	30.8	28.9	29.9	30.2	31.5	31.4	30.8
Asia/Pacific	35.8	35.6	35.2	36.5	35.8	33.1	31.4	34.0	35.5	33.5	35.5	35.2	34.9	36.0	35.4
Europe	14.7	14.9	15.4	14.8	14.9	14.0	11.4	14.0	14.2	13.4	13.9	14.4	15.0	14.6	14.5
FSU	4.5	4.6	4.9	4.8	4.7	4.6	3.9	4.5	4.6	4.4	4.4	4.5	4.7	4.6	4.6
Middle East	8.1	8.2	8.8	8.4	8.4	7.8	6.8	8.1	7.7	7.6	7.7	8.2	8.6	8.0	8.2
World	98.9	99.2	100.5	100.7	99.8	93.9	81.4	94.6	96.9	91.7	95.6	96.6	98.7	98.7	97.4
Annual Chg (%)	0.4	0.6	0.8	1.5	0.8	-5.0	-17.9	-5.9	-3.8	-8.1	1.8	18.6	4.4	1.9	6.2
Annual Chg (mb/d)	0.4	0.6	0.8	1.4	0.8	-5.0	-17.8	-5.9	-3.8	-8.1	1.6	15.2	4.1	1.9	5.7
Changes from last OMR (mb/d)	0.0	0.0	0.0	0.0	0.0	0.4	2.1	-0.5	-0.1	0.5	95.6	96.6	98.7	98.7	97.4

* Including biofuels

Fundamentals

The outlook for world economic growth remains highly uncertain as countries emerge from lockdowns at different paces and in some countries the number of Covid-19 cases remains high. The GDP projections used in this *Report* take into account the recent updates published by the OECD which show GDP falling by 6% in 2020 followed by a rebound of 5.2% in 2021.

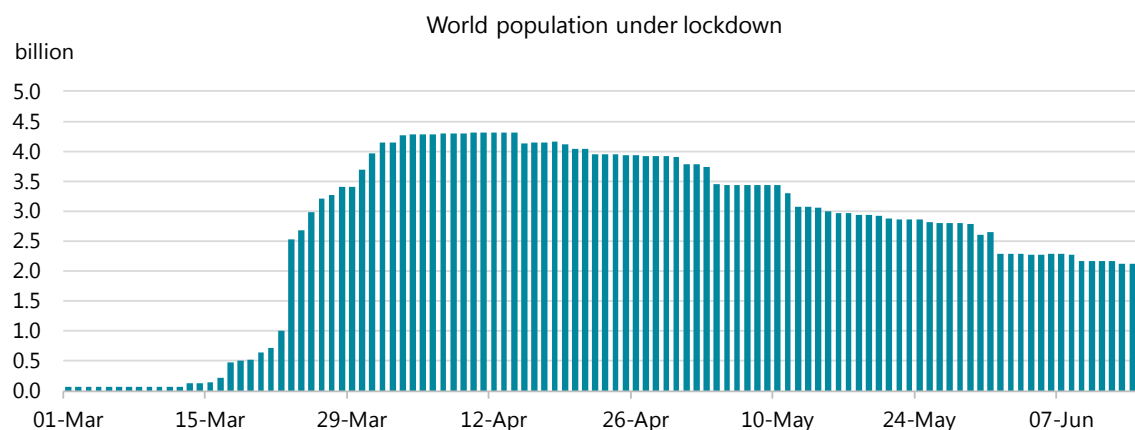
Major institutions, including the OECD and the French Observatory of Economic Conjunctures (OFCE) have started to identify the impact of lockdowns on economic activity during the period. These measures have affected some sectors more than others and have had different impacts around the world. The transport sector has suffered the most and the OFCE estimates an average global reduction in transport value-added of 27% during lockdown period. In turn, air and road transport account for more than half of oil demand. The OECD estimates the reduction in global manufacturing output at around 30%. Industry, including petrochemicals, account for another 22% of total oil demand.

For the economy as a whole, the OECD estimates that a country-wide shut down (allowing for partial sectoral shutdowns) results in a 25% direct output reduction in the median OECD economy. In addition, indirect effects add 6% to 8% points to the direct effect. As a result, potential economic losses during lockdown periods amount to 29% to 37% in major economies.

More specifically, the OFCE estimates that world GDP losses amounted to 19% in April, with significant differences across regions: the EU's GDP loss is estimated at around 30%, for the US it was 22%; China 16%, and Japan 12%. Of course, losses depend on the severity of lockdown measures. For example in France, Italy and Spain, where the lockdown measures were very stringent, up to 35% of GDP was lost during confinement, according to both the OECD and OFCE. This analysis is consistent with our estimate that lockdowns reduced oil demand by 22% y-o-y in April.

For the second half of 2020, we expect a strong rebound in world economic activity as lockdowns are eased. A total of 46 countries eased Covid-19 lockdown measures between the middle of May and the middle of June, freeing an additional 900 million people. Strict virus

containment measures remain in place in some countries in Latin America, the Middle East and South Asia. Africa, East Asia, Europe and North America have mostly re-opened.



Note: For China, only Hubei province is included.

Some encouraging signals have emerged in recent weeks. The OECD Composite Leading Indicator, while remaining at very low levels, bottomed out in April and bounced back in May in every country. This was also the case for PMI indicators: for example, in China, the manufacturing PMI rose from 49.4 in April to 50.7 in May. In the US, non-farm payrolls rose by 2.4 million in May, more than market expectations, although unemployment remains very high.

In 2021, a moderate rebound in economic activity is expected with the lingering impacts of the lockdown measures weighing heavily. Unemployment has surged already in 2020 and will continue to do so later in the year as government support measures are reduced or withdrawn. Employment gains in some sectors could be offset by a fresh wave of joblessness. In particular, the tourism and aviation sectors are likely to remain subdued for an extended period of time.

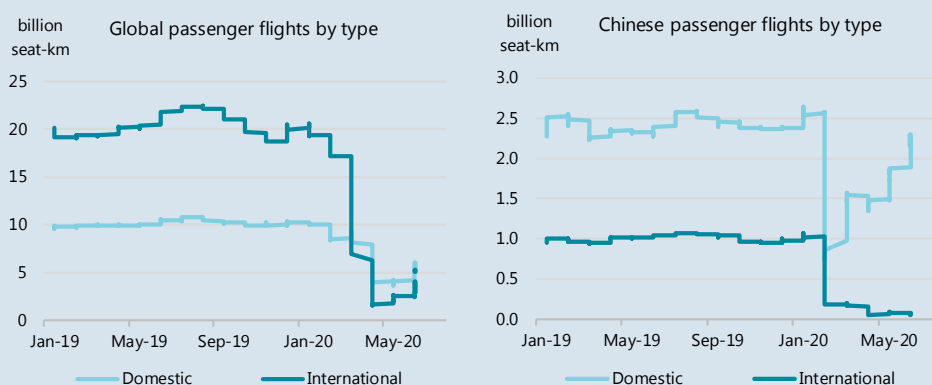
The lingering impact of behavioural changes on oil demand caused by Covid-19 remains uncertain. They include more teleworking (contributing to lower urban traffic) and a reduction in business travel. Increased teleworking could impact transport oil demand in 2021. The share of workers that can work from home has a natural ceiling, however, and relatively little room to increase in the short-term. The International Labour Organisation (ILO) estimates that 8% of the global workforce worked from home on a permanent basis prior to the Covid-19 crisis. It estimates that this share could increase to 18% in the future.

The lockdowns saw a dramatic improvement in air quality in major cities and in many places there is renewed impetus behind efforts to change the patterns of urban transport. These could have a lasting impact on fuel demand. Cycling lanes have recently been created in more than 150 major cities to provide an alternative to public transportation. Some cities are likely to make these measures permanent, thus reducing the volume of traffic. On the other hand, at least in the short term, fear of public transport could lead to an increase in car use.

Box 1. Jet fuel lags behind oil demand recovery

Before Covid-19, jet fuel demand was expected to grow more quickly than other products over the medium-term. However, the outlook has since changed dramatically. Demand plummeted in March as governments closed borders and asked their citizens to stay home. We estimate that combined jet fuel and kerosene demand will fall by 4.9 mb/d (62%) y-o-y in 2Q20 to 3 mb/d. Unlike gasoline and diesel, which are likely to recover to close to pre-crisis levels by the end of 2020, the outlook for jet fuel is more uncertain.

Demand for air travel began to rise gently in the middle of May, as some countries in Europe, East Asia and North America opened up. There was an acceleration in early June. The number of scheduled flights on 10 June was up around 27% from the same period in May, according to data provider OAG. The outlook was propped up by demand for domestic travel, which is currently 60-70% higher than for international flights (whereas the latter is normally twice as important). However, even with this recovery, air travel demand is still down by more than 70% from 2019.



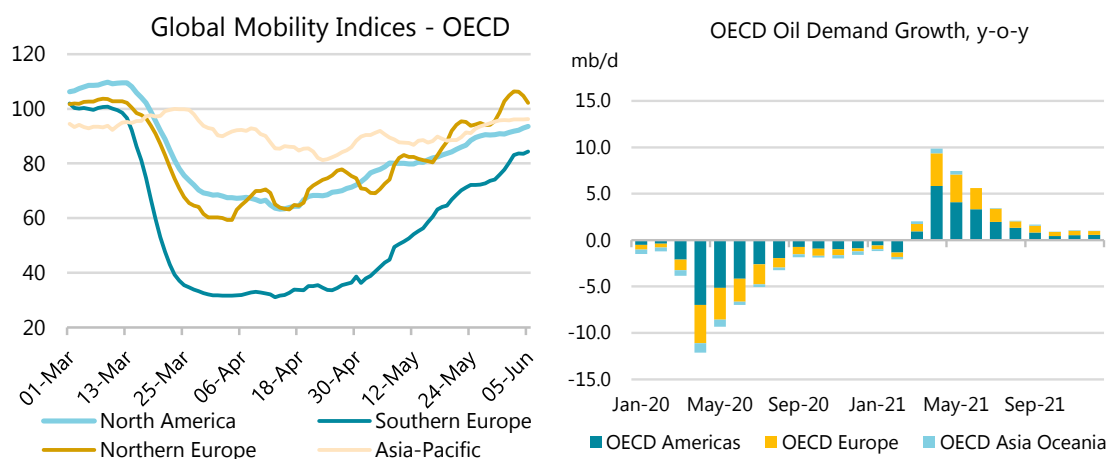
In the coming weeks, the northern hemisphere summer holiday season gets underway and this should provide a boost to airlines. We forecast jet/kerosene deliveries to rise by 1.7 mb/d (57%) in 3Q20, compared with 2Q20. This assumes a recovery in domestic flights in larger countries to pre-Covid-19 levels, as many citizens will not wish to travel long haul. Flights within regional blocs (e.g. the Schengen area in Europe) are also likely to expand significantly. However, there remain border closures and visa restrictions in many countries to limit the spread of Covid-19 and these will weigh heavily on longer distance flights. The spread of the virus has largely been brought under control in East Asia, Europe and, to a lesser extent Africa and North America. But it is continuing to spread in the Middle East, Latin America and South Asia, thus keeping some international borders partially closed for the time being.

The world's largest airlines have announced schedule estimates for July ranging from as low as 20-25% of 2019 levels (e.g. Air France KLM, United Airlines) to 40% (e.g. American Airlines, Lufthansa, Ryanair). Some companies more heavily focused on the domestic market, such as Southwest Airlines in the US, will fulfil half their 2019 schedules. All airlines plan a gradual ramp-up until the end of the year, with Southwest saying it plans a full schedule by year-end. But this is unlikely to be the case for most airlines. Going into 2021, jet fuel demand will depend heavily on the containment of the virus, which is unlikely to be completely achieved until a vaccine is found and widely administered. This could take another 12-18 months.

As a consequence, governments are likely to maintain some travel restrictions in place and passengers could remain reluctant to undertake long haul flights. In addition, the tough economic outlook is bound to reduce travel for leisure while many companies will seek to cut costs and thus the number of business flights. We expect jet and kerosene demand to grow by 1 mb/d y-o-y in 2021, but to remain around 2 mb/d (25%) below 2019 levels. The International Air Transport Association (IATA), for its part, said airlines would likely still be making heavy losses in 2021 and several of them (e.g. Emirates, Lufthansa) have said they do not expect a return to normal traffic levels before 2022 or 2023.

OECD

OECD oil consumption is set to fall by 4.2 mb/d in 2020 and to bounce back by 2.7 mb/d in 2021. In 2020, the largest y-o-y contraction now seems behind us. For 2Q20, we estimate that the decline was 9.5 mb/d. Gasoline demand contracted by 3.9 mb/d and is set to decline by 1.3 mb/d for the year as a whole. Jet fuel and kerosene demand is expected to contract by 1.7 mb/d in 2020 and to recover by only 500 kb/d in 2021.



Our estimates for 2020, and in particular for 2Q20, have been revised up with new oil demand and mobility data. Our OECD mobility index, computed from *Google Mobility* data, shows the impact of lockdowns in various regions. The index is based on observed changes in mobility in various countries, weighted by their share of regional oil demand.

Recent data (to 5 June) show a strong improvement in southern Europe (France, Italy and Spain), where lockdowns have been more severe than in northern Europe (Germany, Norway and Sweden). Northern Europe is almost back to normal activity levels. In North America, confinement has been less severe in Canada and the US than in Mexico. Mobility in the region contracted by 30% of pre-crisis levels on average in April. In June, mobility returned to historical levels in the US and Canada but remained reduced in Mexico and Chile. Globally, mobility was reduced by close to 70% in April and 40% in May.

OECD Demand based on Adjusted Preliminary Submissions - April 20

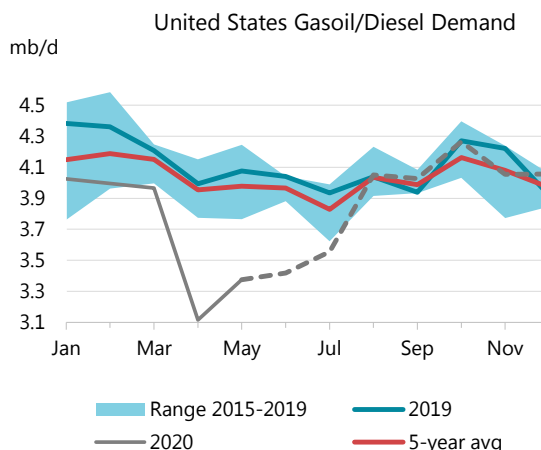
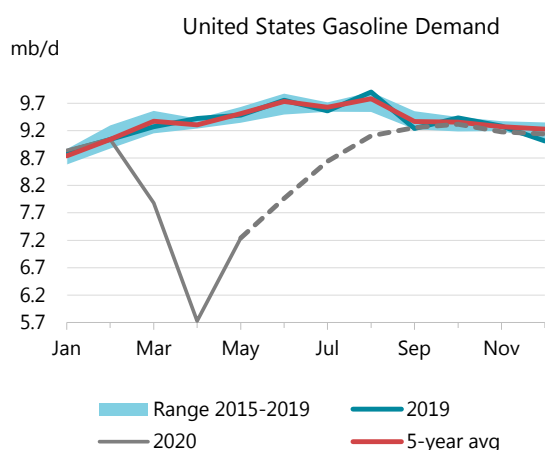
	Gasoline		Jet/Kerosene		Diesel		LPG/Ethane		RFO		Other		Total Products	
	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa
OECD Americas	6.76	-39.2	0.76	-63.1	3.57	-23.9	3.56	-0.3	0.47	-18.7	3.13	-2.8	18.26	-27.7
US*	5.71	-39.3	0.62	-65.2	3.05	-22.3	2.82	3.9	0.27	-16.9	2.19	-4.3	14.67	-28.3
Canada	0.55	-36.7	0.06	-67.5	0.17	-34.9	0.40	-12.0	0.07	-9.7	0.65	0.3	1.89	-23.6
Mexico	0.46	-40.0	0.08	-15.1	0.22	-30.7	0.29	-17.2	0.12	-28.5	0.27	4.4	1.44	-26.3
OECD Europe	1.08	-47.4	0.44	-71.4	3.01	-41.5	1.03	-6.9	0.73	-19.4	3.90	10.0	10.20	-28.7
Germany	0.34	-31.5	0.07	-73.0	0.56	-30.3	0.12	-14.5	0.06	-5.8	0.83	37.6	1.97	-15.9
United Kingdom	0.14	-49.9	0.25	-26.2	0.31	-42.1	0.15	2.5	0.02	-28.3	0.28	-1.9	1.17	-28.7
France	0.06	-70.2	0.02	-86.9	0.35	-52.0	0.10	-22.6	0.03	-37.6	0.66	42.2	1.23	-30.3
Italy	0.04	-73.4	0.01	-92.3	0.18	-59.9	0.04	-41.4	0.05	-24.9	0.23	-19.2	0.56	-50.8
Spain	0.03	-73.8	0.02	-86.9	0.17	-64.4	0.07	-13.1	0.11	-32.9	0.36	7.1	0.77	-42.9
OECD Asia & Oceania	1.14	-24.6	0.59	-34.0	1.26	-13.6	0.75	-1.9	0.44	2.6	2.56	-5.1	6.73	-13.0
Japan	0.65	-22.7	0.39	-16.6	0.42	-8.4	0.36	-6.6	0.21	-4.0	1.15	-5.5	3.18	-11.4
Korea	0.22	-6.9	0.11	-45.4	0.42	-2.7	0.32	4.2	0.20	15.2	1.12	-6.9	2.39	-6.3
Australia	0.22	-29.1	0.05	-71.2	0.37	-25.9	0.05	-4.9	0.01	-19.4	0.15	7.2	0.85	-28.0
OECD Total	8.97	-38.9	1.79	-60.2	7.84	-30.6	5.35	-1.9	1.65	-14.2	9.59	1.3	35.19	-25.6

* Including US territories

OECD Americas

In the US, oil demand will fall by 2 mb/d in 2020 and by as much as 4.5 mb/d in 2Q20. Oil demand should recover by 1.2 mb/d in 2021 but will remain 740 kb/d below the 2019 level.

Partial lockdowns cut y-o-y US gasoline demand by 15% in March, according to the *Department of Energy*, and by nearly 40% in April. In May, provisional weekly data point to a decline of nearly 25%. This is in line with the mobility trends computed from *Google* data. Demand should be 15% to 20% lower y-o-y in June. Gasoline demand will remain 5% to 10% below last year during the summer before returning to normal at the end of the year. Our mobility index shows a strong improvement in the US from mid-April, returning to near normal at the start of June.



US jet and kerosene demand fell by 18% y-o-y in March. This deepened to 65-70% in April and May and is projected to stay around 50% below normal levels during the summer. Demand is forecast to remain 45% below last year's level in 2H20. These assumptions are consistent with recent weekly *DOE* statistics showing a drop of 65% in estimated jet and kerosene demand in May. *OAG* data show an average decline of 74% in scheduled flights in May. North American aviation demand is expected to remain subdued in the medium term. Jet and kerosene demand, after a fall of 840 kb/d in 2020, will only regain 250 kb/d in 2021.

US diesel demand fell 3% in March and weekly data point to a drop of 20% in April and May. Demand is expected to remain subdued as it slowly recovers in June and in July. In 2021, diesel demand is set to increase by 260 kb/d on improving economic conditions. Demand will be almost exactly at the 2019 level (4 mb/d).

Ethane-based petrochemical activity remains largely unchanged. US LPG/ethane demand rose 3% y-o-y in March. Petrochemical activity is supported by the increased use of plastics associated with the Covid-19 pandemic (e.g. packaging, masks), although demand has fallen in some other key sectors (automotive, construction). Overall, LPG/ethane demand is expected to expand by 80 kb/d in 2020.

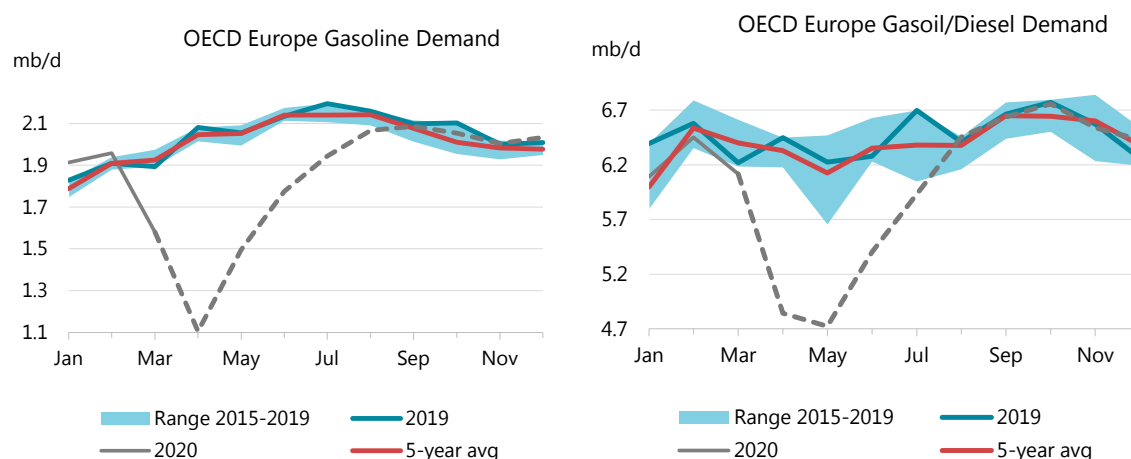
While Canadian mobility returned to year-ago levels by June, mobility indices show a stronger impact of containment measures in Mexico and Chile than in the US. The Mexican index still remains very low (close to 65).

OECD Americas gasoline demand is expected to fall by 1 mb/d in 2020, including a 3 mb/d fall in 2Q20. Jet and kerosene fuel demand will fall by 1.3 mb/d y-o-y in 2Q20 and by 840 kb/d for the year as a whole. Overall, OECD Americas oil demand is set to fall by 2.3 mb/d in 2020 and to bounce back by 1.5 mb/d in 2021.

OECD Europe

In OECD Europe, we forecast total oil demand to fall by 1.5 mb/d in 2020 and to rebound by 1.1 mb/d in 2021. The y-o-y contraction started in 1Q20 with a fall of 690 kb/d, accelerating to 3.3 mb/d in 2Q20, before slowing to 1.3 mb/d in 3Q20 and 570 kb/d in 4Q20.

Gasoline deliveries are set to drop by 630 kb/d in 2Q20 after a modest decline of 60 kb/d in 1Q20. Confinement measures significantly reduce European demand in April, but the progressive lifting of lockdown measures likely resulted in smaller demand losses in May. Our index of mobility shows the convergence of trends between Northern and Southern Europe.



In early June Sweden, Norway, Denmark, Finland, the Netherlands and Germany were all back to normal. In Southern Europe (Italy, Spain, Portugal and France) mobility increased significantly in May and is close to 80% of historical levels at the start of June. Data indicate that gasoline deliveries were down by 70% in France in April, 73% in Italy but only 31% in Germany. For the year as whole, we forecast that gasoline deliveries will fall by 200 kb/d and in 2021 they will bounce back by 185 kb/d.

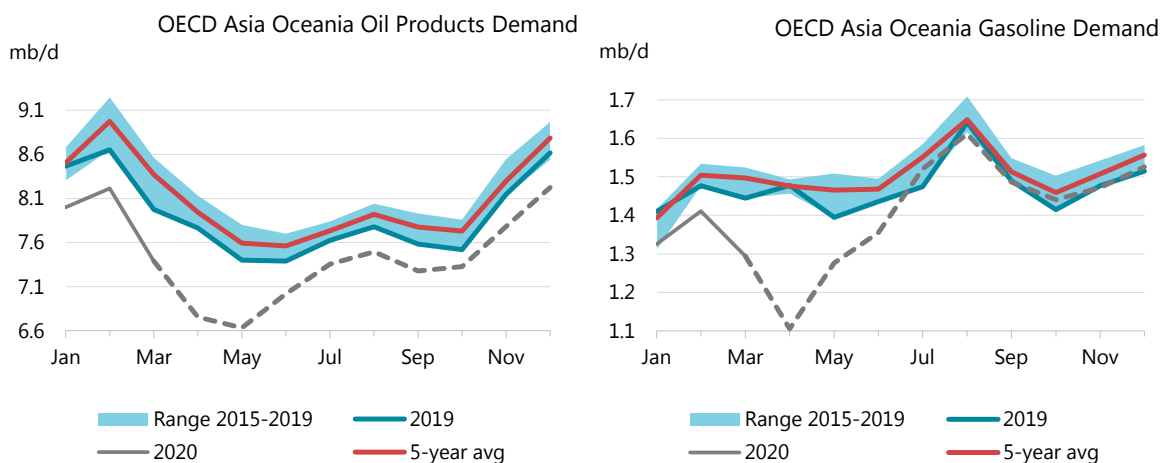
Mobility restrictions have had a strong impact on diesel demand, as 42% of European cars have diesel engines. In France, diesel sales were down by 52% in April and in Germany they fell 30%. In both countries, low prices have triggered a very significant rebound in heating oil deliveries. Demand rose by 65% in both March and April in Germany and by 90% in France in April. Overall, European diesel and gasoil demand is expected to contract by 1.3 mb/d y-o-y in 2Q20, and 430 kb/d on average for the whole year. In 2021, demand is expected to bounce back by 470 kb/d.

OAG data show a y-o-y decline of 90% in scheduled flights in Germany in May, 85% in Italy, 90% in France and 93% in the UK. We see few signs of any significant improvement at the start of June in European air traffic. In our forecasts, we assume that combined jet and kerosene demand will fall by 1.1 mb/d y-o-y in 2Q20 and 630 kb/d for the year as a whole. In 2021, jet fuel demand will remain subdued, increasing by only 250 kb/d.

OECD Asia Oceania

In OECD Asia Oceania, total oil demand is set to contract by 450 kb/d in 2020. From a y-o-y fall of 500 kb/d in 1Q20, the drop accelerated to -720 kb/d in 2Q20. The deficit is expected to narrow to 290 kb/d in 3Q20 and 320 kb/d in 4Q20. Korea and Japan were impacted earlier than Europe by Covid-19. Lockdowns have been less severe and mobility suffered less.

Our mobility index points to a small decline in Korea in February and March and a return to normal in April. In Japan, mobility contracted in April (with our index falling to 75), as containment measures were applied, but recovered in May. Mobility in Australia and New Zealand declined sharply in April and recovered in May. Both countries relaxed containment measures at the end of April.



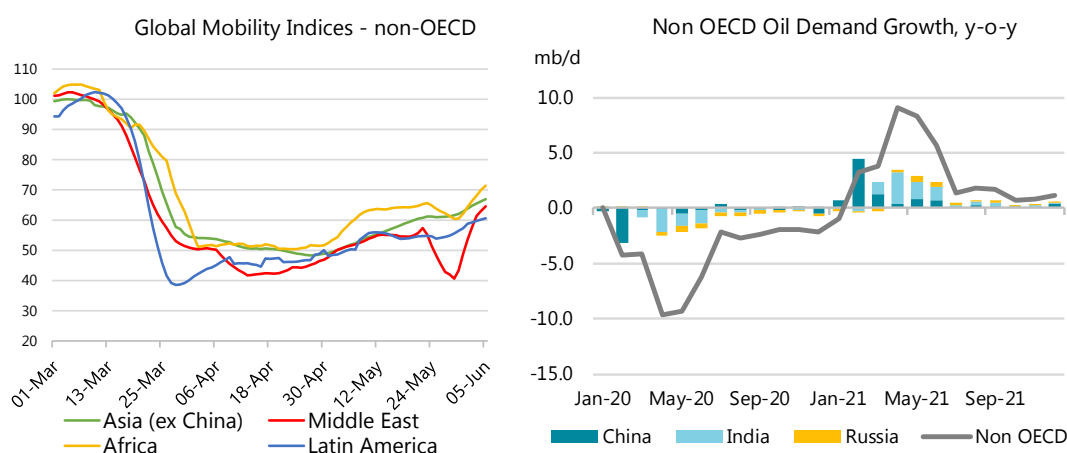
OECD Asia Oceania gasoline deliveries are set to drop by 190 kb/d y-o-y in 2Q20 after a smaller drop of 100 kb/d in 1Q20. In Japan, gasoline demand declined by 23% in April due to containment measures. The lifting of lockdown measures in the region will result in gasoline demand returning to normal in 2H20.

Diesel demand has been less affected but suffers from a slowdown in trade and industrial activity. In Japan, diesel sales fell 8% in April and remained subdued in May before starting to return to normal in June. Overall, diesel and gasoil demand in OECD Asia is expected to fall by 120 kb/d in 2020 and to remain roughly unchanged y-o-y in 2021.

OECD Asia and Oceania jet and kerosene demand suffered due to warmer than normal weather in January and February and collapsed in March and April as the aviation industry crumbled. Prompt indicators from *OAG* for May show a 50% y-o-y drop in the number of flights in Korea in May. In Japan, flight numbers declined by 47% y-o-y in May. Jet and kerosene demand in the region is expected to decline by 210 kb/d in 2020 and to stagnate in 2021.

Non-OECD

Non-OECD countries have long been the main source of oil demand growth, thanks to fast developing economies and rising populations. However, this ceased to be true this year, because of Covid-19. We estimate that oil consumption in non-OECD countries fell 2.8 mb/d y-o-y in 1Q20, as the virus first hit China (-1.2 mb/d y-o-y) in January before affecting India, Indonesia, Iran, Hong Kong, Egypt and several other large countries in February and March.



In 2Q20, non-OECD oil demand contracted by 8.3 mb/d y-o-y with the wide implementation of containment measures. Consumption fell the most in volumetric terms in Asia (particularly in India). However, on a relative basis, demand declines were more pronounced in the Middle East (-17% y-o-y) and Latin America (-24%). New data show demand rebounding strongly in the Asia's two largest oil consumers (China in April and India in May).

However, non-OECD economies are not yet out of the woods. Strict containment measures remain in place in several countries at the time of writing. As a result, mobility indicators, as reported by Google, have not expanded as quickly in non-OECD countries as in the OECD in recent weeks.

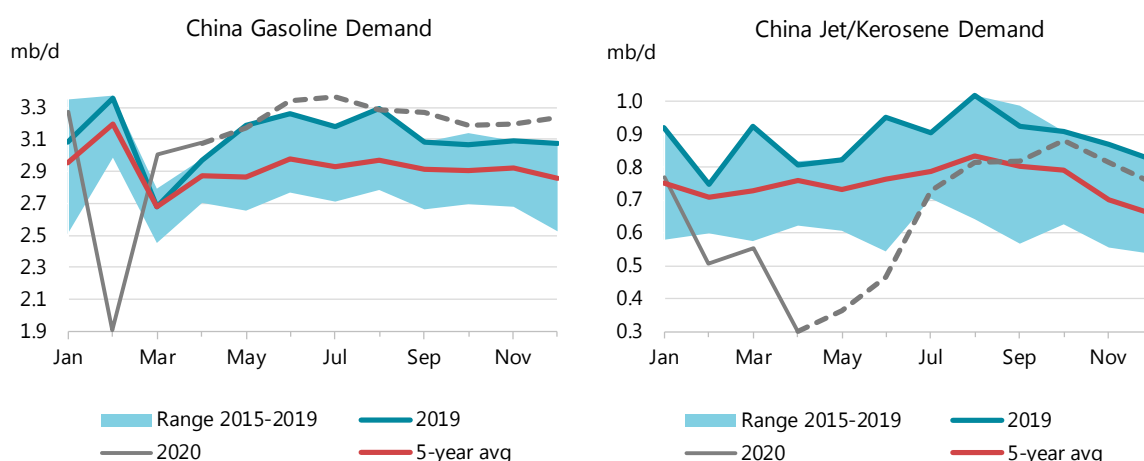
China

Chinese oil demand rebounded impressively in March-April, following the initial hit from Covid-19. Demand climbed 2.7 mb/d (27%) month-on-month in March and another 1.1 mb/d (9%) in April, and was down just 50 kb/d below the previous year's level in April. This was driven entirely by gasoline and diesel as transport demand increased and manufacturing activity revived. We estimate that, by March, demand for both fuels moved into y-o-y expansion.

LPG and ethane demand contracted versus 2019 levels in March, but shifted to an expansion in April. However, jet fuel and kerosene consumption fell well below 2019 levels, as flights to/from China remained at a minimum level. The number of domestic flights bottomed out in February,

before climbing around 30% in March, according to OAG data. However, this was partly offset by a further fall in international flights. A big boost is expected over May and June from domestic flights.

Tepid jet and kerosene demand is likely to continue to hamper the outlook. Overall, we expect total consumption in 2020 to be 13.3 mb/d, down 390 kb/d y-o-y. In 2021, total demand should rise by 760 kb/d, the fastest rate of growth in 5 years and more than making up for 2020's historic fall.



China: Demand by Product

(thousand barrels per day)

	Demand			Annual Chg (kb/d)		Annual Chg (%)	
	2019	2020	2021	2020	2021	2020	2021
LPG & Ethane	1 717	1 654	1 693	- 63	38	-3.7	2.3
Naphtha	1 300	1 335	1 343	36	8	2.7	0.6
Motor Gasoline	3 108	3 114	3 290	7	176	0.2	5.7
Jet Fuel & Kerosene	857	620	843	- 237	223	-27.6	35.9
Gas/Diesel Oil	3 579	3 590	3 802	11	213	0.3	5.9
Residual Fuel Oil	416	407	442	- 9	35	-2.1	8.6
Other Products	2 675	2 544	2 611	- 131	67	-4.9	2.6
Total Products	13 652	13 265	14 025	- 387	759	-2.8	5.7

India

India: Demand by Product

(thousand barrels per day)

	Demand			Annual Chg (kb/d)		Annual Chg (%)	
	2019	2020	2021	2020	2021	2020	2021
LPG & Ethane	848	849	872	0	24	0.0	2.8
Naphtha	327	332	364	5	32	1.4	9.7
Motor Gasoline	732	641	779	- 91	138	-12.5	21.5
Jet Fuel & Kerosene	235	163	227	- 72	64	-30.7	39.5
Gas/Diesel Oil	1 755	1 536	1 776	- 219	240	-12.5	15.6
Residual Fuel Oil	144	134	146	- 11	12	-7.4	9.2
Other Products	971	894	1 011	- 77	117	-7.9	13.1
Total Products	5 013	4 548	5 176	- 465	627	-9.3	13.8

Indian oil demand declined by 670 kb/d y-o-y in March and 2.1 mb/d in April, during the country's lockdown. It rebounded by 1.1 mb/d m-o-m in May as the restrictions were eased. Diesel and gasoline boosted the total, whereas jet and kerosene deliveries stayed well below normal levels. May consumption levels were down around 1 mb/d on the year.

For 2Q20, demand is expected to be 3.8 mb/d, down 1.3 mb/d y-o-y. Demand is likely to fall by 360 kb/d in 3Q20, before recovering to year-ago levels by the end of the year. Overall, in 2020 demand will fall by 460 kb/d. In 2021, there should be a strong recovery, by 620 kb/d, to a fresh historical record, even if that remains below the pre-Covid-19 growth trend.

Other Non-OECD

Latin American demand fell by 610 kb/d y-o-y in March, 1.6 mb/d in April and 1.8 mb/d in May, as governments resorted to increasingly stringent measures to tackle the coronavirus. However, in some countries Covid-19 was still spreading at a rapid pace at the time of writing. The impact on mobility was visible in *Google* data, with movement in the region in early June still down by around 40% versus pre-crisis levels. We expect the region's demand to decline by 600 kb/d in 2020, before rising by a modest 330 kb/d in 2021. Among the countries showing the biggest declines are Argentina (-70 kb/d), Brazil (-230 kb/d) and Venezuela (-120 kb/d).

Non-OECD: Demand by Region							
(thousand barrels per day)							
	Demand			Annual Chg (kb/d)		Annual Chg (%)	
	4Q19	1Q20	2Q20	1Q20	2Q20	1Q20	2Q20
Africa	4 264	4 218	3 228	- 93	-1 060	-2.1	-24.7
Asia	28 415	25 310	24 483	-2 174	-3 642	-7.9	-12.9
FSU	4 822	4 565	3 923	78	- 693	1.7	-15.0
Latin America	6 285	5 819	4 719	- 306	-1 502	-5.0	-24.1
Middle East	8 421	7 846	6 806	- 265	-1 382	-3.3	-16.9
Non-OECD Europe	790	746	641	- 5	- 144	-0.7	-18.3
Total Products	52 996	48 504	43 801	-2 765	-8 423	-5.4	-16.1

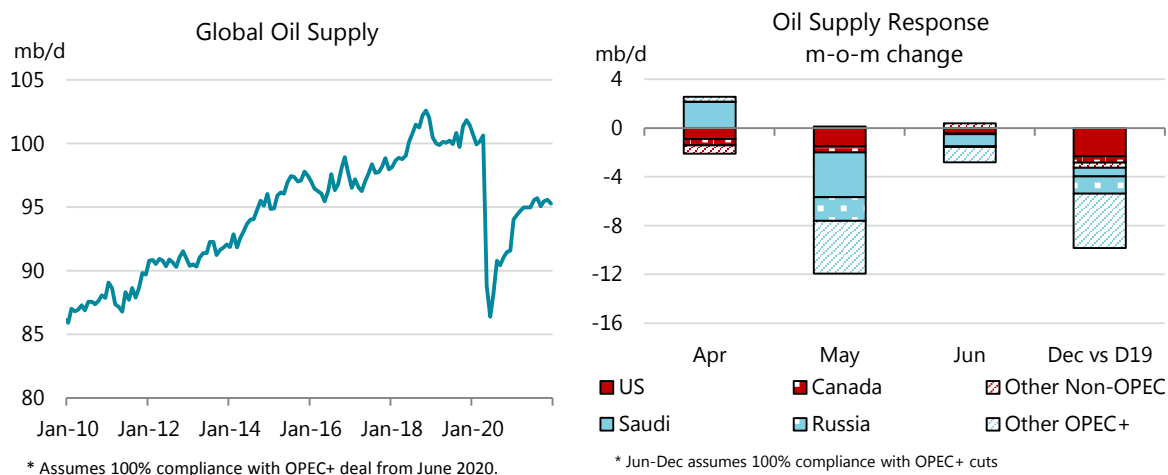
In the Middle East, oil demand fell by 900 kb/d y-o-y in March. We expect a contraction of 1.7 mb/d in April and 1.5 mb/d in May, also because of the coronavirus. Mobility recovered to up to 65% of pre-crisis levels in early June, and we expect oil demand declines to moderate to -980 kb/d in June and -600 kb/d in July. Demand in the region will fall by 760 kb/d in 2020, before recovering by 530 kb/d in 2021.

African demand decreased by 220 kb/d y-o-y in March and we expect contractions of 1.3 mb/d in both April and May. It is likely to recover sharply in June with the decision by many countries to end coronavirus lockdowns. Overall, oil demand is likely to fall by 380 kb/d in 2020, before rebounding by 140 kb/d in 2021.

Supply

Overview

World oil supply is plunging by an unprecedented amount in 2020 after a collapse in demand and prices forced production shut-ins whether from policy decisions or directly in response to commercial pressures. In May, production fell by nearly 12 million b/d versus April, driven by a record OPEC+ cut and extensive shut-ins by US producers. After tumbling by 7.2 mb/d on average in 2020, global production is expected to stage a modest recovery in 2021 assuming that OPEC+ cuts ease further, Norway, Brazil and Guyana deliver gains and Libya manages to sustain a rebound in production. However, anticipated year-on-year (y-o-y) growth of 1.7 mb/d in 2021 comes nowhere close to meeting the forecast recovery in oil demand of 5.7 mb/d, even considering the need to draw down surplus stocks that built up in 2020. That suggests that the market may present producers with an opportunity to ramp up more quickly than dictated by current OPEC+ policy or US and other non-OPEC production could recover more strongly than forecast.



For its part, OPEC+ got off to a strong start during the first month of its historic 9.7 mb/d supply cut. The group reduced supply during May by 9.4 mb/d versus April, to deliver a compliance rate of 89%. Saudi Arabia and Russia achieved a rate at or near 100%, while other Gulf producers came in above 90%. To help speed the rebalancing, OPEC+ agreed on 6 June to extend its record supply cut by one month to the end of July. The total cut in July will ease to 9.6 mb/d because Mexico will only curb output through June. From August through December, the total reduction is due to drop to 7.7 mb/d and then decline to 5.8 mb/d from January 2021 through April 2022. The group also agreed stricter measures to ensure that producers adhere fully to supply targets. Countries such as Iraq, Nigeria, Angola and Kazakhstan, which pumped in excess of their quotas in May, will have to compensate by making extra cuts in 3Q20. The next OPEC+ ministerial meeting is set for 1 December, but the Joint Ministerial Monitoring Committee will meet on a monthly basis to assess the market.

It was Saudi Arabia that led May's dramatic 11.8 mb/d month-on-month (m-o-m) decline in global oil production to 88.8 mb/d. Honouring its commitment to the OPEC+ pact, the Kingdom

throttled back by 3.7 mb/d, Russia cut by 1.95 mb/d and the UAE reined in 1.5 mb/d. The US shut in an estimated 1.5 mb/d.

OPEC+ Crude Oil Production ¹								
(million barrels per day)								
	Apr 2020 Supply	May 2020 Supply	Supply Baseline ²	May Compliance	May-June Target	July Target ⁵	Aug-Dec Target ⁵	Jan 21-Apr 22 Target ⁵
Algeria	1.00	0.81	1.06	102%	0.82	0.82	0.86	0.91
Angola	1.32	1.27	1.53	74%	1.18	1.18	1.25	1.32
Congo	0.33	0.25	0.33	101%	0.25	0.25	0.27	0.28
Equatorial Guinea	0.12	0.09	0.13	128%	0.10	0.10	0.10	0.11
Gabon	0.20	0.17	0.19	40%	0.14	0.14	0.15	0.16
Iraq	4.50	4.17	4.65	46%	3.59	3.59	3.80	4.02
Kuwait	3.05	2.20	2.81	95%	2.17	2.17	2.30	2.43
Nigeria	1.78	1.52	1.83	74%	1.41	1.41	1.50	1.58
Saudi Arabia	11.90	8.50	11.00	100%	8.49	8.49	8.99	9.50
UAE	3.85	2.50	3.17	93%	2.45	2.45	2.59	2.74
Total OPEC 10	28.05	21.48	26.68	86%	20.60	20.60	21.82	23.03
Iran ³	1.99	1.97						
Libya ³	0.08	0.08						
Venezuela ³	0.63	0.56						
Total OPEC	30.75	24.09						
Azerbaijan	0.68	0.56	0.72	98%	0.55	0.55	0.59	0.62
Kazakhstan	1.67	1.42	1.71	73%	1.32	1.32	1.40	1.48
Mexico	1.73	1.59	1.75	165%	1.65			
Oman	0.95	0.72	0.88	81%	0.68	0.68	0.72	0.76
Russia	10.53	8.56	11.00	97%	8.49	8.49	8.99	9.50
Others ⁴	1.00	0.92	1.11	74%	0.85	0.85	0.90	0.96
Total Non-OPEC	16.56	13.77	17.17	94%	13.55	11.90	12.60	13.31
Total OPEC+	44.61	35.25	43.85	89%	34.15	32.50	34.42	36.34

1 Excludes condensates.

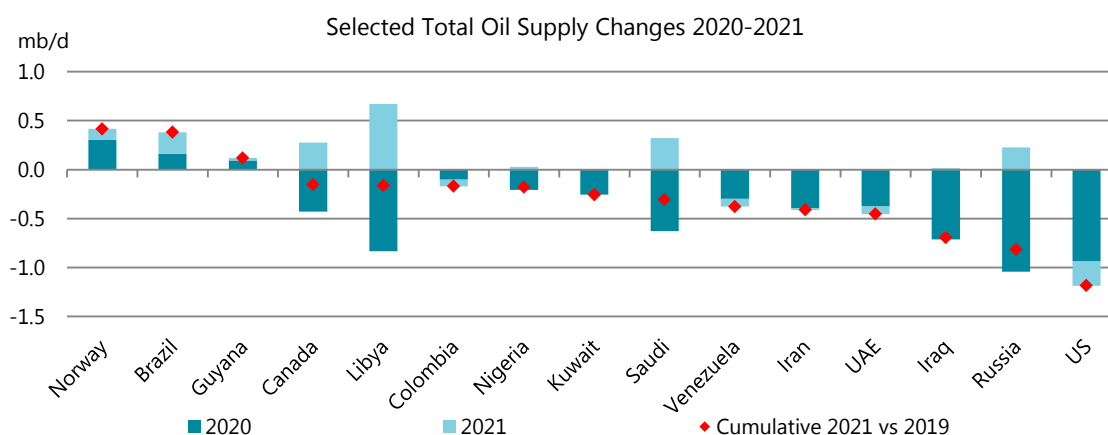
2 Based on Oct-2018, except for Saudi and Russia which each have an 11 mb/d baseline.

3 Target excludes Mexico, who will only cut production in May and June.

3 Iran, Libya, Venezuela exempt from cuts. Mexico cuts for May-June only.

4 Bahrain, Brunei, Malaysia, Sudan and South Sudan.

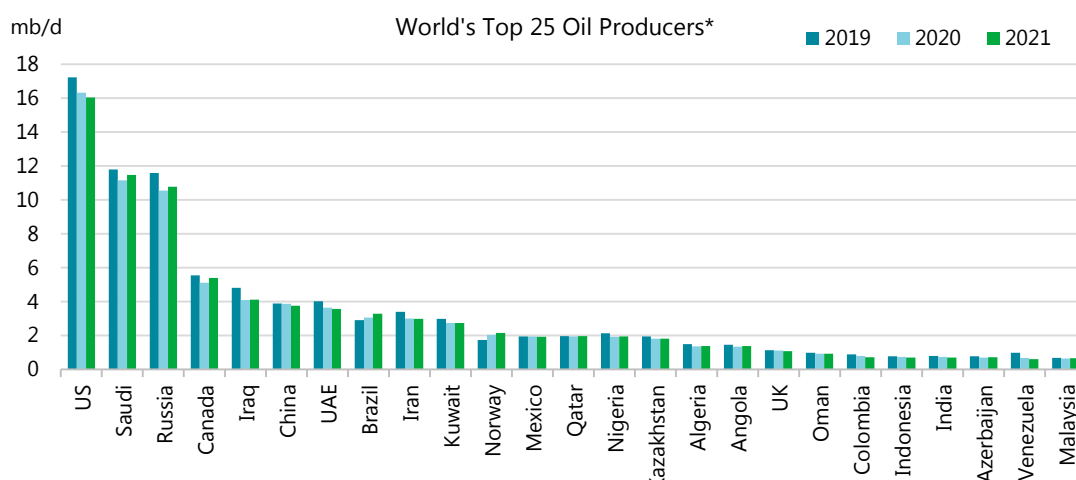
World oil production is expected to fall by a further 2.4 mb/d in June to 86.4 mb/d – the lowest level since early 2010. The decline will once again be led by Saudi Arabia, which has promised an extra one-month voluntary cut of 1 mb/d. OPEC crude oil production in May tumbled 6.66 mb/d to 24.09 mb/d and June could see the group pulling back to 22 mb/d, the lowest level in nearly three decades. This assumes that Riyadh makes good on its pledge, the UAE and Kuwait chip in with extra cuts of 100 kb/d and 80 kb/d, respectively, and that all producers observe 100% compliance with the OPEC+ deal.



*Assumes 100% compliance with OPEC+ supply pact which remains in place through 2021; recovery in Libya

The big picture for total oil output shows that the US could suffer the deepest supply losses over 2020-21. Even so, it will retain its rank as the world's largest producer of crude oil. Assuming OPEC+ supply cuts remain in place, Russia, Iraq and the UAE will also see output well below 2019 levels. Only Norway, Brazil and Guyana are expected to post any meaningful increases over the two-year period as new offshore projects start up. Overall, non-OPEC oil production falls by 3.1 mb/d y-o-y in 2020. In the absence of increased investments in short-cycle projects or a loosening of OPEC+ output cuts, we expect non-OPEC supply to grow by only 0.8 mb/d y-o-y in 2021.

World's top producers slash output



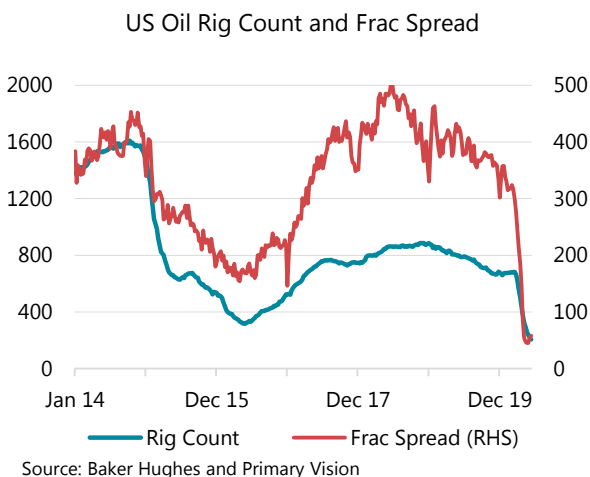
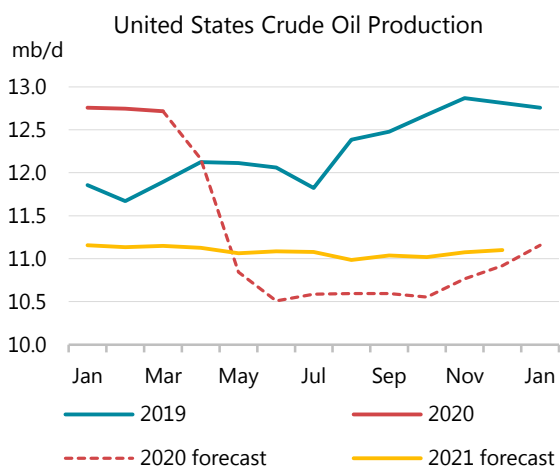
* Ranked by 2020 production. Assumes 100% compliance with OPEC+ cuts from June 2020.

US oil production continued to slide in May, as weak crude demand and limited storage availability forced large scale shut-ins. Drilling and completion rates ground to a near halt with companies slashing budgets and activity levels at a rapid pace. While consolidated output data is only available through March, we estimate crude oil production fell by 0.6 mb/d m-o-m in April and a record 1.3 mb/d in May. An expected uptick in refining activity and higher prices led some producers to announce a partial reversal of output cuts in June. Production is nevertheless expected to fall by an additional 300 kb/d this month to 10.5 mb/d on steep declines from shale wells and shut-ins in the Gulf of Mexico and Alaska. In early June, tropical storm Cristobal briefly shut in as much as 630 kb/d but output recovered swiftly. Alaskan production was also sharply lower as ConocoPhillips followed through with previously announced shut-ins.

The doubling of US oil prices from April's low to around \$40/bbl by early June could see some production return. Firms surveyed in March by the Federal Reserve Bank of Dallas said they could generally cover operating expenses for existing wells at WTI prices between \$23-\$36/bbl meaning that a large portion of shuttered output could potentially return at current prices of around \$35/bbl.

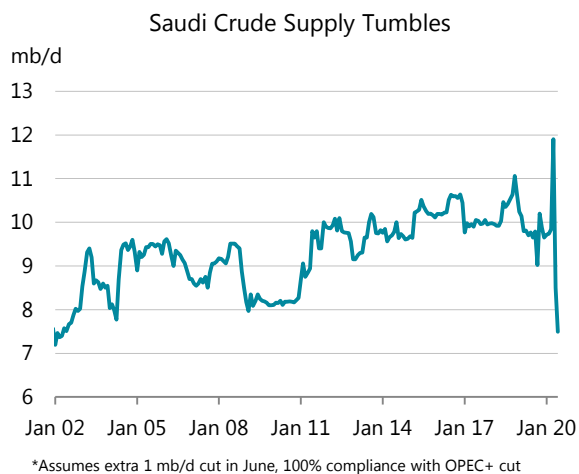
The sharp reduction in upstream spending announced for 2020 dampens prospects for a significant recovery in US shale production. To profitably drill new wells shale companies generally need a WTI price of \$45-50/bbl, though some Permian producers can drill profitably at \$30-40/bbl. With upstream budgets cut by nearly half compared with earlier guidance, activity levels are expected to remain weak. Firms shed another 120 oil rigs during May, so that by early June the count stood at 206 rigs – its lowest since 2009 and 477 less than at the start of March.

The Frac Spread count increased from mid-month, however, which suggests that drilled but uncompleted wells could be brought on line. Looking further ahead to 2021, we expect output to stabilise at around 11.1 mb/d. This assumes a slight recovery in activity that will, along with the start up of the offshore Vito and Mad Dog Phase 2 fields next year, largely offset steep base declines from already producing wells. If well completions do not rebound from May's lows however, US oil production will continue to fall next year. For now, we expect total US oil supply to decline on average by 0.9 mb/d in 2020 and by a further 280 kb/d in 2021.



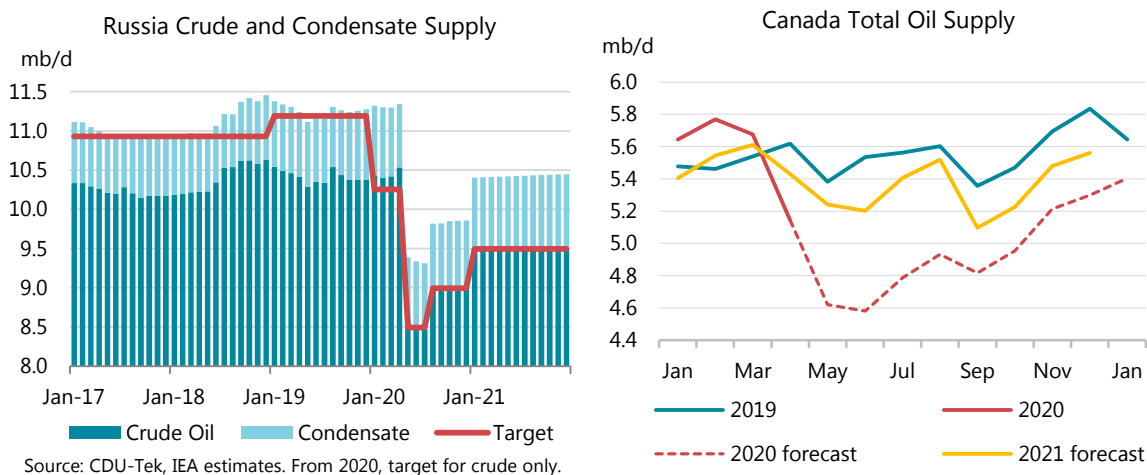
Saudi Arabia led the world's supply decrease in May with crude oil production plunging by 3.4 mb/d to 8.5 mb/d, in line with its OPEC+ target. The Kingdom has promised an extra voluntary cut of 1 mb/d during June to quicken the re-balancing process, which would reduce its output to 7.5 mb/d – the lowest in nearly 20 years. To help make the additional cuts, Saudi Arabia and Kuwait said they would shut in the al-Khafji field in the shared Neutral Zone for the month. The field, which only recently restarted production, pumped around 150 kb/d in May. With deeper OPEC+ cuts extended through July, Saudi crude production for the year as a whole is expected to decline by nearly 600 kb/d to 9.2 mb/d. The planned easing of OPEC+ cuts in 2021 would allow crude output to rise by 280 kb/d.

The dramatic decline in Saudi production from a record high in April led to sharply lower crude oil shipments to world markets. Exports tumbled 3.2 mb/d to 6.4 mb/d in May, with Europe cut back the most. At the time of writing, loadings for June were down 240 kb/d to 6.1 mb/d – the lowest in a decade.



Russia made good on its promise in May, cutting its crude and condensate output by an unprecedented 1.95 mb/d from April, to a 15-year low of 9.4 mb/d. Excluding condensates, estimated at around 0.8 mb/d, crude oil production of 8.56 mb/d was only 70 kb/d above the agreed level. Energy Minister Alexander Novak said earlier this month that Russia will comply fully with the deal in June.

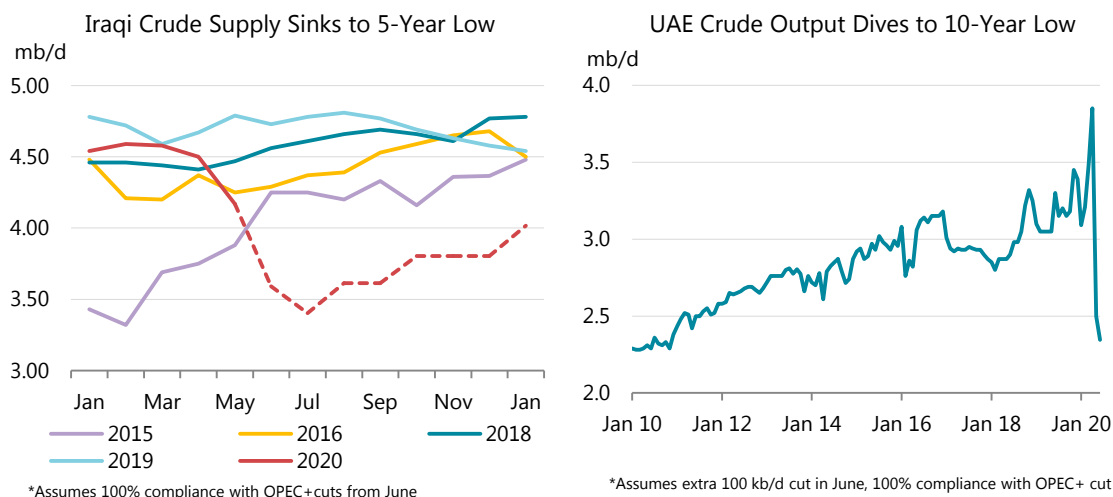
To meet government targets, Russian oil companies cut production on a pro-rata basis in May. Rosneft, excluding Bashneft, shut in 600 kb/d (-16%), Lukoil 345 kb/d (-21%), Surgutneftegaz 295 kb/d (-23%), Gazpromneft 177 kb/d (20%) while Slavneft cut output by 110 kb/d (37%) compared with April. With deeper output cuts extended by one month through July, total Russian oil supply is expected to fall by more than 1 mb/d on average in 2020 and rebound by 230 kb/d next year as cuts ease.



Shut-ins at a number of oil sands sites during April saw **Canadian** oil production plunge by 530 kb/d from a month earlier. Albertan non-upgraded bitumen supply slumped by 360 kb/d m-o-m to 1.5 mb/d, its lowest in nearly four years, while conventional crude oil production dropped by 95kb/d compared with the previous month. Synthetic crude oil output from the province's upgraders held largely steady at around 1.1 mb/d while offshore production was unchanged at around 0.3 mb/d. At just over 5.1 mb/d, supply was 0.5 mb/d lower than a year ago.

With weak demand from both domestic and US refineries and high levels of crude in storage, supplies likely fell further in May and June. However, Albertan oil sands operators have signalled their readiness to quickly restart oil sands production once the situation improves and we expect output to rebound during the second half of the year. Steep capex cuts of more than 30% across the sector will take their toll, however, and production is expected to trail year-earlier levels through to the end of 2020. For the year as a whole, production is forecast to decline by 430 kb/d on average in 2020 and increase by 275 kb/d in 2021.

Iraq reduced production in May by 330 kb/d to a five-year low of 4.17 mb/d, but this was nearly 600 kb/d above its OPEC+ supply target. Nevertheless, Iraq's new Oil Minister Ihsan Ismael was swift to underscore Baghdad's full commitment to the OPEC+ supply pact and ordered deeper cuts for June at the southern oil fields operated by international oil companies (IOCs). Preliminary tanker tracking data for June show crude exports already trending lower by at least 300 kb/d and wellhead flows are likely to follow a similar path. During May, production was reduced mostly from the south, with substantial cuts at West Qurna-2 operated by Lukoil and Halfaya (China National Petroleum Corp). For June, Iraq has reportedly asked that reductions be made at its largest field Rumaila, operated by BP, West Qurna-1 (ExxonMobil) and Zubair (Eni). If Iraq were to comply fully with the OPEC+ pact from June, crude supply would decline on average this year by 710 kb/d to 4 mb/d and hold broadly steady in 2021.

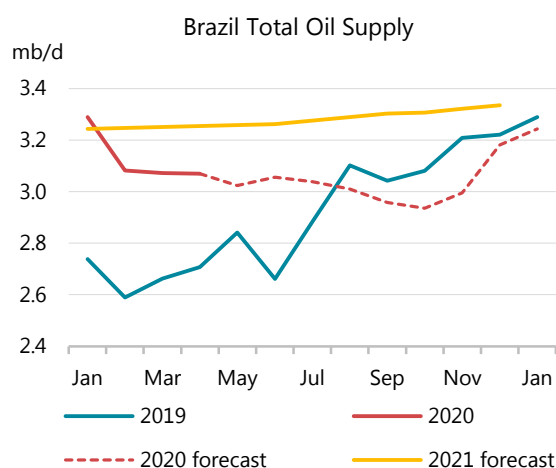


Chinese crude oil production came off recent highs in April, falling 37 kb/d m-o-m to 3.8 mb/d. While output remained above year-ago levels, steep declines at mature fields and spending cuts by the country's largest producers are expected to take their toll in coming months. Crude oil production is forecast to decline by 30 kb/d in 2020 and a steeper 165 kb/d in 2021.

The **UAE** slashed production by 1.35 mb/d in May, which left it just shy of its 2.446 mb/d supply target. Following Saudi Arabia's lead, it announced a further voluntary reduction for June of 100 kb/d. Assuming full compliance, output would sink this month to a 10-year low of 2.346 mb/d. The deeper cut was flagged by the Abu Dhabi National Oil Co (Adnoc), which informed buyers of a 20% reduction in the production of both Upper Zakum and Murban grades (vs. 15% in May) while maintaining a 5% decrease in Umm Lulu and Das crudes. Assuming OPEC+ cuts remain in place through 2021, crude oil output is set to decline by 360 kb/d in 2020 to an average 2.8 mb/d and slip a further 80 kb/d next year.

Brazilian oil output held largely steady in April at just below 3.1 mb/d as higher crude demand led Petrobras to reverse announced production cuts while anti-Covid-19 measures pushed planned maintenance to the second half of the year. A rebound in output from the prolific Lula pre-salt field (+160 kb/d m-o-m) outpaced declines in the mature Campos basin (-140 kb/d) due to lower flows from the Jubarte and Peregrino fields.

Compared with a year ago, total production was 360 kb/d higher, as a 195 kb/d decline in the Campos Basin was more than compensated for by gains from the Lula field (+170 kb/d) and more importantly from Búzios, which was up 350 kb/d y-o-y to 515 kb/d. For 2020 as a whole, Brazil's oil production is expected to increase by 160 kb/d on average. Heavy maintenance during the second half of the year will be offset by fresh supplies from the Atapu field which is nearing completion. Further gains of around 220 kb/d are expected next year, when Petrobras plans to start up two new production systems at the Sepia and Mero fields, while Equinor continues to expand output at the Peregrino field.

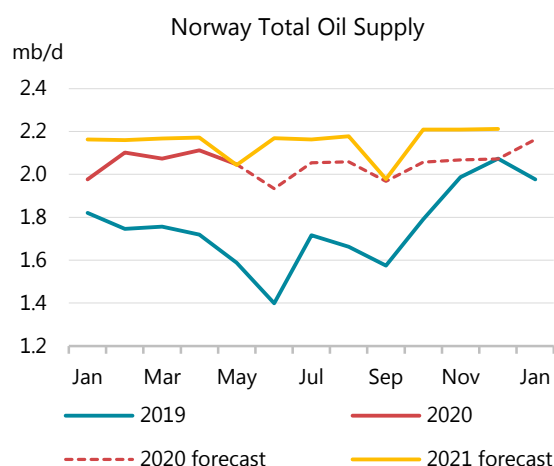


Iran's crude oil production dipped to 1.97 mb/d in May, reaching its lowest level in three decades. Oil exports dropped to a mere 60 kb/d in May from 200 kb/d the previous month, although some barrels are believed to be moving off-radar. Domestic refinery throughput is thought to have edged higher. The volume of oil stored at sea decreased to an estimated 66 million barrels at the end of May (versus 69 mb the previous month). Should crude oil output hold at current levels through end-year, production would fall nearly 400 kb/d y-o-y from 2.36 mb/d in 2019. On the development front, Iran plans to complete Phase 11 of the South Pars gas field even though Covid-19 and US sanctions have restricted its revenues. Petropars, a unit of National Iranian Oil Co, is moving ahead with the project after the withdrawal of Total and China National Petroleum Corp due to US sanctions. The first well is expected to start producing in 2021.

Crude supply from **Kuwait** fell 850 kb/d from April's record high to 2.2 mb/d in May, just above its OPEC+ target. Kuwait has announced an extra voluntary cut of 80 kb/d for June and, along with Saudi Arabia, will halt output from the joint al-Khafji field in the Neutral Zone for one month. Should OPEC+ cuts remain in place through 2021, crude oil production would fall by an average 250 kb/d this year versus 2.7 mb/d in 2019 and hold broadly steady next year.

Data from the Petroleum Directorate show that **Norway's** liquids production rose to 2.1 mb/d in April, its highest in three years (+390 kb/d y-o-y). Growth stemmed mostly from the Johan Sverdrup field that came online in October 2019 and reached its phase 1 production plateau of 470 kb/d in April. However, with government-mandated cuts effective from June through December, output is not expected to reach this level again until 2021.

The Petroleum and Energy Ministry unveiled further details of the cuts that will be shared across 40 oil producing fields, including Johan Sverdrup. In addition, a number of field start-ups have been pushed back to 2021. Delays were already expected at several fields, including Martin Linge, Yme and Njord, as measures to control Covid-19 have hampered operations.



Even after adjusting for the cuts, Norway's output will grow by just over 300 kb/d in 2020, having been at a three-decade low in 2019. Some operators, such as Lundin, have confirmed that planned summer maintenance will still take place but at a lower-than-usual level due to Covid-19-related manning constraints.

In 2021, the roll-back of government production restrictions and the commissioning of several fields will deliver growth of 110 kb/d. Equinor operates the largest project start-ups; Martin Linge is expected to come online in 2Q21 and the Snorre Expansion is due later in the year. Although phase 2 of Johan Sverdrup will boost Norway's output from 2022, future growth is at risk as operators have flagged sharp cuts to their investment plans.

Norway's national statistics agency's recent survey revealed that, having already revised down their 2020 budgets, firms plan to cut spending by a further 20% in 2021. In particular, companies slashed exploration expenditures, while development spend is set to drop 24%. To combat the

impact of the downturn and incentivise investment the government has unveiled tax breaks for upstream companies. In response, Aker BP approved the Hod development and Equinor gave the green light for spending to electrify the Gina Krog and Sleipner facilities.

Mexican oil production inched 30 kb/d lower in April as declines from Ku-Maloob-Zaap and other mature assets offset gains from newly started priority fields. Output from Ixachi, Pokche, Mulach, Hok, Tlame and other priority fields rose 14 kb/d m-o-m to 41 kb/d according to data from the National Hydrocarbons Commission (NHC). At 1.97 mb/d, total oil supply was above year-earlier levels for a sixth consecutive month as a rebound in output from the Xanab, Balam and Yaxche fields also contributed. Output likely fell sharply in May, however, as OPEC+ cuts took effect. Pemex crude oil production reportedly fell 8.6% m-o-m to 1.527 mb/d, from 1.67 mb/d in April. Mexico had agreed to reduce its crude oil production by 100 kb/d for May and June, from a baseline of 1.753 mb/d. While output from the priority fields are expected to see continued gains in 2020 and 2021, steep declines at mature fields and lower spending by Pemex is expected to keep total production relatively steady at around 1.9 mb/d through 2020 and 2021. At the recent OPEC+ meeting, Mexico said that after June it would no longer cut production as previously agreed.

Oil output held steady at around 1.94 mb/d in **Qatar**, which is seeking to enforce a 30% cut in its capital and operating expenditures. It is also set on pushing forward with its bold plan to boost LNG capacity. Commercial bids reportedly are due in September for the construction of four LNG liquefaction trains that will raise capacity from 78 million tonnes a year to 110 million tonnes and increase the supply of NGLs. The first new train is expected to come on line in 2025, a year later than planned. The four-train expansion is expected to produce some 260 kb/d of condensate, 11,000 tons per day of LPG, and 4,000 t/d of ethane. A proposed second phase will boost LNG capacity to 126 million tonnes a year by the late 2020s.

Crude oil production in **Nigeria** fell 260 kb/d in May to 1.52 mb/d, but was 110 kb/d above its OPEC+ target. The head of the Nigerian National Petroleum Corp, Mele Kyari, said on 10 June that the country will make extra cuts to reach compliance by mid-July. Early tanker tracking data show a sharp decline in exports so far in June. If it were to comply fully with OPEC+ cuts from June, crude oil output in 2020 would fall by an average 180 kb/d from 1.7 mb/d in 2019 and hold broadly steady in 2021. Hit hard by the collapse in oil prices, Nigeria has put 57 small oil fields in the Niger Delta region up for auction as it seeks to boost reserves and revenue. The bid round reportedly is only open to local investors and firms. The government has meanwhile further postponed its long-awaited Petroleum Industry Bill due to the Covid-19 outbreak but aims to pass it before the end of the year. The far-reaching bill, on the table for nearly 20 years, covers everything from the share of oil wealth that remains in the Niger Delta oil heartland to licensing rounds.

Kazakhstan got off to a slow start in complying with the OPEC+ deal but has since mid-May kept production in line with its quota. For May as a whole, Kazakhstan produced 105 kb/d more than agreed but will offset this during August and September according to Energy Minister Nurlan Nogayev. Crude and condensate production fell by around 250 kb/d on average, to 1.7 mb/d. Excluding condensates, mainly from the Karachaganak field, crude production in May is estimated at 1.423 mb/d vs. a target of 1.319 mb/d. CPC loadings fell by 220 kb/d, to 1.2 mb/d, with lower contributions from Kashagan (-80 kb/d) and Tengiz (-60 kb/d), while Karachaganak exports held steady.

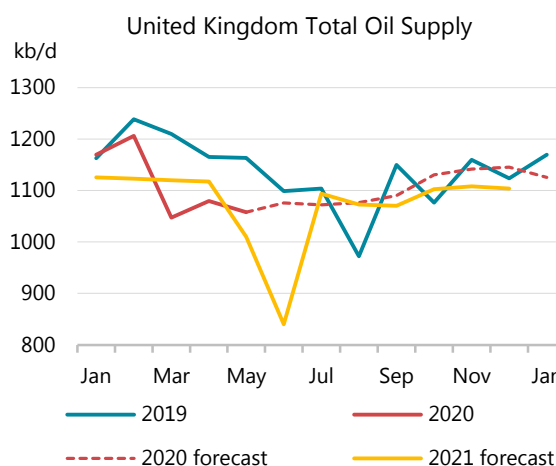
Algeria cut below its OPEC+ target in May, with crude oil supply falling 190 kb/d to 810 kb/d. Algeria expects its budget deficit for 2020 to reach 10.4% of gross domestic product, up from a previous forecast of 7.2%, due to lower oil and gas revenue.

Angola over-produced by 90 kb/d versus its OPEC+ target in May, with output easing only 50 kb/d to 1.27 mb/d. Tanker tracking shows sharply lower exports so far in June. On the upstream front, a bid round for nine oil fields may be delayed due to Covid-19. Data packages are available for six oil fields in the Kwanza and three fields in the Lower Congo basins that are due to be auctioned later this year.

In April, the **UK's** total oil output recovered modestly from a seven-month low in March. At 1.1 mb/d, production fell 85 kb/d y-o-y as safety measures due to Covid-19 reduced staffing and impacted drilling activity. Technical issues at Buzzard and Catcher caused flows to be shut-in for parts of April and May and Premier Oil announced the cessation of output from the Huntington field.

The department for Business, Energy and Industrial Strategy (BEIS) noted that Covid-19-related safety measures are likely to disrupt UK production throughout 2Q20 but give a boost later in the year thanks to the deferral of planned maintenance. For 2020 as a whole, UK production will fall by 27 kb/d y-o-y.

Some UK operators warned of project delays and lower output due to the Covid-19 pandemic. As part of a plan to trim its capital budget by 30%, Premier Oil has delayed development drilling at Catcher and Laverda. Ithaca Energy noted that the construction of the Vorlich project has been restricted, threatening the target for first oil of mid-2020. Meanwhile, Hurricane Energy has suspended Lancaster's output guidance of 18 kb/d while it investigates field problems.



The impact of Covid-19 looks likely to spill over into 2021. Although safety challenges will have hopefully eased, cost-cutting and the disturbances to global supply chains have put project schedules at risk. Neptune Energy has cut its 2020 budget by 30% and announced a one-year delay to its Seagull project. Now due online in late 2022, Seagull will add 30 kb/d to UK flows. Commissioning of Shell's Penguin project is planned for mid-2021 but construction of the FPSO has been held-up in China. Shell has not announced any change to first oil so far. Furthermore, to minimise offshore personnel requirements, Ineos has delayed planned 2020 maintenance on the Forties pipeline system to 2021. Overall, with few sources of growth on the horizon, field declines will dominate and UK output is expected to fall 33 kb/d in 2021.

Oil output in **Oman** fell 237 kb/d from an April record, but crude oil production was 38 kb/d above its OPEC+ target during May. It plans to cut an extra 10 kb/d to 15 kb/d in June as part of the Saudi-led voluntary cutback effort.

Colombian oil production continues to slide and in mid-May crude output slumped to a low of 700 kb/d compared with rates of around 890 kb/d at the start of the year, according to daily government data. Production rebounded to 730 kb/d in early June, but further declines are expected towards year-end and into 2021. Ecopetrol, the country's largest producer, has been hard hit by plummeting oil prices and reported a 95% drop in first quarter profits. As a result, the company has slashed its planned spending for 2020 from an original budget of \$4.5-\$5.5 billion to \$2.5-\$3 billion. Output is expected to decline by an average 100 kb/d in 2020

and 70 kb/d next year. In April, the latest month for which consolidated data is available, output was down 60 kb/d m-o-m to 800 kb/d, 100 kb/d lower than a year earlier.

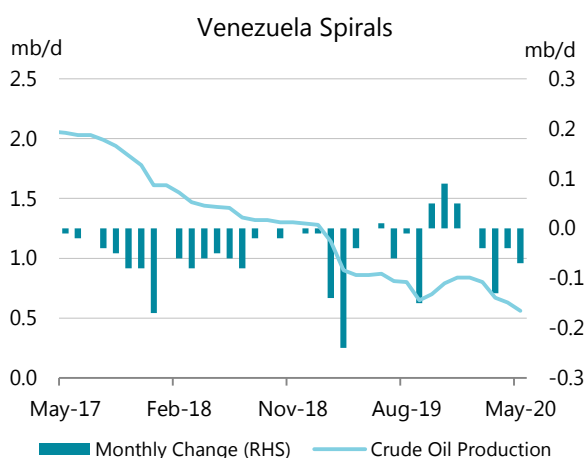
Indonesian crude and condensate production fell by 14 kb/d to 710 kb/d in May, down 40 kb/d y-o-y. State-owned Pertamina says it will press on with a plan to increase production by 1.8% this year despite financial pressures from falling global crude oil prices. Pertamina will invest \$1 billion, nearly a quarter of its total 2020 upstream capital expenditure, in developing the Mahakam Block in East Kalimantan. Next year, Pertamina is slated to take over the Rokan Block in Riau from Chevron. By contrast, privately-owned PT Medco Energi Internasional slashed its capital expenditure and production targets for this year due to the oil price crash. Capital expenditure was cut by 30% to \$240 million “with potential for further 2021 reduction”, while output targets were lowered by 5% to 105 kboe/d.

Indian oil supply dropped by 38 kb/d in April to 740 kb/d, down 75 kb/d y-o-y as a nationwide lockdown for Covid-19 resulted in losses of demand and restrictions on movements for field operators. The biggest decline was registered for NGLs, which fell by 30 kb/d, as fractionators ran at reduced rates. For the year as a whole, output is expected to contract by 70 kb/d y-o-y followed by a further 40 kb/d reduction in 2021.

Azerbaijan fulfilled its OPEC+ obligations, reaching compliance of 98% in May. Oil and gas condensate output in May was 650 kb/d, including 557 kb/d of crude and 93 kb/d of gas condensate.

Venezuela's crude output fell 70 kb/d to 560 kb/d in May, down 300 kb/d on a year ago. Petroleos de Venezuela (PDVSA) continued to store output in tanks as exports sank to just 460 kb/d due to tough US sanctions. Brimming inventories reportedly forced PDVSA to halt operations in June at the Petropiar upgrader and stop transport from its Petrosinovensa and Petromonagas projects. If crude output were to stabilise at current levels, 2020 as a whole would see a loss of 260 kb/d versus supply of 870 kb/d in 2019.

Malaysian crude oil production is estimated at 460 kb/d in May, in line with agreed output levels. Total oil production is assessed at 608 kb/d, down 23 kb/d on April and 85 kb/d below a year earlier. The latest official data for Malaysia is for February.



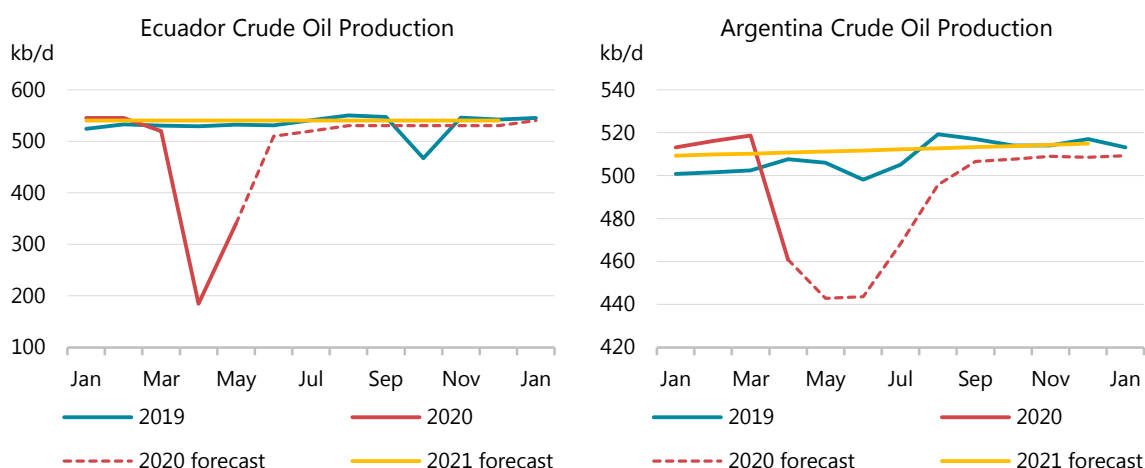
Other key developments

With its ports still blockaded by rebel militias, **Libya** produced only 80 kb/d in May. Military advances by the internationally recognised Government of National Accord (GNA) in Tripoli in recent weeks allowed output to restart in early June at el Sharara and the nearby el Feel field. However, just days later an armed group allied with the eastern-based Libyan National Army (LNA) stormed the field and ordered flows to stop. As a result, the National Oil Corp (NOC) declared *force majeure* on exports from the field that produced 300 kb/d before the blockade, about 30% of Libya's total output. The GNA is now moving towards the eastern oil crescent.

Despite its recent military gains, however, the LNA still controls the eastern terminals of Ras Lanuf, Es Sider, Brega, Zueitina and Marsa el Hariga. This means around two-thirds, or roughly 800 kb/d, of Libyan crude would remain offline.

While very uncertain, recent efforts to engage a ceasefire open an opportunity to restart some production gradually in the coming weeks, notably from core southern fields that pump around 400 kb/d. NOC operates Sharara in a joint venture with Repsol, Total, OMV and Equinor. Sharara had re-started production at an initial rate of 30 kb/d. The El Feel field could start up at a rate of 12 kb/d and return to capacity of around 90 kb/d within two weeks. Should Libyan production stage a gradual recovery this year and rise close to pre-blockade levels in 2021, average crude output in 2020 would come in at about 300 kb/d and recover to more than 900 kb/d in 2021.

Ecuadorian oil production recovered swiftly during May, after a mud-slide forced the shut-in of nearly all of the nation's supply during April. On 10 June, output stood at 517 kb/d, close to pre-shut-in levels. Based on preliminary daily data, output is estimated to have risen by 155 kb/d on average in May, partly reversing April's 355 kb/d decline.



In an attempt to protect its oil industry from falling prices, **Argentina** has set a \$45/bbl domestic crude oil reference price and eliminated an 8% export tax levied when Brent is below \$45/bbl. The reference price will remain in effect until the end of the year, or until Brent surpasses \$45/bbl for more than 10 days. The move followed a slump in domestic crude oil output during April of nearly 60 kb/d, to 460 kb/d, as the government shut down the economy on March 20 to try to contain the spread of the novel coronavirus. The quarantine has been loosened since, allowing crude runs at refineries to recover to around 60% of capacity in May from less than 50% in April. As demand recovers further, production is expected to rebound to near pre-shutdown levels.

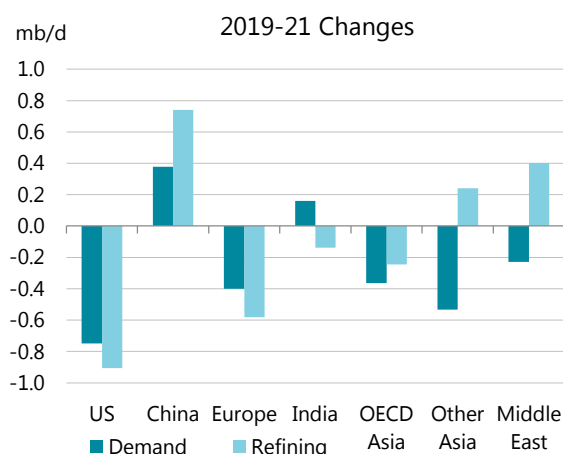
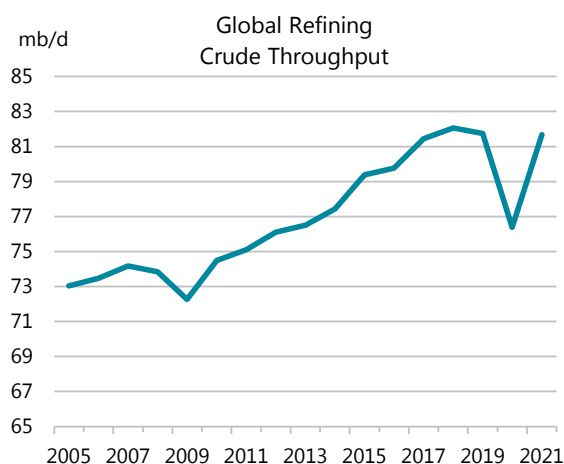
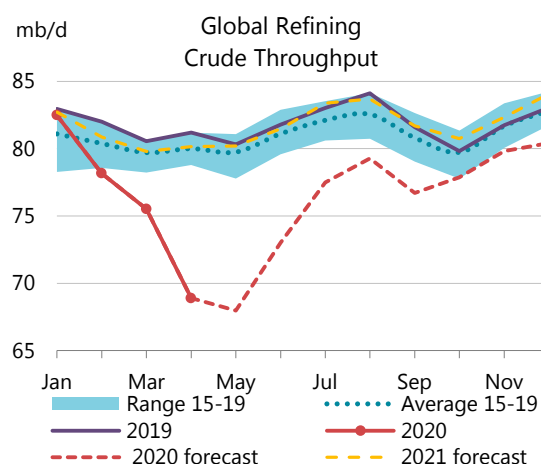
In response to weak gasoline consumption due to Covid-19 lockdown measures, **biofuels** producers have shut in output. Global biofuels supply is expected to be 2.5 mb/d on average in 2020, down 310 kb/d. In 2021, demand for gasoline is expected to rebound prompting higher biofuels production of 2.8 mb/d, a return to the 2019 level.

Refining

Overview

Global refining intake in April plunged 6.6 mb/d month-on-month (m-o-m) to just 68.8 mb/d, down 12.3 mb/d year-on-year (y-o-y). Based on early indications, May refining throughput fell by a further 0.9 mb/d m-o-m. Nevertheless, the refining response so far has lagged the demand decline arising from the Covid-19 lockdown measures, and product stocks are estimated to have built substantially since April. This may have been a key factor behind the freefall of refining margins seen in May.

We expect the total product stocks overhang and crude supply cuts to continue to squeeze refinery margins, keeping activity growth in check and leading to product stock draws in the second half of the year. Refinery throughputs are forecast to decline by 5.4 mb/d in 2020 and, in our first post-Covid-19 outlook for 2021, recover by 5.3 mb/d next year. Mirroring developments in demand, a full rebound in refining activity is not expected before 2022, which leaves 2018 as the record year for global throughputs (in 2019, refinery activity was lower y-o-y by 0.3 mb/d). A potentially higher maintenance programme in 2021, to allow refineries to catch up with the work deferred in 2020 due to travel restrictions and social distancing measures, could weaken the recovery in runs.



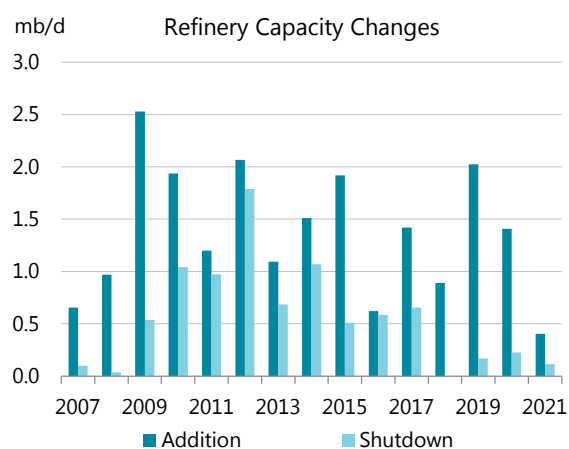
In 2H20 and 2021, refining activity is expected to remain at relatively subdued levels in the US, Europe and OECD Asia, reflecting the outlook for demand. By contrast, runs are expected to fully recover and surpass 2019 levels in China and the Middle East. These two regions combined will account for 70% of new capacity coming online within the next 18 months.

Global Refinery Crude Throughput ¹											
	(million barrels per day)										
	2019	Mar 20	1Q20	Apr 20	May 20	Jun 20	2Q20	3Q20	4Q20	2020	2021
Americas	19.2	17.5	18.4	14.9	15.0	16.7	15.5	18.0	18.5	17.6	18.7
Europe	12.2	11.0	11.7	10.0	9.5	10.6	10.0	10.9	10.8	10.9	11.6
Asia Oceania	6.8	6.5	6.7	6.4	5.3	5.7	5.8	6.6	6.5	6.4	6.6
Total OECD	38.1	35.0	36.7	31.2	29.9	33.0	31.3	35.5	35.8	34.8	36.9
FSU	6.8	6.9	6.9	6.2	5.7	6.1	6.0	6.5	6.6	6.5	6.8
Non-OECD Europe	0.6	0.4	0.5	0.4	0.4	0.3	0.4	0.3	0.5	0.4	0.4
China	13.0	11.7	11.9	13.0	13.6	13.4	13.3	13.5	13.7	13.1	13.7
Other Asia	10.3	10.1	10.6	7.9	8.2	9.0	8.4	9.6	9.8	9.6	10.4
Latin America	3.2	3.0	3.1	2.3	2.5	2.6	2.5	2.8	3.0	2.9	3.3
Middle East	7.7	6.4	6.9	6.0	6.3	6.9	6.4	7.6	7.8	7.2	8.1
Africa	2.0	1.9	2.1	1.7	1.4	1.7	1.6	2.0	2.0	1.9	2.0
Total Non-OECD	43.6	40.4	41.9	37.6	38.0	39.9	38.5	42.3	43.5	41.5	44.8
Total	81.7	75.4	78.6	68.8	67.9	72.9	69.8	77.7	79.3	76.4	81.7
<i>Year-on-year change</i>	-0.3	-5.0	-3.1	-12.3	-12.3	-8.7	-11.1	-5.1	-2.2	-5.4	5.3

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

We have updated our refinery capacity database since the publication of Oil-2020 – Analysis and Forecast to 2025 to incorporate new information for 2020 and 2021. We have also revised down our 2019 net capacity growth by 200 kb/d to 1.9 mb/d by removing two Chinese independent refinery expansion projects that were not confirmed. We no longer see 2019 as the record net growth year for capacity, but it was very close to 2009's 2 mb/d peak for net additions and the highest in a decade.

Net additions for 2020 are now expected to be 100 kb/d higher, at 1.2 mb/d. On the other hand, 2021 capacity growth is revised down from an already small 315 kb/d to 280 kb/d. Out of 1.5 mb/d expected in 2020-21, 530 kb/d comes from China, and the Middle East accounts for another 710 kb/d. Several projects are included for the first time: a 200 kb/d train at the former Hovensa refinery in the Virgin Islands, redeveloped by Arlight Capital as the Limetree Bay refinery project; a 10 kb/d modular refinery in Liberia, the country's first, and a 25 kb/d modular refinery in the port of Fujairah.



We have only included official announcements of permanent shutdowns. HollyFrontier's 50 kb/d plant in Wyoming has been added to this list as the company decided to convert the site to a renewable diesel refinery. Hydrotreated vegetable oil (HVO) production is becoming increasingly popular among US refiners in their strategy to respond to decarbonisation policy measures. The conversion of Marathon's 20 kb/d plant in North Dakota was the first project announced this year. Meanwhile, Delek's 70 kb/d Alon Bakersfield site in California, which has been idle for the best part of the last decade, was sold to a company that wants to convert the existing facilities to an HVO facility.

Box 2. Global crude oil and product balances – quarterly breakdown

The onset of the Covid-19 pandemic in January resulted in record oil stock builds in 1Q20. While our estimates and forecasts show an even larger surplus of oil in 2Q20, we dissect our 1Q20 balances to compare with reported stock changes and observe the residual balance.

Crude Oil and Product Balances (million barrels per day)												
	1Q18	2Q18	3Q18	4Q18	2018	1Q19	2Q19	3Q19	4Q19	2019	1Q20	2Q20
World total demand	98.5	98.6	99.8	99.3	99.0	98.9	99.2	100.5	100.7	99.8	93.9	81.4
World total supply	98.6	99.3	101.2	102.3	100.3	100.1	100.1	100.2	101.5	100.5	100.3	91.9
World balance	0.1	0.7	1.4	3.0	1.3	1.2	0.9	-0.3	0.8	0.7	6.3	10.5
Crude oil demand	82.4	82.5	84.5	83.3	83.2	82.7	82.1	84.1	82.4	82.8	79.5	70.9
Crude and condensate supply	82.8	82.7	84.0	85.6	83.7	83.5	82.7	82.5	84.2	83.2	83.3	75.7
Crude oil balance	0.4	0.1	-0.5	2.2	0.6	0.7	0.6	-1.5	1.8	0.4	3.7	4.8
of which												
OECD crude oil observed stock change	0.0	-0.1	-0.5	0.3	-0.1	0.4	-0.2	-0.5	0.1	0.0	0.6	
Crude oil in transit	-0.5	0.3	-0.1	0.2	0.0	-0.3	-0.2	-0.1	0.9	0.1	0.1	
China implied crude oil balance	0.4	0.2	-0.1	0.9	0.4	0.6	0.7	0.6	0.8	0.7	1.9	
Other non-OECD Kayros measurements	-0.1	0.0	0.1	-0.1	0.0	0.1	0.3	-0.3	0.2	0.1	0.5	
Other Non-OECD implied stock change	0.5	-0.3	0.1	0.9	0.3	-0.1	0.0	-1.2	-0.2	-0.4	0.7	
Refined product demand	82.8	83.8	84.6	83.1	83.6	82.7	84.0	85.1	84.3	82.8	77.7	66.7
Refined product supply	83.6	83.7	85.6	84.6	84.4	84.1	83.3	85.2	83.8	83.3	80.9	71.8
Refined product balance	0.9	-0.1	1.0	1.5	0.8	1.4	-0.6	0.1	-0.6	0.5	3.2	5.1
of which												
OECD refined product observed stock change	-0.1	-0.5	0.5	0.0	0.0	0.0	-0.1	0.2	0.1	0.0	0.4	
Non-OECD refined product implied stock change ¹	1.0	0.4	0.5	1.5	0.8	1.3	-0.5	-0.1	-0.7	0.0	2.8	
Non-refined product balance	-1.2	0.6	0.9	-0.7	-0.1	-0.9	1.0	1.1	-0.5	0.5	-0.6	0.5
of which												
OECD LPG/ethane observed stock change	-0.7	0.5	0.5	-0.5	0.0	-0.4	0.8	0.5	-0.7	0.1	-0.4	
Brazil ethanol stock change	-0.4	0.3	0.4	-0.2	0.0	-0.5	0.2	0.4	-0.1	0.0	-0.4	
Other non-refined product implied stock change ¹	-0.1	-0.2	0.0	0.0	-0.1	0.0	0.0	0.2	0.3	0.4	0.2	

¹ Including oil in transit

The estimated 6.3 mb/d oil supply surplus in 1Q20 was a net result of a 6.9 mb/d build in crude oil and refined products and 0.6 mb/d draws in non-refined products. Our calculated Chinese implied balances account for half of the crude oil supply excess. These are not observed stocks, but a residual of the country's crude oil balance. Reported OECD crude oil stock changes were 0.6 mb/d. Crude oil stock change estimates from satellite observations for non-OECD countries excluding China amounted to another 0.5 mb/d.

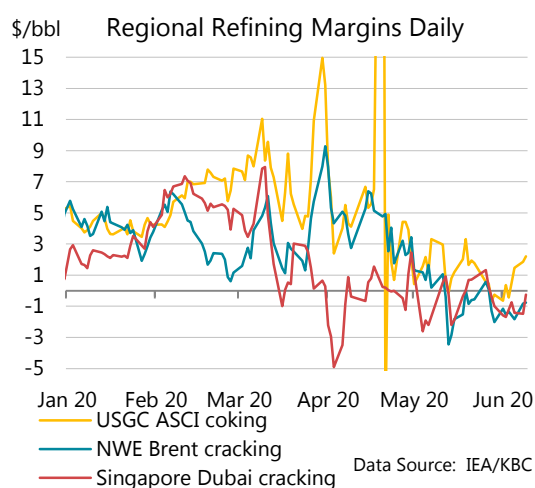
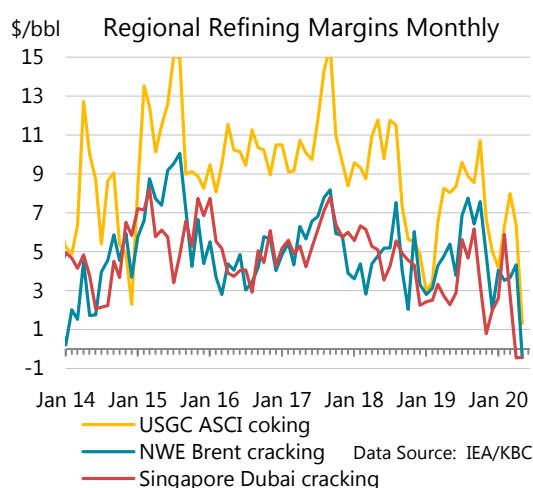
Crude oil in transit volumes increased by a minimal 0.1 mb/d, leaving 0.6 mb/d unexplained by available data. It may have been absorbed in non-OECD storage space that is currently not covered by satellite measurements. Our refined product balances imply an estimated 2.8 mb/d stock build in non-OECD countries, for which we have extremely patchy data and little ability to verify. A significant part of this could have accumulated in China during the country's peak lockdown period in February and March (see *Stocks* for more detailed breakdown of OECD and non-OECD observed stocks).

Non-refined products have essentially two major components for analytical purposes. OECD LPG stocks have a strong seasonality, drawing in winter heating months and building during the summer. Brazil's seasonal ethanol stocks vary from large builds in the harvest season to large

draws off-season. Unlike Brazil, US ethanol production is reported not at the time of harvest, but at the time of consumption; i.e. when blended with gasoline. Therefore, seasonal stock changes are not significant for the purposes of our global balance analysis.

Margins

Refining margins in seaborne trade hubs plunged in May under immense pressure from the oversized April product overhang and recovering crude prices, which surged by \$10-12 /bbl m-o-m. Despite a 2 mb/d m-o-m increase in demand and a 0.9 mb/d m-o-m decrease in refinery throughput, global product balances still show a large surplus of 3 mb/d. All four main margin indicators for North West Europe turned negative on a monthly average basis in May. For Brent cracking margins this was the first time based on our monthly data going back to 2006.



The fall in sour margins was even more pronounced as OPEC+ output cuts and falls in several non-OPEC countries (Canada, Colombia, etc) removed 10 mb/d of predominantly medium sour crude from the market. Urals cracking margins fell \$9/bbl m-o-m. US Gulf Coast sour margins hit their lowest levels in eight years. US Midwest margins based on local and Canadian grades ducked the trend by rising m-o-m thanks to stronger gasoline cracks, despite local crude prices almost doubling. Gasoline supply was constrained with lower refining activity and unit outages in the region, and gasoline stocks have been declining since end-March.

In Singapore, Dubai cracking margins remained negative for the second month in a row. The positive effect of freight rates retreating closer to their historical average levels was offset by diesel cracks falling to single digits. The very low sulphur 0.5% bunker fuel continues to remain the strongest priced fuel in Asia, reflecting the product's relatively strong fundamentals compared to the rest of the oil complex. Crude oil on water in April rose by 6.2 mb/d, or 17%, to a record high. In May, even as it declined slightly, oil on water volumes remained 13% higher than in 1Q20, showing a strong underlying demand for bunkering.

Globally, waning support from middle distillates cracks was a major factor in the deterioration of refining margins in May. Jet cracks fell to below zero on a monthly average basis for the first time in history. Diesel cracks plunged to around \$5/bbl, to just above a third of their March-April levels. This was the first time since 2016 that diesel cracks in Europe had fallen to single digits

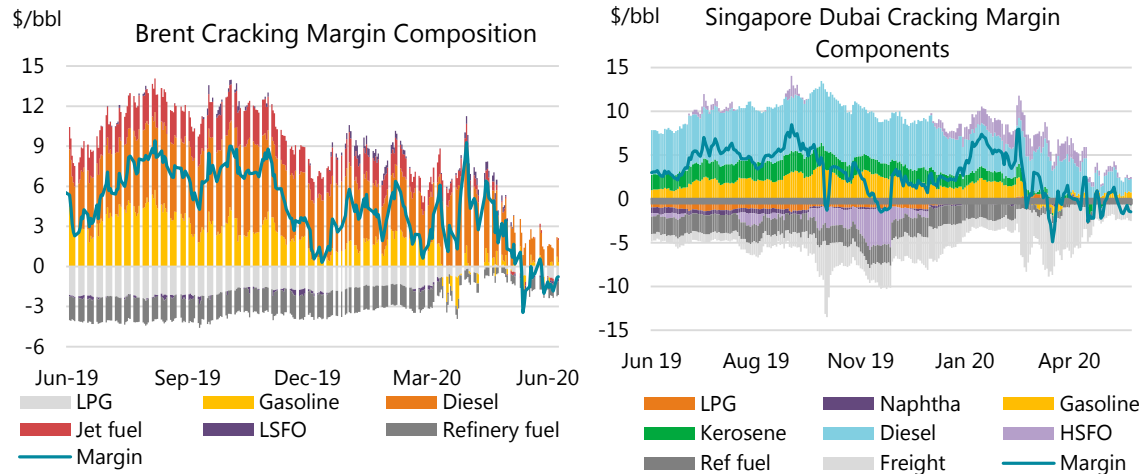
on a monthly average basis. Our 2021 demand forecast (see *Demand*) offers a rather bleak outlook for middle distillate cracks. Jet/kerosene demand in 2021 not only fails to rebound to 2019 levels, but remains below 1997 levels, as the Covid-19 pandemic effectively erases two decades of growth.

IEA/KBC Global Indicator Refining Margins ¹											
(\$/bbl)											
	Monthly Average				Change		Average for week ending:				
	Feb 20	Mar 20	Apr 20	May 20	May 20-Apr 20	15 May	22 May	29 May	05 Jun	12 Jun	
NW Europe											
Brent (Cracking)	3.51	3.67	4.32	-0.45	↓	-4.77	-1.49	-0.71	-0.67	-1.49	-0.80
Urals (Cracking)	2.80	6.56	7.58	-1.35	↓	-8.93	-2.11	-1.42	-2.13	-3.01	-2.28
Brent (Hydroskimming)	2.30	2.84	4.79	-0.90	↓	-5.69	-2.00	-1.36	-1.34	-1.89	-1.61
Urals (Hydroskimming)	-2.66	2.97	5.64	-3.59	↓	-9.23	-4.47	-3.66	-4.32	-4.60	-4.22
Mediterranean											
Es Sider (Cracking)	5.73	5.37	5.62	0.77	↓	-4.85	-0.37	0.83	0.82	-0.07	0.52
Urals (Cracking)	3.35	7.25	7.83	-1.41	↓	-9.24	-2.39	-1.39	-2.05	-3.06	-1.11
Es Sider (Hydroskimming)	4.58	3.89	5.49	0.24	↓	-5.25	-0.93	0.17	0.16	-0.47	-0.20
Urals (Hydroskimming)	-2.51	2.76	5.18	-3.81	↓	-8.99	-4.84	-3.76	-4.49	-4.97	-3.33
US Gulf Coast											
Mars (Cracking)	2.22	2.95	2.54	-1.20	↓	-3.73	-1.57	-0.14	-2.46	-1.48	-0.25
50/50 HLS/LLS (Coking)	8.27	9.22	6.42	2.37	↓	-4.05	2.24	3.23	1.94	2.43	4.41
50/50 Maya/Mars (Coking)	6.14	7.91	8.05	2.12	↓	-5.92	2.02	2.66	1.24	0.68	2.35
ASCI (Coking)	6.33	7.97	6.36	1.31	↓	-5.05	1.09	2.15	0.03	0.25	2.04
US Midwest											
30/70 WCS/Bakken (Cracking)	10.46	6.83	2.58	4.86	↑	2.28	4.43	4.61	2.94	5.85	7.80
Bakken (Cracking)	11.52	8.41	4.35	6.31	↑	1.96	6.17	5.32	3.97	7.46	9.65
WTI (Coking)	10.54	6.73	4.38	9.14	↑	4.76	8.83	7.32	6.13	6.92	8.36
30/70 WCS/Bakken (Coking)	13.12	9.45	4.03	6.59	↑	2.55	6.12	5.88	4.35	7.23	9.52
Singapore											
Dubai (Hydroskimming)	-2.39	-2.80	-2.99	-4.29	↓	-1.30	-4.65	-3.29	-3.92	-4.42	-4.19
Tapis (Hydroskimming)	-1.37	4.85	7.57	5.07	↓	-2.50	7.00	3.41	1.56	0.45	1.44
Dubai (Hydrocracking)	5.89	2.72	-0.47	-0.44	↑	0.03	-0.57	0.38	0.05	-1.33	-0.87
Tapis (Hydrocracking)	-1.31	3.93	6.47	5.27	↓	-1.21	7.23	3.72	1.92	1.05	1.82

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

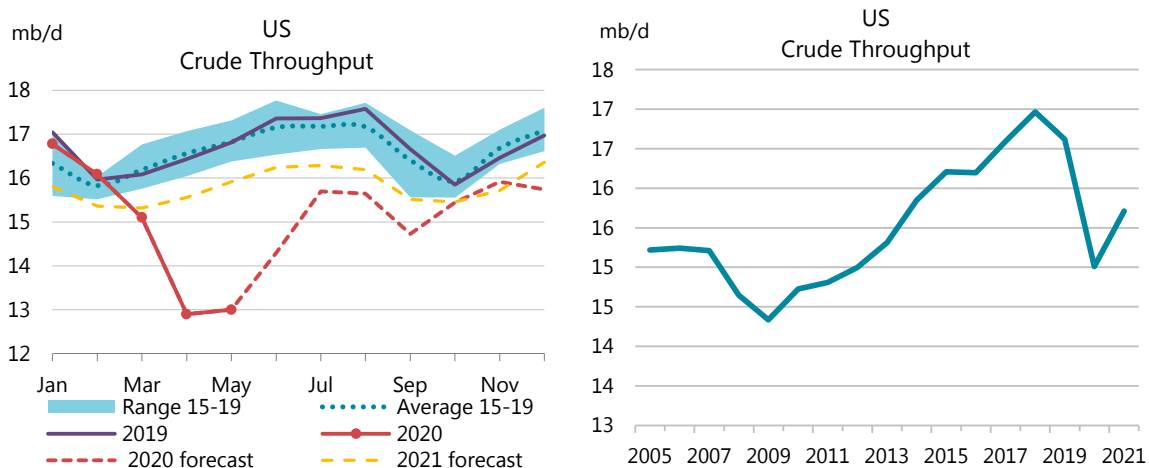
Source: IEA, KBC Advanced Technologies (KBC)

Continuously lower jet demand will force refiners to keep diverting kerosene fractions to the diesel pool, potentially increasing its supply by up to 7-10%. With diesel demand also fragile and conditional on macroeconomic prospects, refinery margins will struggle to find a strong core for the next couple of years. This could favour reduced crude runs, to limit output of gasoil and kerosene, while increasing utilisation rates of conversion capacity to produce gasoline and other components. In turn, this would result in boosting refinery demand for heavy feedstocks, contributing to an overall tightening of products at the bottom of the barrel.

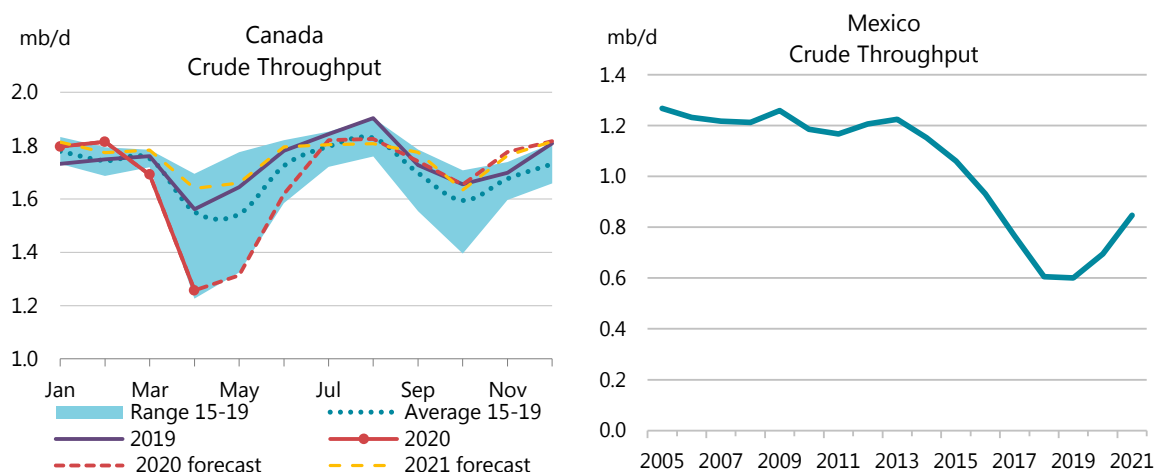


Regional refining outlook

US runs in May barely edged up from April, increasing by only 100 kb/d m-o-m to 12.9 mb/d, 3.8 mb/d lower y-o-y. Refining activity declined further in the export-oriented US Gulf Coast, but rose in the import-dependent Midwest and North East. By end-month, weekly runs were up 1 mb/d from the lows of early May. Refinery intake is expected to increase at a faster rate in June and July, taking its lead from demand, but further upside is limited this year. Overall, US refining activity is not expected to fully recover before 2022. This is due to not only demand developments, but also to potentially higher maintenance outages to compensate for work cancelled in 2020.



Canadian refining activity recovered slightly faster in May compared to their neighbour, according to the weekly data. The 80 kb/d North West Redwater refinery finally started processing diluted bitumen, its designated feedstock. It took the refinery 2.5 years to solve issues related to the gasifier. Overall, Canada's refining activity decline in April-March was not as unprecedented as elsewhere, with the Covid-19 impact similar to that of the 2018 wildfires.

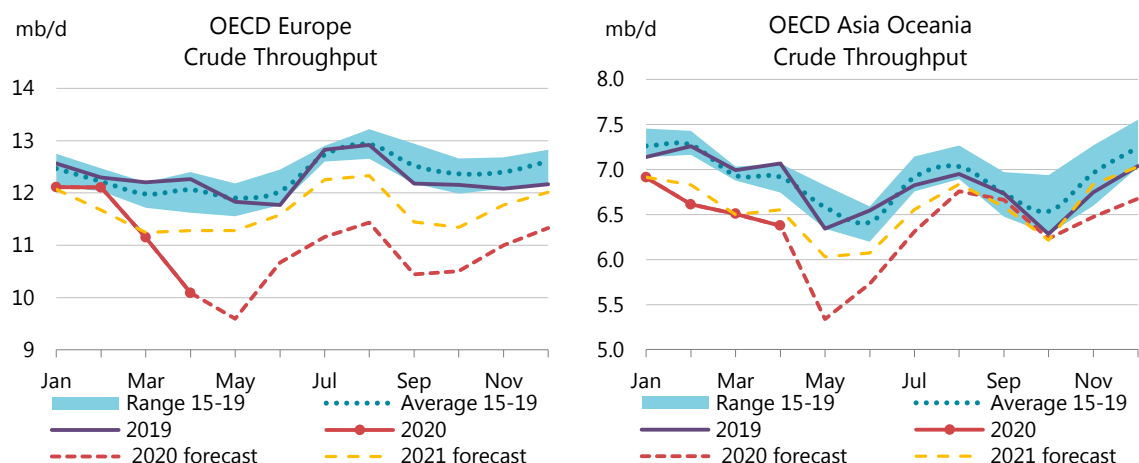


Mexico's refining intake continued increasing in April and, according to media reports, in May too. The Covid-19-related demand decline has not been an impediment for a refining sector that saw its operating rates falling to just 40% last year. Falling imports have compensated for the demand loss. Based on *Vortexa* cargo tracking data, Mexican oil product imports in April-May fell by 200-300 kb/d. Gasoline and diesel supplies come mainly from the US Gulf Coast, where refiners' prospects are closely related to the recovery in Mexican processing rates. After years of decline, Mexico could be among a handful of countries managing to register growth in refining activity this year. Judging by crude exports, heavier grades are now increasingly processed at home, to free higher-priced lighter grades for export markets.

European runs in April were reported to be 1.4 mb/d higher than our initial estimates, while the Euroilstock May survey of 15 European countries showed a smaller than expected decline. Runs in **France** improved slightly from a multi-decade low, but remained down 540 kb/d y-o-y. Combined declines in **Germany, Italy, Spain** and the **UK** amounted to another 1.1 mb/d y-o-y. Throughput is expected to start recovering in June. Total's 93 kb/d Grandpuits refinery in France restarted operations in early June after several months of outages due to a major crude pipeline leak and will run at reduced rates to avoid further pipeline accidents. The company says it is contemplating the future of the site, given the costly repairs required to fix the ongoing problems or replace the pipeline. Between 2010 and 2016, Total shut about 400 kb/d of refining capacity in France, notably converting its La Mede site to a biodiesel plant.

Despite the still very cautious signs of a demand recovery, terminal operator HES International reportedly restarted the 100 kb/d vacuum distillation unit (VDU) at the Wilhelmshaven refinery in **Germany**. The project was first announced in 2019 and was aimed at catering for the 0.5% bunker fuel market in North West Europe. VDUs typically process residual fuels into vacuum gasoil, feedstock for hydrocracking and cracking units, which is now also used in VLSFO blending.

Refining intake in OECD Asia fell by a modest 100 kb/d m-o-m in April, but this followed several months of lower throughputs. In 1Q20, throughput was down 450 kb/d y-o-y, with Covid-19 already pressuring regional demand and refining activity since end-January. In April, runs fell 700 kb/d y-o-y. **Japanese** weekly data for May show runs falling below 55% utilisation rates. A slow and incomplete recovery is expected over the next 18 months with the 2021 intake 250 kb/d lower than in 2019 as regional competition increases with new capacity coming online.



Refinery Crude Throughput and Utilisation in OECD Countries

(million barrels per day)

	Nov 19	Dec 19	Jan 20	Feb 20	Mar 20	Apr 20	Change from		Utilisation rate ¹	
							Mar 20	Apr 19	Apr 20	Apr 19
US ²	16.36	16.87	16.68	15.98	15.00	12.80	-2.20	-3.53	67%	86%
Canada	1.69	1.80	1.79	1.80	1.68	1.25	-0.43	-0.30	62%	77%
Chile	0.20	0.21	0.21	0.21	0.20	0.15	-0.05	-0.05	66%	88%
Mexico	0.59	0.57	0.56	0.47	0.60	0.67	0.07	0.10	41%	35%
OECD Americas³	18.84	19.45	19.23	18.46	17.48	14.87	-2.61	-3.79	65%	81%
France	0.81	0.84	0.75	0.74	0.48	0.50	0.03	-0.54	41%	84%
Germany	1.82	1.84	1.85	1.88	1.65	1.48	-0.17	-0.23	73%	85%
Italy	1.35	1.30	1.31	1.24	1.12	1.00	-0.12	-0.30	58%	75%
Netherlands	1.10	1.15	1.22	1.14	1.02	1.05	0.03	-0.04	82%	84%
Spain	1.17	1.29	1.26	1.22	1.21	1.06	-0.15	-0.32	75%	98%
United Kingdom	1.13	1.16	1.18	1.12	1.02	0.83	-0.20	-0.26	65%	85%
Other OECD Europe	4.61	4.49	4.44	4.67	4.56	4.07	-0.49	-0.49	75%	87%
OECD Europe	11.98	12.07	12.01	12.00	11.05	9.99	-1.06	-2.17	69%	84%
Japan	2.99	3.13	3.08	2.90	2.84	2.91	0.07	-0.18	82%	87%
South Korea	2.88	2.98	2.97	2.85	2.85	2.63	-0.21	-0.52	75%	90%
Other Asia Oceania	0.86	0.93	0.86	0.85	0.81	0.82	0.01	0.00	95%	95%
OECD Asia Oceania	6.74	7.03	6.90	6.60	6.50	6.37	-0.13	-0.69	80%	89%
OECD Total	37.56	38.55	38.15	37.07	35.02	31.22	-3.80	-6.66	69%	84%

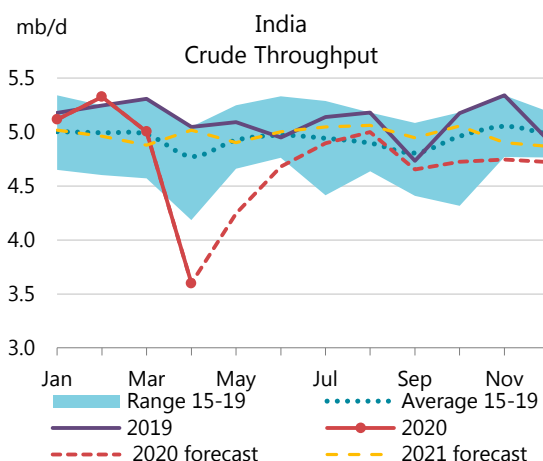
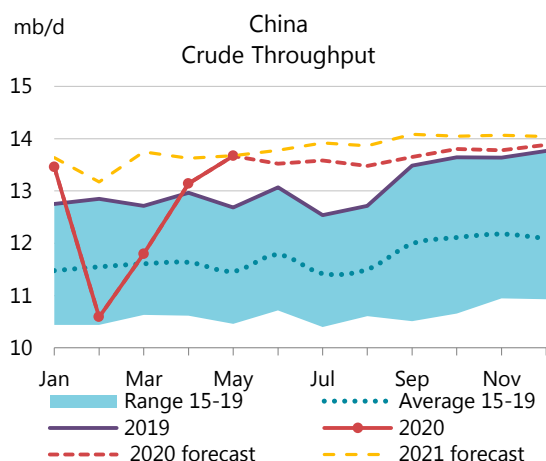
¹ Expressed as a percentage, based on crude throughput and current operable refining capacity

² US\$0

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

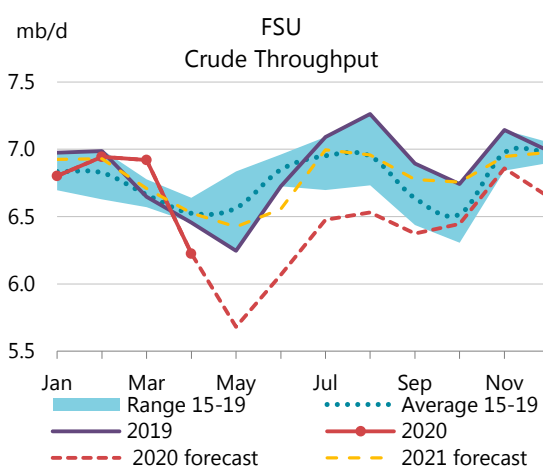
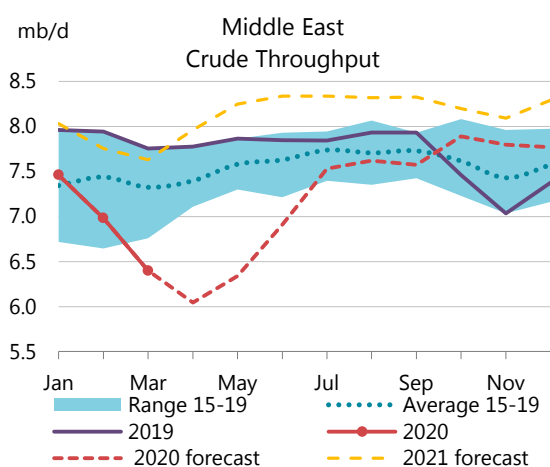
Chinese refinery intake continued its strong gains in April and May. In May, throughput was 1.9 mb/d higher than in March, surging 1 mb/d y-o-y. During the second half of this year, 360 kb/d of capacity is expected to come online in China, followed by 170 kb/d in 2021. In early May, Sinopec launched the marine port facility associated with its 200 kb/d Zhongke refinery that is due to start up this year and has started building crude inventories. In the second half of 2020 Chinese throughput is expected to increase by 400 kb/d y-o-y, and runs in 2021 are forecast to be 740 kb/d above 2019 levels.

Indian throughput in April fell by 1.4 mb/d both m-o-m and y-o-y to 3.6 mb/d as the country introduced some of the strictest lockdown policies to fight the spread of Covid-19. Refiners reported higher operating rates in May. Two capacity expansion projects should be completed this year, but overall operating rates will be subdued given an incomplete demand recovery.



Elsewhere in Asia, April data are not yet available. March data for **Indonesia**, **Thailand** and **Chinese Taipei** were stronger than expected by a combined 350 kb/d. Just like in many other non-OECD countries, monthly statistics are a rarity in Asia, yet the region's importance in the oil market is paramount. In this report, we introduce a new methodology for estimating monthly throughputs in Asian countries where traditional statistical data are not available or are demonstrated to be unreliable (see Box *Alternative solutions for missing data*). We plan to extend the use of this methodology to cover more countries in the region.

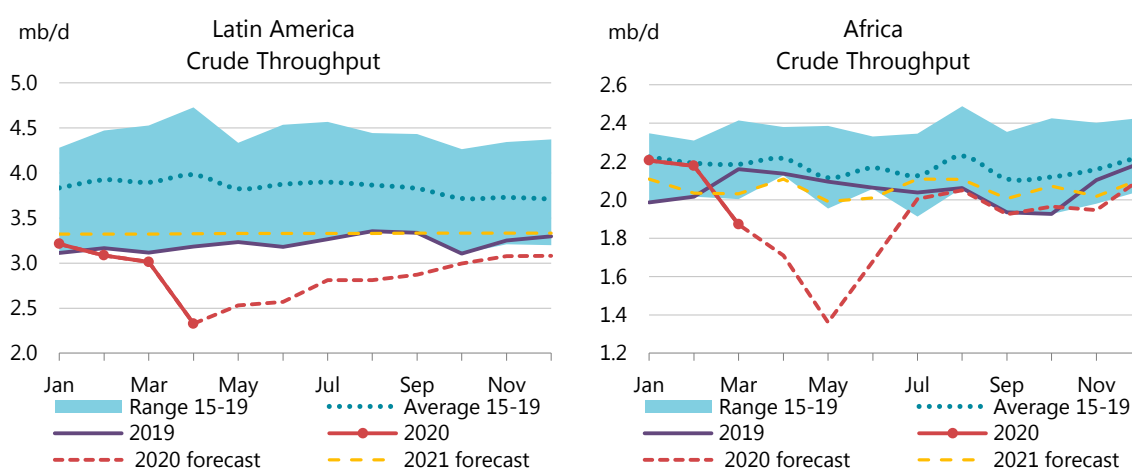
Middle Eastern refinery intake in March was down 580 kb/d m-o-m and 1.4 mb/d y-o-y due to heavy maintenance programmes in several countries. After further declines in April due to Covid-19, a recovery is expected to have started in May. There has been no recent news of the 400 kb/d Jazan refinery in **Saudi Arabia** that was planned to start up before mid-year. **Kuwait's** clean fuels project, which combined two existing refineries into a single modernization and expansion programme, should be completed this year. The new coker associated with the project has reportedly started exporting coke. Within the next 18 months the Middle East will be the leader in new additions, including a 65 kb/d condensate splitter and a 25 kb/d modular VLSFO-oriented refinery in the **UAE**. The latter is a trimmed-down version of the Brooge Petroleum project originally planned for 250 kb/d. In 2021, regional runs are forecast to rebound by 1 mb/d after a 500 kb/d decline in 2020.



Russian refining activity fell 400 kb/d m-o-m in May, and 255 kb/d down y-o-y. At the beginning of June the government asked refiners to ramp-up operating rates ahead of the lifting of the

lockdown to ensure supplies of summer specification gasoline. A refinery shutdown reduced April and May runs in **Kazakhstan**. In **Belarus**, February runs were at just 38% of capacity due to lower crude deliveries from Russia. The first US crude cargo destined for Belarus was waiting to discharge at a Lithuanian port at the time of writing.

April crude intake in **Argentina** and **Brazil** declined sharply by a combined 570 kb/d m-o-m. **Colombia** reported 1Q20 data, and runs were flat y-o-y. The prospects for Arclight Capital's Limetree Bay project are now increasingly uncertain (based on a 200 kb/d train of the **Virgin Islands** Hovensa refinery, shut down in 2012). The project aimed to capitalise on the bunker fuel market in the region, catering for the new IMO fuel rules but also the tighter Caribbean emission control area specifications. However, a crucial client base, the cruise industry, is one of the sectors most heavily impacted by the Covid-19 crisis and the prospects of recovery are bleak. Meanwhile, the government of **Aruba** issued a request for expressions of interest for resuming oil-processing activity at the island's 235 kb/d refinery that was shut-in 2012.



In Africa, March data for **Egypt** and **Algeria** showed the first signs of activity slowdown. After a 30 kb/d y-o-y increase in 1Q20 runs in the region are forecast to decline by 500 kb/d in 2Q20.

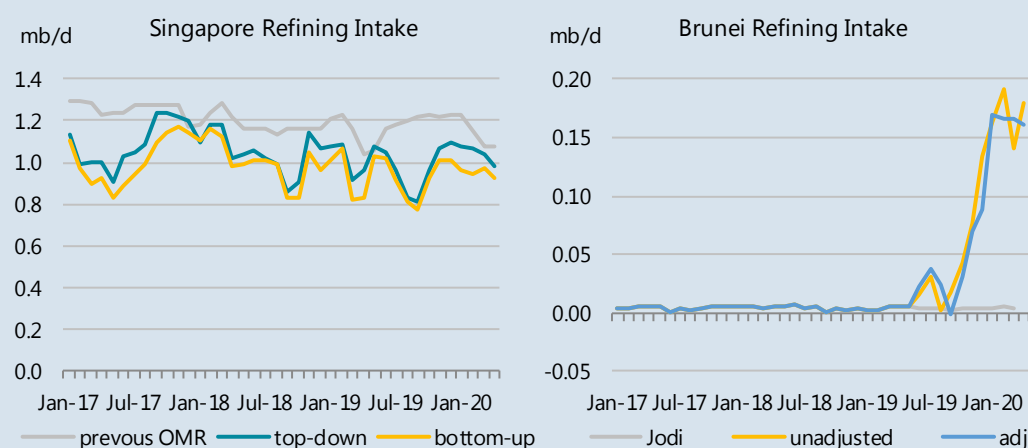
Box 3. Alternative solutions for missing data

The first commercial manned spacecraft launch last month by SpaceX was a notable milestone in space exploration. This month, we mark our own milestone by incorporating satellite-enabled data to fill in for missing terrestrial statistics. For refining analysis, we model each of the 110 countries with operating refineries. Of these, regular monthly updates are available for only just over half. We are revising our methodology to incorporate alternative data sources from cargo tracking and storage site observations wherever possible to construct monthly series for refining inputs.

We started with relatively simple cases of compact refining systems and/or no local crude production, to reduce the number of unknowns in our model. Brunei was our first choice. Last year, a 165 kb/d refinery was launched by a Chinese petrochemical company, in addition to a 10 kb/d refinery, but its activity is not reflected in the country's submission to JODI. The Hengyi refinery is located on the Muara Besar island, and is not connected by pipeline to other users or other crude oil deliveries except its own terminal. This could be defined as a closed simple system. Combining

crude flow data from Kpler (in this case, only imports) and observed crude tank inventory changes from Kayrros we get an approximation for the refinery intake.

The results need to be adjusted to remove values that fall outside the probable range (in excess of installed capacity or negative values). This is partly because inventory observation intervals (between 6-24 days depending on the region) are longer than cargo-tracking's daily updates and thus the estimates of monthly stock changes are based on available observation dates, rather than the end of the month. Cargo tracking data, which have been in wide use over the last two decades, have their own uncertainties depending on the reliability of information on the cargo's type and grade.



Our second case was Singapore, a large, 1.4 mb/d refining system, strategically located on the strait of Malacca, for which there are no monthly data. It does not produce crude oil, but the large oil storage business and the use of underground rock caverns for oil storage introduces uncertainty in the model results. This is a closed complex system. Inventory data are not available yet for several tankfarms. There is a 200 kb/d gap between bottom-up estimates based on individual refineries and top-down estimates from overall flows and inventory changes. Nevertheless, using the adjusted top-down results is a notable improvement compared to our previous estimates. The new numbers are lower than our previous data by about 200 kb/d, but are 130 kb/d higher than the latest annual data reported by Singapore Energy Market Authority for 2017. This could be due to the condensate splitters associated with petrochemical sites not being taken into account for refinery input statistics.

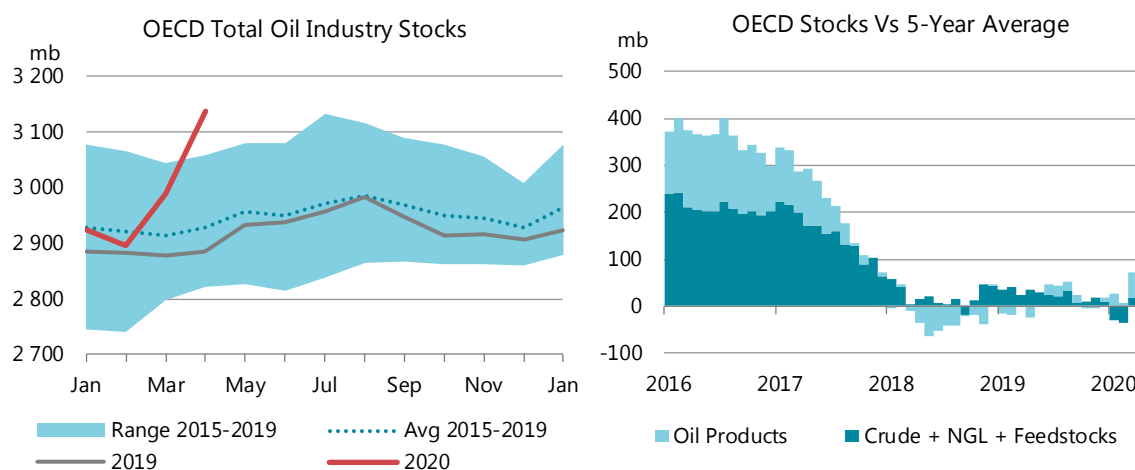
The need for additional correction and adjustment means that these alternative data sources have their own issues of compatibility as well as statistical differences and need to be studied more before being widely used. Most of these issues will be resolved over time by expanding geographical coverage and the frequency of observations. As of now, they cannot replace reasonably robust data from traditional sources, especially for larger and open-complex systems (such as many of the oil producing and large refining countries). However, for refining systems where data cannot be considered robust and reliable, this methodology offers a significant enhancement for our analysis and we will continue to expand the list of the countries covered by it.

Stocks

Overview

This *Report* has updated its crude storage capacity assessment with the most recent complete official data up to March, supplemented by various sources to capture developments in April and May. On this basis, the 6.7 billion bbls of global crude oil storage capacity held 5.1 billion bbls at the end of May, representing a utilisation rate of 76%. We assume that 80% of the nameplate capacity +/- 5% is the maximum operational level. Therefore, around 255 mb of spare capacity remained available at end-May (see *Storage capacity assessment*).

In April, OECD total industry stocks rose by 148.7 mb (4.95 mb/d) month on month (m-o-m) to 3 137 mb. At end-month, total inventories stood 208.3 mb above the five-year average. In terms of forward demand, industry stocks covered 77.7 days, a decrease of 1.5 days m-o-m but 15.5 days above the five-year average, reflecting the recent collapse of demand due to Covid-19.



OECD crude stocks rose in April by 86.9 mb (2.9 mb/d) to 1 236 mb, with all three regions showing an increase. Crude stocks in the Americas built by 52.1 mb (1.7 mb/d), amid lower refinery runs in the US (-2.2 mb/d m-o-m in April). European crude inventories rose by 20.7 mb as refinery throughput fell by 1 mb/d m-o-m. Crude inventories in Asia Oceania increased counter-seasonally by 14.1 mb.

Oil product inventories increased by 58.5 mb (1.95 mb/d) to 1 557 mb in April. Middle distillate stocks led with a 43.7 mb increase, notably in the Americas (29.9 mb). Gasoline and fuel oil inventories built counter-seasonally by 7.6 mb and 2.1 mb, respectively, due to lower demand for transport fuels. Other oil inventories also rose by 5.1 mb.

Preliminary May data showed crude oil and product stocks built in the US and Japan, while falling in Europe. US crude stocks rose counter-seasonally by 2.4 mb due to surging imports. Total US product inventories also built by 43.5 mb (1.4 mb/d), led by a 25.4 mb increase for middle distillates. Crude stocks in Europe fell 0.2 mb, including a decrease in Spain of 4.4 mb. European product stocks drew 10.3 mb owing to a fall in gasoline (-3.6 mb) and middle distillate

inventories (-7.1 mb). Japanese crude stocks rose 6.6 mb, larger than the usual increase of 3.7 mb. Total product stocks in Japan built by 0.3 mb.

Preliminary Industry Stock Change in April 2020 and First Quarter 2020												
April 2020 (preliminary)								First Quarter 2020				
	(million barrels)				(million barrels per day)				(million barrels per day)			
	Am	Europe	As.Ocean	Total	Am	Europe	As.Ocean	Total	Am	Europe	As.Ocean	Total
Crude Oil	52.1	20.7	14.1	86.9	1.7	0.7	0.5	2.9	0.7	0.1	-0.3	0.6
Gasoline	2.1	4.8	0.7	7.6	0.1	0.2	0.0	0.3	0.1	0.1	0.0	0.2
Middle Distillates	29.9	18.2	-4.4	43.7	1.0	0.6	-0.1	1.5	-0.2	0.2	0.0	0.0
Residual Fuel Oil	1.7	0.8	-0.4	2.1	0.1	0.0	0.0	0.1	0.1	0.1	0.0	0.2
Other Products	6.6	1.2	-2.6	5.1	0.2	0.0	-0.1	0.2	-0.2	0.1	0.0	-0.1
Total Products	40.2	25.0	-6.7	58.5	1.3	0.8	-0.2	2.0	-0.2	0.4	0.0	0.3
Other Oils ¹	-7.4	8.0	2.6	3.2	-0.2	0.3	0.1	0.1	0.0	0.0	0.0	0.1
Total Oil	85.0	53.7	10.0	148.7	2.8	1.8	0.3	5.0	0.6	0.6	-0.3	0.9

¹ Other oils includes NGLs, feedstocks and other hydrocarbons.

This Report has updated 1Q20 stock changes, using complete OECD data for March and revised estimates for other regions. We compare this assessment of stocks to the *implied* balance arising from our supply and demand estimates.

In 1Q20, OECD industry stocks rose by 80.5 mb (0.9 mb/d) from 4Q19. The changes in the combined stocks of crude + NGL and feedstock explained the majority of the change in the balance led by the Americas (66.1 mb or 0.7 mb/d). European product stocks rose by 39.1 mb. OECD government stocks built by 1.9 mb in total.

For 46 non-OECD economies excluding China, crude oil inventories rose by 24.9 mb according to satellite data from *Kayrros*. The *implied* crude stock balance in China in 1Q20, as calculated by the IEA, was 172.8 mb (1.9 mb/d). Independent product stocks in Fujairah and Singapore rose by 4.1 mb and 8.6 mb, respectively.

Crude oil on water including floating storage fell slightly by 1.1 mb in 1Q20 compared to very high transit volumes at end-December according to *Kpler*. Overall, our assessment accounts for 3.3 mb/d of oil stock builds in 1Q20, of which 2.8 mb/d is for crude oil.

Based on the IEA's global oil supply and demand balance and refining throughput analysis, 1Q20 showed a relatively large "total stock change and miscellaneous to balance" figure of 575.3 mb (6.3 mb/d). Using as many data sources as possible we have accounted for more than half (296.1 mb or 3.3 mb/d) of this implied item to balance. In time, as revisions are made to demand and supply data, as well as to reported stocks, this miscellaneous figure will fall.

1Q20 v 4Q19 Implied Balance		
	mb	mb/d
OECD Americas crude + NGL and feedstock	66.1	0.73
OECD Americas total products	-14.4	-0.16
OECD Europe crude + NGL and feedstock	14.7	0.16
OECD Europe total products	39.1	0.43
OECD Asia Oceania crude + NGL and feedstock	-25.0	-0.28
OECD Asia Oceania total products	0.1	0.00
Total OECD Commercial Stocks	80.5	0.89
of which total OECD commercial crude + NGL and feeds	55.8	0.61
of which total OECD commercial products	24.8	0.27
OECD Government crude + NGL and feedstock	-0.4	0.00
OECD Government total products	2.4	0.03
Non-OECD crude oil stocks excl. China (<i>Kayrros</i>)	24.9	0.27
Fujairah (FEDCom/S&P Global Platts)	4.1	0.05
Singapore (Enterprise Singapore)	8.6	0.09
Crude oil on water incl. floating storage (<i>Kpler</i>)	-1.1	-0.01
Products on water incl. floating storage (Refinitiv)	4.3	0.05
Total excl. China Balance	123.3	1.35
China crude balance	172.8	1.90
Total Accounted Balance	296.1	3.25
of which total crude balance	252.0	2.77
of which total products balance	44.1	0.49
IEA Global Oil Balance	575.3	6.32
of which crude balance	343.3	3.77
of which products balance	232.1	2.55
Unaccounted Balance	279.2	3.07
of which crude oil balance	91.3	1.00
of which products incl. biofuels balance	187.9	2.07

Revisions versus May 2020 Oil Market Report

(million barrels)

	Americas		Europe		Asia Oceania		OECD	
	Feb-20	Mar-20	Feb-20	Mar-20	Feb-20	Mar-20	Feb-20	Mar-20
Crude Oil	0.6	0.0	0.1	3.8	0.0	-1.7	0.7	2.0
Gasoline	0.0	11.0	0.0	-2.5	0.0	0.3	0.0	8.8
Middle Distillates	0.0	7.2	0.1	-3.9	0.1	-0.1	0.2	3.3
Residual Fuel Oil	0.0	-0.4	0.0	1.4	0.0	-0.3	0.0	0.6
Other Products	0.2	1.8	0.3	5.6	0.0	0.7	0.4	8.0
Total Products	0.2	19.6	0.4	0.6	0.1	0.6	0.6	20.8
Other Oils ¹	0.0	3.5	0.4	1.0	0.0	-0.2	0.5	4.3
Total Oil	0.8	23.2	0.9	5.3	0.1	-1.3	1.8	27.1

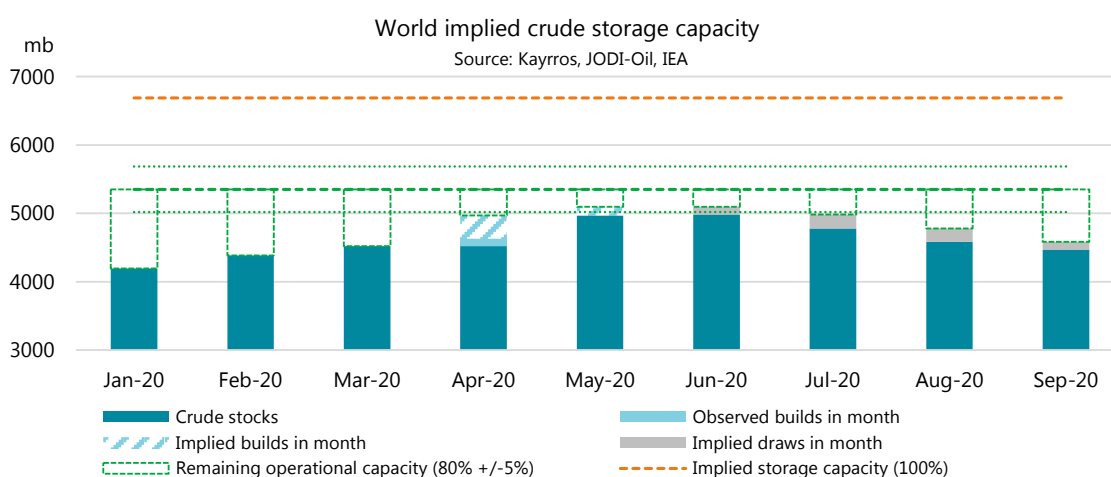
¹ Other oils includes NGLs, feedstocks and other hydrocarbons.

Data for March show that total OECD stocks were revised up by 27.1 mb to 2 988 mb. The largest adjustment was for total product inventories in the Americas, which rose 19.6 mb, led by motor gasoline (11 mb). Revisions also lifted crude oil stocks in Europe by 3.8 mb, but reduced those in the Asia Pacific (-1.7 mb). February figures were revised up by 1.8 mb to 2 895 mb.

Storage capacity assessment

The crude oil balance in this *Report*, derived from production, refinery runs and direct burn, suggests that global crude stocks could build at a rate of around 5 mb/d in 2Q20. From June onwards crude stock will draw amid steep production cuts and a recovery in refinery runs. This should lower considerably the pressure on storage capacity.

As noted in the previous *Report*, there is only limited and incomplete publicly available data covering the capacity of onshore storage tanks, underground storage caverns and tankers used for floating storage, as well as their availability, accessibility and current level of use. Based on analysis with such limited data, onshore crude storage capacity for both commercial and government use (including underground caverns) is estimated to be 6.7 billion bbls in 78 countries.

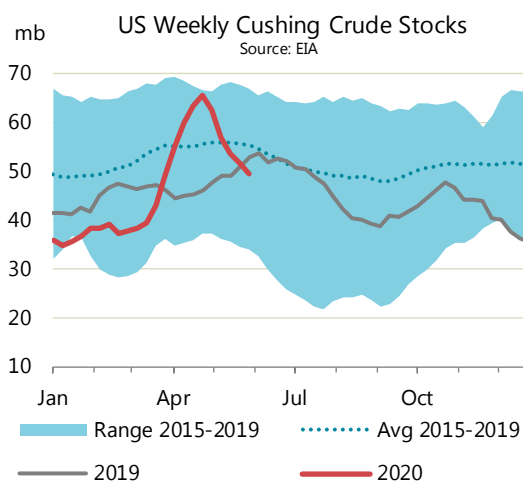


The key sources for this assessment are the IEA's *Monthly Oil Data Service (MODS)* for OECD countries; *Kayrros*, which analyse satellite images of storage tanks; and *JODI-Oil* mainly for non-OECD countries. Complete data set is available for March for OECD countries from *MODS* and for non-OECD economies which reported their stock developments in March to *JODI-Oil*. April

and May crude stock changes are estimated using *Kayrros* data. However, observed changes with this methodology in these two months are noticeably lower than suggested in the crude oil balance in this *Report*.

The available data show that the global crude storage fill level at the end of May was 5.1 billion bbls, representing a capacity utilisation rate of 76%. We assume a maximum operational capacity of 80% +/-5% (5.0-5.7 billion bbls range). On this basis, there was around 255 mb of available storage capacity unfilled globally at end-May. Based on the supply and demand assumptions in this *Report*, fears in March and April that capacity would be overwhelmed by excess supply have not materialised thanks to supply cuts and higher refining activity.

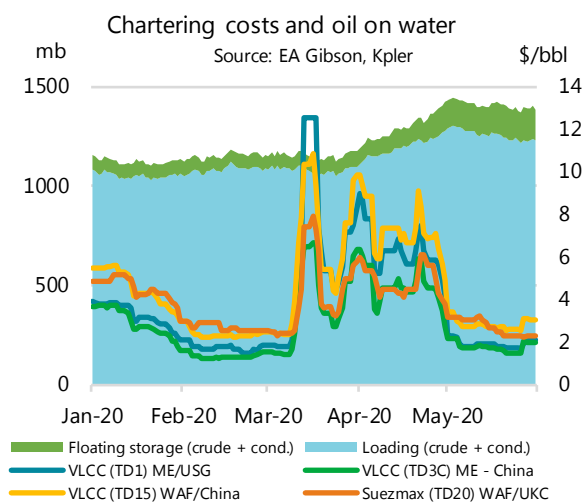
In the **US**, crude stocks at Cushing in Oklahoma, where NYMEX crude futures are physically settled, fell by 14.1 mb m-o-m to 51.1 mb at end-May. Net stocks (48.8 mb: total stocks less pipeline fill and stocks in transit) utilised 64.4% of crude storage capacity (75.8 mb), according to the *Energy Information Administration (EIA)*. For the US as a whole, 408.9 mb net crude stocks utilised 60.8% of the 672.4 mb storage capacity at the end of May. In the Gulf Coast (PADD 3) and Midwest (PADD 2, including Cushing), storage capacity utilisation stood at 61.3% and 58.2%, respectively.



The US Strategic Petroleum Reserve (SPR) built by 15 mb, or 305 kb/d, from 635 mb in mid-April to 650 mb on the week ended on 5 June. Currently, crude oil held at four SPR sites utilise 91% of the 714 mb design capacity.

On top of the onshore storage facilities, large oil tankers can be chartered with options for storage over several months depending on market conditions. Spot chartering costs for major tanker routes remained relatively high in April amid surging exports by Middle East Gulf producers and increased floating storage demand. In May, spot chartering costs eased as crude oil exports fell (see *Prices*).

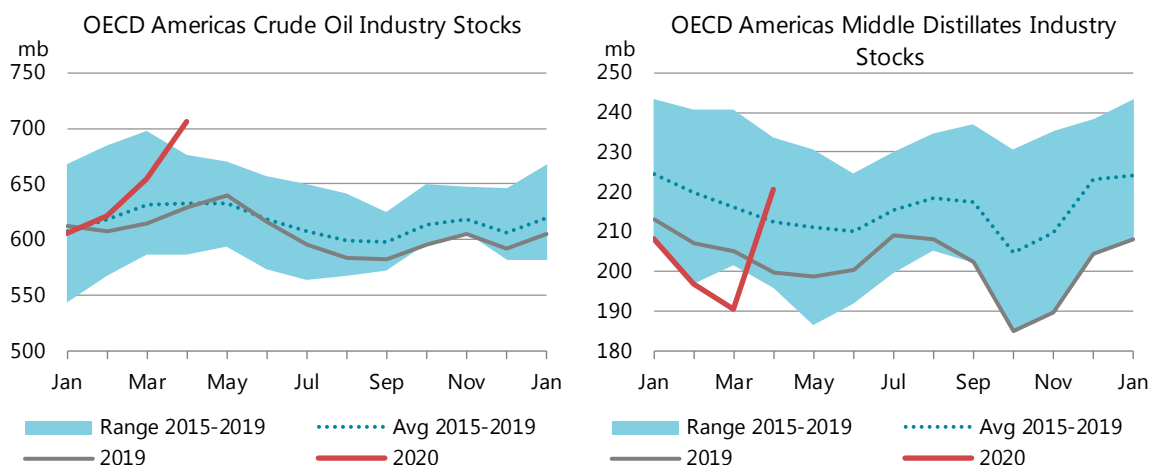
At end-May, 3.5% of the total fleet capacity was utilised for floating storage and held 154 mb of stocks, according to *Kpler*. Shipbroker *EA Gibson* showed a similar picture: 165.8 mb of crude oil stored at sea in May, some 6.4 mb below the historic high of 172.2 mb in April. The extended production cuts agreed by OPEC+ producers and the gradual recovery of refining activity will ease the pressure on available capacity, both on-shore and floating.



Recent OECD industry stock changes

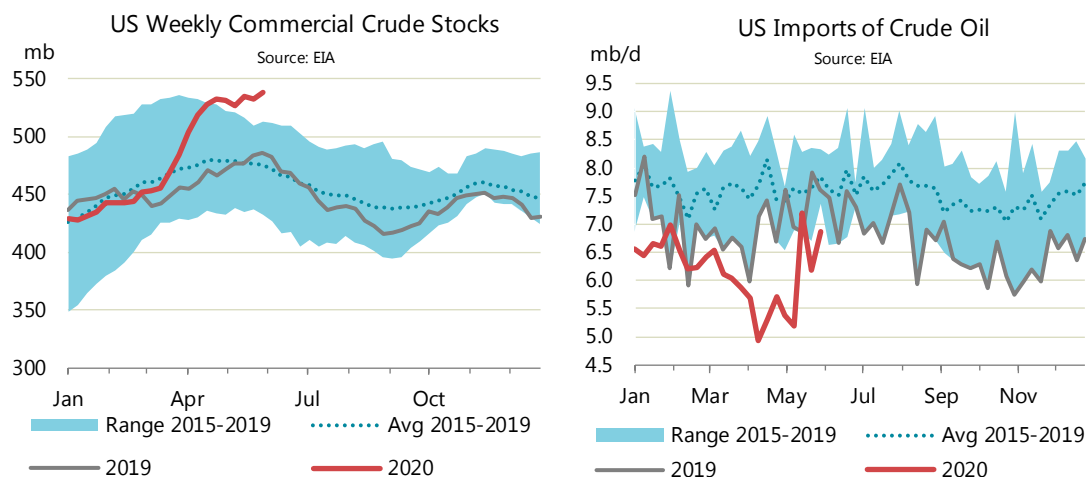
OECD Americas

Industry stocks in the OECD Americas rose by 85 mb m-o-m (2.8 mb/d) in April to 1 675 mb, 137.3 mb above the five-year average. The increase was more than eight times the usual build of 10.6 mb for the month due to crude oil stocks.



Crude oil inventories rose 52.1 mb m-o-m (1.7 mb/d) and stood at 706 mb, 73.4 mb above the five-year average. The increase was higher than the usual level of 2 mb due to lower refinery runs in the US (-2.2 mb/d m-o-m in April). US crude oil exports fell to 3.1 mb/d in April compared with 3.6 mb/d in March according to the *US Census Bureau*, and this also helped boost crude stocks.

Oil product stocks also built by 40.2 mb, nearly ten times the usual increase of 4.2 mb, owing to a large increase in middle distillate stocks (29.9 mb vs a five-year average draw of 3.6 mb) as demand plunged. Motor gasoline and fuel oil inventories rose counter-seasonally by 2.1 mb and 1.7 mb, respectively. Other oil stocks built largely in line with the seasonal pattern, by 6.6 mb.



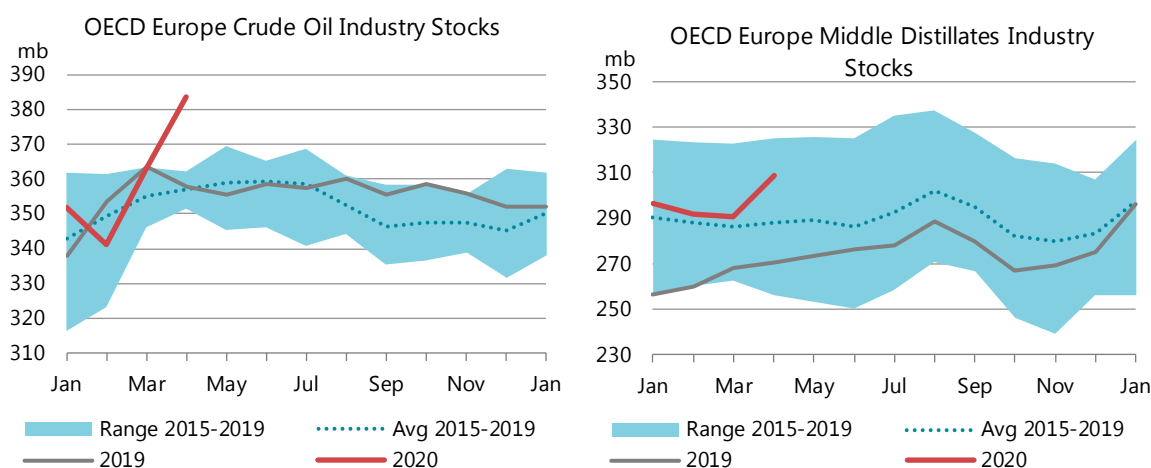
Weekly *EIA* data showed a counter-seasonal crude oil inventory increase of 2.4 mb m-o-m in May as crude imports surged to 7.2 mb/d during the week ended 22 May and remained 6 mb/d on average in May (+490 kb/d m-o-m). Total product stocks also rose, by 43.5 mb (1.4 mb/d). Gasoline and fuel oil stocks rose counter-seasonally by 1.2 mb and 2.2 mb, respectively. With lower demand, middle distillate inventories built by a large 25.4 mb. Other refined product stocks rose by 14.7 mb largely in line with the seasonal pattern.

OECD Europe

In April, commercial stocks in OECD Europe built by 53.7 mb (1.8 mb/d) to 1 083 mb, 92.2 mb above the five-year average. The counter-seasonal increase reflected an increase in both crude and product stocks.

Crude oil inventories in Europe rose by 20.7 mb (0.7 mb/d), more than ten times the usual increase to 384 mb, 26.8 mb above the five-year average. The build was attributable to lower refinery runs in the region (-1 mb/d m-o-m in April). Crude stocks built more than usual in the Netherlands (12 mb) and Germany (1.5 mb) while they fell counter-seasonally in Italy (-2.4 mb).

Oil product stocks increased counter-seasonally by 25 mb (0.8 mb/d); of which 4.8 mb was for gasoline, 1.2 mb for other oil products and 0.8 mb for fuel oil. Middle distillate stocks built more than the seasonal trend by 18.2 mb.

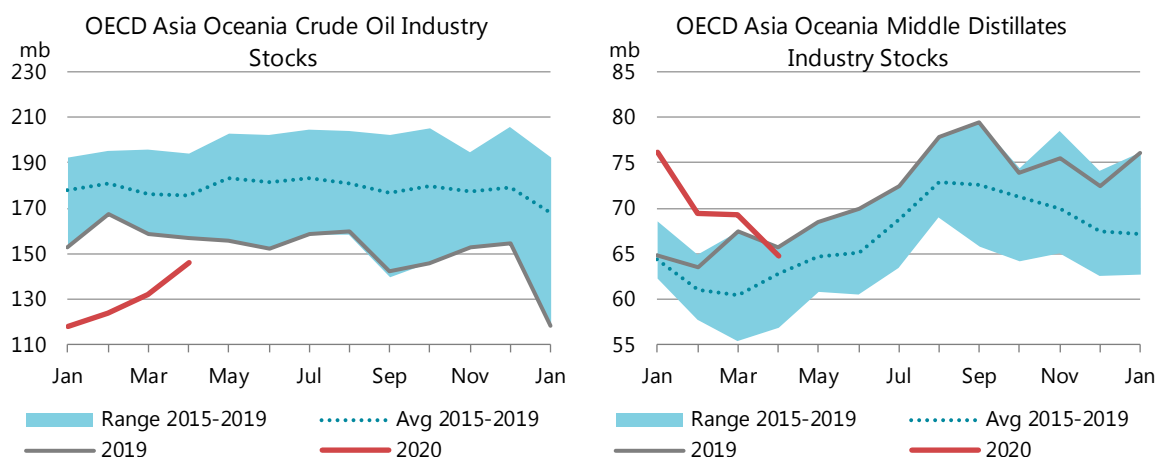


Preliminary May data from *Euroilstock* showed overall inventories falling by 10.5 mb. Crude oil stocks drew 0.2 mb, notably in Spain (-4.4 mb). By contrast, France (2.6 mb) and the Netherlands (2.2 mb) increased their crude inventories. Total oil product stocks also fell, by 10.3 mb, of which -7.1 mb was for middle distillates, -3.6 mb for gasoline and -0.6 mb for naphtha, while fuel oil stocks rose by 1 mb.

OECD Asia Oceania

Total commercial stocks in the Asia Oceania region rose by 10 mb in April to 379 mb, remaining 21.3 mb below the five-year average. The build was double the usual increase for the month. Crude stocks rose by 14.1 mb, when they typically fall by 0.9 mb. Crude inventories in Japan increased counter-seasonally by 5.2 mb amid year-on-year (y-o-y) lower refinery throughput (-175 kb/d). Korean refinery runs fell 515 kb/d y-o-y and crude stocks increased by 8.9 mb.

By contrast, total product stocks in the region fell 6.7 mb amid plunging refinery activity. The draw was counter-seasonal versus the usual build of 2.8 mb for the month. Middle distillate and fuel oil stocks drew by 4.4 mb and 0.4 mb, respectively. Other oil stocks fell more than usual by 2.6 mb. By contrast gasoline stocks built by 0.7 mb, in line with the seasonal pattern.

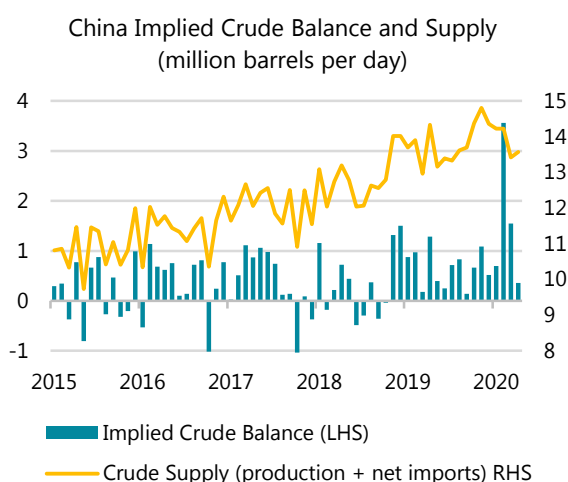


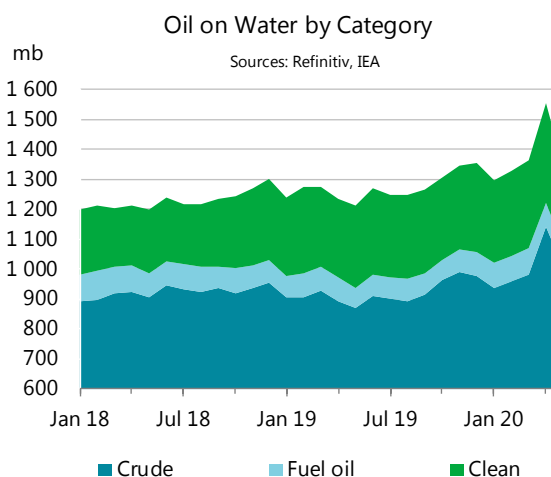
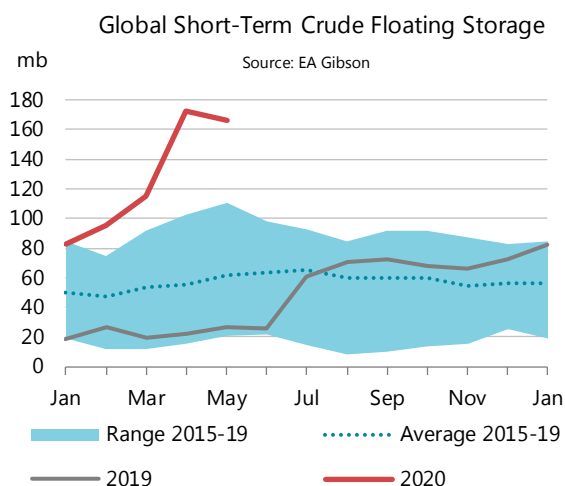
Preliminary data for May from the *Petroleum Association of Japan* showed crude oil inventories increasing by 6.6 mb m-o-m, more than the five-year average build of 3.7 mb. Refinery throughput fell 760 kb/d m-o-m in May and pushed crude inventories up. Total product stocks rose by 0.3 mb. Middle distillate, other products (mainly naphtha) and fuel oil inventories built by 0.7 mb, 0.3 mb and 0.2 mb, respectively. Gasoline fell counter-seasonally by 0.8 mb.

Other stock developments

The Chinese implied crude balance rose by 10.8 mb (0.36 mb/d) in April, according to data derived from reported crude production, refinery runs and net crude imports. Refinery runs increased by 1.3 mb/d m-o-m from 11.7 mb/d in March to 13 mb/d. Crude net imports were 9.8 mb/d, 190 kb/d higher m-o-m.

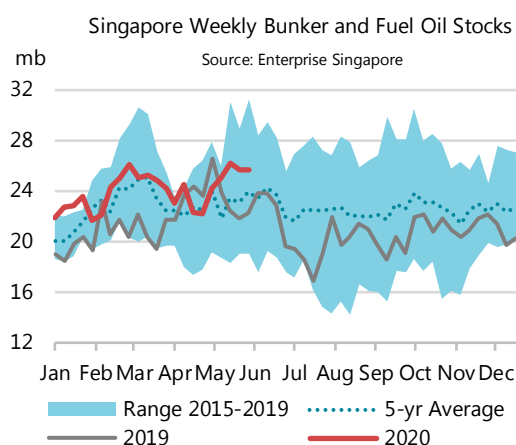
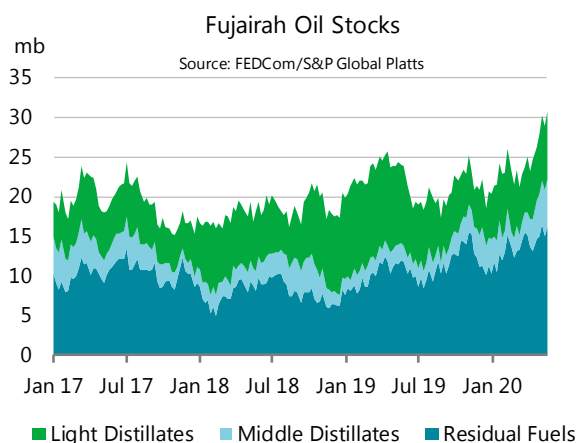
Short-term floating storage reached an all-time high level of 172.2 mb in April, then fell by 6.4 mb in May to 165.8 mb, according to *EA Gibson* data. Crude oil stored in the Middle East Gulf and Asia Pacific fell 7.6 mb each and stood at 78.2 mb and 48.2 mb, respectively. North West European storage fell by 2.1 mb. Floating storage in the US Gulf Coast and West Coast increased by a combined 5.4 mb to 20.9 mb. The number of Iranian VLCCs used for storage fell by one to 30. Together with Suezmax fleets (down by one), the total numbers of vessels thought to store Iranian crude oil is now 36. Globally, 63 VLCCs and 26 Suezmaxes are used for floating storage.





Oil-on-water volumes (including floating storage), based on data from *Refinitiv*, rose by a large 192.2 mb in April due to a m-o-m increase in crude oil (159.8 mb) and clean products (41.5 mb). Seaborne crude oil exports from Saudi Arabia and Brazil rose 59.3 mb (1.98 mb/d) and 13 mb (0.43 mb/d), respectively, according to *Kpler* data. Venezuela also ramped up exports, by 4.2 mb (0.14 mb/d). Fuel oil volumes on-the-water fell by 9 mb. Preliminary May data shows a 140 mb m-o-m decrease in crude oil on water (1 001 mb) amid production cuts implemented by OPEC+ producers.

In Fujairah, stocks rose in May by 5.1 mb m-o-m to a record high of 30.4 mb, according to data from *FEDCom* and *S&P Global Platts*. Residual fuel stocks used in the marine and power industries led the build by 2.3 mb. Light and middle distillate inventories increased by 1.3 mb and 1.5 mb, respectively. Inventories in Singapore, the world's largest bunkering hub, rose by 2.6 mb during the month based on data from *Enterprise Singapore*. Total inventories stood at 55.5 mb owing to a 3.2 mb increase seen in residual fuel oil. Light distillate stocks fell by 0.6 mb. Middle distillate inventories were largely unchanged.



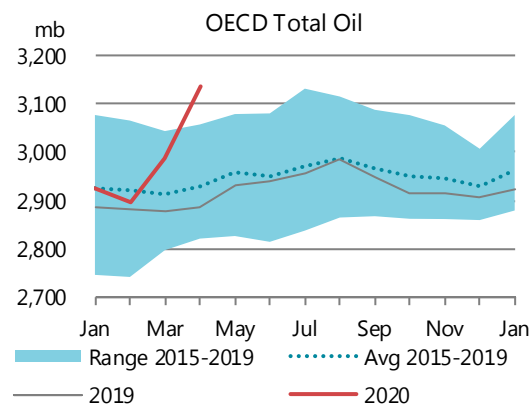
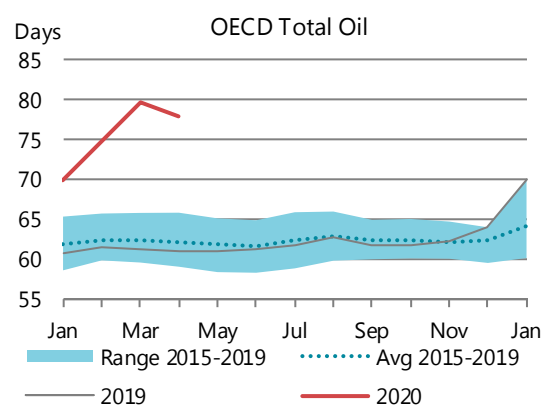
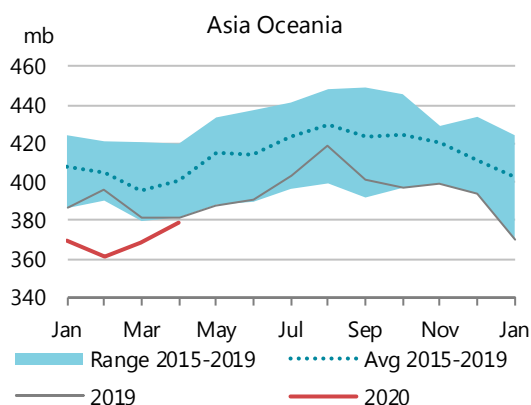
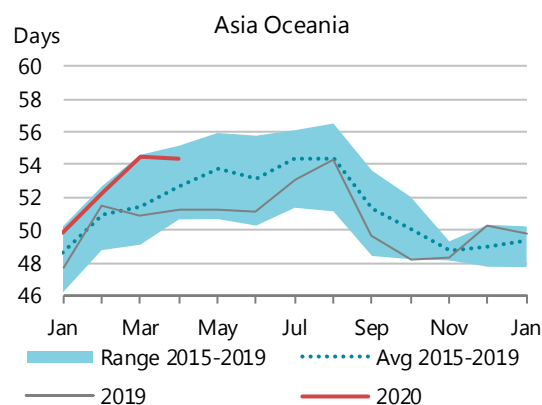
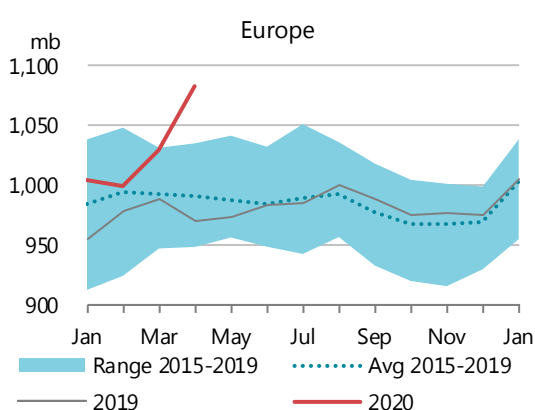
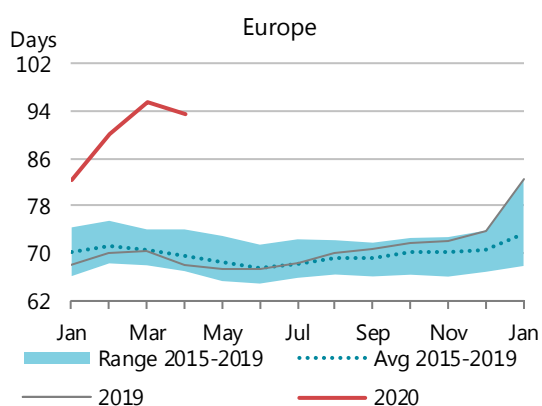
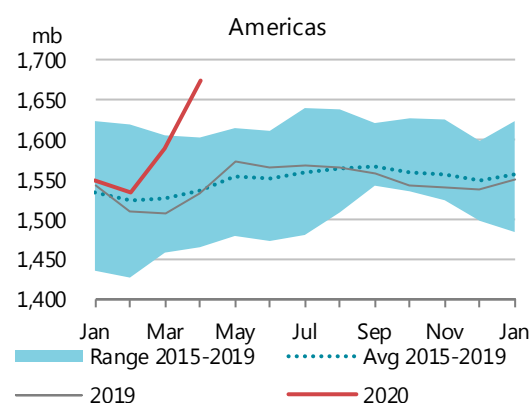
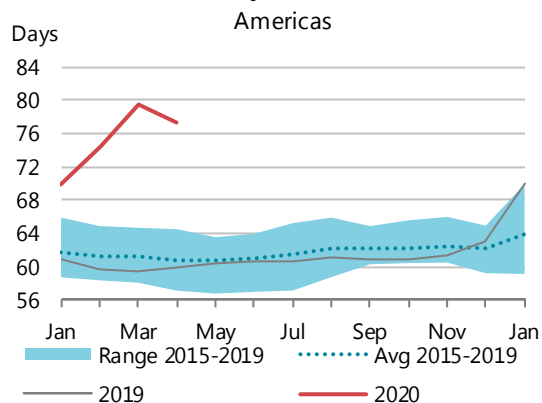
Total oil stocks in 20 non-OECD economies covered by the *JODI-Oil* database rose 23.2 mb m-o-m in March, led by builds in crude oil (14.8 mb). Crude stocks in India built by 3.9 mb. Saudi Arabia and Algeria also increased their crude stock holdings by 2.9 mb and 1.9 mb, respectively. For oil products, India increased stocks by 4.6 mb. Nigeria also built product stocks, by 1.6 mb. By contrast, product stocks in Saudi Arabia fell by 3.8 mb.

Regional OECD End-of-Month Industry Stocks

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

Days¹

Million Barrels



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

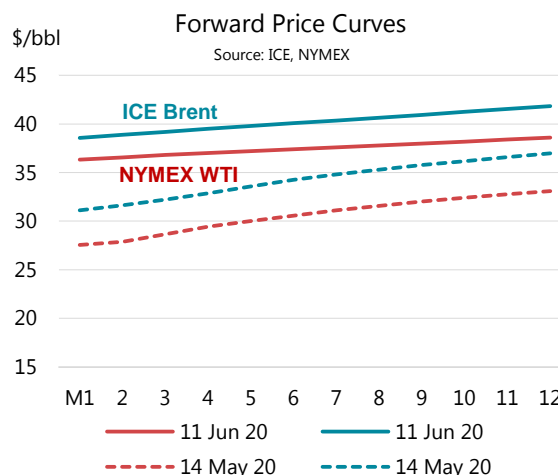
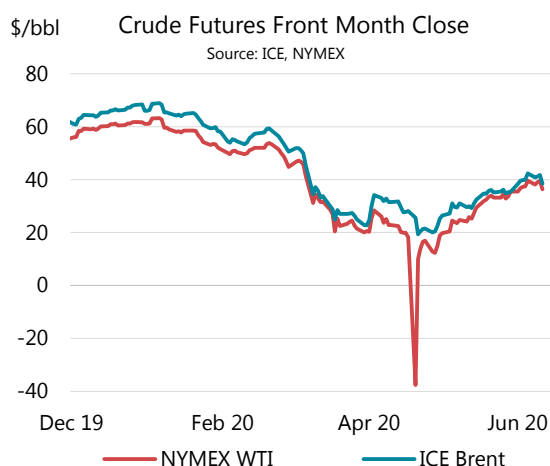
Prices

Overview

Oil prices increased in May. Although oil demand remained very subdued, consumption ticked up on easing confinement measures. At the same time, global supply fell sharply as new OPEC+ cuts took effect and other producers reduced flows in response to low prices. With demand remaining under pressure, uncertainty over the economic recovery and high crude and product stocks, prices remained well below the levels seen before the Covid-19 pandemic.

In early June, benchmark crude prices rose to the highest level in three months as OPEC+ agreed to extend their record production cuts of close to 10 mb/d into July. As this *Report* is published, ICE Brent is \$39/bbl and NYMEX WTI is \$36/bbl.

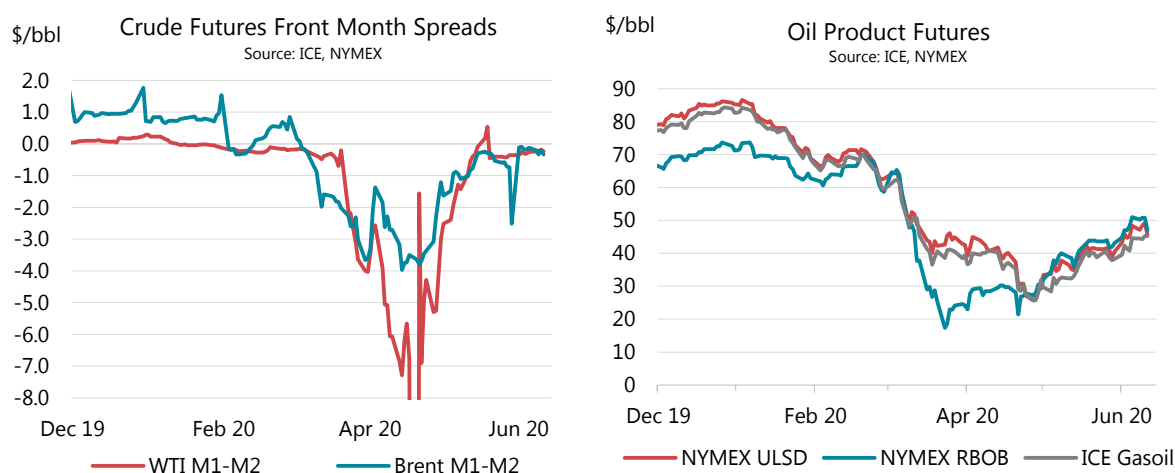
In May, rising crude prices squeezed product cracks. In particular, middle distillate margins fell to multi-year lows on weak demand and heightened concerns about the economic impact of Covid-19. Despite the lifting of some travel restrictions, gasoline cracks remained depressed with markets heavily oversupplied. Jet fuel cracks turned negative with aviation activity not expected to return to pre-Covid levels for some time.



Futures markets

Front-month ICE Brent futures rose to average \$32.41/bbl in May and in early June prices reached \$42/bbl, more than double the two-decade low observed in late April. Front-month NYMEX WTI gained \$11.83/bbl month-on-month (m-o-m), to average \$28.53/bbl. The Brent-WTI spread narrowed to \$3.88/bbl on average, a much smaller discount for US prices than seen in 2019 (\$7/bbl on average).

The price rally went hand-in-hand with a shift up in crude futures forward curves. The contango at the front narrowed as prompt prices gained the most. As forward curves flattened, the economics of storing crude weakened, even as freight rates fell.



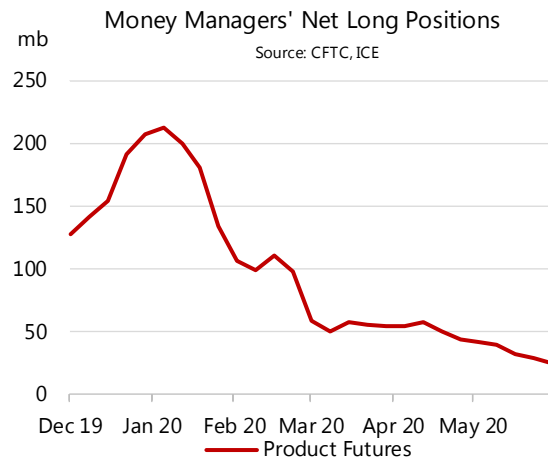
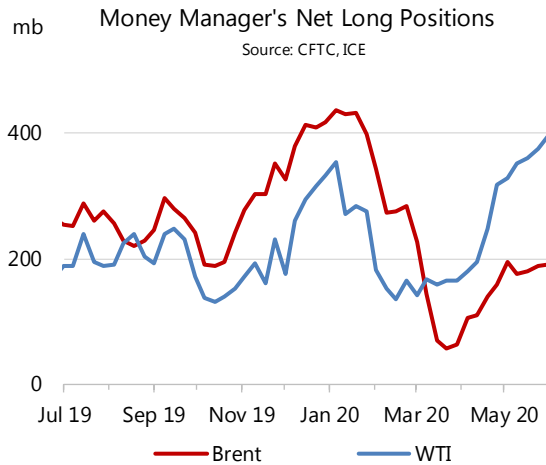
The front of the WTI curve briefly flipped to backwardation on 18 May, following the expiration of the June (prompt) contract. This occurred in an orderly fashion, in contrast to the volatility seen on the expiration of the May contract on 20 April when WTI settled at -\$37.63/bbl. Steep cuts to US crude production and falling inventories at Cushing eased fears about tight storage constraints and shifted focus to available barrels.

Concern about a slow economic recovery and weak industrial activity weighed on diesel markets. NYMEX ultra-low sulphur diesel (ULSD) fell \$10.01/bbl vs WTI m-o-m and ICE gasoil declined by \$4.61/bbl vs Brent. NYMEX RBOB held steady vs WTI in May. Gasoline demand will likely recover relatively quickly due to reduced travel restrictions, particularly if private car use is preferred to public transport.

Prompt Month Oil Futures Prices										
(monthly and weekly averages, \$/bbl)										
	Mar	Apr	May	May-Apr	%	Week Commencing:				
				Avg Chg	Chg	11 May	18 May	25 May	01 Jun	08 Jun
NYMEX										
Light Sweet Crude Oil	30.45	16.70	28.53	11.83	70.8	26.44	33.00	34.09	37.30	37.87
RBOB	37.70	28.06	40.10	12.04	42.9	38.47	43.66	42.70	47.60	49.21
ULSD	49.34	36.41	38.23	1.82	5.0	36.57	41.51	40.46	45.45	47.36
ULSD (\$/mmbtu)	8.70	6.42	6.74	0.32	5.0	6.45	7.32	7.14	8.02	8.35
Henry Hub Natural Gas (\$/mmbtu)	1.73	1.76	1.81	0.05	2.8	1.70	1.77	1.80	1.80	1.78
ICE										
Brent	33.73	26.63	32.41	5.78	21.7	30.49	35.28	35.41	39.99	40.20
Gasoil	46.41	34.34	35.51	1.17	3.4	33.56	39.64	38.88	41.56	44.55
Prompt Month Differentials										
NYMEX WTI - ICE Brent	-3.28	-9.93	-3.88	6.05		-4.05	-2.28	-1.32	-2.69	-2.33
NYMEX ULSD - WTI	18.89	19.71	9.70	-10.01		10.13	8.51	6.37	8.15	9.49
NYMEX RBOB - WTI	7.25	11.36	11.57	0.21		12.03	10.66	8.61	10.30	11.34
NYMEX 3-2-1 Crack (RBOB)	11.13	14.14	10.95	-3.19		11.40	9.95	7.86	9.58	10.72
NYMEX ULSD - Natural Gas (\$/mmbtu)	6.97	4.66	4.93	0.27		4.75	5.56	5.34	6.22	6.58
ICE Gasoil - ICE Brent	12.68	7.71	3.10	-4.61		3.07	4.36	3.47	1.57	4.35

Source: ICE, NYMEX.

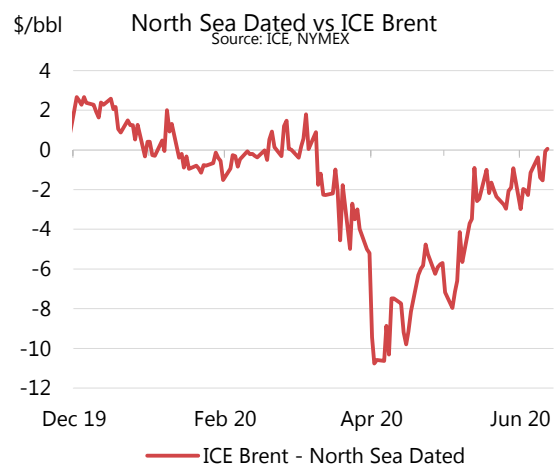
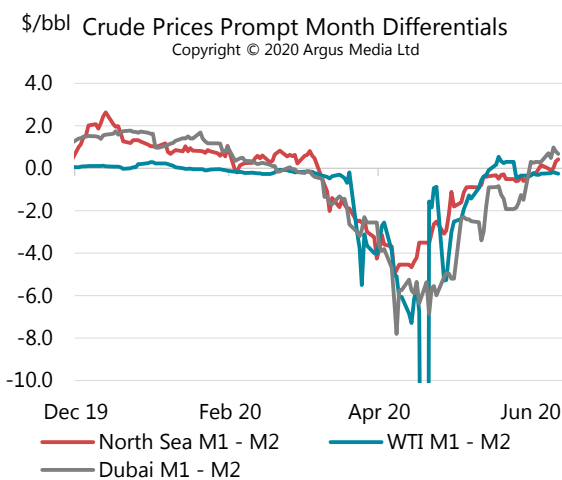
In May, money managers increased their bets that oil prices will rise, with net length up at 585 mb, the highest since January. WTI futures attracted positive sentiment due to steep US production cuts. By early June, net length in WTI futures had risen for 11 consecutive weeks to 394 mb. The last time money managers had held so many bets on higher WTI prices was in 2018 when the US reintroduced sanctions against Iran. Net length in Brent futures rose more modestly, by only 5 mb, as global oversupply continued to weigh on the price outlook.



Net length in product futures slipped further in May, to 25 mb, having been at over 100 mb in February before the impact of Covid-19 spread around the world. Money managers seem more pessimistic about a rebound in the price of refined products given the weak economic outlook.

Spot crude oil prices

Spot crude prices made strong gains in May. The combined easing of lockdown measures lifting demand, and in turn refinery throughputs, as well as plummeting production helped to ease market oversupply. North Sea Dated rose 56% m-o-m to average \$29/bbl and the wide discount of physical to futures prices narrowed. North Sea Dated's discount to ICE Brent averaged \$3.41/bbl in May (+\$4.38/bbl m-o-m).



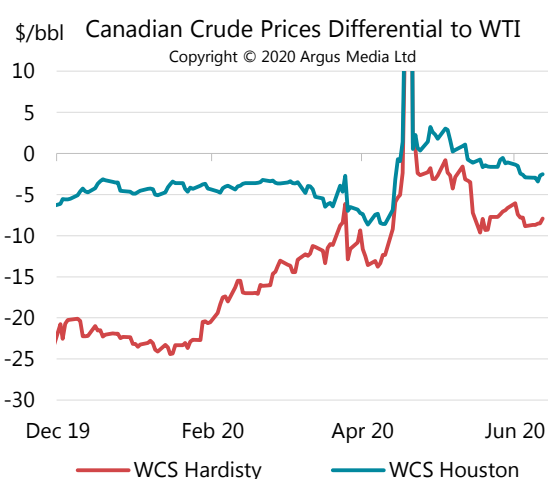
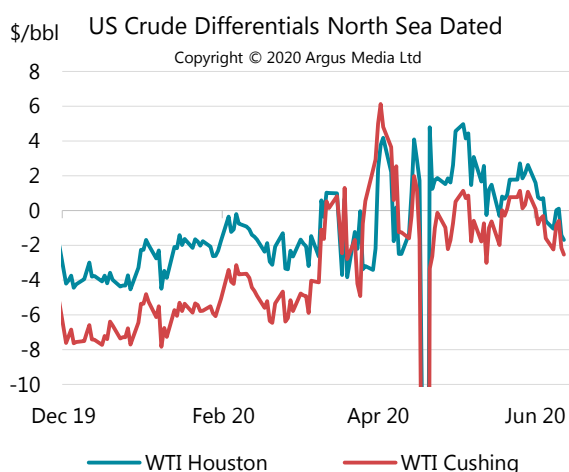
Spot WTI prices at Cushing rose \$12.05/bbl m-o-m on the back of steep US production cuts. Easing market oversupply caused the WTI forward curve to briefly flip into backwardation (M1-M2) in mid-month for the first time since January. By end month, the forward curve returned to contango as refining activity hadn't fully recovered and US Gulf Coast crude inventories built. Furthermore, large volumes of Saudi exports arriving in the US in May and June newly aggravated the supply glut.

Dubai prices strengthened as a fresh round of deep OPEC+ cuts came into effect with the majority coming from Middle East producers. The contango in the Dubai forward curve (M1-M2) narrowed by \$3.56/bbl m-o-m and the curve flipped to backwardation in early June.

The Brent-Dubai Exchange of Futures for Swaps (EFS) rose by \$2.20/bbl in May as demand for North Sea crude strengthened. However, it remained negative (-\$0.91/bbl on average) reflecting tighter sour crude markets due to OPEC+ cuts. Meanwhile, high floating storage volumes of North Sea crude persisted due to the glut of supplies.

Spot Crude Oil Prices and Differentials										
(monthly and weekly averages, \$/bbl)										
	Mar	Apr	May	May-Apr Avg Chg	% Chg	Week Commencing:				
						11 May	18 May	25 May	01 Jun	08 Jun
Crudes										
North Sea Dated	31.71	18.57	29.00	10.43	56.1	27.86	33.44	33.42	37.91	39.54
Brent (Asia) Mth 1	36.47	29.37	35.94	6.57	22.4	33.57	39.33	38.42	44.04	43.84
WTI (Cushing) Mth 1	29.89	16.52	28.57	12.05	72.9	26.44	33.17	34.09	37.30	37.87
Urals (Mediterranean)	29.51	16.50	30.84	14.34	87.0	29.66	35.24	35.72	40.34	41.27
Dubai	33.78	21.33	30.98	9.65	45.2	28.85	33.43	34.06	39.03	40.74
Tapis (Dated)	35.38	17.91	26.40	8.48	47.4	22.46	31.58	34.12	38.61	40.24
Differential to North Sea Dated										
WTI (Cushing)	-1.83	-2.05	-0.43	1.62		-1.42	-0.27	0.68	-0.61	-1.67
Urals (Mediterranean)	-2.20	-2.08	1.84	3.92		1.80	1.80	2.30	2.43	1.73
Dubai	2.07	2.76	1.99	-0.78		0.99	-0.01	0.64	1.12	1.20
Tapis (Dated)	3.66	-0.66	-2.60	-1.94		-5.40	-1.86	0.70	0.70	0.70
Prompt Month Differential										
Forward Cash Brent Mth1-Mth2	-1.45	-3.50	-0.70	2.80		-0.57	-0.39	-0.55	-0.13	0.12
Forward WTI Cushing Mth1-Mth2	-1.45	-6.78	-0.67	6.11		-0.46	0.32	-0.38	-0.29	-0.22
Forward Dubai Mth1-Mth2	-1.62	-5.44	-1.88	3.56		-2.33	-1.27	-1.57	0.29	0.73

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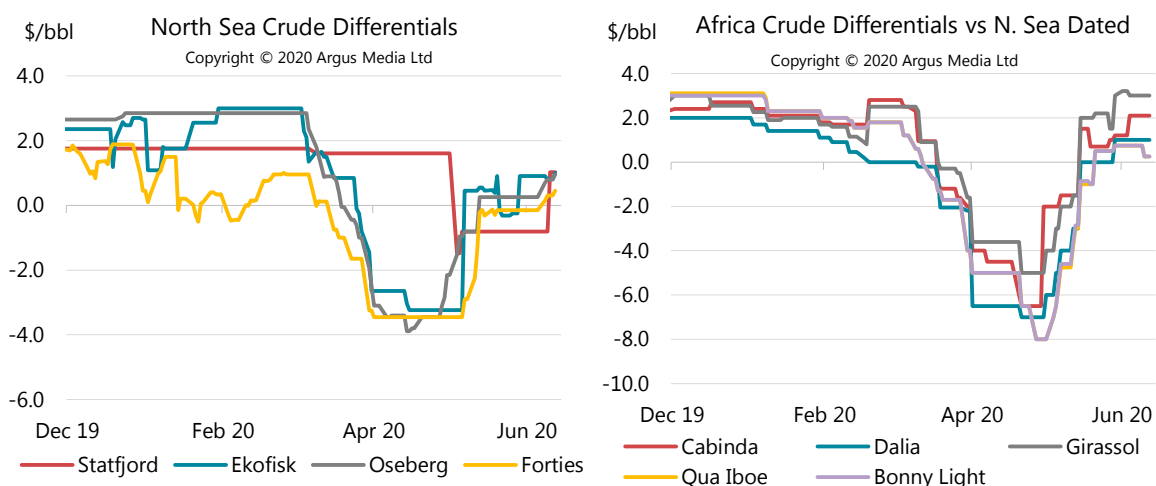


In May, falling supply amid returning Asia Pacific refinery demand was supportive for US crude. WTI Houston rose by \$1.92/bbl vs North Sea Dated m-o-m. In early June, the recovery faltered and WTI Houston fell to a discount to North Sea Dated. Steep US production cuts, particularly of light tight oil, caused WTI Midland and Bakken to strengthen vs. WTI Cushing, by \$2.00/bbl and \$2.26/bbl m-o-m, respectively. Mars fell \$0.44/bbl vs WTI m-o-m on the arrival of Saudi cargoes and as weaker diesel cracks pressured sour barrels.

Western Canadian Select (WCS) priced in Hardisty fell sharply vs WTI in the first half of the month, reaching a discount of \$9.62/bbl on 18 May. The differential narrowed through the end

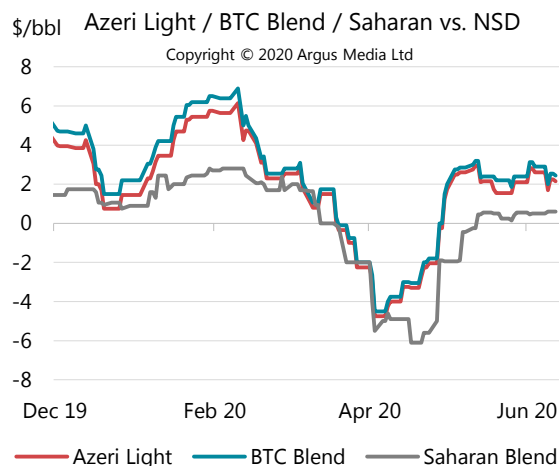
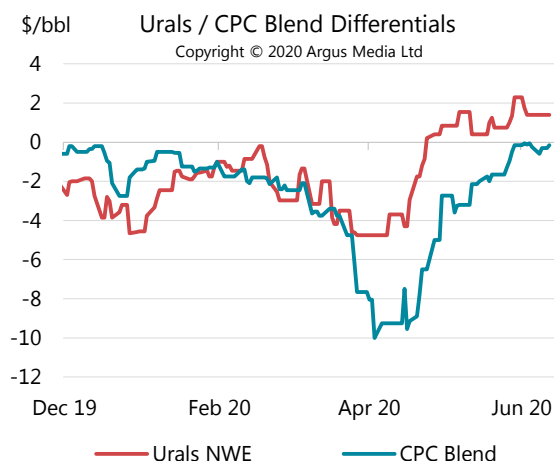
of the month to \$6.62/bbl. Several Canadian operators have curtailed production in response to low prices, particularly from heavy oil sands. The outright WCS price almost doubled in May to \$23.32/bbl on average but remained at a level that challenges the economics of relatively expensive Canadian production.

In May, differentials for North Sea grades recovered from the record lows seen in April. The expectation of tighter supplies was supportive, despite high floating storage volumes of North Sea crude that built in recent months. Operators revised down July loading programmes and the Norwegian government introduced a crude production limit to combat the supply glut. Easing freight rates also boosted differentials. Stronger buying interest caused Forties to rise by \$3.30/bbl during May from a discount of \$3.45/bbl, the widest on record. Oseberg and Ekofisk gained \$3.09/bbl and \$2.57/bbl vs North Sea Dated m-o-m, respectively.

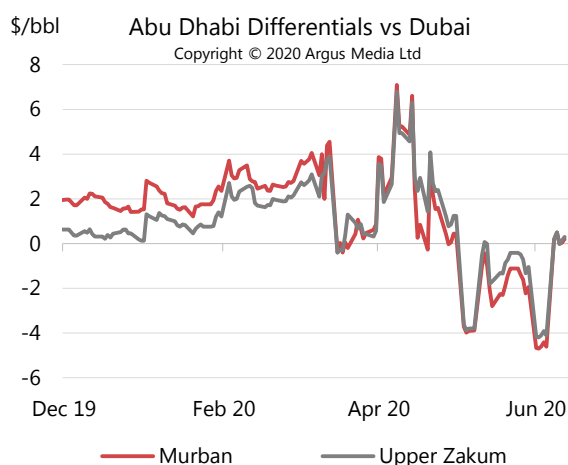
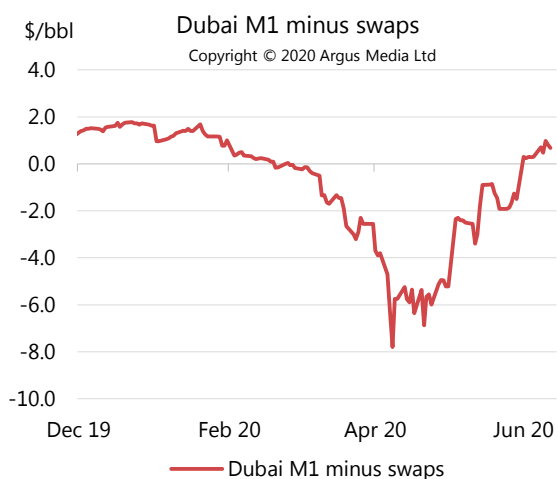


Price differentials for key Angolan and Nigerian grades rebounded to positive territory vs North Sea Dated in May due to a range of factors. Regional production cuts as part of the new OPEC+ deal helped to clear some excess supply while refiner buying ticked-up in key markets such as India, China and Europe on the relaxation of confinement measures. Further support came as freight rates plummeted from recent highs. Medium sweet Dalia rose by \$4.70/bbl vs North Sea Dated m-o-m. Cabinda and Girassol gained \$4.74/bbl and \$4.06/bbl vs North Sea Dated m-o-m, respectively, thanks to stronger Chinese demand. Ongoing weakness in gasoline and jet fuel markets penalised the lighter Nigerian crude in addition to a backlog of supply. Nevertheless, Bonny Light and Forcados increased vs North Sea Dated by \$3.48/bbl and \$3.25/bbl m-o-m, respectively.

Urals in North West Europe rose from a 12-year low of \$4.75/bbl below North Sea Dated on 8 April to a record premium of +\$2.30/bbl at end-May. Russian producers made sharp cuts as part of the OPEC+ deal, adding to the curtailment of global sour crude supplies. Along with strong Chinese demand, Urals has also become more popular with European refiners due to its relatively short shipping time to market, which allows buyers more flexibility to handle the highly uncertain demand situation. CPC Blend rose to a discount of \$0.15/bbl vs North Sea Dated at end May, the narrowest since November 2019. Revised loading programmes suggest that June exports will be the lowest in more than a year. Stronger demand from Asia Pacific refiners boosted Azeri Light and BTC blend by around \$5/bbl vs North Sea Dated m-o-m. Saharan Blend gained \$4.40/bbl vs North Sea Dated m-o-m as a drop in exports came amid increased European and Mediterranean buying.



A steep drop in regional production and cuts to June allocations for buyers of Saudi and UAE supplies boosted spot prices for Middle Eastern crude. Stronger demand from Europe and Asia Pacific caused prompt Dubai to gain \$3.56/bbl vs forward swaps, and the differential returned to a premium (backwardation) for the first time since February. As sour crude markets tightened, Basra Light and Basra Heavy rose by \$2.06/bbl and \$1.97/bbl vs Dubai (M2) m-o-m, respectively. Murban slipped by \$1.21/bbl vs Dubai (M2) m-o-m, as refiner interest focussed on the more sour grades.

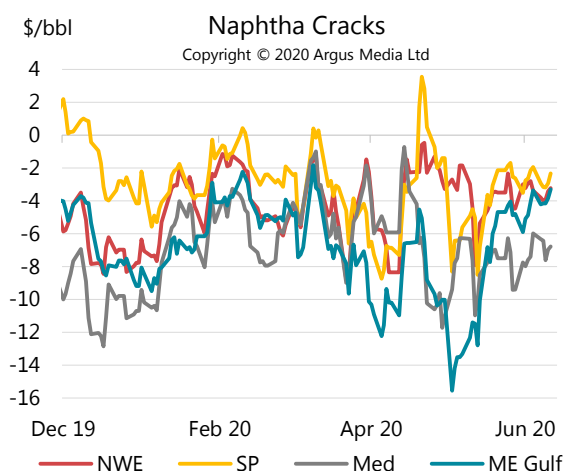
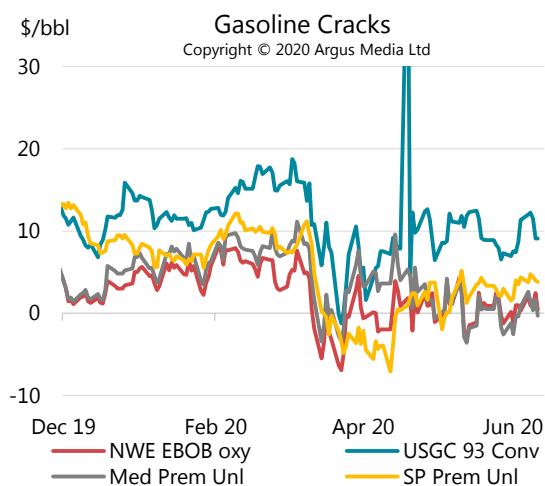


Spot product prices

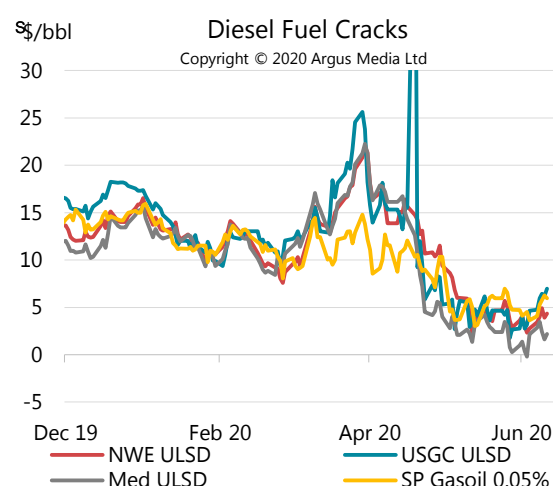
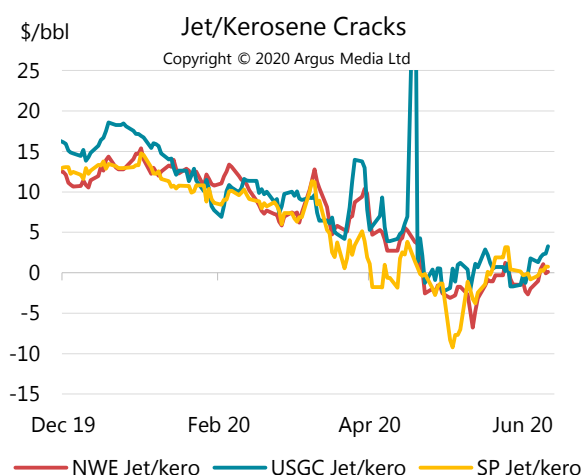
The rise in product prices has generally lagged the recovery in crude prices due to OPEC+ production cuts and non-OPEC shut-ins tightening the market. In addition to some product specific factors, rising crude prices mostly drove product cracks lower over the month of May.

A persistent oversupply in US and European markets contributed to lower gasoline cracks in May. Declines were modest as demand ticked-up following the easing of confinement measures. In Rotterdam, EBOB (oxy) averaged \$0.59/bbl above North Sea Dated in May, having slipped into negative territory in mid-month. On the US Gulf Coast, super unleaded gasoline cracks vs WTI Houston declined by \$0.13/bbl m-o-m to average \$9.72/bbl. US private car use during the lockdown was significantly higher than in Europe and rose during May as many

states began to deconfine. Even so, traffic data suggest that activity remained depressed due to lockdowns, high unemployment and as many continue to work from home. Downward pressure on US prices came as imports arrived from Europe and India, amid extremely weak import requirements in Latin America and the Caribbean. In Singapore, premium unleaded gasoline rose by \$3.30/bbl vs Dubai m-o-m in May as regional demand returned, particularly in China and Vietnam. Maintenance in Korea will reduce regional gasoline output in June, although supplies from Vietnam will be higher than expected as Covid-19's impact on logistics has delayed a planned turnaround there.



Naphtha cracks in key regions fell in May, as weak gasoline demand saw little interest in naphtha blending to boost supply. In North West Europe, naphtha fell \$0.71/bbl vs North Sea Dated m-o-m as pressure also came from lower prices for rival petrochemical feedstock LPG. Despite robust demand from petrochemical facilities in Korea, Taiwan and China, prices in Singapore fell by \$1.02/bbl vs Dubai m-o-m on plentiful exports from North West Europe and the Mediterranean as well as competition from cheaper alternative feedstocks.



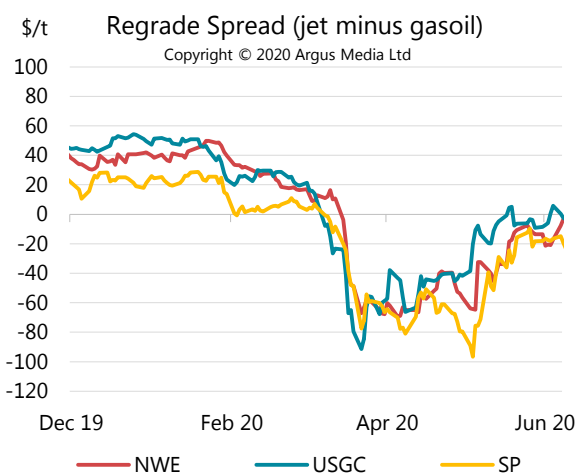
Jet/kerosene cracks fell well below zero in North West Europe, Asia Pacific and on the US Gulf Coast in May. Despite a very limited recovery in aviation activity, particularly for domestic flights in Asia Pacific, overall jet fuel demand remained severely depressed. In Singapore, jet prices rebounded from a record low of \$9.23/bbl below Dubai on 5 May and briefly moved into positive territory at end month. In North West Europe, jet/kerosene prices averaged \$2.12/bbl

below North Sea Dated. Imports from the Middle East and India added to the supply overhang. On the US Gulf Coast, prices have fluctuated at around \pm \$2/bbl vs WTI Houston since mid-April. Notwithstanding the increase in flight numbers, jet fuel demand seems unlikely to recover to pre-pandemic levels in the near future (see *Demand*).

Spot Product Prices															
(monthly and weekly averages, \$/bbl)															
	Mar	Apr	May	May-Apr Chg	%	04 May	Week Commencing:					Mar	Apr	May	Chg
							11 May	18 May	25 May	01 Jun					
Rotterdam, Barges FOB											Differential to North Sea Dated				
Gasoline EBOB oxy	32.32	19.35	29.59	10.23	52.9	23.98	28.00	34.32	34.10	38.15	0.60	0.78	0.59	-0.19	
Naphtha	27.39	15.31	25.02	9.71	63.4	20.15	22.31	29.61	29.80	34.85	-4.33	-3.26	-3.98	-0.71	
Jet/Kerosene	39.68	21.35	26.88	5.53	25.9	20.24	23.45	32.47	33.35	36.00	7.96	2.78	-2.12	-4.90	
ULSD 10ppm	46.36	33.12	34.10	0.98	3.0	30.28	31.78	37.65	37.74	41.06	14.64	14.55	5.10	-9.45	
Gasoil 0.1%	45.01	31.27	33.19	1.91	6.1	28.78	30.47	37.25	37.26	40.43	13.30	12.70	4.19	-8.51	
VGO 2.0%	36.42	24.86	30.53	5.67	22.8	27.29	28.84	33.70	33.40	39.04	4.71	6.29	1.53	-4.75	
Fuel Oil 0.5%	40.15	29.91	32.23	2.32	7.7	26.63	29.35	37.54	36.56	40.02	8.43	11.34	3.23	-8.11	
LSFO 1%	31.80	24.01	27.74	3.72	15.5	23.54	25.33	31.63	31.56	36.36	0.09	5.44	-1.26	-6.70	
HSFO 3.5%	21.76	15.97	21.56	5.59	35.0	16.70	19.14	26.04	25.97	32.15	-9.95	-2.60	-7.44	-4.84	
Mediterranean, FOB Cargoes											Differential to Urals				
Premium Unl 10 ppr	33.29	20.52	31.10	10.57	51.5	25.94	29.25	35.71	35.54	39.59	3.78	4.03	0.26	-3.77	
Naphtha	24.88	10.50	22.71	12.22	116.4	16.72	20.97	27.89	27.67	33.00	-4.63	-6.00	-8.12	-2.13	
Jet Aviation fuel	37.76	17.43	25.01	7.58	43.5	17.22	22.53	31.15	31.58	34.39	8.25	0.93	-5.83	-6.76	
ULSD 10ppm	45.03	29.00	33.60	4.59	15.8	27.51	32.25	38.38	37.59	41.28	15.52	12.51	2.76	-9.75	
Gasoil 0.1%	44.29	26.77	30.48	3.71	13.8	25.53	27.96	35.25	34.52	39.57	14.78	10.28	-0.36	-10.64	
LSFO 1%	33.66	25.62	29.02	3.40	13.3	24.50	26.42	33.08	33.08	37.67	4.15	9.13	-1.82	-10.95	
HSFO 3.5%	23.47	16.27	22.22	5.95	36.6	16.96	19.76	26.97	26.65	32.00	-6.04	-0.23	-8.62	-8.40	
US Gulf, FOB Pipeline											Differential to WTI Houston				
Super Unleaded	40.21	28.44	40.66	12.22	43.0	36.83	40.71	44.42	43.29	46.95	10.02	9.84	9.72	-0.13	
Unleaded	35.05	23.20	35.09	11.89	51.3	32.13	33.52	38.53	38.68	43.12	4.86	4.60	4.14	-0.46	
Jet/Kerosene	38.81	24.53	31.07	6.54	26.6	26.95	29.12	35.73	35.25	38.29	8.61	5.93	0.13	-5.81	
ULSD 10ppm	46.97	33.30	35.32	2.02	6.1	31.81	33.39	38.97	39.09	42.03	16.77	14.70	4.37	-10.33	
Heating Oil	40.96	24.51	27.53	3.02	12.3	21.58	24.31	33.36	33.91	35.79	10.77	5.91	-3.41	-9.33	
No. 6 3%*	23.84	17.02	23.88	6.86	40.3	20.31	22.00	27.83	27.55	32.12	-6.36	-1.58	-7.07	-5.49	
Singapore, FOB Cargoes											Differential to Dubai				
Premium Unleaded	36.42	20.49	33.44	12.95	63.2	27.40	32.00	37.16	36.61	42.09	2.64	-0.84	2.45	3.30	
Naphtha	30.60	17.86	26.49	8.63	48.3	20.83	22.91	30.30	31.88	36.43	-3.19	-3.48	-4.49	-1.02	
Jet/Kerosene	39.39	21.35	28.94	7.59	35.6	19.46	26.32	33.62	35.83	38.78	5.61	0.01	-2.05	-2.06	
Gasoil 0.001%	45.45	31.41	36.08	4.67	14.9	31.70	33.39	39.18	39.94	43.29	11.67	10.08	5.09	-4.98	
Fuel Oil 0.5%	44.92	33.39	37.09	3.70	11.1	33.77	35.37	39.92	39.03	42.00	11.14	12.06	6.11	-5.95	
LSWR Cracked	46.83	31.51	34.29	2.78	8.8	30.87	32.17	36.97	37.01	39.80	13.05	10.17	3.31	-6.87	
HSFO 180 CST	31.45	23.36	26.72	3.37	14.4	22.23	24.16	30.33	29.92	35.46	-2.33	2.02	-4.26	-6.28	
HSFO 380 CST 4%	30.55	22.59	25.33	2.74	12.1	21.38	22.74	28.76	28.22	33.80	-3.23	1.26	-5.66	-6.91	

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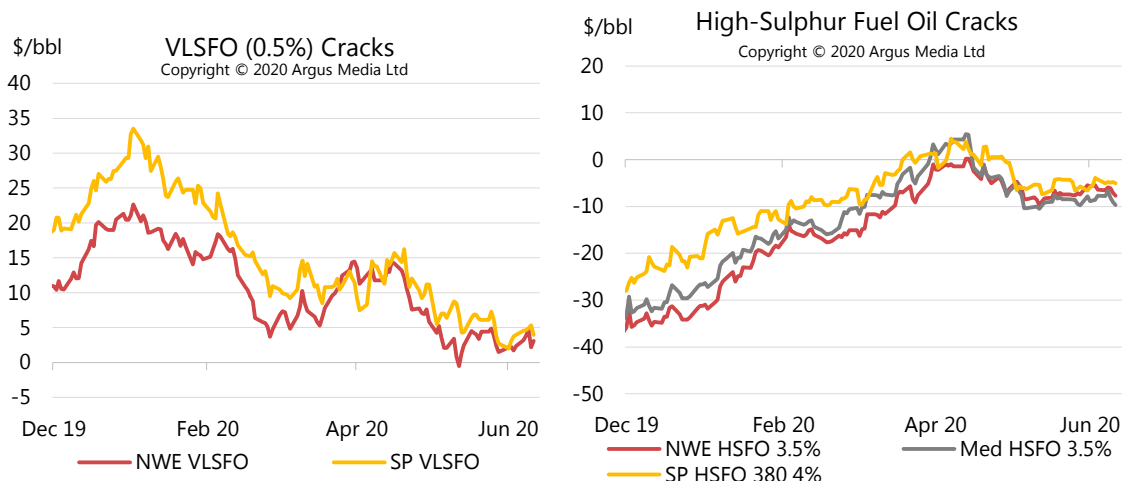
Despite easing lockdown measures, the weak global economic outlook and low industrial activity weighed heavily on diesel markets. Global cracks fell below \$5/bbl in May, the lowest in four years. High stock levels persisted and markets were flooded with supplies from Russia, Norway, the US and India. The sharp discount of jet/kerosene prices to gasoil observed in April and May has provided a strong incentive to refiners to blend where possible their surplus kerosene into the gasoil pool. The downgrading of jet to gasoil added pressure to gasoil



cracks but helped rebalance kerosene markets by limiting the supply overhang. On 13 May, ultra-low sulphur diesel (ULSD) prices in North West Europe fell to \$2.05/bbl vs North Sea Dated, the lowest in 18 years as German industrial activity remained subdued and with plentiful imports. On the US Gulf Coast, ULSD fell by over \$10/bbl vs WTI Houston m-o-m, to average \$4.37/bbl. Domestic consumption was weak, with the planting season providing little support, and demand from key export markets in Latin American and the Caribbean stymied by the impact of Covid-19.

In Singapore, the price of diesel fell \$4.98/bbl vs Dubai m-o-m to average \$5.09/bbl in May. High Chinese exports exacerbated market oversupply and Indian refiners reportedly ran out of land-based storage capacity. Cracks recovered modestly from the record low of \$3.03/bbl observed on 14 May to \$4.75/bbl at month-end. Support came as demand in Vietnam ticked up and on expectations of a return in Indian consumption. Rising refining activity in many regions to meet stronger gasoline demand has aggravated the gasoil surplus as diesel demand has suffered a slower recovery. However, heavy refinery maintenance in Taiwan, Japan and Korea should help tighten the market.

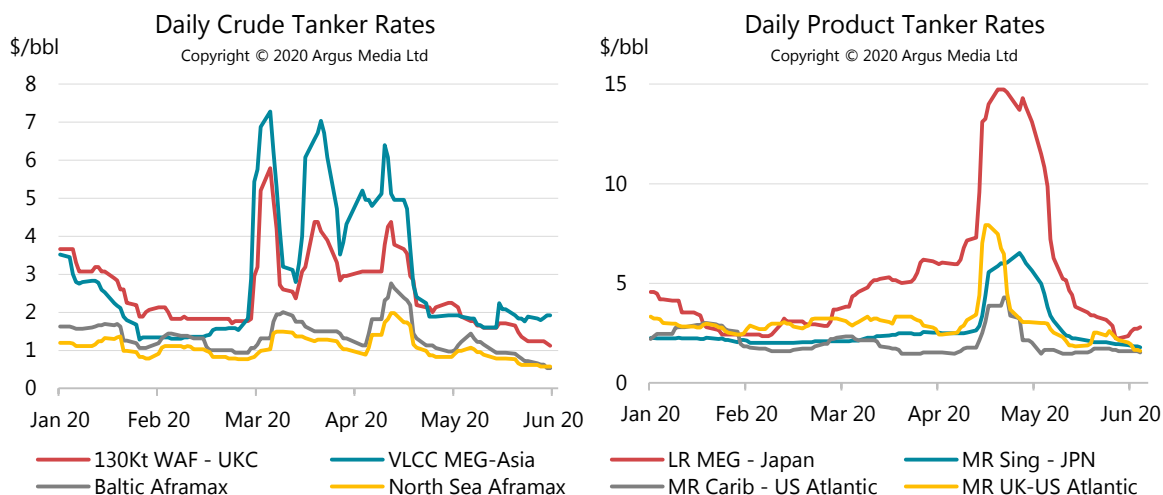
Weak bunkering demand amid oversupplied markets weighed on fuel oil prices. In Singapore, very low sulphur fuel oil (VLSFO) prices fell to \$2/bbl vs Dubai in early June, the lowest in over one year. In North West Europe, VLSFO cracks slipped briefly into negative territory before recovering to just over \$2/bbl in early June. High sulphur fuel oil (HSFO) cracks held steady in May, at around \$7/bbl below benchmark crude. Demand is tepid but expected to pick up in the summer months in the Middle East and Asia as increased power generation is required for air conditioning and as refiners buy more fuel as feedstock to boost gasoline output from conversion units.



Freight

In May, the cost of shipping crude declined from extremely high levels seen in April as global production fell sharply, reducing demand for vessels. Rates for Very Large Crude Carriers (VLCCs) travelling between the Middle East Gulf (MEG) and Asia fell to below \$2/bbl, from a peak of \$6.40/bbl on 21 April (-\$3.07/bbl m-o-m). The collapse in rates came as several producers reduced exports in line with the new OPEC+ deal. VLCC rates averaged \$1.92/bbl in May, slightly above the 2019 average of \$1.78/bbl, as floating storage demand remained robust. Some modest support also came from discharging delays linked to Covid-19 logistical

challenges. Suezmax rates almost halved in May, averaging \$1.92/bbl on the West Africa – UK, Continent route, due to weaker demand. Rates for Aframaxes also slipped m-o-m. Baltic Aframax rates fell \$0.68/bbl m-o-m and North Sea Aframax rates fell \$0.48/bbl m-o-m. There were reports of some discharging delays in the North Sea.



In clean product shipping markets, rates for Long Range (LR) vessels plummeted from the record highs seen in April. Rates for LR vessels travelling between the Middle East Gulf and Japan had soared to almost \$15/bbl due to floating storage demand and high naphtha shipments. With demand easing, rates fell back to \$2.24/bbl in early June. The medium range (MR) vessel market also took a hit due to weak US demand for European gasoline cargoes, lower naphtha shipments and reduced floating storage interest. Rates for MRs travelling between the UK and US Atlantic fell \$1.74/bbl m-o-m to average \$2.59/bbl.

Tables

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

	2017	2018	1Q19	2Q19	3Q19	4Q19	2019	1Q20	2Q20	3Q20	4Q20	2020	1Q21	2Q21	3Q21	4Q21	2021
OECD DEMAND																	
Americas	25.1	25.5	25.4	25.4	25.9	25.7	25.6	24.4	20.0	24.1	24.7	23.3	24.1	24.4	25.5	25.2	24.8
Europe	14.4	14.3	13.9	14.1	14.6	14.0	14.1	13.2	10.7	13.2	13.4	12.6	13.2	13.7	14.2	13.8	13.7
Asia Oceania	8.2	8.1	8.3	7.5	7.6	8.1	7.9	7.8	6.8	7.4	7.8	7.4	7.8	7.1	7.4	7.8	7.5
Total OECD	47.6	47.9	47.6	47.0	48.0	47.7	47.6	45.4	37.5	44.7	45.9	43.4	45.1	45.1	47.1	46.9	46.0
NON-OECD DEMAND																	
FSU	4.5	4.6	4.5	4.6	4.9	4.8	4.7	4.6	3.9	4.5	4.6	4.4	4.4	4.5	4.7	4.6	4.6
Europe	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.7	0.6	0.8	0.8	0.7	0.8	0.7	0.8	0.8	0.8
China	12.5	13.0	13.0	13.7	13.8	14.1	13.7	11.9	13.5	13.8	13.9	13.3	13.9	14.1	14.0	14.1	14.0
Other Asia	13.8	14.0	14.5	14.4	13.8	14.4	14.2	13.5	11.2	12.8	13.8	12.8	13.8	14.1	13.5	14.1	13.9
Americas	6.3	6.3	6.1	6.2	6.3	6.3	6.2	5.8	4.7	5.9	6.0	5.6	5.8	5.9	6.1	6.1	6.0
Middle East	8.4	8.3	8.1	8.2	8.8	8.4	8.4	7.8	6.8	8.1	7.7	7.6	7.7	8.2	8.6	8.0	8.2
Africa	4.3	4.2	4.3	4.3	4.1	4.3	4.2	4.2	3.2	3.9	4.1	3.9	4.1	4.0	3.9	4.1	4.0
Total Non-OECD	50.5	51.2	51.3	52.2	52.5	53.0	52.2	48.5	43.9	49.9	51.0	48.3	50.5	51.5	51.6	51.8	51.4
Total Demand¹	98.1	99.0	98.9	99.2	100.5	100.7	99.8	93.9	81.4	94.6	96.9	91.7	95.6	96.6	98.7	98.7	97.4
OECD SUPPLY																	
Americas	20.5	23.0	24.1	24.5	24.6	25.6	24.7	25.7	22.8	22.3	22.8	23.4	23.2	23.2	23.4	23.6	23.4
Europe	3.5	3.5	3.5	3.2	3.2	3.5	3.3	3.7	3.5	3.6	3.7	3.6	3.7	3.6	3.6	3.8	3.7
Asia Oceania	0.4	0.4	0.5	0.5	0.6	0.6	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Total OECD⁴	24.4	26.9	28.0	28.2	28.4	29.7	28.6	29.9	26.9	26.5	27.0	27.6	27.5	27.4	27.6	28.0	27.6
NON-OECD SUPPLY																	
FSU	14.3	14.6	14.8	14.4	14.6	14.7	14.6	14.8	13.2	12.7	13.0	13.4	13.6	13.7	13.7	13.7	13.7
Europe	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
China	3.9	3.8	3.9	3.9	3.9	3.9	3.9	4.0	3.9	3.8	3.8	3.9	3.8	3.8	3.7	3.7	3.7
Other Asia	3.5	3.4	3.3	3.3	3.1	3.2	3.2	3.1	3.0	3.0	2.9	3.0	2.9	2.9	2.9	2.9	2.9
Americas	5.1	5.1	5.1	5.1	5.4	5.5	5.3	5.6	5.1	5.3	5.4	5.4	5.6	5.6	5.6	5.6	5.6
Middle East	3.2	3.3	3.2	3.2	3.2	3.2	3.2	3.2	3.1	3.0	3.1	3.1	3.1	3.1	3.1	3.1	3.1
Africa	1.4	1.4	1.5	1.5	1.4	1.5	1.5	1.4	1.4	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
Total Non-OECD⁴	31.5	31.6	31.9	31.5	31.8	32.1	31.8	32.2	29.8	29.2	29.6	30.2	30.5	30.5	30.5	30.4	30.5
Processing gains ³	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.0	2.3	2.3	2.2	2.3	2.3	2.3	2.3	2.3
Global Biofuels	2.5	2.6	2.3	3.0	3.2	2.7	2.8	2.2	2.4	2.7	2.5	2.5	2.3	2.9	3.2	2.8	2.8
Total Non-OPEC Supply	60.6	63.5	64.5	65.1	65.8	66.8	65.5	66.6	61.1	60.7	61.4	62.5	62.8	63.1	63.6	63.6	63.3
OPEC²																	
Crude	31.5	31.4	30.1	29.6	29.0	29.3	29.5	28.2									
NGLs	5.4	5.5	5.5	5.5	5.4	5.4	5.4	5.4	5.2	5.1	5.2	5.2	5.3	5.3	5.3	5.3	5.3
Total OPEC	36.9	36.9	35.6	35.1	34.4	34.7	34.9	33.6									
Total Supply	97.5	100.3	100.1	100.1	100.2	101.5	100.5	100.3									
STOCK CHANGES AND MISCELLANEOUS																	
Reported OECD																	
Industry	-0.4	0.1	0.1	0.7	0.1	-0.4	0.1	0.9									
Government	-0.1	-0.1	0.1	-0.1	0.0	-0.1	0.0	0.0									
Total	-0.5	0.0	0.1	0.6	0.1	-0.5	0.1	0.9									
Floating storage/Oil in transit	0.4	0.0	-0.3	-0.1	0.0	0.9	0.1	0.1									
Miscellaneous to balance ⁵	-0.5	1.3	1.4	0.4	-0.4	0.5	0.5	5.3									
Total Stock Ch. & Misc	-0.6	1.3	1.2	0.9	-0.3	0.8	0.7	6.3									
Memo items:																	
Call on OPEC crude + Stock ch. ⁶	32.1	30.1	28.9	28.6	29.3	28.5	28.8	21.9	15.1	28.8	30.3	24.0	27.5	28.1	29.8	29.9	28.9

¹ Measured as deliveries from refineries and primary stocks, comprises inland deliveries, international marine bunkers, refinery fuel, crude for direct burning, oil from non-conventional sources and other sources of supply. Includes Biofuels.

² OPEC data based on today's membership throughout the time series.

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

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

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

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

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

	2017	2018	1Q19	2Q19	3Q19	4Q19	2019	1Q20	2Q20	3Q20	4Q20	2020	1Q21	2Q21	3Q21	4Q21	2021
OECD DEMAND																	
Americas	-	-	-	-	-	-	-	-0.1	0.5	-0.5	-	-	-	-	-	-	-
Europe	-	-	-	-	-	-	-	0.2	0.5	0.1	-	0.2	-	-	-	-	-
Asia Oceania	-	-	-	-	-	-	-	-	0.3	0.1	-	0.1	-	-	-	-	-
Total OECD	-	-	-	-	-	-	-	0.1	1.3	-0.3	0.1	0.3	-	-	-	-	-
NON-OECD DEMAND																	
FSU	-	-	-	-	-	-	-	-	0.2	-0.1	-0.1	-	-	-	-	-	-
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	0.2	0.8	0.7	0.6	0.6	-	-	-	-	-
Other Asia	-	-	-	-	-	-	-	-	-0.1	-0.4	-0.4	-0.2	-	-	-	-	-
Americas	-	-	-	-	-	-	-	-	0.1	-0.1	-	-	-	-	-	-	-
Middle East	-	-	-	-	-	-	-	0.1	-	-0.3	-0.2	-0.1	-	-	-	-	-
Africa	-	-	-	-	-	-	-	0.1	-0.1	-	-	-	-	-	-	-	-
Total Non-OECD	-	-	-	-	-	-	-	0.3	0.8	-0.2	-0.1	0.2	-	-	-	-	-
Total Demand	-	-	-	-	-	-	-	0.4	2.1	-0.5	-0.1	0.5	-	-	-	-	-
OECD SUPPLY																	
Americas	-	-	-	-	-	-	-	0.1	-0.1	0.4	0.5	0.2	-	-	-	-	-
Europe	-	-	-	-	-	-	-	-	0.1	-	-	-	-	-	-	-	-
Asia Oceania	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total OECD	-	-	-	-	-	-	-	0.1	-	0.4	0.5	0.3	-	-	-	-	-
NON-OECD SUPPLY																	
FSU	-	-	-	-	-	-	-	-	-	-0.3	-0.1	-0.1	-	-	-	-	-
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Asia	-	-	-	-	-	-	-	-	-	-0.1	-0.1	-	-	-	-	-	-
Americas ²	-	-	-	-	-	-	-	-	-	-	0.1	-	-	-	-	-	-
Middle East	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Non-OECD	-	-	-	-	-	-	-	-	-	-0.4	-	-0.1	-	-	-	-	-
Processing gains	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Global Biofuels	-	-	-	-	-	-	-	-	0.1	-	-	-	-	-	-	-	-
Total Non-OPEC Supply	-	-	-	-	-	-	-	0.1	0.1	-	0.5	0.2	-	-	-	-	-
OPEC																	
Crude ²	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NGLs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total OPEC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Supply	-	-	-	-	-	-	-	0.1	-	-	-	-	-	-	-	-	-
STOCK CHANGES AND MISCELLANEOUS																	
REPORTED OECD																	
Industry	-	-	-	-	-	-	-	0.3	-	-	-	-	-	-	-	-	-
Government	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	0.3	-	-	-	-	-	-	-	-	-
Floating storage/Oil in transit	-	-	-	-	-	-	-	0.3	-	-	-	-	-	-	-	-	-
Miscellaneous to balance	-	-	-	-	-	-	-	-0.9	-	-	-	-	-	-	-	-	-
Total Stock Ch. & Misc	-	-	-	-	-	-	-	-0.3	-	-	-	-	-	-	-	-	-
Memo items:																	
Call on OPEC crude + Stock ch.	-	-	-	-	-	-	-	0.3	2.0	-0.5	-0.5	0.3	-	-	-	-	-

¹ When submitting their monthly oil statistics, OECD Member countries periodically update data for prior periods. Similar updates to non-OECD data can occur.
² Ecuador left OPEC on 1 January 2020, and its production will from this Report be accounted for in Non-OECD Americas.

Table 2
SUMMARY OF GLOBAL OIL DEMAND

	2018	1Q19	2Q19	3Q19	4Q19	2019	1Q20	2Q20	3Q20	4Q20	2020	1Q21	2Q21	3Q21	4Q21	2021
Demand (mb/d)																
Americas	25.53	25.40	25.41	25.85	25.66	25.58	24.39	19.97	24.08	24.73	23.30	24.08	24.38	25.46	25.24	24.80
Europe	14.27	13.90	14.08	14.56	13.98	14.13	13.21	10.74	13.22	13.40	12.65	13.19	13.67	14.17	13.84	13.72
Asia Oceania	8.06	8.33	7.49	7.64	8.07	7.88	7.84	6.78	7.35	7.75	7.43	7.80	7.07	7.43	7.82	7.53
Total OECD	47.85	47.64	46.98	48.05	47.70	47.59	45.43	37.49	44.66	45.89	43.38	45.07	45.12	47.07	46.90	46.04
Asia	27.00	27.48	28.13	27.55	28.41	27.90	25.31	24.62	26.67	27.73	26.09	27.75	28.15	27.52	28.19	27.90
Middle East	8.33	8.11	8.19	8.79	8.42	8.38	7.85	6.81	8.11	7.73	7.62	7.75	8.21	8.64	8.01	8.15
Americas	6.27	6.13	6.22	6.31	6.28	6.24	5.82	4.72	5.94	6.05	5.63	5.80	5.85	6.08	6.13	5.97
FSU	4.60	4.49	4.62	4.86	4.82	4.70	4.57	3.92	4.51	4.56	4.39	4.37	4.53	4.69	4.64	4.56
Africa	4.21	4.31	4.29	4.14	4.26	4.25	4.22	3.23	3.92	4.12	3.87	4.09	3.99	3.92	4.07	4.02
Europe	0.76	0.75	0.78	0.80	0.79	0.78	0.75	0.64	0.77	0.78	0.74	0.76	0.75	0.80	0.81	0.78
Total Non-OECD	51.18	51.27	52.22	52.46	53.00	52.24	48.50	43.93	49.92	50.97	48.35	50.52	51.47	51.65	51.84	51.37
World	99.04	98.91	99.20	100.51	100.70	99.84	93.94	81.42	94.58	96.86	91.72	95.58	96.59	98.71	98.74	97.42
of which: US50	20.50	20.31	20.35	20.68	20.55	20.47	19.32	15.87	19.14	19.72	18.52	19.07	19.39	20.30	20.13	19.73
Europe 5*	8.24	8.09	8.09	8.27	7.98	8.11	7.57	6.06	7.43	7.62	7.17	7.62	7.77	7.97	7.85	7.80
China	12.97	13.03	13.72	13.79	14.06	13.65	11.86	13.45	13.85	13.90	13.27	13.95	14.05	14.02	14.08	14.02
Japan	3.81	4.09	3.41	3.44	3.76	3.67	3.70	3.13	3.35	3.65	3.46	3.69	3.07	3.37	3.66	3.45
India	4.86	5.14	5.08	4.78	5.06	5.01	4.96	3.79	4.42	5.05	4.56	5.21	5.54	4.81	5.15	5.18
Russia	3.48	3.41	3.49	3.71	3.61	3.56	3.52	3.03	3.40	3.39	3.34	3.31	3.48	3.55	3.45	3.45
Brazil	3.03	3.01	3.05	3.16	3.17	3.10	2.97	2.43	2.99	3.08	2.87	2.86	2.93	3.00	3.05	2.96
Saudi Arabia	3.13	2.96	3.05	3.48	3.09	3.15	2.96	2.69	3.26	2.86	2.94	2.90	3.35	3.55	3.06	3.22
Canada	2.45	2.45	2.44	2.57	2.54	2.50	2.54	2.10	2.50	2.49	2.41	2.50	2.48	2.59	2.55	2.53
Korea	2.62	2.63	2.48	2.58	2.67	2.59	2.56	2.33	2.48	2.55	2.48	2.57	2.44	2.48	2.54	2.51
Mexico	1.89	1.93	1.94	1.93	1.86	1.92	1.82	1.49	1.83	1.84	1.74	1.80	1.83	1.89	1.85	1.84
Iran	1.98	2.00	1.95	1.95	2.02	1.98	1.87	1.65	1.82	1.88	1.81	1.86	1.84	1.82	1.81	1.83
Total	68.97	69.04	69.06	70.36	70.38	69.71	65.63	58.04	66.46	68.03	64.55	67.32	68.16	69.36	69.19	68.52
% of World	69.6%	69.8%	69.6%	70.0%	69.9%	69.8%	69.9%	71.3%	70.3%	70.2%	70.4%	70.4%	70.6%	70.3%	70.1%	70.3%
Annual Change (% per annum)																
Americas	1.8	0.4	0.3	0.0	0.2	0.2	-4.0	-21.4	-6.8	-3.6	-8.9	-1.2	22.1	5.7	2.1	6.4
Europe	-0.8	-1.2	-1.1	-0.7	-1.0	-1.0	-5.0	-23.7	-9.2	-4.1	-10.5	-0.2	27.3	7.2	3.3	8.5
Asia Oceania	-1.2	-3.7	-3.1	-1.4	-0.3	-2.1	-5.9	-9.6	-3.8	-3.9	-5.7	-0.5	4.3	1.1	0.8	1.3
Total OECD	0.5	-0.8	-0.7	-0.5	-0.2	-0.5	-4.6	-20.2	-7.1	-3.8	-8.9	-0.8	20.3	5.4	2.2	6.1
Asia	2.9	2.7	3.3	2.9	4.4	3.3	-7.9	-12.5	-3.2	-2.4	-6.5	9.6	14.3	3.2	1.7	7.0
Middle East	-0.6	0.4	-2.7	1.3	3.2	0.6	-3.3	-16.9	-7.8	-8.2	-9.0	-1.3	20.6	6.6	3.5	6.9
Americas	-0.8	-1.2	0.0	-0.6	-0.6	-0.6	-5.0	-24.1	-6.0	-3.7	-9.7	-0.3	24.0	2.4	1.3	5.9
FSU	2.3	2.3	2.3	1.6	2.2	2.1	1.7	-15.0	-7.2	-5.4	-6.5	-4.2	15.5	4.0	1.6	3.8
Africa	-1.0	0.9	1.5	1.1	0.5	1.0	-2.1	-24.7	-5.2	-3.4	-8.9	-3.1	23.5	0.0	-1.1	3.7
Europe	-0.1	2.4	5.4	3.0	-0.1	2.6	-0.7	-18.3	-2.9	-0.8	-5.7	1.9	16.5	3.0	2.9	5.6
Total Non-OECD	1.4	1.6	1.7	1.9	3.0	2.1	-5.4	-15.9	-4.8	-3.8	-7.5	4.1	17.2	3.5	1.7	6.3
World	1.0	0.4	0.6	0.8	1.5	0.8	-5.0	-17.9	-5.9	-3.8	-8.1	1.8	18.6	4.4	1.9	6.2
Annual Change (mb/d)																
Americas	0.46	0.09	0.08	-0.01	0.06	0.05	-1.02	-5.43	-1.77	-0.93	-2.28	-0.30	4.41	1.38	0.51	1.50
Europe	-0.11	-0.17	-0.16	-0.11	-0.13	-0.14	-0.69	-3.34	-1.33	-0.57	-1.48	-0.02	2.93	0.95	0.44	1.07
Asia Oceania	-0.10	-0.32	-0.24	-0.11	-0.02	-0.17	-0.50	-0.72	-0.29	-0.32	-0.45	-0.04	0.29	0.08	0.06	0.10
Total OECD	0.25	-0.40	-0.32	-0.23	-0.10	-0.26	-2.20	-9.49	-3.39	-1.82	-4.21	-0.37	7.62	2.41	1.01	2.67
Asia	0.75	0.71	0.89	0.77	1.20	0.89	-2.17	-3.51	-0.88	-0.69	-1.81	2.44	3.53	0.84	0.46	1.81
Middle East	-0.05	0.03	-0.23	0.11	0.26	0.05	-0.27	-1.38	-0.69	-0.69	-0.76	-0.10	1.40	0.53	0.27	0.53
Americas	-0.05	-0.08	0.00	-0.04	-0.04	-0.04	-0.31	-1.50	-0.38	-0.24	-0.60	-0.02	1.13	0.14	0.08	0.33
FSU	0.10	0.10	0.10	0.08	0.10	0.10	0.08	-0.69	-0.35	-0.26	-0.31	-0.19	0.61	0.18	0.07	0.17
Africa	-0.04	0.04	0.06	0.04	0.02	0.04	-0.09	-1.06	-0.22	-0.15	-0.38	-0.13	0.76	0.00	-0.05	0.14
Europe	0.00	0.02	0.04	0.02	0.00	0.02	-0.01	-0.14	-0.02	-0.01	-0.04	0.01	0.11	0.02	0.02	0.04
Total Non-OECD	0.71	0.83	0.87	0.98	1.55	1.06	-2.77	-8.29	-2.54	-2.02	-3.90	2.01	7.54	1.72	0.87	3.03
World	0.95	0.43	0.55	0.76	1.45	0.80	-4.97	-17.78	-5.93	-3.84	-8.11	1.65	15.16	4.13	1.88	5.70
Revisions to Oil Demand from Last Month's Report (mb/d)																
Americas	0.00	0.00	0.00	-0.01	0.01	0.00	-0.07	0.49	-0.47	0.05	0.00					
Europe	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.52	0.15	0.03	0.22					
Asia Oceania	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	0.02	0.28	0.07	-0.02	0.09					
Total OECD	-0.00	-0.01	-0.00	-0.02	0.00	-0.01	0.12	1.29	-0.25	0.06	0.30					
Asia	-0.02	-0.02	-0.02	-0.02	-0.05	-0.03	0.16	0.65	0.26	0.27	0.33					
Middle East	0.00	0.01	0.01	0.01	0.02	0.01	0.09	-0.04	-0.32	-0.19	-0.12					
Americas	0.00	-0.01	0.00	-0.01	-0.01	-0.01	-0.03	0.11	-0.06	-0.02	0.00					
FSU	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	0.20	-0.07	-0.11	0.00					
Africa	0.00	0.00	0.00	0.00	0.00	0.00	0.06	-0.07	-0.04	-0.05	-0.03					
Europe	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	0.00	0.00	0.00					
Total Non-OECD	-0.02	-0.02	-0.01	-0.01	-0.04	-0.02	0.28	0.84	-0.25	-0.11	0.19					
World	-0.02	-0.02	-0.02	-0.03	-0.04	-0.03	0.40	2.13	-0.50	-0.05	0.49					
Revisions to Oil Demand Growth from Last Month's Report (mb/d)																
World	-0.02	0.01	0.01	-0.01	-0.02	0.00	0.42	2.15	-0.47	-0.02	0.52					

* France, Germany, Italy, Spain and UK

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

										Latest month vs.	
	2018	2019	2Q19	3Q19	4Q19	1Q20	Jan 20	Feb 20	Mar 20 ²	Feb 20	Mar 19
Americas											
LPG and ethane	3.69	3.78	3.40	3.54	4.00	4.04	4.09	4.10	3.94	-0.16	0.08
Naphtha	0.31	0.27	0.28	0.27	0.24	0.30	0.31	0.28	0.30	0.02	0.01
Motor gasoline	11.09	11.04	11.26	11.28	10.93	10.23	10.54	10.77	9.41	-1.37	-1.50
Jet and kerosene	2.03	2.08	2.10	2.17	2.07	1.86	2.02	1.93	1.64	-0.28	-0.38
Gasoil/diesel oil	5.32	5.25	5.17	5.12	5.26	5.16	5.16	5.17	5.15	-0.02	-0.24
Residual fuel oil	0.61	0.59	0.60	0.64	0.50	0.44	0.51	0.38	0.43	0.05	-0.18
Other products	2.48	2.57	2.61	2.83	2.67	2.36	2.28	2.40	2.40	0.01	0.12
Total	25.53	25.58	25.41	25.85	25.66	24.39	24.91	25.03	23.27	-1.76	-2.09
Europe											
LPG and ethane	1.16	1.09	1.10	1.07	1.04	1.14	1.15	1.16	1.11	-0.06	0.02
Naphtha	1.03	0.98	0.88	0.93	0.99	1.04	1.06	1.06	1.00	-0.06	-0.09
Motor gasoline	1.99	2.01	2.06	2.13	2.01	1.79	1.89	1.93	1.55	-0.38	-0.31
Jet and kerosene	1.51	1.53	1.58	1.72	1.46	1.23	1.33	1.40	0.97	-0.43	-0.43
Gasoil/diesel oil	6.44	6.46	6.32	6.59	6.54	6.22	6.10	6.46	6.12	-0.34	-0.10
Residual fuel oil	0.86	0.83	0.86	0.82	0.75	0.71	0.72	0.70	0.72	0.02	-0.14
Other products	1.28	1.22	1.28	1.30	1.19	1.08	1.07	1.07	1.10	0.03	-0.10
Total	14.27	14.13	14.08	14.56	13.98	13.21	13.31	13.78	12.57	-1.21	-1.16
Asia Oceania											
LPG and ethane	0.75	0.77	0.72	0.71	0.81	0.83	0.87	0.82	0.79	-0.02	0.01
Naphtha	2.04	2.01	1.91	2.03	2.01	1.98	2.09	2.06	1.81	-0.26	-0.19
Motor gasoline	1.53	1.50	1.47	1.57	1.50	1.37	1.36	1.44	1.33	-0.12	-0.15
Jet and kerosene	0.93	0.92	0.78	0.74	1.01	1.00	1.15	1.11	0.75	-0.36	-0.23
Gasoil/diesel oil	1.89	1.90	1.88	1.86	1.95	1.82	1.69	1.92	1.86	-0.05	-0.07
Residual fuel oil	0.52	0.43	0.40	0.40	0.44	0.47	0.45	0.49	0.46	-0.04	-0.01
Other products	0.40	0.34	0.34	0.34	0.35	0.37	0.38	0.35	0.37	0.02	0.05
Total	8.06	7.88	7.49	7.64	8.07	7.84	7.98	8.19	7.37	-0.82	-0.59
OECD											
LPG and ethane	5.60	5.63	5.22	5.32	5.84	6.01	6.11	6.08	5.84	-0.24	0.10
Naphtha	3.39	3.27	3.07	3.22	3.25	3.32	3.46	3.40	3.10	-0.30	-0.27
Motor gasoline	14.61	14.56	14.79	14.97	14.44	13.39	13.78	14.15	12.28	-1.86	-1.96
Jet and kerosene	4.46	4.53	4.45	4.63	4.54	4.10	4.50	4.44	3.37	-1.08	-1.04
Gasoil/diesel oil	13.65	13.62	13.36	13.57	13.74	13.20	12.94	13.54	13.13	-0.41	-0.41
Residual fuel oil	2.00	1.85	1.86	1.86	1.69	1.62	1.68	1.58	1.61	0.03	-0.33
Other products	4.16	4.14	4.23	4.47	4.21	3.80	3.72	3.82	3.87	0.06	0.07
Total	47.85	47.59	46.98	48.05	47.70	45.43	46.20	47.00	43.20	-3.80	-3.84

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

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

² Latest official OECD submissions (MOS).

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

	2018	2019	2Q19	3Q19	4Q19	1Q20	Jan 20	Feb 20	Mar 20 ²	Latest month vs.	
										Feb 20	Mar 19
United States³											
LPG and ethane	2.87	2.93	2.60	2.71	3.13	3.22	3.31	3.22	3.13	-0.09	0.10
Naphtha	0.23	0.21	0.21	0.22	0.19	0.20	0.22	0.17	0.19	0.02	-0.01
Motor gasoline	9.33	9.27	9.48	9.49	9.16	8.49	8.76	8.97	7.78	-1.19	-1.39
Jet and kerosene	1.71	1.75	1.78	1.80	1.75	1.58	1.70	1.66	1.39	-0.27	-0.32
Gasoil/diesel oil	4.15	4.08	4.01	3.94	4.10	3.96	4.00	3.97	3.91	-0.06	-0.24
Residual fuel oil	0.32	0.29	0.26	0.32	0.27	0.17	0.26	0.15	0.11	-0.04	-0.17
Other products	1.89	1.95	2.02	2.20	1.95	1.70	1.66	1.66	1.76	0.10	0.06
Total	20.50	20.47	20.35	20.68	20.55	19.32	19.91	19.80	18.28	-1.51	-1.98
Japan											
LPG and ethane	0.40	0.37	0.35	0.29	0.37	0.41	0.40	0.43	0.39	-0.04	-0.03
Naphtha	0.74	0.74	0.69	0.71	0.76	0.71	0.75	0.76	0.62	-0.14	-0.15
Motor gasoline	0.86	0.84	0.81	0.90	0.83	0.76	0.74	0.80	0.75	-0.05	-0.07
Jet and kerosene	0.50	0.49	0.37	0.34	0.55	0.61	0.67	0.69	0.48	-0.21	-0.08
Diesel	0.46	0.47	0.45	0.47	0.47	0.44	0.39	0.47	0.46	-0.01	-0.02
Other gasoil	0.32	0.30	0.28	0.27	0.31	0.31	0.28	0.35	0.30	-0.05	-0.02
Residual fuel oil	0.28	0.24	0.21	0.23	0.25	0.24	0.23	0.25	0.23	-0.02	-0.01
Other products	0.26	0.23	0.23	0.24	0.22	0.22	0.26	0.20	0.21	0.01	-0.03
Total	3.81	3.67	3.41	3.44	3.76	3.70	3.72	3.96	3.44	-0.52	-0.41
Germany											
LPG and ethane	0.11	0.12	0.13	0.13	0.11	0.11	0.11	0.11	0.12	0.01	0.00
Naphtha	0.27	0.27	0.22	0.23	0.30	0.29	0.29	0.30	0.28	-0.02	-0.01
Motor gasoline	0.49	0.50	0.50	0.51	0.50	0.46	0.48	0.48	0.42	-0.06	-0.06
Jet and kerosene	0.22	0.22	0.23	0.23	0.21	0.18	0.20	0.21	0.13	-0.08	-0.08
Diesel	0.76	0.77	0.78	0.79	0.77	0.71	0.70	0.75	0.69	-0.06	-0.06
Other gasoil	0.32	0.35	0.29	0.36	0.33	0.44	0.35	0.43	0.53	0.09	0.20
Residual fuel oil	0.06	0.05	0.05	0.05	0.04	0.05	0.03	0.07	0.05	-0.01	-0.01
Other products	0.11	0.10	0.10	0.12	0.09	0.08	0.10	0.07	0.08	0.01	0.00
Total	2.35	2.38	2.31	2.43	2.35	2.33	2.27	2.43	2.30	-0.13	-0.01
Italy											
LPG and ethane	0.10	0.08	0.07	0.07	0.08	0.08	0.10	0.09	0.06	-0.03	-0.01
Naphtha	0.13	0.08	0.08	0.09	0.09	0.07	0.07	0.07	0.07	0.00	-0.01
Motor gasoline	0.17	0.14	0.14	0.16	0.16	0.12	0.14	0.14	0.08	-0.07	-0.05
Jet and kerosene	0.11	0.11	0.11	0.13	0.10	0.07	0.09	0.08	0.03	-0.05	-0.04
Diesel	0.46	0.45	0.45	0.45	0.46	0.38	0.43	0.44	0.26	-0.18	-0.19
Other gasoil	0.08	0.07	0.06	0.07	0.08	0.06	0.05	0.06	0.07	0.01	0.01
Residual fuel oil	0.07	0.07	0.07	0.07	0.07	0.06	0.07	0.06	0.06	-0.01	0.00
Other products	0.16	0.15	0.16	0.16	0.15	0.13	0.13	0.15	0.11	-0.03	-0.02
Total	1.27	1.15	1.14	1.20	1.18	0.97	1.07	1.09	0.75	-0.35	-0.31
France											
LPG and ethane	0.13	0.13	0.12	0.11	0.13	0.14	0.13	0.14	0.16	0.02	0.03
Naphtha	0.10	0.11	0.11	0.11	0.09	0.11	0.10	0.12	0.11	-0.01	-0.03
Motor gasoline	0.19	0.20	0.21	0.22	0.20	0.18	0.19	0.19	0.15	-0.05	-0.04
Jet and kerosene	0.17	0.17	0.18	0.19	0.16	0.14	0.16	0.17	0.10	-0.06	-0.06
Diesel	0.71	0.70	0.71	0.71	0.71	0.67	0.66	0.74	0.61	-0.13	-0.07
Other gasoil	0.24	0.23	0.20	0.24	0.22	0.21	0.25	0.17	0.21	0.04	-0.01
Residual fuel oil	0.05	0.04	0.05	0.05	0.03	0.03	0.03	0.03	0.02	-0.01	-0.02
Other products	0.12	0.12	0.12	0.14	0.11	0.08	0.10	0.07	0.07	0.00	-0.04
Total	1.71	1.71	1.71	1.78	1.65	1.57	1.63	1.64	1.43	-0.21	-0.24
United Kingdom											
LPG and ethane	0.14	0.12	0.15	0.10	0.09	0.14	0.14	0.15	0.13	-0.03	-0.02
Naphtha	0.03	0.03	0.03	0.03	0.02	0.04	0.04	0.04	0.04	0.00	0.01
Motor gasoline	0.28	0.29	0.29	0.29	0.29	0.27	0.27	0.29	0.25	-0.05	-0.01
Jet and kerosene	0.32	0.32	0.32	0.33	0.32	0.31	0.31	0.35	0.29	-0.07	-0.04
Diesel	0.52	0.51	0.52	0.51	0.51	0.49	0.46	0.54	0.47	-0.07	0.01
Other gasoil	0.14	0.13	0.13	0.14	0.13	0.12	0.10	0.12	0.14	0.03	0.02
Residual fuel oil	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.00
Other products	0.11	0.11	0.11	0.11	0.11	0.10	0.10	0.10	0.09	-0.01	-0.02
Total	1.57	1.53	1.59	1.53	1.49	1.48	1.43	1.61	1.42	-0.19	-0.06
Canada											
LPG and ethane	0.39	0.42	0.42	0.42	0.42	0.36	0.32	0.40	0.38	-0.02	-0.02
Naphtha	0.05	0.03	0.03	0.01	0.02	0.07	0.06	0.07	0.06	-0.01	0.02
Motor gasoline	0.88	0.88	0.89	0.91	0.89	0.91	0.95	0.96	0.81	-0.15	-0.02
Jet and kerosene	0.16	0.18	0.17	0.23	0.17	0.14	0.17	0.13	0.12	-0.01	-0.03
Diesel	0.26	0.26	0.26	0.26	0.26	0.27	0.26	0.28	0.26	-0.02	0.01
Other gasoil	0.29	0.28	0.25	0.30	0.28	0.30	0.30	0.31	0.30	-0.01	0.01
Residual fuel oil	0.05	0.06	0.06	0.05	0.04	0.07	0.08	0.08	0.06	-0.01	0.00
Other products	0.38	0.39	0.37	0.39	0.47	0.42	0.38	0.51	0.38	-0.13	0.05
Total	2.45	2.50	2.44	2.57	2.54	2.54	2.51	2.73	2.38	-0.35	0.00

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

² Latest official OECD submissions (MOS).

³ US figures exclude US territories.

Table 3
WORLD OIL PRODUCTION
(million barrels per day)

	2019	2020	2021	1Q20	2Q20	3Q20	4Q20	1Q21	Mar 20	Apr 20	May 20
OPEC											
Crude Oil											
Saudi Arabia	9.80			9.77					9.84	11.90	8.50
Iran	2.36			2.02					1.99	1.99	1.97
Iraq	4.71			4.57					4.58	4.50	4.17
UAE	3.18			3.27					3.50	3.85	2.50
Kuwait	2.68			2.73					2.84	3.05	2.20
Neutral Zone ¹	0.00			0.01					0.02	0.14	0.15
Angola	1.39			1.39					1.40	1.32	1.27
Nigeria	1.73			1.73					1.78	1.78	1.52
Libya	1.09			0.33					0.08	0.08	0.08
Algeria	1.02			1.02					1.03	1.00	0.81
Congo	0.33			0.30					0.31	0.33	0.25
Gabon	0.21			0.19					0.21	0.20	0.17
Equatorial Guinea	0.11			0.12					0.12	0.12	0.09
Venezuela	0.87			0.77					0.67	0.63	0.56
Total Crude Oil	29.49			28.21					28.35	30.75	24.09
Total NGLs²	5.45	5.22	5.31	5.41	5.18	5.11	5.16	5.29	5.38	5.51	5.02
Total OPEC³	34.94			33.62					33.73	36.26	29.11
NON-OPEC⁴											
OECD											
Americas											
United States	17.21	16.32	16.04	18.02	16.09	15.51	15.67	15.76	18.14	17.24	15.76
Mexico	1.93	1.94	1.92	2.00	1.88	1.95	1.94	1.93	2.01	1.97	1.84
Canada	5.54	5.12	5.39	5.69	4.78	4.84	5.15	5.52	5.68	5.14	4.62
Chile	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Europe	3.34	3.60	3.67	3.65	3.55	3.55	3.66	3.74	3.56	3.64	3.55
UK	1.13	1.11	1.07	1.14	1.07	1.08	1.14	1.12	1.05	1.08	1.06
Norway	1.74	2.04	2.15	2.05	2.03	2.03	2.07	2.16	2.07	2.11	2.05
Others	0.46	0.45	0.45	0.46	0.44	0.45	0.45	0.45	0.44	0.44	0.44
Asia Oceania											
Australia	0.53	0.57	0.58	0.53	0.57	0.59	0.59	0.58	0.56	0.57	0.56
Others	0.46	0.50	0.51	0.46	0.50	0.52	0.52	0.51	0.49	0.50	0.49
Others	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.08	0.07
Total OECD	28.57	27.56	27.61	29.90	26.88	26.45	27.03	27.54	29.95	28.57	26.33
NON-OECD											
Former USSR											
Russia	14.63	13.40	13.67	14.78	13.21	12.68	12.96	13.64	14.77	14.81	12.49
Azerbaijan	11.58	10.54	10.77	11.64	10.35	9.99	10.19	10.75	11.63	11.68	9.72
Kazakhstan	0.77	0.70	0.72	0.76	0.69	0.67	0.68	0.72	0.76	0.77	0.65
Others	1.93	1.81	1.81	2.02	1.81	1.67	1.73	1.81	2.01	2.01	1.75
Asia	0.35	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36
China	7.11	6.88	6.65	7.11	6.90	6.80	6.73	6.73	7.10	6.99	6.88
Malaysia	3.88	3.87	3.74	3.97	3.91	3.84	3.79	3.79	3.97	3.94	3.91
India	0.67	0.64	0.66	0.67	0.62	0.63	0.63	0.66	0.65	0.63	0.61
Indonesia	0.80	0.73	0.69	0.77	0.73	0.72	0.70	0.70	0.78	0.74	0.74
Others	0.77	0.73	0.70	0.75	0.74	0.73	0.72	0.71	0.75	0.75	0.73
Europe	0.99	0.91	0.86	0.94	0.91	0.89	0.88	0.87	0.94	0.94	0.89
Americas	0.12	0.11	0.11	0.12	0.11	0.11	0.11	0.11	0.12	0.12	0.11
Brazil	5.28	5.35	5.61	5.58	5.11	5.32	5.39	5.60	5.48	5.01	5.05
Argentina	2.90	3.06	3.28	3.15	3.05	3.00	3.04	3.25	3.07	3.07	3.02
Colombia	0.60	0.58	0.60	0.61	0.54	0.58	0.60	0.60	0.61	0.55	0.53
Ecuador	0.89	0.79	0.72	0.88	0.77	0.76	0.75	0.74	0.86	0.80	0.76
Others	0.53	0.48	0.54	0.54	0.34	0.53	0.53	0.54	0.52	0.19	0.34
Middle East	0.36	0.44	0.47	0.41	0.41	0.46	0.47	0.47	0.41	0.40	0.40
Oman	3.24	3.12	3.14	3.22	3.14	3.04	3.07	3.14	3.30	3.35	3.05
Qatar	0.98	0.92	0.92	1.01	0.94	0.85	0.88	0.92	1.09	1.12	0.88
Others	1.96	1.93	1.95	1.93	1.94	1.93	1.93	1.95	1.91	1.94	1.94
Africa	0.30	0.27	0.27	0.28	0.26	0.26	0.26	0.27	0.30	0.30	0.24
Egypt	1.45	1.34	1.29	1.41	1.36	1.28	1.30	1.31	1.39	1.37	1.39
Others	0.63	0.60	0.57	0.62	0.60	0.60	0.59	0.58	0.60	0.61	0.60
Others	0.82	0.74	0.73	0.79	0.75	0.69	0.71	0.73	0.78	0.76	0.79
Total Non-OECD	31.83	30.21	30.47	32.22	29.83	29.24	29.56	30.54	32.15	31.65	28.97
Processing gains ⁵	2.35	2.21	2.35	2.28	1.97	2.29	2.28	2.35	2.18	1.90	1.95
Global Biofuels	2.80	2.48	2.82	2.24	2.43	2.72	2.54	2.33	2.18	2.24	2.45
TOTAL NON-OPEC	65.55	62.46	63.25	66.64	61.11	60.71	61.41	62.75	66.45	64.36	59.70
TOTAL SUPPLY	100.49			100.26					100.17	100.62	88.81

¹ Neutral Zone production is also included in Saudi Arabia and Kuwait production with their respective shares.

² 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.

³ OPEC data based on today's membership throughout the time series.

⁴ Comprises crude oil, condensates, NGLs and oil from non-conventional sources

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

Table 3a
OIL SUPPLY IN OECD COUNTRIES¹
(thousand of barrels per day)

	2019	2020	2021	1Q20	2Q20	3Q20	4Q20	1Q21	Mar 20	Apr 20	May 20
United States											
Alaska	466	416	429	476	392	344	452	465	470	459	401
California	455	430	414	437	432	428	424	420	433	434	433
Texas	5069	4933	4442	5396	5147	4683	4516	4468	5422	5387	5134
Federal Gulf of Mexico ²	1883	1938	2100	1962	1895	1935	1960	2077	1932	1964	1935
Other US Lower 48	4360	3631	3706	4467	3300	3268	3494	3665	4459	3916	2941
NGLs ³	4813	4797	4772	5125	4737	4679	4649	4510	5253	4897	4726
Other Hydrocarbons	169	174	174	156	186	176	179	156	168	184	187
Total	17215	16319	16038	18018	16090	15511	15674	15761	18137	17239	15755
Canada											
Alberta Light/Medium/Heavy	487	447	409	494	434	433	427	420	492	396	460
Alberta Bitumen	1837	1493	1808	1857	1245	1351	1521	1731	1844	1482	1165
Saskatchewan	487	484	460	493	487	481	475	469	485	490	488
Other Crude	489	537	541	518	532	548	549	546	532	523	533
NGLs	961	931	950	969	904	918	933	991	981	947	889
Other Upgraders	172	165	165	183	158	150	168	183	180	175	146
Synthetic Crudes	1111	1061	1060	1179	1019	964	1082	1179	1161	1130	938
Total	5545	5117	5393	5695	4779	4844	5154	5518	5676	5143	4620
Mexico											
Crude	1709	1728	1729	1770	1665	1737	1740	1727	1783	1762	1620
NGLs	220	210	189	222	210	206	201	196	220	208	213
Total	1933	1941	1922	1995	1879	1946	1945	1926	2006	1973	1837
UK											
Brent Fields	44	32	27	36	35	27	29	31	37	35	35
Forties Fields	327	301	259	344	285	276	301	294	320	282	276
Ninian Fields	37	31	25	33	32	31	30	28	33	33	32
Flotta Fields	57	54	51	55	52	55	54	53	59	55	45
Other Fields	590	611	637	593	589	613	649	640	519	598	590
NGLs	79	77	75	77	78	78	77	76	79	78	80
Total	1134	1107	1074	1140	1071	1079	1139	1123	1047	1080	1058
Norway⁵											
Ekofisk-Ula Area	138	141	151	141	138	134	152	155	137	142	143
Oseberg-Troll Area	260	263	263	270	248	262	272	273	265	227	248
Statfjord-Gullfaks Area	237	239	233	243	235	235	241	237	255	227	237
Haltenbanken Area	287	293	315	291	292	290	299	306	276	286	291
Sleipner-Frigg Area	429	777	821	699	804	801	803	802	716	814	786
Other Fields	86	34	91	96	18	15	7	99	103	113	47
NGLs	299	296	278	309	296	289	291	290	322	303	294
Total	1737	2043	2152	2049	2031	2027	2065	2163	2074	2112	2047
Other OECD Europe											
Denmark	101	72	68	79	71	70	68	66	75	68	73
Italy	78	92	109	90	85	92	100	108	90	84	84
Turkey	58	59	58	59	59	59	59	59	60	59	59
Other	95	96	90	94	100	97	95	93	93	102	100
NGLs	8	8	7	8	8	8	8	7	9	8	8
Non-Conventional Oils	125	125	115	133	122	122	122	116	112	122	121
Total	465	452	448	463	444	447	451	449	439	444	445
Australia											
Gippsland Basin	9	9	8	9	9	8	8	8	9	9	9
Cooper-Eromanga Basin	34	36	34	37	37	36	35	35	37	37	37
Carnarvon Basin	72	92	100	79	88	96	103	102	95	89	87
Other Crude	246	250	256	227	252	263	261	259	240	247	245
NGLs	99	112	110	110	114	113	112	111	108	114	113
Total	460	499	508	461	499	516	519	515	490	495	491
Other OECD Asia Oceania											
New Zealand	24	20	19	20	21	20	20	19	18	21	21
Japan	4	4	4	4	4	4	4	4	4	4	4
NGLs	12	11	11	12	11	11	11	11	12	11	11
Non-Conventional Oils	28	35	35	34	36	36	35	35	32	39	34
Total	69	71	69	71	72	71	70	70	66	75	71
OECD											
Crude Oil	20458	19546	19659	21373	18983	18693	19149	19662	21297	20345	18561
NGLs	6500	6451	6401	6841	6368	6310	6290	6202	6993	6574	6342
Non-Conventional Oils ⁴	1610	1563	1554	1689	1525	1450	1590	1673	1656	1654	1429
Total	28568	27561	27614	29903	26876	26453	27029	27536	29946	28572	26333

¹ Subcategories refer to crude oil only unless otherwise noted.

² Only production from Federal waters is included.

³ To the extent possible, condensates from natural gas processing plants are included with NGLs, while field condensates are counted as crude oil.

⁴ Does not include biofuels.

⁵ 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.

⁶ Other North Sea NGLs is included.

Table 4
OECD STOCKS AND QUARTERLY STOCK CHANGES

	RECENT MONTHLY STOCKS ² in Million Barrels					PRIOR YEARS' STOCKS ² in Million Barrels			STOCK CHANGES in mb/d			
	Dec2019	Jan2020	Feb2020	Mar2020	Apr2020*	Apr2017	Apr2018	Apr2019	2Q2019	3Q2019	4Q2019	1Q2020
OECD INDUSTRY-CONTROLLED STOCKS¹												
OECD Americas												
Crude	591.4	605.4	621.0	654.1	706.3	676.7	586.9	629.6	0.01	-0.37	0.10	0.69
Motor Gasoline	280.9	292.2	278.3	293.1	295.2	275.7	271.8	260.7	-0.07	-0.02	0.25	0.13
Middle Distillate	204.4	208.2	196.9	190.6	220.5	233.6	195.8	199.8	-0.05	0.02	0.02	-0.15
Residual Fuel Oil	37.7	37.9	38.3	42.6	44.3	43.5	38.7	33.5	0.02	0.00	0.02	0.05
Total Products ³	756.0	757.2	724.1	741.6	781.8	745.7	698.8	710.7	0.37	0.23	-0.10	-0.16
Total⁴	1538.4	1549.4	1533.7	1590.0	1675.0	1602.8	1465.2	1532.5	0.62	-0.06	-0.22	0.57
OECD Europe												
Crude	352.1	352.0	341.3	363.0	383.6	354.7	362.0	357.9	-0.05	-0.03	-0.04	0.12
Motor Gasoline	91.8	96.9	98.4	99.7	104.5	100.3	93.4	88.4	-0.10	-0.04	0.06	0.09
Middle Distillate	275.1	296.5	291.8	290.5	308.7	322.7	256.3	270.6	0.09	0.04	-0.05	0.17
Residual Fuel Oil	59.6	66.5	66.5	69.6	70.5	67.3	58.6	59.0	0.00	0.07	-0.07	0.11
Total Products ³	542.0	570.3	572.1	581.1	606.1	605.3	521.2	529.6	0.01	0.07	-0.07	0.43
Total⁴	975.4	1004.6	999.5	1029.2	1082.9	1035.0	966.5	970.6	-0.07	0.06	-0.14	0.59
OECD Asia Oceania												
Crude	154.7	118.3	124.2	132.0	146.0	193.4	163.1	156.7	-0.07	-0.11	0.13	-0.25
Motor Gasoline	26.8	28.7	27.6	28.0	28.8	24.2	25.5	26.1	-0.01	0.01	0.00	0.01
Middle Distillate	72.5	76.1	69.4	69.2	64.8	65.7	65.1	65.7	0.03	0.10	-0.08	-0.04
Residual Fuel Oil	17.4	20.0	20.0	18.7	18.3	18.3	18.2	20.1	0.00	0.01	-0.04	0.02
Total Products ³	175.3	186.5	175.2	175.4	168.7	164.7	166.2	163.6	0.10	0.20	-0.20	0.00
Total⁴	393.8	369.8	361.3	368.9	378.8	419.8	389.5	381.6	0.11	0.11	-0.08	-0.27
Total OECD												
Crude	1098.3	1075.7	1086.4	1149.1	1236.0	1224.8	1111.9	1144.2	-0.11	-0.52	0.20	0.56
Motor Gasoline	399.4	417.7	404.3	420.9	428.5	400.2	390.7	375.2	-0.18	-0.05	0.31	0.24
Middle Distillate	552.0	580.8	558.0	550.3	594.1	622.0	517.2	536.1	0.07	0.16	-0.10	-0.02
Residual Fuel Oil	114.7	124.3	124.8	131.0	133.0	129.1	115.4	112.5	0.02	0.08	-0.08	0.18
Total Products ³	1473.3	1514.0	1471.5	1498.1	1556.6	1515.7	1386.2	1403.8	0.49	0.51	-0.37	0.27
Total⁴	2907.5	2923.8	2894.5	2988.1	3136.7	3057.7	2821.1	2884.7	0.66	0.10	-0.44	0.88
OECD GOVERNMENT-CONTROLLED STOCKS⁵												
OECD Americas												
Crude	635.0	635.0	635.0	635.0	637.8	688.8	664.0	648.6	-0.05	0.00	-0.11	0.00
Products	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	0.00	0.00	0.00	0.00
OECD Europe												
Crude	207.5	206.1	207.0	206.8	209.7	206.1	211.6	209.4	-0.02	-0.01	0.01	-0.01
Products	273.0	275.1	276.1	275.4	276.5	277.0	274.9	277.9	-0.01	-0.02	-0.01	0.03
OECD Asia Oceania												
Crude	377.3	377.4	377.4	377.4	377.3	385.1	383.4	378.6	0.00	-0.02	0.00	0.00
Products	38.9	38.9	38.9	38.9	38.9	38.0	38.7	38.8	0.00	0.00	0.00	0.00
Total OECD												
Crude	1219.7	1218.4	1219.4	1219.2	1224.8	1280.0	1259.0	1236.6	-0.07	-0.03	-0.09	-0.01
Products	313.9	316.0	317.0	316.3	317.4	316.9	315.6	318.6	-0.01	-0.01	-0.01	0.03
Total⁴	1535.3	1536.2	1538.2	1537.3	1543.5	1599.4	1578.3	1557.5	-0.09	-0.05	-0.10	0.02

* estimated

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

2 Closing stock levels.

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

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

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

Table 4a
INDUSTRY STOCKS¹ ON LAND IN SELECTED COUNTRIES

(million barrels)

	November			December			January			February			March		
	2018	2019	%	2018	2019	%	2019	2020	%	2019	2020	%	2019	2020	%
United States²															
Crude	449.4	446.9	-0.6	442.5	432.9	-2.2	448.8	442.8	-1.3	451.7	454.2	0.6	459.3	482.5	5.1
Motor Gasoline	230.2	233.7	1.5	246.5	253.8	3.0	261.3	264.2	1.1	251.4	251.7	0.1	236.1	260.8	10.5
Middle Distillate	168.4	169.8	0.8	184.4	183.3	-0.6	183.5	189.4	3.2	180.1	177.3	-1.6	175.7	168.3	-4.2
Residual Fuel Oil	29.8	32.5	9.1	28.3	30.9	9.2	29.4	30.7	4.4	27.8	31.2	12.2	28.7	34.4	19.9
Other Products	209.9	225.2	7.3	197.8	215.0	8.7	182.8	200.1	9.5	176.1	191.3	8.6	183.7	195.9	6.6
Total Products	638.3	661.2	3.6	657.0	683.0	4.0	657.0	684.4	4.2	635.4	651.5	2.5	624.2	659.4	5.6
Other ³	174.5	182.5	4.6	164.6	173.1	5.2	164.7	171.4	4.1	166.2	173.6	4.5	165.5	178.9	8.1
Total	1262.2	1290.6	2.3	1264.1	1289.0	2.0	1270.5	1298.6	2.2	1253.3	1279.3	2.1	1249.0	1320.8	5.7
Japan															
Crude	100.7	86.9	-13.7	95.8	92.1	-3.9	90.5	75.6	-16.5	95.1	79.6	-16.3	95.5	84.4	-11.6
Motor Gasoline	11.0	10.4	-5.5	9.6	10.8	12.5	10.6	11.9	12.3	10.1	11.2	10.9	10.3	11.7	13.6
Middle Distillate	39.3	37.1	-5.6	34.7	33.1	-4.6	31.3	34.0	8.6	28.1	28.5	1.4	26.9	27.5	2.2
Residual Fuel Oil	8.2	8.5	3.7	8.6	7.2	-16.3	8.8	7.8	-11.4	8.0	7.3	-8.8	8.0	6.4	-20.0
Other Products	37.9	36.3	-4.2	37.7	35.8	-5.0	35.9	37.5	4.5	36.2	32.8	-9.4	30.6	33.4	9.2
Total Products	96.4	92.3	-4.3	90.6	86.9	-4.1	86.6	91.2	5.3	82.4	79.8	-3.2	75.8	79.0	4.2
Other ³	57.0	54.4	-4.6	54.7	53.1	-2.9	53.6	54.5	1.7	49.2	51.8	5.3	47.1	51.8	10.0
Total	254.1	233.6	-8.1	241.1	232.1	-3.7	230.7	221.3	-4.1	226.7	211.2	-6.8	218.4	215.2	-1.5
Germany															
Crude	46.0	47.4	3.0	43.2	47.3	9.5	46.8	44.3	-5.3	47.8	47.8	0.0	47.8	51.3	7.3
Motor Gasoline	9.8	11.3	15.3	11.3	11.4	0.9	12.1	11.5	-5.0	12.3	11.5	-6.5	10.7	11.1	3.7
Middle Distillate	22.1	22.7	2.7	25.5	24.8	-2.7	25.6	28.3	10.5	22.9	26.5	15.7	23.6	23.2	-1.7
Residual Fuel Oil	7.9	8.0	1.3	7.8	7.0	-10.3	7.9	7.3	-7.6	7.9	6.8	-13.9	7.0	7.0	0.0
Other Products	10.2	9.7	-4.9	10.3	10.2	-1.0	10.3	9.5	-7.8	10.3	9.9	-3.9	10.9	9.7	-11.0
Total Products	50.0	51.7	3.4	54.9	53.4	-2.7	55.9	56.6	1.3	53.4	54.7	2.4	52.2	51.0	-2.3
Other ³	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	96.0	99.1	3.2	98.1	100.7	2.7	102.7	100.9	-1.8	101.2	102.5	1.3	100.0	102.3	2.3
Italy															
Crude	38.5	35.9	-6.8	40.5	39.4	-2.7	35.3	42.0	19.0	38.4	37.9	-1.3	42.2	44.8	6.2
Motor Gasoline	12.8	12.5	-2.3	12.6	12.9	2.4	13.7	12.3	-10.2	13.6	12.8	-5.9	13.0	13.9	6.9
Middle Distillate	27.9	29.0	3.9	27.7	28.1	1.4	28.8	29.2	1.4	31.2	29.6	-5.1	30.3	32.9	8.6
Residual Fuel Oil	8.8	8.9	1.1	8.6	8.9	3.5	9.5	9.0	-5.3	9.5	9.4	-1.1	8.4	9.3	10.7
Other Products	11.9	14.1	18.5	12.4	13.9	12.1	12.6	14.8	17.5	12.6	16.0	27.0	12.7	17.2	35.4
Total Products	61.4	64.5	5.0	61.3	63.8	4.1	64.6	65.3	1.1	66.9	67.8	1.3	64.4	73.3	13.8
Other ³	14.8	14.5	-2.0	14.2	14.9	4.9	15.1	15.6	3.3	15.0	16.2	8.0	14.7	16.8	14.3
Total	114.7	114.9	0.2	116.0	118.1	1.8	115.0	122.9	6.9	120.3	121.9	1.3	121.3	134.9	11.2
France															
Crude	11.3	17.3	53.1	8.9	11.9	33.7	10.3	10.2	-1.0	11.4	9.9	-13.2	14.9	11.7	-21.5
Motor Gasoline	4.2	3.8	-9.5	4.5	3.8	-15.6	5.1	4.9	-3.9	4.5	5.3	17.8	4.5	4.9	8.9
Middle Distillate	17.0	19.3	13.5	21.5	21.5	0.0	20.0	20.6	3.0	20.5	20.6	0.5	20.4	22.5	10.3
Residual Fuel Oil	1.0	1.5	50.0	0.8	1.5	87.5	1.3	1.7	30.8	1.2	1.1	-8.3	1.4	1.2	-14.3
Other Products	4.6	3.9	-15.2	4.4	4.3	-2.3	3.4	4.2	23.5	4.3	4.5	4.7	4.5	4.8	6.7
Total Products	26.8	28.5	6.3	31.2	31.1	-0.3	29.8	31.4	5.4	30.5	31.5	3.3	30.8	33.4	8.4
Other ³	7.5	7.8	4.0	7.9	7.7	-2.5	7.7	7.9	2.6	8.3	9.0	8.4	8.0	8.2	2.5
Total	45.6	53.6	17.5	48.0	50.7	5.6	47.8	49.5	3.6	50.2	50.4	0.4	53.7	53.3	-0.7
United Kingdom															
Crude	27.2	27.6	1.5	27.3	28.7	5.1	30.3	28.6	-5.6	29.1	27.8	-4.5	31.4	29.3	-6.7
Motor Gasoline	9.4	9.2	-2.1	10.3	9.1	-11.7	10.0	10.9	9.0	10.5	10.9	3.8	10.3	10.6	2.9
Middle Distillate	22.4	28.3	26.3	23.9	27.3	14.2	25.0	28.9	15.6	24.8	27.4	10.5	24.2	27.2	12.4
Residual Fuel Oil	0.9	1.3	44.4	1.1	1.3	18.2	1.1	1.3	18.2	0.9	2.1	133.3	1.3	1.7	30.8
Other Products	5.4	6.7	24.1	5.2	7.0	34.6	4.9	6.2	26.5	4.9	6.5	32.7	5.1	6.7	31.4
Total Products	38.1	45.5	19.4	40.5	44.7	10.4	41.0	47.3	15.4	41.1	46.9	14.1	40.9	46.2	13.0
Other ³	8.4	8.7	3.6	8.6	7.9	-8.1	8.3	8.2	-1.2	8.8	7.6	-13.6	8.6	7.6	-11.6
Total	73.7	81.8	11.0	76.4	81.3	6.4	79.6	84.1	5.7	79.0	82.3	4.2	80.9	83.1	2.7
Canada⁴															
Crude	118.9	125.5	5.6	118.4	125.3	5.8	117.8	129.5	9.9	120.9	133.2	10.2	122.8	138.0	12.4
Motor Gasoline	16.2	14.8	-8.6	15.9	15.3	-3.8	16.7	16.2	-3.0	14.9	15.1	1.3	14.8	17.2	16.2
Middle Distillate	16.8	11.5	-31.5	18.9	12.0	-36.5	16.4	11.4	-30.5	16.4	11.9	-27.4	16.9	12.9	-23.7
Residual Fuel Oil	2.0	1.9	-5.0	2.4	2.4	0.0	4.0	2.6	-35.0	2.7	2.4	-11.1	2.4	2.8	16.7
Other Products	12.9	9.4	-27.1	12.8	9.0	-29.7	11.0	9.7	-11.8	11.7	10.3	-12.0	11.6	10.2	-12.1
Total Products	47.9	37.6	-21.5	50.0	38.7	-22.6	48.1	39.9	-17.0	45.7	39.7	-13.1	45.7	43.1	-5.7
Other ³	23.5	19.6	-16.6	23.9	17.4	-27.2	21.1	15.1	-28.4	18.8	14.7	-21.8	17.7	15.2	-14.1
Total	190.3	182.7	-4.0	192.3	181.4	-5.7	187.0	184.5	-1.3	185.4	187.6	1.2	186.2	196.3	5.4

¹ Stocks are primary national territory stocks on land (excluding utility stocks and including pipeline and entrapot 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 US figures exclude US territories.

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

⁴ 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 COUNTRIES¹
(millions of barrels² and days³)

	End March 2019		End June 2019		End September 2019		End December 2019		End March 2020 ³	
	Stock Level	Days Fwd ² Demand	Stock Level	Days Fwd Demand	Stock Level	Days Fwd Demand	Stock Level	Days Fwd Demand	Stock Level	Days Fwd Demand
OECD Americas										
Canada	186.1	78	182.0	69	185.6	73	181.3	72	196.3	-
Chile	10.5	28	11.0	31	12.3	32	11.5	31	11.9	-
Mexico	40.5	21	39.6	24	34.3	21	34.4	22	39.0	-
United States ⁴	1900.2	93	1956.9	95	1951.4	95	1926.0	100	1957.7	-
Total⁴	2159.4	85	2211.6	86	2205.6	87	2175.3	90	2227.0	111
OECD Asia Oceania										
Australia	44.0	37	45.8	39	44.8	37	42.6	37	42.7	-
Israel	-	-	-	-	-	-	-	-	-	-
Japan	539.7	158	547.7	159	551.6	147	551.9	149	534.9	-
Korea	205.1	83	204.4	79	210.2	79	206.3	81	196.5	-
New Zealand	9.8	56	10.4	59	10.1	52	9.2	51	11.0	-
Total	798.6	107	808.4	106	816.6	101	810.0	103	785.1	116
OECD Europe⁵										
Austria	23.0	80	21.4	71	20.9	77	22.0	86	24.3	-
Belgium	45.8	78	49.1	81	47.5	76	45.7	75	47.9	-
Czech Republic	23.0	100	20.4	86	21.4	100	22.3	116	24.0	-
Denmark	22.2	123	24.8	152	28.2	170	26.9	191	29.2	-
Estonia	2.6	88	2.7	87	2.7	84	3.9	123	2.6	-
Finland	38.5	197	38.9	191	39.2	195	36.4	175	38.7	-
France	169.0	99	169.2	95	160.4	97	158.6	101	162.5	-
Germany	274.0	119	278.7	115	276.6	118	277.0	119	278.3	-
Greece	35.3	116	29.0	85	32.0	108	29.4	108	35.7	-
Hungary	25.8	147	23.8	133	24.9	145	26.2	169	25.8	-
Ireland	10.8	68	9.8	62	8.8	54	9.7	61	10.4	-
Italy	130.5	114	129.4	107	134.9	114	128.3	133	145.2	-
Latvia	4.0	98	3.9	90	3.6	95	2.5	78	2.7	-
Lithuania	7.5	107	6.2	85	8.0	121	6.9	121	7.3	-
Luxembourg	0.5	8	0.6	10	0.6	10	0.6	11	0.7	-
Netherlands	151.2	179	147.0	176	149.1	166	145.6	157	145.0	-
Norway	27.2	165	26.6	151	27.1	194	24.4	159	29.2	-
Poland	80.6	116	77.8	106	79.3	112	81.2	126	83.2	-
Portugal	26.4	105	24.8	99	24.1	100	24.3	115	25.7	-
Slovak Republic	12.0	141	11.2	125	11.7	139	12.3	150	12.5	-
Slovenia	4.9	93	5.1	90	4.8	94	5.3	119	5.2	-
Spain	124.2	93	126.0	95	123.1	94	124.8	102	127.4	-
Sweden	38.3	114	41.9	116	42.8	138	41.5	145	43.9	-
Switzerland	31.6	148	30.7	136	32.1	143	32.3	153	33.4	-
Turkey	87.7	90	87.0	78	88.0	90	88.3	100	89.4	-
United Kingdom	80.8	51	81.1	53	78.3	53	81.2	55	83.1	-
Total	1477.3	105	1467.2	101	1470.0	105	1457.5	110	1513.2	141
Total OECD	4435.4	95	4487.2	94	4492.2	95	4442.8	98	4525.3	121
DAYS OF IEA Net Imports⁶ -	191	-	215	-	214	-	213	-	217	-

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

² Note that days of forward demand represent the stock level divided by the forward quarter average daily demand and is very different from the days of net imports used for the calculation of IEA Emergency Reserves.

³ End March 2020 forward demand figures are IEA Secretariat forecasts.

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

⁵ Data not available for Iceland.

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

TOTAL OECD STOCKS

CLOSING STOCKS	Total	Government ¹	Industry	Total	Government ¹	Industry
		controlled			controlled	
		Millions of Barrels			Days of Fwd. Demand ²	
1Q2017	4636	1601	3035	98	34	64
2Q2017	4614	1590	3024	96	33	63
3Q2017	4553	1579	2974	94	33	62
4Q2017	4428	1569	2860	92	33	60
1Q2018	4395	1577	2818	93	33	60
2Q2018	4389	1575	2814	91	33	58
3Q2018	4438	1570	2868	93	33	60
4Q2018	4427	1552	2875	93	33	61
1Q2019	4435	1557	2878	95	33	61
2Q2019	4487	1549	2938	94	32	62
3Q2019	4492	1544	2948	95	33	62
4Q2019	4443	1535	2908	98	34	64
1Q2020	4525	1537	2988	121	41	80

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

² Days of forward demand calculated using actual demand except in 1Q2020 (when latest forecasts are used).

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

	2017	2018	2019	2Q19	3Q19	4Q19	1Q20	Jan 20	Feb 20	Mar 20	Year Earlier	
											Mar 19	change
Saudi Light & Extra Light												
Americas	0.59	0.66	0.20	0.15	0.08	0.23	0.49	0.44	0.48	0.55	0.34	0.21
Europe	0.69	0.69	0.68	0.75	0.71	0.56	0.56	0.49	0.59	0.60	0.64	-0.04
Asia Oceania	1.56	1.45	1.42	1.41	1.33	1.32	1.41	1.43	1.30	1.48	1.58	-0.10
Saudi Medium												
Americas	0.33	0.30	0.12	0.21	0.10	0.06	0.06	0.03	0.11	0.03	0.36	-0.33
Europe	0.01	0.01	0.02	0.01	0.04	0.02	0.05	0.04	0.04	0.06	-	-
Asia Oceania	0.37	0.41	0.23	0.23	0.24	0.19	0.22	0.19	0.28	0.20	0.13	0.07
Canada Heavy												
Americas	2.23	2.41	2.27	2.19	2.29	2.33	2.64	2.67	2.70	2.57	2.47	0.10
Europe	0.02	0.04	0.04	0.05	0.05	0.04	0.04	0.06	0.02	0.02	0.00	0.02
Asia Oceania	-	0.00	0.00	-	0.01	0.01	-	-	-	-	-	-
Iraqi Basrah Light ²												
Americas	0.63	0.50	0.31	0.24	0.32	0.21	0.26	0.28	0.22	0.29	0.45	-0.17
Europe	0.76	0.76	0.85	0.96	0.96	0.59	0.50	0.50	0.43	0.56	0.92	-0.36
Asia Oceania	0.40	0.43	0.37	0.39	0.24	0.39	0.27	0.31	0.27	0.22	0.43	-0.21
Kuwait Blend												
Americas	0.11	0.02	-	-	-	-	-	-	-	-	-	-
Europe	0.20	0.13	0.11	0.11	0.17	0.10	0.08	0.07	0.03	0.13	0.00	0.13
Asia Oceania	0.68	0.66	0.61	0.62	0.64	0.57	0.63	0.59	0.71	0.58	0.54	0.04
Iranian Light												
Americas	-	-	-	-	-	-	-	-	-	-	-	-
Europe	0.27	0.16	0.00	-	-	-	-	-	-	-	-	-
Asia Oceania	0.01	0.01	0.00	-	-	-	-	-	-	-	0.03	-
Iranian Heavy ³												
Americas	-	-	-	-	-	-	-	-	-	-	-	-
Europe	0.52	0.35	0.04	0.07	-	-	-	-	-	-	0.12	-
Asia Oceania	0.57	0.28	0.14	0.18	-	-	-	-	-	-	0.60	-
BFOE												
Americas	0.02	0.00	0.00	-	0.01	-	-	-	-	-	-	-
Europe	0.45	0.35	0.37	0.31	0.34	0.45	0.48	0.48	0.52	0.43	0.30	0.13
Asia Oceania	0.10	0.09	0.01	0.01	0.02	-	-	-	-	-	-	-
Kazakhstan												
Americas	-	-	-	-	-	-	-	-	-	-	-	-
Europe	0.75	0.75	0.76	0.78	0.75	0.67	0.70	0.80	0.74	0.55	0.90	-0.34
Asia Oceania	0.10	0.19	0.18	0.17	0.22	0.15	0.10	0.10	0.10	0.08	0.21	-0.12
Venezuelan 22 API and heavier												
Americas	0.48	0.44	0.05	-	-	-	-	-	-	-	-	-
Europe	0.04	0.03	0.09	0.06	0.09	0.09	0.03	0.02	0.05	0.02	0.09	-0.06
Asia Oceania	-	-	-	-	-	-	-	-	-	-	-	-
Mexican Maya												
Americas	0.58	0.63	0.51	0.51	0.52	0.46	0.55	0.59	0.56	0.50	0.56	-0.06
Europe	0.20	0.21	0.19	0.21	0.17	0.17	0.13	0.13	0.10	0.16	0.21	-0.05
Asia Oceania	0.07	0.08	0.13	0.14	0.13	0.14	0.14	0.16	0.14	0.11	0.13	-0.01
Russian Urals												
Americas	0.01	0.01	0.01	-	0.02	-	-	-	-	-	-	-
Europe	1.64	1.40	1.37	1.37	1.50	1.23	1.32	1.30	1.25	1.41	1.62	-0.22
Asia Oceania	0.01	0.00	-	-	-	-	-	-	-	-	-	-
Cabinda and Other Angola												
North America	0.07	0.06	0.01	0.04	-	-	-	-	-	-	-	-
Europe	0.11	0.14	0.15	0.10	0.20	0.13	0.18	0.27	0.13	0.13	0.18	-0.05
Pacific	0.01	0.01	0.00	-	-	0.01	-	-	-	-	-	-
Nigerian Light ⁴												
Americas	0.04	0.01	0.03	0.07	0.05	-	-	-	-	-	-	-
Europe	0.39	0.53	0.51	0.58	0.48	0.50	0.50	0.51	0.52	0.46	0.47	-0.01
Asia Oceania	0.02	0.02	0.02	0.00	0.03	0.02	0.04	0.06	0.07	-	0.03	-
Libya Light and Medium												
Americas	0.02	-	0.00	0.01	-	-	-	-	-	-	-	-
Europe	0.54	0.62	0.67	0.72	0.73	0.70	0.20	0.47	0.10	0.01	0.54	-0.53
Asia Oceania	0.03	0.02	0.03	0.03	0.04	0.02	0.04	0.06	0.04	0.02	0.03	-0.02

¹ Data based on monthly submissions from IEA countries to the crude oil import register (in '000 bbl), subject to availability. May differ from Table 8 of the Report. IEA Americas includes United States and Canada. IEA Europe includes all countries in OECD Europe except Estonia, Hungary, Slovenia and Latvia. IEA Asia Oceania includes Australia, New Zealand, Korea and Japan.

² Iraqi Total minus Kirkuk.

³ Iranian Total minus Iranian Light.

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

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

	2017	2018	2019	2Q19	3Q19	4Q19	1Q20	Jan 20	Feb 20	Mar 20	Year Earlier	
											Mar 19	% change
Crude Oil												
Americas	4361	3759	2698	2961	2654	2292	2089	2126	2115	2027	2663	-24%
Europe	9902	9814	9872	9575	10309	9589	9305	9505	9197	9207	9849	-7%
Asia Oceania	6849	6697	6542	6379	6365	6520	6360	6117	6557	6419	6547	-2%
Total OECD	21112	20269	19112	18914	19329	18401	17754	17747	17869	17653	19059	-7%
LPG												
Americas	20	22	76	21	21	225	233	248	206	244	22	1022%
Europe	432	457	434	410	408	438	539	483	549	585	420	39%
Asia Oceania	551	553	582	551	608	586	647	700	635	604	413	46%
Total OECD	1003	1032	1092	982	1037	1250	1419	1432	1390	1433	855	68%
Naphtha												
Americas	19	8	9	4	5	20	28	29	23	33	5	497%
Europe	369	391	347	334	310	396	421	336	410	517	255	103%
Asia Oceania	978	1021	993	958	1031	1061	1109	1243	1068	1012	882	15%
Total OECD	1366	1420	1349	1296	1347	1477	1558	1608	1501	1561	1142	37%
Gasoline³												
Americas	727	773	948	1045	957	1188	1009	908	945	1169	650	80%
Europe	153	110	112	148	92	90	112	166	101	68	97	-29%
Asia Oceania	102	113	114	116	117	110	100	112	98	91	139	-34%
Total OECD	983	996	1174	1309	1165	1388	1221	1186	1144	1328	886	50%
Jet & Kerosene												
Americas	171	140	190	185	206	229	225	223	246	207	150	38%
Europe	504	509	520	571	558	496	421	505	325	427	471	-9%
Asia Oceania	80	89	76	60	69	94	118	118	154	86	82	5%
Total OECD	755	738	786	816	832	819	764	845	724	719	702	2%
Gasoil/Diesel												
Americas	77	124	183	81	72	373	307	328	292	301	60	401%
Europe	1337	1339	1298	1285	1276	1253	1260	1431	1209	1136	1269	-10%
Asia Oceania	196	253	262	259	270	286	282	319	300	227	278	-18%
Total OECD	1610	1716	1743	1625	1618	1912	1849	2078	1801	1663	1607	4%
Heavy Fuel Oil												
Americas	131	161	122	104	85	152	171	178	125	205	120	71%
Europe	233	197	223	229	240	206	283	205	319	327	187	75%
Asia Oceania	146	162	101	106	116	80	107	112	129	83	62	33%
Total OECD	510	520	447	439	441	438	561	495	574	615	369	67%
Other Products												
Americas	717	679	713	730	792	809	703	769	691	647	539	20%
Europe	1012	1011	865	902	830	722	652	702	693	565	964	-41%
Asia Oceania	259	263	268	279	260	273	287	313	272	276	254	9%
Total OECD	1987	1952	1846	1911	1882	1804	1642	1784	1656	1489	1757	-15%
Total Products												
Americas	1862	1908	2241	2171	2138	2995	2676	2684	2528	2806	1546	81%
Europe	4040	4013	3798	3879	3714	3602	3688	3828	3606	3625	3662	-1%
Asia Oceania	2312	2454	2397	2328	2470	2490	2650	2917	2656	2378	2109	13%
Total OECD	8214	8374	8436	8378	8323	9087	9014	9429	8790	8809	7318	20%
Total Oil												
Americas	6223	5666	4939	5131	4793	5288	4765	4810	4644	4833	4209	15%
Europe	13942	13827	13670	13453	14023	13191	12993	13333	12803	12832	13512	-5%
Asia Oceania	9160	9151	8939	8707	8836	9010	9010	9033	9214	8797	8657	2%
Total OECD	29326	28644	27548	27292	27652	27489	26768	27177	26660	26462	26377	0%

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

2 Excludes intra-regional trade.

3 Includes additives.

Table 7a
REGIONAL OECD IMPORTS FROM NON-OECD COUNTRIES^{1,2}
(thousand barrels per day)

	2017	2018	2019	2Q19	3Q19	4Q19	1Q20	Jan 20	Feb 20	Mar 20	Year Earlier	
											Mar 19	% change
Crude Oil												
Americas	4235	3606	2553	2707	2519	2203	2035	2093	2042	1971	2516	-22%
Europe	9436	9088	8913	8773	9383	8397	8022	8168	8116	7788	8929	-13%
Asia Oceania	6553	6249	5914	5808	5695	5795	5678	5436	5884	5728	6087	-6%
Total OECD	20224	18943	17380	17289	17598	16395	15736	15697	16043	15488	17532	-12%
LPG												
Americas	16	15	73	21	21	223	231	241	206	244	22	1022%
Europe	337	350	303	305	274	282	308	297	322	307	336	-9%
Asia Oceania	205	158	74	95	65	54	46	63	48	26	73	-64%
Total OECD	557	523	450	421	360	559	585	602	576	577	431	34%
Naphtha												
Americas	16	4	6	1	3	17	22	27	21	20	1	2280%
Europe	350	360	320	321	284	348	399	320	381	494	246	101%
Asia Oceania	931	924	898	868	975	941	924	1043	884	842	766	10%
Total OECD	1297	1288	1223	1191	1261	1306	1345	1390	1285	1355	1012	34%
Gasoline³												
Americas	213	271	447	367	386	787	707	643	668	808	236	243%
Europe	149	105	108	142	89	87	108	164	97	63	94	-33%
Asia Oceania	102	90	88	60	97	101	83	87	74	88	84	6%
Total OECD	464	466	644	569	572	975	899	894	840	959	413	132%
Jet & Kerosene												
Americas	67	56	54	24	55	93	119	139	112	105	50	110%
Europe	436	445	464	521	473	446	356	418	278	365	401	-9%
Asia Oceania	80	89	76	60	69	94	118	118	154	86	82	5%
Total OECD	583	590	594	605	596	632	593	675	544	556	532	4%
Gasoil/Diesel												
Americas	50	100	152	40	58	341	295	302	281	301	39	676%
Europe	1086	1160	1124	1091	1026	1168	1145	1335	1095	1000	1090	-8%
Asia Oceania	195	253	261	259	264	286	282	319	300	227	278	-18%
Total OECD	1331	1513	1537	1390	1349	1796	1721	1956	1676	1528	1406	9%
Heavy Fuel Oil												
Americas	123	147	108	97	81	132	139	134	109	173	103	69%
Europe	218	185	202	201	210	191	268	180	318	309	173	79%
Asia Oceania	146	162	100	106	114	80	107	112	129	83	62	33%
Total OECD	487	493	411	405	405	403	515	426	556	565	338	67%
Other Products												
Americas	542	522	542	560	615	646	611	656	611	567	397	43%
Europe	731	702	629	656	615	509	355	399	347	318	719	-56%
Asia Oceania	182	182	184	187	175	198	198	186	199	210	190	11%
Total OECD	1455	1406	1355	1403	1404	1353	1164	1240	1156	1096	1305	-16%
Total Products												
Americas	1026	1115	1383	1110	1219	2239	2125	2142	2008	2217	846	162%
Europe	3307	3307	3150	3238	2971	3031	2938	3113	2839	2857	3059	-7%
Asia Oceania	1841	1857	1681	1635	1758	1755	1758	1927	1787	1562	1534	2%
Total OECD	6175	6279	6214	5983	5948	7025	6821	7183	6634	6635	5439	22%
Total Oil												
Americas	5261	4721	3936	3818	3738	4442	4160	4235	4050	4188	3362	25%
Europe	12744	12395	12062	12011	12354	11428	10961	11282	10955	10645	11988	-11%
Asia Oceania	8394	8106	7595	7444	7453	7550	7437	7364	7671	7290	7621	-4%
Total OECD	26399	25223	23594	23272	23545	23420	22557	22880	22676	22123	22971	-4%

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

² Excludes intra-regional trade

³ Includes additives

Table 7b
INTER-REGIONAL OECD TRANSFERS^{1,2}
(thousand barrels per day)

	2017	2018	2019	2Q19	3Q19	4Q19	1Q20	Jan 20	Feb 20	Mar 20	Year Earlier	
											Mar 19	% change
Crude Oil												
Americas	126	153	145	253	135	89	54	33	73	56	147	-62%
Europe	466	726	959	802	926	1192	1283	1337	1080	1418	920	54%
Asia Oceania	296	448	628	570	670	725	682	680	673	691	460	50%
Total OECD	888	1326	1731	1625	1731	2007	2018	2050	1827	2165	1527	42%
LPG												
Americas	4	7	3	0	0	3	2	7	0	0	0	na
Europe	95	107	131	105	134	156	230	186	227	278	84	232%
Asia Oceania	346	395	508	455	543	532	601	637	587	578	340	70%
Total OECD	445	508	642	560	678	690	834	830	814	856	424	102%
Naphtha												
Americas	3	4	3	3	3	3	6	2	2	13	5	182%
Europe	19	31	27	12	26	48	23	16	29	23	9	161%
Asia Oceania	47	97	96	90	57	120	185	201	184	170	116	47%
Total OECD	69	132	125	105	86	171	213	218	216	206	129	60%
Gasoline³												
Americas	514	502	500	678	571	400	302	265	277	361	415	-13%
Europe	5	5	4	6	2	3	4	2	4	5	3	103%
Asia Oceania	0	23	26	56	20	9	17	25	24	2	55	-95%
Total OECD	519	530	530	740	593	413	322	292	305	369	472	-22%
Jet & Kerosene												
Americas	104	84	136	161	151	137	106	83	133	102	100	2%
Europe	68	64	56	50	85	50	65	86	47	62	70	-12%
Asia Oceania	0	0	0	0	0	0	0	0	0	0	0	na
Total OECD	172	148	192	211	236	186	171	170	180	164	170	-4%
Gasoil/Diesel												
Americas	28	25	31	42	14	31	12	26	11	0	21	-100%
Europe	250	178	174	193	250	85	115	96	114	136	179	-24%
Asia Oceania	1	0	1	0	5	0	0	0	0	0	0	na
Total OECD	279	203	206	235	269	116	128	123	125	136	200	-32%
Heavy Fuel Oil												
Americas	8	15	14	6	4	20	31	44	16	32	17	86%
Europe	15	12	21	28	30	15	15	25	2	18	14	28%
Asia Oceania	0	0	1	0	2	0	0	0	0	0	0	na
Total OECD	23	27	36	35	36	35	46	70	18	50	31	60%
Other Products												
Americas	175	157	171	170	177	163	92	113	81	81	142	-43%
Europe	280	308	236	246	216	213	297	304	345	246	245	1%
Asia Oceania	77	81	83	92	85	75	89	127	74	66	65	1%
Total OECD	532	546	490	508	477	451	478	543	499	393	452	-13%
Total Products												
Americas	836	793	858	1060	920	756	551	542	520	589	700	-16%
Europe	733	706	649	641	743	571	750	715	767	769	603	27%
Asia Oceania	470	597	716	693	712	735	892	989	869	816	575	42%
Total OECD	2039	2095	2222	2394	2375	2062	2193	2246	2157	2174	1879	16%
Total Oil												
Americas	962	945	1002	1314	1055	846	605	575	593	645	847	-24%
Europe	1199	1432	1608	1442	1669	1763	2033	2052	1848	2187	1524	44%
Asia Oceania	766	1044	1343	1264	1382	1461	1574	1670	1542	1507	1035	46%
Total OECD	2927	3421	3953	4020	4107	4069	4211	4296	3983	4339	3406	27%

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

² Excludes intra-regional trade

³ Includes additives

Table 8
REGIONAL OECD CRUDE IMPORTS BY SOURCE¹
(thousand barrels per day)

	2017	2018	2019	2Q19	3Q19	4Q19	1Q20	Jan 20	Feb 20	Mar 20	Year Earlier Mar 19	change
OECD Americas												
Venezuela	618	506	81	41	-	-	-	-	-	-	47	-
Other Central & South America	928	795	867	882	888	849	823	819	868	784	800	-16
North Sea	124	150	143	246	135	89	54	33	73	56	147	-91
Other OECD Europe	-	1	2	7	-	-	-	-	-	-	-	-
Non-OECD Europe	-	-	-	-	-	-	-	-	-	-	-	-
Former Soviet Union	121	145	189	253	209	143	146	129	114	192	189	3
Saudi Arabia	1043	983	601	607	555	501	533	501	560	538	741	-202
Kuwait	144	78	45	48	22	26	37	44	46	23	129	-106
Iran	-	-	-	-	-	-	-	-	-	-	-	-
Iraq	605	519	331	329	332	292	284	299	262	290	275	14
Oman	14	-	-	-	-	-	-	-	-	-	-	-
United Arab Emirates	20	5	3	-	11	-	-	-	-	-	-	-
Other Middle East	2	-	-	-	-	-	-	-	-	-	-	-
West Africa ²	497	317	267	324	332	244	118	140	131	82	208	-126
Other Africa	214	196	137	208	127	92	56	113	43	11	94	-83
Asia	26	61	32	16	43	54	40	48	17	52	33	19
Other	4	3	0	-	-	1	-	-	-	-	-	-
Total	4361	3759	2698	2961	2654	2292	2089	2126	2115	2027	2663	-636
of which Non-OECD	4235	3606	2553	2707	2519	2203	2035	2093	2042	1971	2516	-545
OECD Europe												
Canada	45	81	60	34	73	65	115	140	89	116	46	70
Mexico + USA	419	645	900	768	853	1127	1167	1197	992	1302	874	428
Venezuela	67	57	106	73	102	104	33	19	54	28	101	-73
Other Central & South America	160	132	118	76	124	156	229	191	194	300	55	245
Non-OECD Europe	9	12	14	11	11	25	34	36	23	42	10	32
Former Soviet Union	4437	4149	4240	4019	4410	4186	4131	4366	4142	3885	4276	-392
Saudi Arabia	750	818	792	852	868	624	716	595	838	723	757	-34
Kuwait	201	137	97	105	143	53	90	110	31	127	66	61
Iran	801	536	74	77	41	32	18	41	3	8	159	-152
Iraq	995	962	1124	1269	1189	862	828	750	707	1018	1264	-246
Oman	-	-	-	-	-	-	-	-	-	-	-	-
United Arab Emirates	6	2	2	-	-	7	-	-	-	-	-	-
Other Middle East	1	-	3	8	2	-	-	-	-	-	7	-
West Africa ²	960	1115	1140	1099	1179	1134	1313	1162	1543	1250	1136	114
Other Africa	1045	1161	1180	1149	1301	1204	599	899	513	379	1048	-669
Asia	2	-	-	-	-	-	-	-	-	-	-	-
Other	5	9	13	24	0	12	10	-	-	30	52	-22
Total	9903	9816	9863	9563	10296	9590	9283	9506	9127	9206	9851	-644
of which Non-OECD	9436	9088	8913	8773	9383	8397	8022	8168	8116	7788	8929	-1140
OECD Asia Oceania												
Canada	-	3	5	-	6	12	-	-	-	-	-	-
Mexico + USA	199	344	613	559	642	705	673	680	648	691	460	231
Venezuela	8	-	-	-	-	-	-	-	-	-	-	-
Other Central & South America	35	35	48	67	51	23	79	31	42	162	24	138
North Sea	97	100	10	11	22	8	8	-	26	-	-	-
Other OECD Europe	-	-	-	-	-	-	-	-	-	-	-	-
Non-OECD Europe	-	-	-	-	-	-	-	-	-	-	-	-
Former Soviet Union	413	435	435	402	488	392	402	336	460	415	519	-103
Saudi Arabia	2166	2040	1878	1868	1793	1751	1844	1862	1756	1908	1911	-3
Kuwait	671	672	666	665	705	615	668	647	744	616	604	12
Iran	543	274	137	184	-	-	-	-	-	-	612	-
Iraq	402	435	364	388	244	381	267	311	267	222	428	-206
Oman	42	56	59	66	70	46	35	87	17	-	60	-
United Arab Emirates	1147	1098	1256	1240	1257	1416	1427	1336	1412	1534	992	542
Other Middle East	390	450	449	387	516	463	454	545	412	404	425	-21
West Africa ²	66	95	56	77	29	45	96	147	51	88	53	36
Other Africa	92	105	90	72	96	108	79	76	98	63	79	-16
Non-OECD Asia	325	319	220	205	184	230	193	202	187	188	213	-25
Other	253	235	255	189	262	325	134	-145	437	128	168	-40
Total	6849	6697	6542	6379	6365	6520	6360	6117	6557	6419	6547	-128
of which Non-OECD	6553	6249	5914	5808	5695	5795	5678	5436	5884	5728	6087	-359
Total OECD Trade	21113	20271	19103	18903	19316	18402	17732	17749	17800	17653	19061	-1408
of which Non-OECD	20224	18943	17380	17289	17598	16395	15736	15697	16043	15488	17532	-2044

¹ 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.

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

Table 9
REGIONAL OECD GASOLINE IMPORTS BY SOURCE¹
(thousand barrels per day)

	2017	2018	2019	2Q19	3Q19	4Q19	1Q20	Jan 20	Feb 20	Mar 20	Year Earlier	
											Mar 19	change
OECD Americas												
Venezuela	18	23	4	-	-	-	-	-	-	-	1	-
Other Central & South America	42	64	82	86	105	54	26	18	13	45	90	-45
ARA (Belgium Germany Netherlands)	178	167	180	270	233	121	83	57	70	121	104	16
Other Europe	326	323	293	365	309	267	200	198	184	217	273	-56
FSU	84	80	100	88	125	119	57	34	50	85	76	9
Saudi Arabia	1	11	7	7	4	-	4	7	4	-	-	-
Algeria	-	1	-	-	-	-	10	-	19	10	-	-
Other Middle East & Africa	24	19	14	11	25	8	9	10	10	9	1	7
Singapore	10	8	5	6	12	-	-	-	-	-	-	-
OECD Asia Oceania	10	13	28	42	29	13	20	10	23	27	37	-10
Non-OECD Asia (excl. Singapore)	63	84	108	180	135	47	51	49	22	81	70	11
Other	3	0	149	-	0	591	554	536	551	575	-	-
Total²	759	794	968	1056	978	1220	1013	919	947	1170	653	517
of which Non-OECD	213	271	447	367	386	787	707	643	668	808	236	572
OECD Europe												
OECD Americas	4	4	3	5	1	3	2	1	2	4	2	2
Venezuela	-	0	0	-	0	-	-	-	-	-	-	-
Other Central & South America	3	5	3	2	2	4	7	-	11	10	14	-4
Non-OECD Europe	15	11	18	21	23	18	21	22	21	20	13	7
FSU	89	70	62	76	47	60	57	101	26	42	57	-15
Saudi Arabia	0	2	0	-	1	-	-	-	-	-	-	-
Algeria	1	0	0	0	-	1	-	-	-	-	-	-
Other Middle East & Africa	5	4	8	4	4	17	3	6	2	1	2	-1
Singapore	2	2	3	4	2	2	2	2	3	2	2	0
OECD Asia Oceania	1	1	1	1	1	0	1	1	2	1	0	1
Non-OECD Asia (excl. Singapore)	3	2	0	0	0	0	0	0	-	-	-	-
Other	41	20	21	43	17	-5	28	39	45	2	18	-15
Total²	163	122	121	157	100	101	122	173	111	83	108	-25
of which Non-OECD	149	105	108	142	89	87	108	164	97	63	94	-31
OECD Asia Oceania												
OECD Americas	-	4	6	-	20	1	8	0	24	0	14	-14
Venezuela	-	-	-	-	-	-	-	-	-	-	-	-
Other Central & South America	0	-	-	-	-	-	-	-	-	-	-	-
ARA (Belgium Germany Netherlands)	-	13	14	40	-	9	9	25	-	1	24	-23
Other Europe	-	7	5	15	-	-	1	-	-	2	18	-16
FSU	-	1	0	1	-	-	1	-	-	2	-	-
Saudi Arabia	0	0	1	-	-	-	-	-	-	-	-	-
Algeria	-	-	-	-	-	-	-	-	-	-	-	-
Other Middle East & Africa	5	1	-	-	-	-	-	-	-	-	-	-
Singapore	52	49	46	29	49	63	46	42	50	48	38	10
Non-OECD Asia (excl. Singapore)	30	19	21	11	26	17	17	26	4	21	26	-5
Other	15	20	21	20	22	21	20	19	20	19	19	0
Total²	102	114	114	116	117	110	101	112	98	93	139	-46
of which Non-OECD	102	90	88	60	97	101	83	87	74	88	84	5
Total OECD Trade²	1024	1029	1204	1328	1194	1431	1237	1203	1156	1345	900	446
of which Non-OECD	464	466	644	569	572	975	899	894	840	959	413	546

¹ Based on Monthly Oil Questionnaire data submitted by OECD countries in tonnes.

² Total figure excludes intra-regional trade.

Table 10
REGIONAL OECD GASOIL/DIESEL IMPORTS BY SOURCE¹
(thousand barrels per day)

	2017	2018	2019	2Q19	3Q19	4Q19	1Q20	Jan 20	Feb 20	Mar 20	Year Earlier	
											Mar 19	change
OECD Americas												
Venezuela	2	4	1	-	-	-	-	-	-	-	-	-
Other Central and South America	13	30	38	35	47	41	25	22	29	24	9	15
ARA (Belgium Germany Netherlands)	7	6	5	1	2	18	7	10	11	-	-	-
Other Europe	3	3	2	4	2	1	1	3	-	-	2	-
FSU	6	16	6	2	3	11	1	-	4	-	-	-
Saudi Arabia	2	17	3	-	-	-	3	2	3	3	-	-
Algeria	-	-	-	-	-	-	-	-	-	-	-	-
Other Middle East and Africa	4	8	2	-	-	-	4	11	-	-	2	-
Singapore	0	1	0	-	-	-	-	-	-	-	0	-
OECD Asia Oceania	18	15	23	36	10	12	5	13	0	-	19	-
Non-OECD Asia (excl. Singapore)	22	23	29	3	8	27	28	36	21	28	18	9
Other	0	-	73	-	-	263	234	231	225	246	10	236
Total²	77	124	183	81	72	373	307	328	292	301	60	241
of which Non-OECD	50	100	152	40	58	341	295	302	281	301	39	262
OECD Europe												
OECD Americas	222	154	138	159	214	54	89	79	80	106	146	-39
Venezuela	-	-	-	-	-	-	-	-	-	-	-	-
Other Central and South America	3	4	0	0	-	-	2	-	1	5	-	-
Non-OECD Europe	48	39	41	37	40	48	27	27	49	7	28	-20
FSU	732	714	683	658	648	670	806	776	818	825	794	31
Saudi Arabia	160	225	205	222	188	203	113	280	56	-	126	-
Algeria	-	-	0	-	-	0	-	-	-	-	-	-
Other Middle East and Africa	72	76	83	89	70	77	79	84	68	83	81	3
Singapore	15	14	27	27	39	34	16	16	22	10	13	-2
OECD Asia Oceania	28	25	36	34	36	31	27	18	33	29	34	-4
Non-OECD Asia (excl. Singapore)	125	151	152	134	95	199	150	158	164	128	206	-77
Other	21	12	10	8	16	8	-15	19	-37	-28	1	-29
Total²	1427	1413	1376	1369	1347	1324	1294	1457	1255	1167	1427	-260
of which Non-OECD	1086	1160	1124	1091	1026	1168	1145	1335	1095	1000	1090	-90
OECD Asia Oceania												
OECD Americas	1	-	1	-	5	-	-	-	-	-	-	-
Venezuela	-	-	-	-	-	-	-	-	-	-	-	-
Other Central and South America	0	-	-	-	-	-	-	-	-	-	-	-
ARA (Belgium Germany Netherlands)	-	-	-	-	-	-	-	-	-	-	-	-
Other Europe	-	-	-	-	-	-	-	-	-	-	-	-
FSU	5	4	4	4	4	3	3	4	5	1	5	-5
Saudi Arabia	-	3	-	-	-	-	-	-	-	-	-	-
Algeria	-	-	-	-	-	-	-	-	-	-	-	-
Other Middle East and Africa	1	8	7	9	-	11	0	-	2	-	28	-
Singapore	87	141	111	121	96	133	76	75	98	57	101	-44
Non-OECD Asia (excl. Singapore)	96	91	133	121	158	134	196	234	190	164	139	26
Other	7	5	5	5	6	5	6	6	5	5	5	0
Total²	196	253	262	259	270	286	282	319	300	227	278	-51
of which Non-OECD	195	253	261	259	264	286	282	319	300	227	278	-51
Total OECD Trade²	1701	1790	1820	1709	1689	1983	1882	2104	1847	1694	1765	-71
of which Non-OECD	1331	1513	1537	1390	1349	1796	1721	1956	1676	1528	1406	121

¹ Based on Monthly Oil Questionnaire data submitted by OECD countries in tonnes.

² Total figure excludes intra-regional trade.

Table 11
REGIONAL OECD JET AND KEROSENE IMPORTS BY SOURCE¹
(thousand barrels per day)

	2017	2018	2019	2Q19	3Q19	4Q19	1Q20	Jan 20	Feb 20	Mar 20	Year Earlier	
											Mar 19	change
OECD Americas												
Venezuela	16	6	0	0	-	-	-	-	-	-	-	-
Other Central and South America	1	2	7	1	8	11	5	10	1	3	10	-7
ARA (Belgium Germany Netherlands)	-	0	-	-	-	-	-	-	-	-	-	-
Other Europe	0	0	0	-	1	-	3	-	8	1	-	-
FSU	1	0	-	-	-	-	-	-	-	-	-	-
Saudi Arabia	2	1	2	1	-	-	3	-	7	2	20	-18
Algeria	0	-	-	-	-	-	1	-	3	-	-	-
Other Middle East and Africa	3	2	10	9	15	11	11	3	22	10	-	-
Singapore	2	6	3	6	4	-	13	10	11	18	-	-
OECD Asia Oceania	104	84	136	161	151	137	103	83	125	101	100	1
Non-OECD Asia (excl. Singapore)	30	27	14	6	28	11	21	47	2	14	5	9
Other	13	11	18	-	-	59	65	70	67	57	15	43
Total²	171	140	190	185	206	229	225	223	246	207	150	57
of which Non-OECD	67	56	54	24	55	93	119	139	112	105	50	55
OECD Europe												
OECD Americas	20	32	20	13	32	16	35	24	47	34	18	16
Venezuela	5	1	-	-	-	-	-	-	-	-	-	-
Other Central and South America	2	2	1	-	-	0	0	-	-	1	1	0
Non-OECD Europe	3	6	2	6	1	-	-	-	-	-	-	-
FSU	33	40	45	56	53	32	32	24	45	27	37	-10
Saudi Arabia	94	98	105	112	106	115	54	58	39	64	120	-57
Algeria	12	9	11	-	17	14	12	16	20	-	8	-
Other Middle East and Africa	207	197	199	237	172	196	174	235	112	171	172	-1
Singapore	28	25	29	33	36	34	21	30	3	28	3	25
OECD Asia Oceania	48	32	36	37	53	34	31	63	-	27	52	-25
Non-OECD Asia (excl. Singapore)	53	69	73	80	89	51	67	56	62	81	67	14
Other	1	1	2	0	3	5	-2	-	-2	-5	0	-5
Total²	508	512	523	574	561	497	422	506	325	429	479	-50
of which Non-OECD	436	445	464	521	473	446	356	418	278	365	401	-35
OECD Asia Oceania												
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	-	-	-	-	-	-	-	-	-	-
Singapore	23	28	21	19	25	20	24	36	17	20	26	-6
Non-OECD Asia (excl. Singapore)	34	26	29	21	27	39	52	40	77	42	31	10
Other	22	33	26	19	17	35	42	43	60	24	24	0
Total²	80	89	76	60	69	94	118	118	154	86	82	4
of which Non-OECD	80	89	76	60	69	94	118	118	154	86	82	4
Total OECD Trade²	758	741	789	819	835	820	765	847	725	722	711	11
of which Non-OECD	583	590	594	605	596	632	593	675	544	556	532	23

¹ Based on Monthly Oil Questionnaire data submitted by OECD countries in tonnes.

² Total figure excludes intra-regional trade.

Table 12
REGIONAL OECD RESIDUAL FUEL OIL IMPORTS BY SOURCE¹
(thousand barrels per day)

	2017	2018	2019	2Q19	3Q19	4Q19	1Q20	Jan 20	Feb 20	Mar 20	Year Earlier	
											Mar 19	change
OECD Americas												
Venezuela	16	42	7	-	-	-	-	-	-	-	21	-
Other Central and South America	71	72	49	51	38	51	70	17	50	144	43	100
ARA (Belgium Germany Netherlands)	5	7	6	1	1	9	6	18	-	0	-	-
Other Europe	3	7	8	5	3	11	25	26	16	32	17	14
FSU	24	23	30	39	40	27	49	71	59	18	12	6
Saudi Arabia	-	-	2	-	-	-	-	-	-	-	-	-
Algeria	1	-	8	5	1	17	8	22	-	2	25	-23
Other Middle East and Africa	9	7	5	2	2	14	1	3	-	-	1	-
Singapore	3	-	1	-	-	-	-	-	-	-	-	-
OECD Asia Oceania	-	-	-	-	-	-	-	-	-	-	-	-
Non-OECD Asia (excl. Singapore)	1	0	0	0	-	-	-	-	-	-	-	-
Other	0	2	7	-	-	27	16	36	-	11	-	-
Total²	131	161	124	104	85	156	176	193	125	206	120	86
of which Non-OECD	123	147	108	97	81	132	139	134	109	173	103	71
OECD Europe												
OECD Americas	6	4	7	8	14	4	9	10	0	15	-	-
Venezuela	-	-	-	-	-	-	-	-	-	-	-	-
Other Central and South America	2	3	5	4	4	4	5	4	10	0	2	-2
Non-OECD Europe	17	17	21	29	17	20	5	11	3	1	22	-21
FSU	195	154	154	148	167	145	152	158	105	191	133	59
Saudi Arabia	0	1	-	-	-	-	-	-	-	-	-	-
Algeria	1	1	0	-	-	-	1	1	2	0	-	-
Other Middle East and Africa	23	15	19	20	27	17	14	10	18	16	3	13
Singapore	-	-	1	-	2	2	1	-	-	3	-	-
OECD Asia Oceania	9	8	14	21	16	11	7	15	1	3	14	-11
Non-OECD Asia (excl. Singapore)	1	0	3	1	4	0	-	-	-	-	11	-
Other	-8	5	8	10	6	4	91	2	180	98	2	96
Total²	246	208	232	240	256	208	285	210	319	328	187	140
of which Non-OECD	218	185	202	201	210	191	268	180	318	309	173	136
OECD Asia Oceania												
OECD Americas	0	0	1	-	2	-	-	-	-	-	-	-
Venezuela	-	-	-	-	-	-	-	-	-	-	-	-
Other Central and South America	-	-	-	-	-	-	-	-	-	-	-	-
ARA (Belgium Germany Netherlands)	-	-	-	-	-	-	-	-	-	-	-	-
Other Europe	-	-	-	-	-	-	-	-	-	-	-	-
FSU	9	16	6	0	3	14	11	9	10	13	5	8
Saudi Arabia	-	-	1	-	3	-	-	-	-	-	-	-
Algeria	1	-	-	-	-	-	-	-	-	-	-	-
Other Middle East and Africa	18	23	27	27	49	24	42	-	78	51	-	-
Singapore	58	37	25	21	26	16	25	47	21	7	17	-10
Non-OECD Asia (excl. Singapore)	59	85	40	53	33	26	29	56	21	11	40	-29
Other	0	0	1	5	0	-	-	-	-	-	-	-
Total²	146	162	101	106	116	80	107	112	129	83	62	21
of which Non-OECD	146	162	100	106	114	80	107	112	129	83	62	21
Total OECD Trade²	523	531	457	450	457	444	568	514	574	616	369	247
of which Non-OECD	487	493	411	405	405	403	515	426	556	565	338	227

¹ Based on Monthly Oil Questionnaire data submitted by OECD countries in tonnes.

² Total figure excludes intra-regional trade.

Table 13
AVERAGE IEA CIF CRUDE COST AND SPOT CRUDE AND PRODUCT PRICES
 (\$/bbl)

	2017	2018	2019	2Q19	3Q19	4Q19	1Q20	Dec 19	Jan 20	Feb 20	Mar 20	Apr 20	May 20
CRUDE OIL PRICES													
IEA CIF Average Import¹													
IEA Americas	48.58	60.02	56.93	62.53	56.63	54.71	44.57	55.19	54.21	47.67	32.13		
IEA Europe	53.26	70.52	64.25	69.11	62.31	63.40	54.07	66.34	65.86	58.20	38.04		
IEA Asia Oceania	54.13	72.46	66.38	70.75	65.40	65.68	64.01	67.40	70.21	67.08	55.00		
IEA Total	52.05	67.77	62.75	67.62	61.51	61.66	54.00	63.47	63.69	57.51	40.94		
FOB Spot													
North Sea Dated	54.16	71.27	64.12	68.74	61.84	63.06	50.02	66.83	63.38	55.45	31.71	18.57	29.00
Brent (Asia) Mth 1	54.86	72.23	64.86	70.17	62.38	62.49	52.63	65.79	65.63	56.76	36.47	29.37	35.94
WTI (Cushing) Mth 1	50.78	65.20	57.03	59.89	56.40	56.88	45.57	59.81	57.52	50.53	29.89	16.52	28.57
Urals (Mediterranean)	53.26	70.17	64.31	68.77	61.84	63.40	48.97	67.06	62.86	55.11	29.51	16.50	30.84
Dubai (1st month)	53.15	69.65	63.49	67.52	61.23	62.00	50.41	64.86	64.19	54.25	33.78	21.33	30.98
Tapis (Dated)	56.41	73.69	69.16	72.91	66.63	70.08	56.06	74.22	71.42	62.67	35.38	17.91	26.40
PRODUCT PRICES													
Rotterdam, Barges FOB													
Premium Unl 10 ppm	65.80	78.78	71.35	79.58	72.78	69.21	53.77	69.30	68.14	61.57	32.32	19.35	29.59
Naphtha	54.19	64.48	0.00	58.79	53.18	57.90	45.86	60.37	58.87	51.88	27.39	15.31	25.02
Jet/Kerosene	65.92	86.39	79.24	81.19	79.03	78.51	60.06	79.12	75.92	65.03	39.68	21.35	26.88
ULSD 10ppm	66.28	86.22	79.45	81.87	77.92	78.96	62.85	80.37	76.07	66.45	46.36	33.12	34.10
Gasoil 0.1 %	64.68	84.28	77.73	80.14	76.53	76.91	61.41	78.70	74.59	64.94	45.01	31.27	33.19
LSFO 1%	48.72	63.22	62.21	64.33	61.60	62.83	52.84	67.23	70.22	56.86	31.80	24.01	27.74
HSFO 3.5%	45.63	61.13	50.31	60.06	51.20	33.35	33.39	33.14	39.57	39.38	21.76	15.97	21.56
Mediterranean, FOB Cargoes													
Premium Unl 10 ppm	65.83	79.41	71.31	77.58	72.12	70.45	54.91	70.31	69.05	63.14	33.29	20.52	31.10
Naphtha	52.74	66.08	54.43	57.08	51.94	55.36	43.27	56.98	56.03	49.46	24.88	10.50	22.71
Jet Aviation Fuel	65.04	85.37	77.76	79.75	77.97	76.48	58.08	76.42	73.68	63.27	37.76	17.43	25.01
ULSD 10ppm	66.20	86.03	79.05	81.24	77.73	78.23	61.86	79.23	74.98	65.94	45.03	29.00	33.60
Gasoil 0.1 %	64.60	84.74	77.70	79.68	76.99	76.72	60.94	77.96	74.10	64.76	44.29	26.77	30.48
LSFO 1%	49.91	64.31	63.90	65.04	62.73	65.32	54.94	70.27	72.26	59.30	33.66	25.62	29.02
HSFO 3.5%	47.22	62.06	52.17	60.65	52.70	37.35	35.67	36.85	42.64	41.42	23.47	16.27	22.22
US Gulf, FOB Pipeline													
Super Unleaded	73.82	85.71	79.24	87.04	81.48	75.52	60.05	73.85	72.87	68.85	40.21	28.44	40.66
Unleaded	67.98	80.10	72.28	80.84	74.00	68.37	54.57	68.40	66.83	63.61	35.05	23.20	35.09
Jet/Kerosene	65.40	85.12	78.81	80.80	78.19	77.90	58.25	79.37	74.03	63.32	38.81	24.53	31.07
ULSD 10 ppm	67.93	85.94	79.09	81.32	77.78	78.46	61.81	79.61	74.19	65.29	46.97	33.30	35.32
No. 6 3% ³	46.03	60.20	52.57	60.32	50.83	39.32	35.91	39.09	41.70	43.49	23.84	17.02	23.88
Singapore, FOB Cargoes													
Premium Unleaded	67.96	80.21	72.55	75.06	72.76	75.03	56.85	74.82	71.13	64.34	36.42	20.49	33.44
Naphtha	53.99	67.50	57.15	58.68	53.64	60.13	47.72	63.62	61.06	52.56	30.60	17.86	26.49
Jet/Kerosene	65.28	85.05	77.26	79.77	77.00	75.99	58.88	77.75	75.34	63.05	39.39	21.35	28.94
Gasoil 0.05%	65.65	84.33	77.23	79.92	76.61	76.32	61.38	78.24	76.03	64.66	44.42	28.85	34.04
LSWR Cracked	52.47	67.44	64.61	71.34	66.74	54.62	60.33	58.60	69.52	65.52	46.83	31.51	34.29
HSFO 180 CST	50.84	67.04	58.62	65.23	62.33	43.51	43.14	43.23	52.04	46.66	31.45	23.36	26.72
HSFO 380 CST 4%	50.01	66.01	57.57	63.40	61.43	42.63	41.71	41.87	50.21	45.07	30.55	22.59	25.33

¹ IEA CIF Average Import price for March is an estimate.

IEA Americas includes United States and Canada.

IEA Europe includes all countries in OECD Europe except Estonia, Hungary and Slovenia.

IEA Asia Oceania includes Australia, New Zealand, Korea and Japan.

³ Waterborne

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Table 14
MONTHLY AVERAGE END-USER PRICES FOR PETROLEUM PRODUCTS

May 2020

NATIONAL CURRENCY *							US DOLLARS						
	Total	% change from		Ex-Tax	% change from			Total	% change from		Ex-Tax	% change from	
	Price	Apr-20	May-19		Price	Apr-20		May-19	Price	Apr-20		May-19	Price
GASOLINE ¹ (per litre)													
France	1.243	- 1.9	- 21.5	0.345	-5.5	-45.2		1.356	-1.6	-23.5	0.376	-5.2	-46.5
Germany	1.194	- 0.7	- 21.6	0.349	-2.0	-44.2		1.302	-0.4	-23.6	0.381	-1.7	-45.6
Italy	1.364	- 3.6	- 16.1	0.390	-9.7	-35.5		1.488	-3.3	-18.2	0.425	-9.4	-37.2
Spain	1.079	- 2.8	- 20.4	0.419	-5.6	-35.3		1.177	-2.5	-22.4	0.457	-5.3	-37.0
United Kingdom	1.062	- 2.7	- 17.3	0.306	-7.0	-37.6		1.306	-3.6	-20.8	0.376	-7.9	-40.2
Japan	125.7	- 4.3	- 16.3	59.8	-8.1	-27.5		1.172	-3.8	-14.1	0.558	-7.6	-25.6
Canada	0.936	17.0	- 30.0	0.519	31.1	-41.9		0.670	17.7	-32.6	0.371	31.8	-44.1
United States	0.494	1.6	- 34.6	0.367	2.2	-41.8		0.494	1.6	-34.6	0.367	2.2	-41.8
AUTOMOTIVE DIESEL FOR NON COMMERCIAL USE (per litre)													
France	1.165	- 4.2	- 21.4	0.362	-10.4	-42.2		1.271	-3.9	-23.4	0.395	-10.1	-43.6
Germany	1.047	- 3.2	- 19.3	0.410	-6.6	-33.9		1.142	-2.9	-21.3	0.447	-6.3	-35.5
Italy	1.255	- 4.1	- 17.4	0.412	-9.6	-34.4		1.369	-3.8	-19.5	0.449	-9.4	-36.0
Spain	0.986	- 3.5	- 21.7	0.436	-6.4	-34.1		1.075	-3.2	-23.7	0.476	-6.1	-35.8
United Kingdom	1.134	- 2.2	- 16.4	0.366	-5.4	-33.7		1.395	-3.2	-20.0	0.450	-6.3	-36.5
Japan	107.0	- 5.1	- 18.1	66.6	-7.2	-24.7		0.998	-4.5	-15.9	0.621	-6.7	-22.7
Canada	0.899	- 6.8	- 30.3	0.534	-10.1	-41.0		0.643	-6.3	-32.8	0.382	-9.6	-43.2
United States	0.632	- 4.1	- 24.3	0.484	-5.3	-29.9		0.632	-4.1	-24.3	0.484	-5.3	-29.9
DOMESTIC HEATING OIL (per litre)													
France	0.728	- 1.3	- 24.5	0.451	-1.7	-30.4		0.794	-0.9	-26.4	0.492	-1.4	-32.1
Germany	0.478	- 5.2	- 36.0	0.341	-6.1	-39.9		0.522	-4.9	-37.6	0.371	-5.8	-41.4
Italy	1.069	- 2.3	- 19.8	0.473	-4.3	-31.4		1.166	-2.0	-21.9	0.516	-4.0	-33.2
Spain	0.464	- 7.7	- 42.9	0.286	-10.0	-50.1		0.506	-7.4	-44.3	0.312	-9.7	-51.4
United Kingdom	0.389	- 4.4	- 36.7	0.259	-6.1	-45.3		0.479	-5.3	-39.3	0.319	-7.0	-47.6
Japan ²	76.2	- 5.9	- 17.2	67.7	-6.1	-17.7		0.710	-5.4	-14.9	0.632	-5.6	-15.5
Canada	0.813	- 9.9	- 31.7	0.704	-10.2	-32.8		0.582	-9.3	-34.2	0.504	-9.7	-35.3
United States	-	-	-	-	-	-		-	-	-	-	-	-
LOW SULPHUR FUEL OIL FOR INDUSTRY ³ (per kg)													
France	0.375	4.1	- 36.7	0.235	6.7	-48.0		0.408	4.4	-38.3	0.256	7.0	-49.3
Germany	-	-	-	-	-	-		-	-	-	-	-	-
Italy	0.313	8.9	- 37.2	0.282	9.9	-39.7		0.342	9.2	-38.8	0.308	10.3	-41.2
Spain	0.255	- 18.1	- 43.8	0.238	-19.2	-45.6		0.278	-17.9	-45.3	0.259	-18.9	-46.9
United Kingdom	-	-	-	-	-	-		-	-	-	-	-	-
Japan	-	-	-	-	-	-		-	-	-	-	-	-
Canada	-	-	-	-	-	-		-	-	-	-	-	-
United States	-	-	-	-	-	-		-	-	-	-	-	-

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

² Kerosene for Japan.

³ 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 Margins¹
 (\$/bbl)

	Monthly Average					Change	Average for week ending:				
	Feb 20	Mar 20	Apr 20	May 20		May 20-Apr 20	15 May	22 May	29 May	05 Jun	12 Jun
NW Europe											
Brent (Cracking)	3.51	3.67	4.32	-0.45	↓	-4.77	-1.49	-0.71	-0.67	-1.49	-0.80
Urals (Cracking)	2.80	6.56	7.58	-1.35	↓	-8.93	-2.11	-1.42	-2.13	-3.01	-2.28
Brent (Hydroskimming)	2.30	2.84	4.79	-0.90	↓	-5.69	-2.00	-1.36	-1.34	-1.89	-1.61
Urals (Hydroskimming)	-2.66	2.97	5.64	-3.59	↓	-9.23	-4.47	-3.66	-4.32	-4.60	-4.22
Mediterranean											
Es Sider (Cracking)	5.73	5.37	5.62	0.77	↓	-4.85	-0.37	0.83	0.82	-0.07	0.52
Urals (Cracking)	3.35	7.25	7.83	-1.41	↓	-9.24	-2.39	-1.39	-2.05	-3.06	-1.11
Es Sider (Hydroskimming)	4.58	3.89	5.49	0.24	↓	-5.25	-0.93	0.17	0.16	-0.47	-0.20
Urals (Hydroskimming)	-2.51	2.76	5.18	-3.81	↓	-8.99	-4.84	-3.76	-4.49	-4.97	-3.33
US Gulf Coast											
Mars (Cracking)	2.22	2.95	2.54	-1.20	↓	-3.73	-1.57	-0.14	-2.46	-1.48	-0.25
50/50 HLS/LLS (Coking)	8.27	9.22	6.42	2.37	↓	-4.05	2.24	3.23	1.94	2.43	4.41
50/50 Maya/Mars (Coking)	6.14	7.91	8.05	2.12	↓	-5.92	2.02	2.66	1.24	0.68	2.35
ASCI (Coking)	6.33	7.97	6.36	1.31	↓	-5.05	1.09	2.15	0.03	0.25	2.04
US Midwest											
30/70 WCS/Bakken (Cracking)	10.46	6.83	2.58	4.86	↑	2.28	4.43	4.61	2.94	5.85	7.80
Bakken (Cracking)	11.52	8.41	4.35	6.31	↑	1.96	6.17	5.32	3.97	7.46	9.65
WTI (Coking)	10.54	6.73	4.38	9.14	↑	4.76	8.83	7.32	6.13	6.92	8.36
30/70 WCS/Bakken (Coking)	13.12	9.45	4.03	6.59	↑	2.55	6.12	5.88	4.35	7.23	9.52
Singapore											
Dubai (Hydroskimming)	-2.39	-2.80	-2.99	-4.29	↓	-1.30	-4.65	-3.29	-3.92	-4.42	-4.19
Tapis (Hydroskimming)	-1.37	4.85	7.57	5.07	↓	-2.50	7.00	3.41	1.56	0.45	1.44
Dubai (Hydrocracking)	5.89	2.72	-0.47	-0.44	↑	0.03	-0.57	0.38	0.05	-1.33	-0.87
Tapis (Hydrocracking)	-1.31	3.93	6.47	5.27	↓	-1.21	7.23	3.72	1.92	1.05	1.82

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

Source: IEA, KBC Advanced Technologies (KBC)

Table 16
REFINED PRODUCT YIELDS BASED ON TOTAL INPUT (%)¹

	Jan-20	Feb-20	Mar-20	Mar-19	Mar 20 vs Previous Month	Mar 20 vs Previous Year	Mar 20 vs 5 Year Average	5 Year Average
OECD Americas								
Naphtha	1.4	1.3	1.4	1.4	0.1	0.0	-0.3	1.6
Motor gasoline	46.8	45.7	44.2	44.8	-1.5	-0.6	-1.5	45.7
Jet fuel	9.7	9.3	7.8	9.5	-1.5	-1.7	-1.3	9.1
Other kerosene	0.1	0.1	0.1	0.0	-0.1	0.0	0.0	0.1
Gasoil/diesel oil	28.9	28.5	30.5	28.8	2.0	1.7	1.9	28.5
Residual fuel oil	2.1	2.2	2.4	3.0	0.2	-0.5	-1.3	3.7
Petroleum coke	4.8	4.8	4.7	4.4	-0.1	0.3	0.1	4.6
Other products	10.8	11.2	13.1	12.6	1.9	0.5	1.3	11.8
OECD Europe								
Naphtha	8.3	8.7	8.6	9.0	-0.1	-0.5	0.0	8.5
Motor gasoline	21.2	19.9	19.2	19.6	-0.7	-0.4	-1.2	20.4
Jet fuel	9.5	8.9	7.5	8.8	-1.3	-1.2	-0.7	8.3
Other kerosene	2.5	2.4	2.4	2.3	0.0	0.1	0.1	2.3
Gasoil/diesel oil	40.7	40.5	40.9	40.1	0.4	0.7	1.0	39.9
Residual fuel oil	9.1	8.8	8.8	9.9	0.0	-1.1	-1.4	10.2
Petroleum coke	1.6	1.5	1.6	1.3	0.1	0.2	0.3	1.3
Other products	13.6	14.1	15.5	14.3	1.4	1.2	1.4	14.1
OECD Asia Oceania								
Naphtha	15.9	14.6	15.5	16.1	0.9	-0.6	0.8	14.7
Motor gasoline	20.8	20.9	21.4	21.1	0.4	0.3	-0.5	21.9
Jet fuel	16.2	15.7	14.6	15.5	-1.1	-1.0	-1.0	15.6
Other kerosene	6.0	4.9	4.7	4.0	-0.2	0.7	-0.1	4.8
Gasoil/diesel oil	29.3	29.6	29.7	30.1	0.1	-0.4	0.7	29.1
Residual fuel oil	7.3	8.3	8.4	6.3	0.0	2.1	0.8	7.6
Petroleum coke	0.4	0.3	0.3	0.5	0.0	-0.2	-0.1	0.4
Other products	11.6	11.8	12.2	12.5	0.5	-0.3	0.1	12.2
OECD Total								
Naphtha	6.3	6.2	6.3	6.6	0.1	-0.3	0.0	6.3
Motor gasoline	33.9	32.8	32.0	32.2	-0.8	-0.2	-1.2	33.2
Jet fuel	10.9	10.3	9.0	10.4	-1.4	-1.4	-1.0	10.0
Other kerosene	1.9	1.7	1.7	1.5	-0.1	0.1	0.0	1.7
Gasoil/diesel oil	32.7	32.5	33.6	32.7	1.1	0.9	1.4	32.3
Residual fuel oil	5.3	5.5	5.5	5.8	0.1	-0.3	-0.9	6.5
Petroleum coke	2.9	2.9	2.9	2.6	0.0	0.2	0.1	2.8
Other products	11.8	12.2	13.7	13.1	1.5	0.6	1.1	12.6

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

Table 17
WORLD BIOFUELS PRODUCTION
(thousand barrels per day)

	2018	2019	2020	3Q19	4Q19	1Q20	Mar 20	Apr 20	May 20
ETHANOL									
OECD Americas¹	1078	1064	862	1053	1073	1057	981	619	695
United States	1048	1029	829	1018	1039	1025	949	586	662
Other	30	35	33	35	35	32			
OECD Europe²	87	85	75	89	94	104	93	65	65
France	13	15	12	17	16	19	16	10	10
Germany	13	12	11	12	13	22	19	7	7
Spain	9	9	7	9	9	6	5	8	8
United Kingdom	9	4	4	5	5	11	9	1	1
Other	42	45	41	46	51	47			
OECD Asia Oceania³	4	5	6	5	5	5	4	6	6
Australia	4	4	4	4	4	4	4	4	4
Other	0	1	1	1	1	0			
Total OECD Ethanol	1169	1154	942	1148	1173	1166	1078	690	766
Total Non-OECD Ethanol	718	814	736	1226	747	284	309	744	870
Brazil	547	621	539	1035	550	105	130	544	670
China	56	69	75	67	73	58			
Argentina	19	19	16	19	19	16			
Other	95	105	105	105	105	105	179	199	199
TOTAL ETHANOL	1887	1968	1678	2374	1920	1450	1387	1433	1636
BIODIESEL									
OECD Americas¹	126	119	117	125	111	110	117	120	120
United States	121	113	111	118	105	109	116	112	112
Other	5	6	6	6	6	1			
OECD Europe²	268	290	260	301	289	256	250	261	261
France	49	52	45	52	54	47	41	44	44
Germany	62	66	56	68	65	56	55	55	55
Italy	14	18	30	18	22	26			
Spain	36	40	30	39	39	23	20	32	32
Other	107	115	100	123	110	104	108	98	98
OECD Asia Oceania³	14	16	15	19	13	9	10	17	17
Australia	1	1	1	1	1	0	0	1	1
Other	13	15	14	18	12	9			
Total OECD Biodiesel	408	425	392	444	413	376	377	398	398
Total Non-OECD Biodiesel	315	402	413	403	403	413	413	413	413
Brazil	92	102	104	106	112	104	111	92	102
Argentina*	47	43	31	37	37	31			
Other	176	258	278	260	254	278			
TOTAL BIODIESEL	723	827	805	847	816	788	790	811	811
GLOBAL BIOFUELS	2611	2796	2483	3221	2735	2238	2176	2244	2447

1 As of August 2012 OMR, OECD Americas includes Chile.

2 As of August 2012 OMR, OECD Europe includes Estonia and Slovenia.

3 As of August 2012 OMR, OECD Asia Oceania includes Israel.

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