

Oil Market Report

14 October 2020

- Global supply fell 0.6 mb/d to 91.1 mb/d in September, down 8.7 mb/d on 2019, as the UAE slashed output and maintenance cut flows in the North Sea and Brazil, more than offsetting a US rebound from August's hurricane shut-ins. In 4Q20, world supply may rise towards 92 mb/d from 91.3 mb/d in 3Q20 if Libyan output continues to recover and assuming OPEC+ produces to its target. Total non-OPEC supply is set to drop by 2.6 mb/d in 2020 before recovering by 0.4 mb/d in 2021.
- Global oil demand rose 3.4 mb/d month-on-month (m-o-m) in July, as coronavirus restrictions eased and summer holidays in the northern hemisphere supported a rise in transport fuel demand. However, a second wave of Covid-19 cases and new movement restrictions are now slowing demand growth. Our 2020 forecast is unchanged at 91.7 mb/d, down 8.4 mb/d from 2019. Our 2021 forecast is also largely unchanged at 97.2 mb/d, showing a gain of 5.5 mb/d from 2020.
- Strong gains in global refinery throughput in July and relatively stable runs in August and September came at the cost of steep falls in margins, which in 3Q20 saw one of their worst quarters. In 4Q20, demand and refining forecasts imply large product stock draws, but refinery margins may not get an immediate boost. In 2021, runs will rebound only partially, to levels last seen in 2015.
- In August, OECD industry stocks fell by 22.1 mb (0.71 mb/d) m-o-m to 3 194 mb, and were 209.1 mb above their five-year average level. Preliminary data for September show that crude stocks in the US and Japan fell by 6.5 mb and 1.8 mb, respectively, while those in Europe rose by 3.3 mb. Implied global stocks fell by 2.3 mb/d in 3Q20 and are projected to fall by 4.1 mb/d in 4Q20. In September, volumes of crude oil held in floating storage fell sharply by 70 mb (2.33 mb/d) to 139.1 mb.
- Crude futures fell in September versus August, partly reflecting weaker financial markets. ICE Brent fell by-\$3.15/bbl and NYMEX WTI by -\$2.76/bbl m-o-m to \$41.87/bbl and \$39.63/bbl, respectively. Prices saw a 10% early-October jump ahead of Hurricane Delta. Physical prices e.g. North Sea Dated, remained below the futures front month reflecting a well-supplied prompt market. Freight rates remain at historically weak levels as tanker activity sits at a near 10% deficit to 2019 levels.



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A moving target

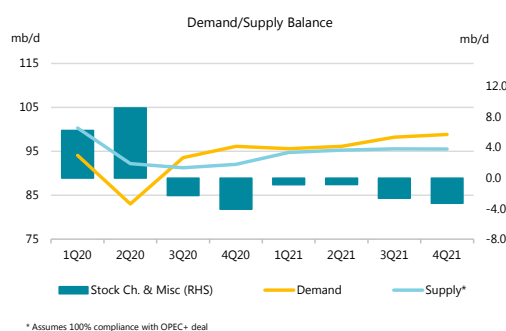
Six months ago leading oil producers came together, supported by an extraordinary meeting of G20 energy ministers, to coordinate massive production cuts to offset the collapse in oil demand caused by Covid-19 lockdowns and so provide life support to the oil market. It was impossible at that time to know how extensive the damage from the pandemic would be and for how long life support would be needed. Stabilising the market was the aim and to the extent that oil prices have been remarkably steady since mid-June and observed oil stocks drew in the third quarter (-0.9 mb/d), the efforts of the producers have shown some success.

However, as we said in last month's *Report*, the outlook remains fragile. The trajectory for Covid-19 infections is strongly upwards in many countries and governments are tightening restrictions on the movements of their citizens. This surely raises doubts about the robustness of the anticipated economic recovery and thus the prospects for oil demand growth. Reflecting new data we have revised down our demand estimates for the third quarter of 2020 (-0.2 mb/d), with weakness seen particularly in North America (including Mexico) and India. The overall demand estimate for 2020 is largely unchanged at 91.7 mb/d (down 8.4 mb/d versus 2019), as is the estimate for 2021 at 97.2 mb/d, (up 5.5 mb/d year-on-year).

Global oil supply fell in September as OPEC+ countries improved the compliance rate with their agreement. Also, maintenance and unplanned outages curbed output in Brazil, Canada and the North Sea. In October, Hurricane Delta shut in record volumes of United States offshore production, although initial reports suggest that damage to infrastructure is limited and output is expected to recover quickly. Of greater long term significance is the potential for a sustained increase in production from Libya. There have been several false dawns in recent years, but the latest ceasefire has seen output pick up already. Our balances assume an increase in Libyan production from 0.3 mb/d currently to 0.7 mb/d in December. Libya, being outside the OPEC+ agreement, can produce at the level it wishes.

Our global demand and supply estimates (including an assumption of full compliance with the OPEC+ agreement) imply a significant stock draw of 4 mb/d in the fourth quarter. While this is a large change, it is happening from record high levels. With the 1.9 mb/d increase in the OPEC+ production ceiling currently planned for 1 January, there is only limited headroom for the market to absorb extra supply in the next few months. Also, there is a risk that the demand recovery is stalled by the recent increase in Covid-19 cases in many countries.

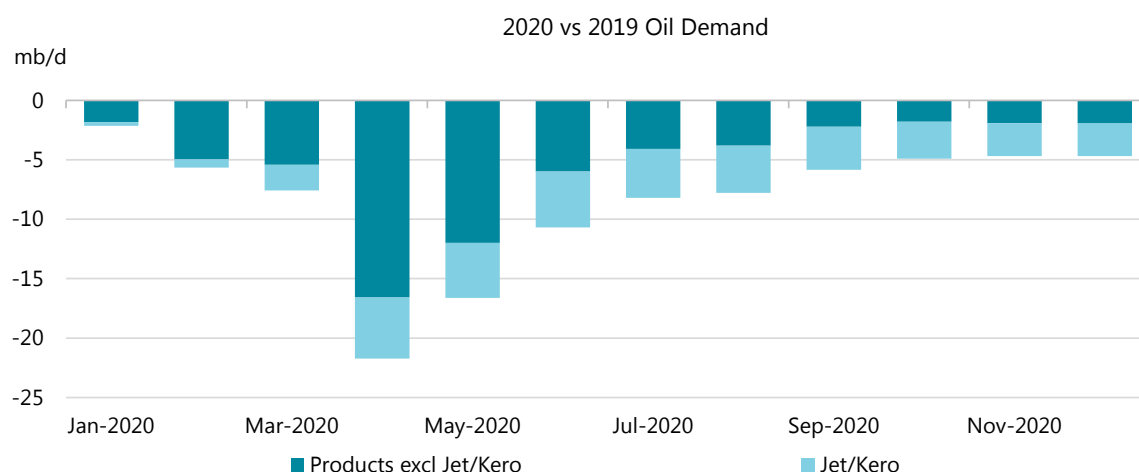
The uncertain outlook that could see the draw down of stocks falter is reflected in the fact that physical prices have weakened and this has brought down the front of the forward curve for Brent crude oil. The longer term offers little encouragement for the producers; the curve shows prices not reaching \$50/bbl until 2023. Truly, those wishing to bring about a tighter oil market are looking at a moving target.



Demand

Overview

Global oil demand rose 3.4 mb/d month-on-month (m-o-m) in July, well above the seasonal trend, as coronavirus restrictions eased and summer holidays in the northern hemisphere supported a rise in transport fuel demand. Consumption rose 14.7 mb/d in total versus April's nadir, but was still down 8.2 mb/d year-on-year (y-o-y), highlighting the persistent gap with historical levels. Based on preliminary data, we estimate that demand gained a further 1.5 mb/d m-o-m in August, slightly above the seasonal trend, thanks to higher mobility. The rise was largely driven by gasoline (+780 kb/d in August versus July). Products such as jet/kerosene (+340 kb/d), LPG/ethane (+170 kb/d) and residual fuel (+120 kb/d) also made significant gains.



Data for September remain scarce at the time of writing, but early indications point to higher work mobility in Europe and North America, and a significant demand increase in India following the end of the monsoon season and due to easing coronavirus restrictions. At the same time, however, the summer northern hemisphere driving boom for leisure trips has ceased, while surging new Covid-19 cases in parts of the Americas and Europe have seen renewed movement restrictions being imposed. In addition, the recovery in passenger flights has slowed, as governments have maintained travel restrictions. We therefore expect demand to rise by just 350 kb/d m-o-m in September, the smallest such gain recorded since May, and with one country, India, responsible for the lion's share of the gain.

In September, the largest demand deficit compared with 2019 remains in jet/kerosene (-3.6 mb/d y-o-y), followed by gasoline (-1 mb/d), gasoil/diesel (-730 kb/d) and residual fuel (-270 kb/d). On a relative basis, gasoline, gasoil/diesel and residual fuel deliveries are back to 96-97% of pre-crisis levels, but jet/kerosene consumption is only just over half of its previous level. Overall, oil demand has reached 94% of 2019 levels. We expect oil consumption to recover by a further 1.7 mb/d by December vs September levels, helped by additional gains in gasoil/diesel, gasoline but also jet/kerosene. Diesel and gasoline should be back to 98% of last year's consumption by the end of the year, whereas jet will still be down by one third.

The economic outlook and the future spread of the virus, both key influences on oil demand, remain uncertain. There is growing evidence that the world's economies are learning to live with the virus, despite the ongoing significant disruptions to mobility and trade. Official gross domestic product figures for 2Q20, which were published in recent weeks, were not as weak as previously thought. As a result, several forecasters have recently increased their economic outlooks for the rest of 2020 and into 2021 (see *Fundamentals*).

In this *Report*, we have revised down 3Q20 oil demand by 140 kb/d overall due to poorer than expected deliveries. This was offset by slightly higher estimates for 4Q20. As a result, our 2020 forecast is unchanged at 91.7 mb/d, a decline of 8.4 mb/d from 2019. Our 2021 forecast is also largely unchanged at 97.2 mb/d, showing a gain of 5.5 mb/d from 2020.

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	4.2	4.3	4.3	4.3	3.3	3.9	4.1	3.9	4.1	4.0	4.0	4.1	4.1
Americas	31.6	31.7	32.3	32.1	31.9	30.1	24.9	29.1	30.3	28.6	29.7	30.1	31.1	31.2	30.6
Asia/Pacific	35.9	35.6	35.2	36.4	35.8	33.3	32.1	33.9	35.3	33.6	35.7	35.3	34.9	36.3	35.6
Europe	14.8	15.0	15.5	14.9	15.0	14.1	11.6	13.8	14.0	13.4	13.8	14.2	14.8	14.5	14.3
FSU	4.6	4.7	4.9	4.9	4.8	4.6	4.0	4.7	4.8	4.5	4.5	4.6	4.9	4.8	4.7
Middle East	8.1	8.1	8.7	8.3	8.3	7.8	7.0	8.1	7.7	7.7	7.8	7.9	8.4	7.9	8.0
World	99.2	99.4	100.8	100.9	100.1	94.1	83.0	93.6	96.1	91.7	95.6	96.1	98.2	98.8	97.2
Annual Chg (%)	0.6	0.6	0.7	1.4	0.8	-5.1	-16.5	-7.2	-4.7	-8.4	1.6	15.8	5.0	2.8	6.0
Annual Chg (mb/d)	0.6	0.6	0.7	1.4	0.8	-5.1	-16.4	-7.3	-4.8	-8.4	1.5	13.1	4.7	2.7	5.5
Changes from last OMR (mb/d)	-0.1	-0.1	0.0	-0.1	-0.1	0.1	0.0	-0.1	0.1	0.0	0.0	0.3	0.0	-0.1	0.0

* Including biofuels

Fundamentals

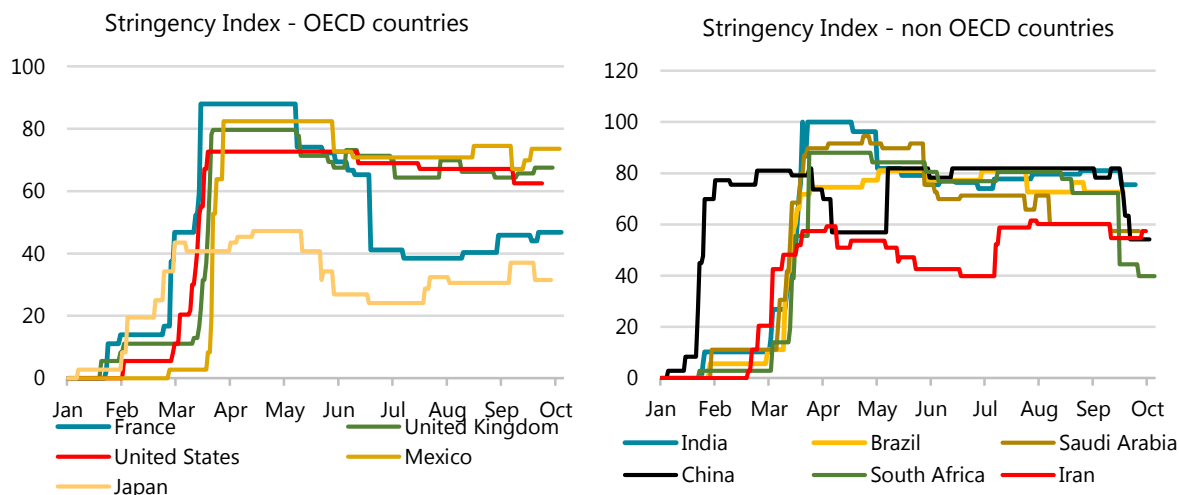
Following the publication of 2Q20 GDP data and parallel monthly economic activity indicators showing the ongoing impact of the pandemic, major forecasters revised their growth outlooks for several countries. China, the United States and some European countries saw upgrades while others saw downgrades: notably India, Mexico and South Africa.

Growth slowed in many countries in 3Q20 as the first wave of Covid had yet to be fully contained while others saw a second wave of cases that hindered mobility and economic activity. In the fourth quarter of the year and in 2021, with the onset of the northern hemisphere winter, world economic growth – and therefore oil demand linked to economic activity – will crucially depend on the progression of Covid cases and measures taken by authorities to contain it (not to mention voluntary steps taken to maintain social distancing). These containment measures will also have a direct impact on transport fuel demand.

In September and October, the reported number of new Covid-19 cases increased significantly in Europe. A smaller third wave is emerging in the US and the number of cases and deaths are rising significantly in Mexico. In OECD Asia, by contrast, the virus' propagation appears to have stopped for now.

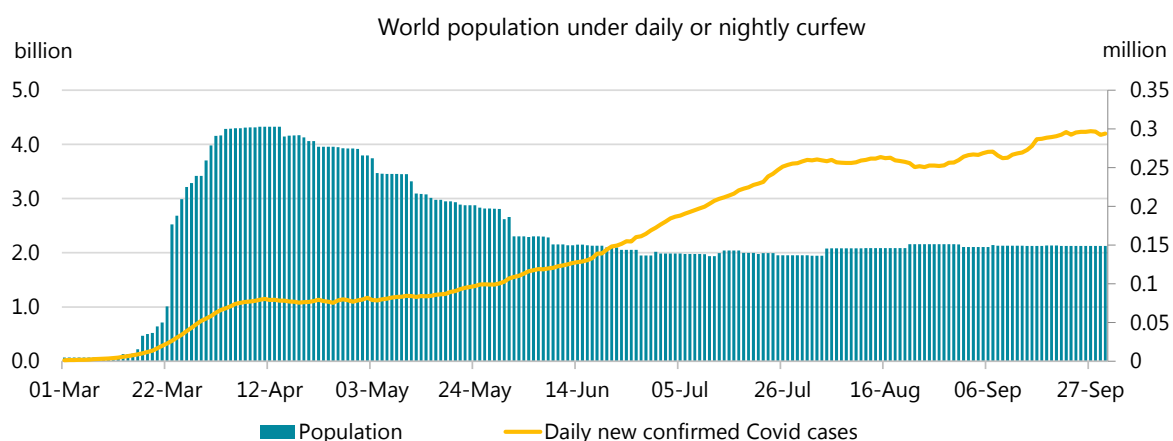
In non-OECD Asia, the number of daily cases is declining in India and in China only sporadic cases are being reported. The situation has stabilised in Saudi Arabia and South Africa, and is improving in Brazil and Iraq. By contrast, cases are increasing in Argentina, Iran, Russia, Ukraine and the United Arab Emirates. In most countries, the number of deaths attributable to Covid-19 has not increased as fast as cases and containment measures remain localised.

Given the huge economic and social costs, countries are reluctant to re-impose very stringent containment measures. They have been applied in countries where a second wave of Covid cases appears to be spreading fast, such as in OECD Europe. On the other hand, many non-OECD countries continue to relax social distancing measures.



Source: Oxford Blavatnik School of Government

The *Oxford Blavatnik School of Government* tracks containment measures (e.g. the closure of schools, teleworking, bans or limits on public gatherings, the closure of public transport, stay-at-home orders and travel restrictions) all over the world and has built several indicators to estimate the severity of responses taken by different countries. The index was at its maximum for most countries between mid-March and mid-May. More recently, it has increased in Europe but has declined in the US, OECD Asia and several non-OECD countries. However, it is also becoming more difficult to interpret: a high index (for example in China) may reflect containment measures re-introduced on a limited localised basis rather than global or extended lockdowns. It is quite clear that the measures re-introduced recently are less severe than those seen earlier in the year.



At the end of September, restrictions were in place in more than 30 countries. Some countries with many new Covid-19 cases (Jordan, Lebanon, Philippines, Spain and the UK) have implemented local curbs to mobility and Israel went back into full lockdown on 18 September. In addition, several countries have closed bars and/or restaurants (Indonesia, France, US states

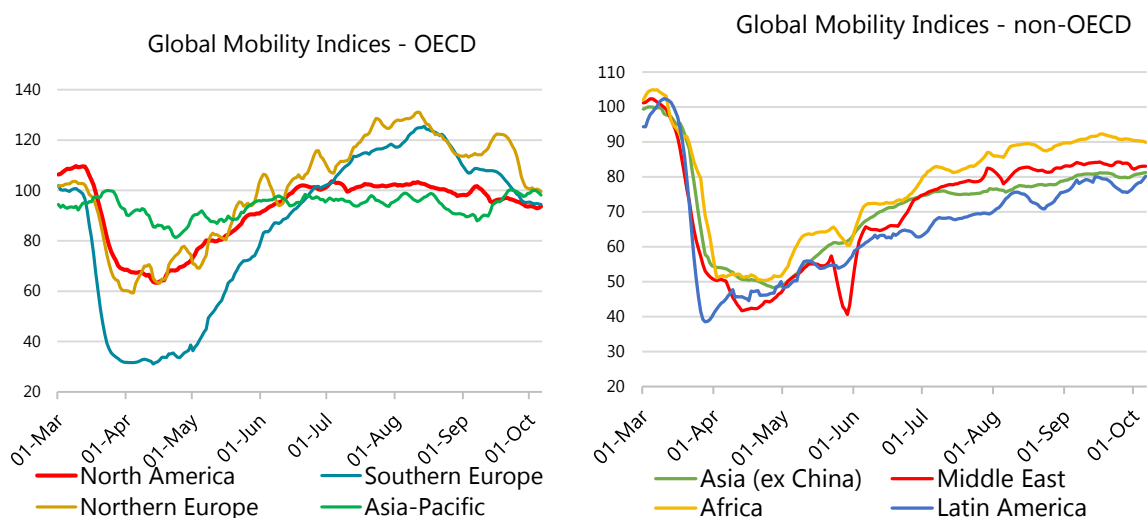
such as California or New York) or maintained schools closed (Angola, Bangladesh, Egypt, Kazakhstan, Nepal, Oman). Teleworking remains the norm in many service industries across the world. All these measures continue to have an impact on fuel demand.

China's economic recovery was initially due to strong state support and higher industrial production (+5.6% y-o-y in August). Retail sales and internal tourism are now following suit. In the US, the economic recovery is more uncertain. Industrial activity has regained some ground but was still more than 7% below pre-pandemic levels in August. In the absence of further fiscal support, the US is likely to experience a significant drop in household revenues and spending. While employment is up, job growth slowed for the third consecutive month in September.

In Europe, the rebound in manufacturing activity (particularly in Germany) is being offset by a drop in services. Several countries recently took severe Covid containment measures, including the closure of bars and restaurants. Similar measures have impacted growth in Brazil and India, even while industrial production in the latter rose strongly in September according to the manufacturing PMI. The global IHS composite PMI fell to 52.2 in September from 52.4 in August, while the manufacturing component of the PMI rose to 53.5. The new orders sub-index rose at its fastest pace in more than two years, boosted by new export orders. The acceleration in global goods trade contributed to growth in the factory sector, while growth slowed in the service sector due to the impact of Covid containment measures.

The aviation sector remains deeply affected by the crisis. The number of scheduled flights remained 47% below last year's level in September, according to OAG. The number of scheduled flights were down y-o-y by 94% in Singapore and 90% in Hong Kong, 65% in Germany, 55% in Italy, 51% in France and 54% in Spain. In India, flight numbers were 56% below last year in September (from 60% in August) and in the US the deficit was 47%. Japan and China are doing better, with a y-o-y reduction in scheduled flights in August of 37% and 5%, respectively. International flights are much more affected than domestic flights and countries with a large domestic market are faring better.

In several countries, the resurgence of the virus is slowing the recovery in mobility observed in the past few months. Mobility indices in many OECD countries have declined recently with the end of the summer holidays and the re-imposition of measures to contain Covid-19. In addition, the recovery in non-OECD countries has been slow and appears to have stalled in recent weeks.



Source: computed from Google mobility data

OECD

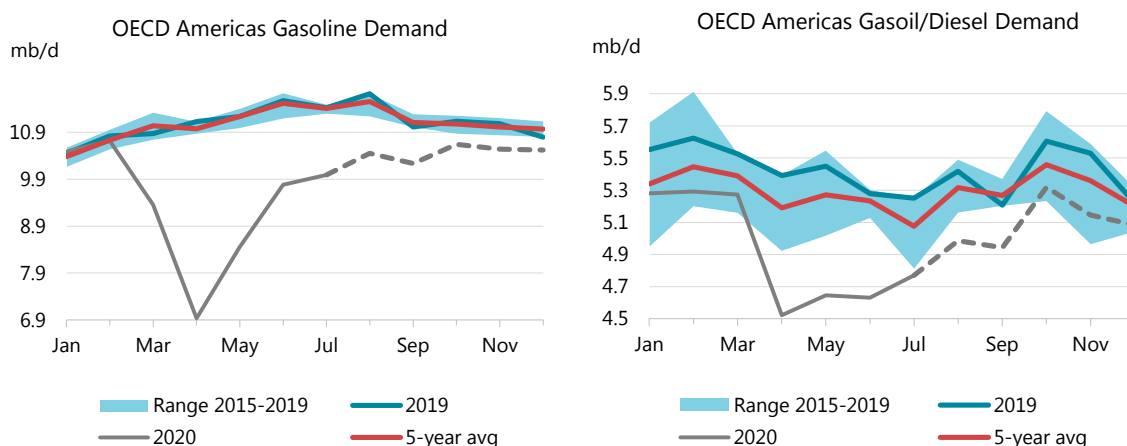
Oil demand in the OECD is set to decline by 4.9 mb/d in 2020 and to rebound by 2.7 mb/d in 2021. Demand bottomed out in April at 35.2 mb/d (-12.3 mb/d y-o-y) and recovered strongly through June as countries came out of lockdown. In July, the latest month for which finalised data are available, the recovery stalled and demand remained 6.2 mb/d below last year.

OECD Demand based on Adjusted Preliminary Submissions - August 2020														
(million barrels per day)														
	Gasoline		Jet/Kerosene		Diesel		LPG/Ethane		RFO		Other		Total Products	
	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa
OECD Americas	10.43	-10.8	1.14	-49.2	4.38	-8.4	3.74	6.8	0.55	-18.2	3.62	-3.2	23.87	-10.4
US*	8.89	-10.2	1.02	-46.0	3.73	-6.6	2.89	10.6	0.39	-8.2	2.59	-3.6	19.51	-9.3
Canada	0.86	-6.2	0.09	-65.7	0.26	3.0	0.43	-5.1	0.04	-31.3	0.73	-4.0	2.41	-10.6
Mexico	0.61	-23.5	0.03	-68.1	0.25	-31.4	0.37	-4.1	0.10	-40.6	0.28	3.2	1.64	-21.2
OECD Europe	2.04	-5.6	0.71	-59.4	4.83	-4.3	1.05	-9.2	0.78	-7.0	3.39	-4.4	12.82	-11.7
Germany	0.46	-10.3	0.13	-46.5	0.73	-6.1	0.08	-38.7	0.05	-1.1	0.54	-21.0	2.00	-17.0
United Kingdom	0.27	-8.1	0.15	-55.0	0.48	-7.6	0.11	7.9	0.02	-10.8	0.30	-0.5	1.32	-15.7
France	0.22	-0.7	0.08	-58.8	0.61	-4.5	0.11	-4.8	0.04	-27.7	0.37	-17.8	1.42	-14.6
Italy	0.17	-4.0	0.06	-61.6	0.39	-3.5	0.08	-6.0	0.06	-7.6	0.29	-5.0	1.04	-11.5
Spain	0.13	-10.3	0.07	-62.8	0.45	-6.7	0.04	-32.2	0.11	-26.1	0.33	7.0	1.12	-14.8
OECD Asia & Oceania	1.54	-9.3	0.47	-33.3	1.36	-7.8	0.67	-4.0	0.41	4.5	2.48	-8.0	6.93	-9.6
Japan	0.89	-8.9	0.30	-7.5	0.39	-8.2	0.26	-3.1	0.22	2.6	1.20	-1.7	3.26	-4.9
Korea	0.24	-14.0	0.10	-40.7	0.44	-9.2	0.33	-5.4	0.17	12.1	1.04	-16.6	2.31	-13.4
Australia	0.29	-9.2	0.04	-75.6	0.47	-7.5	0.07	-3.9	0.01	-3.6	0.11	8.4	0.98	-15.7
OECD Total	14.02	-9.9	2.33	-50.6	10.58	-6.5	5.47	2.0	1.74	-8.6	9.49	-5.0	43.63	-10.7

* Including US territories

OECD Americas

Oil demand in the Americas recovered strongly through June but slowed thereafter. Demand remained 3.4 mb/d below last year in July (vs. -4.1 mb/d in June). Containment measures and a tough economic environment weighed on gasoline and gasoil deliveries.

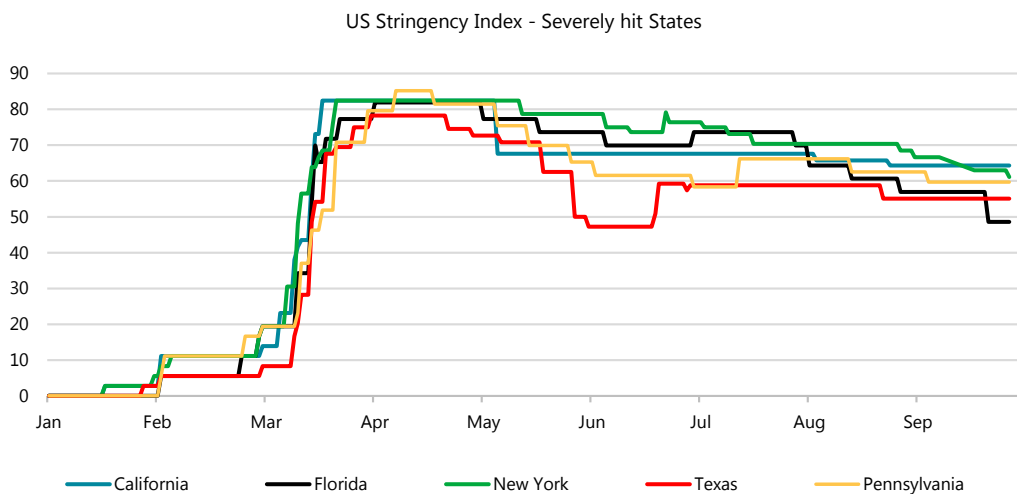


Preliminary data for the **US** in September point to a shortfall of around 1.5 mb/d in oil demand versus a year ago, as gasoline deliveries posted a seasonal decline. Many states relaxed containment measures in September. Most schools and universities re-opened, sometimes with specific state guidelines and protocols. Florida allowed the re-opening of restaurants and bars under some conditions. Indeed, many states continue to put restrictions on bars, theatres, night clubs and restaurants. Public gatherings remain limited in several states and are prohibited in

California. Few states have implemented stay at home orders, but in some cases night curfews are in place (Alabama, California, and Florida). California continued to recommend working from home if possible.

US gasoline demand is expected to be lower by 350 kb/d y-o-y in 4Q20, averaging 8.9 mb/d. Teleworking and social distancing will take their toll. In September, deliveries of gasoil/diesel fell 280 kb/d y-o-y and of jet/kerosene by 810 kb/d y-o-y. The Cass Freight Index for shipment volumes was down 8% y-o-y in August, showing lower freight transportation in the US.

In **Mexico**, oil deliveries remained 440 kb/d below year-ago levels in August. Oil consumption was also 450 kb/d below last year in **Canada** in July, with gasoline and diesel demand the most affected. Canada is experiencing a second wave of Covid cases in Ontario and Quebec, the two most populous provinces.



Source: Oxford Blavatnik School of Government

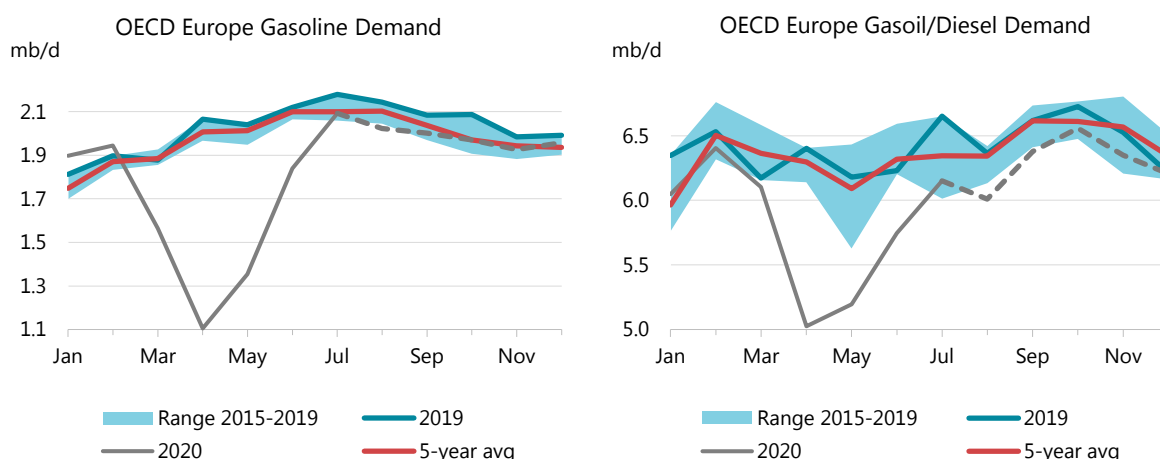
We forecast the region's oil demand to average 24.3 mb/d in 4Q20, down 1.5 mb/d on the year but up 950 kb/d on the previous quarter with a continued recovery in gasoline and diesel and an uptick in jet fuel demand. In 2020 as a whole, the region's demand is expected to fall by 2.7 mb/d, before it recovers by 1.6 mb/d in 2021.

OECD Europe

OECD Europe oil consumption rose 1.1 mb/d m-o-m in July. Strong gains were seen in the UK (+140 kb/d), Italy (+150 kb/d), Turkey (+120 kb/d), France (+160 kb/d m-o-m) and Spain (+140 kb/d). Overall, demand remained 1.9 mb/d below July 2019 levels, up from a y-o-y contraction of 2.2 mb/d in June.

Monthly declines observed in major countries in August are close to seasonal trends. Preliminary data for **France** for August show consumption down 170 kb/d on the month and 240 kb/d y-o-y. The largest annual declines were in gasoil/diesel and jet/kerosene. However, gasoline deliveries were back up to last year's levels. **German** consumption in August was down 220 kb/d on the month and 410 kb/d y-o-y, weighed down mainly by diesel and jet/kerosene. As for **Italy**, deliveries were down 145 kb/d m-o-m and 135 kb/d on the year. Like France and Germany, diesel and jet/kerosene showed hefty declines versus last year's demand levels.

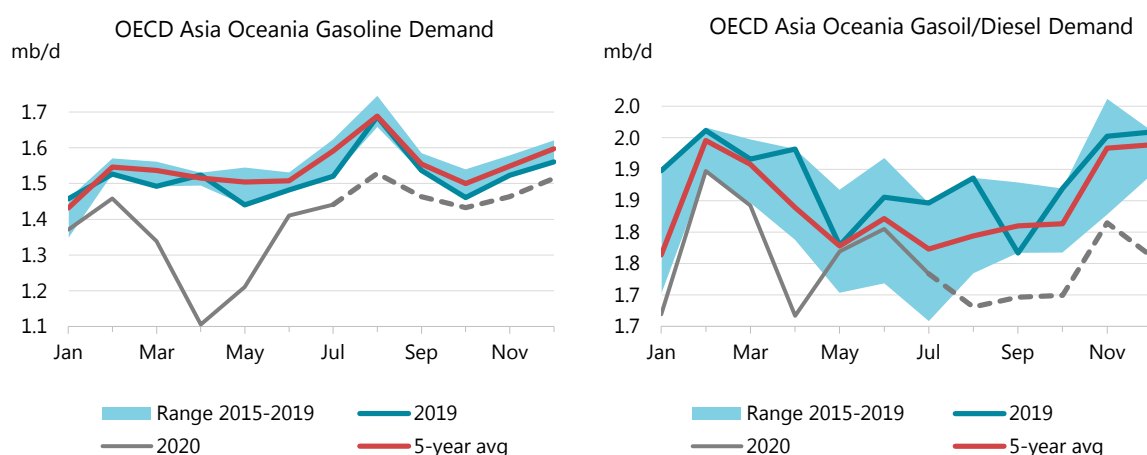
Several European countries continued to ease mobility restrictions in September. In Belgium, local restrictions in Antwerp (stay at home requirements) were lifted at the end of August. In Turkey, restrictions on weddings and ceremonies were cancelled at the start of September. The rise in the number of Covid cases has, however, forced several countries to take new localised measures, potentially impacting economic growth and oil demand. In Spain, the government declared a state of emergency at the start of October, re-imposing partial lockdowns in and around Madrid. London is also set to announce new restrictions. France has imposed restrictions on restaurants and closed bar and sports complexes in several major cities.



The ongoing recovery in oil demand is expected to slow through the remainder of this year. By 4Q20, demand in the OECD Europe region will still be down around 880 kb/d from 2019. The region's demand should fall 1.6 mb/d in 2020 before recovering by 880 kb/d in 2021.

OECD Asia Oceania

Oil demand in OECD Asia Oceania fell 890 kb/d y-o-y in July. Gasoline deliveries were just 80 kb/d below last year. Jet/kerosene deliveries posted a stronger decline of 340 kb/d.

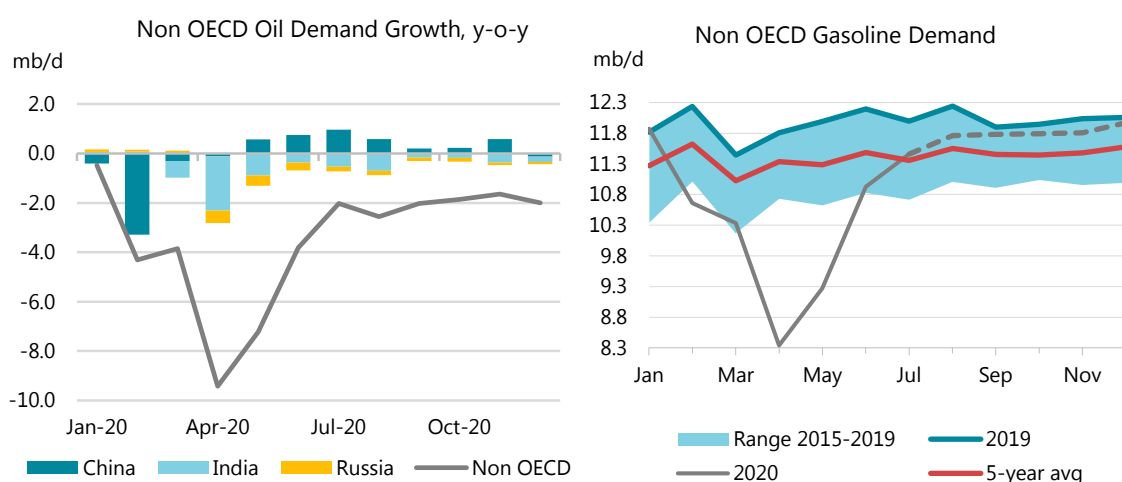


Preliminary data for **Japan** show demand down by about 170 kb/d y-o-y in August. Demand for gasoline and diesel was down by 90 kb/d and 60 kb/d y-o-y, respectively. As the Covid situation improved, **Australia** (Melbourne) and **New Zealand** lifted restrictions on business operations and schools, and authorised large public gatherings.

Oil demand in the region is expected to continue to recover progressively, even if it will remain below pre-pandemic levels in 4Q20, by around 500 kb/d. The region's consumption should fall by 640 kb/d in 2020 and rise by 250 kb/d in 2021.

Non-OECD

Non-OECD oil demand rose by a strong 2.5 mb/d per month on average between May and July, thus recovering nearly two-thirds of what was destroyed at the peak of the lockdowns in April. However, we estimate that m-o-m gains were less significant in August and September (+140 kb/d and +240 kb/d, respectively), as mobility gains eased and due to poor weather in India. The aviation sector has rebounded strongly in China and Russia, helped by domestic travel, but continues to lag behind in India and South Africa.



China

Chinese oil demand increased by 140 kb/d m-o-m in August, the last month for which data are available, and was up a significant 580 kb/d y-o-y, making China the only major oil consumer to show demand growth over the period. As with previous months, the petrochemical sector was a major driver: LPG/ethane deliveries were up 210 kb/d y-o-y and naphtha climbed 110 kb/d. These increases in consumption have been driven by plant capacity expansions, however they also underscore the resilience of Chinese industry in the face of the Covid-19 pandemic and the reduction in global trade.

We estimate that gasoline deliveries were up 60 kb/d y-o-y and that gasoil/diesel demand was up 270 kb/d y-o-y, showing vehicle usage has returned to normal levels. By contrast, jet and kerosene demand was down 150 kb/d y-o-y, due to much-reduced international travel. In September, total Chinese passenger aircraft traffic rose another 1% m-o-m, but remained 21% below year-ago levels, data from OAG showed.

During the Golden Week national holiday (first week of October), the Ministry of Culture and Tourism recorded 637 million trips, generating \$70bn in tourism revenue. While below last year's figure (728m trips) it highlights the progressive improvement in activity and consumer spending. The holiday week mainly benefited road traffic: compared to the previous year passenger trips on public transportation were down 30% at the start of the holiday but highway

traffic volumes fell only 6%. Travel restrictions were eased in 3Q20, with tourism agencies allowed to offer trips across provincial borders in July.

China: Demand by Product							
(thousand barrels per day)							
	Demand			Annual Chg (kb/d)		Annual Chg (%)	
	2019	2020	2021	2020	2021	2020	2021
LPG & Ethane	1 681	1 755	1 831	75	76	4.5	4.3
Naphtha	1 360	1 444	1 552	84	109	6.1	7.5
Motor Gasoline	3 203	3 267	3 476	65	209	2.0	6.4
Jet Fuel & Kerosene	792	603	714	- 189	111	-23.9	18.5
Gas/Diesel Oil	3 719	3 759	3 896	39	137	1.1	3.6
Residual Fuel Oil	427	507	516	80	9	18.8	1.7
Other Products	2 522	2 348	2 430	- 174	82	-6.9	3.5
Total Products	13 703	13 683	14 415	- 20	732	-0.1	5.4

We expect China's oil demand to rise by 220 kb/d y-o-y in 4Q20, helped by much higher gasoline deliveries whereas jet/kerosene deliveries will remain hindered by international border closures. Overall, in 2020, demand should fall by a very modest 20 kb/d from 2019. In 2021, we expect demand to grow by 730 kb/d, the strongest annual gain since 2015.

India

Indian oil consumption was impacted in recent months by the coronavirus as well as record monsoon floods during July-August. Demand contracted by 700 kb/d y-o-y in August while gasoil/diesel deliveries fell a significant 305 kb/d y-o-y. Gasoline demand was less affected and fell only 50 kb/d y-o-y.

In September, deliveries surged 390 kb/d m-o-m due to higher transportation activity, even if overall oil demand remained 160 kb/d below last year's level. Gasoline demand was up 20 kb/d y-o-y. Gasoil/diesel deliveries increased by 200 kb/d m-o-m but remained down 90 kb/d on the year. Jet and kerosene deliveries rose 30 kb/d on the month and were 90 kb/d below September 2019 levels.

We expect India's oil consumption to rise by 500 kb/d q-o-q in 4Q20 (still 250 kb/d below last year) with further gains in transport fuels. Demand should average 4.6 mb/d in 2020, a 510 kb/d fall on 2019. In 2021, we expect demand to rise by 340 kb/d y-o-y, meaning that it will likely remain below 2019 levels.

India: Demand by Product							
(thousand barrels per day)							
	Demand			Annual Chg (kb/d)		Annual Chg (%)	
	2019	2020	2021	2020	2021	2020	2021
LPG & Ethane	858	874	843	16	- 31	1.9	-3.5
Naphtha	332	336	367	4	30	1.4	9.0
Motor Gasoline	745	667	708	- 77	41	-10.4	6.2
Jet Fuel & Kerosene	237	136	190	- 101	54	-42.7	40.2
Gas/Diesel Oil	1 735	1 465	1 658	- 270	193	-15.5	13.1
Residual Fuel Oil	143	134	138	- 9	4	-6.6	3.2
Other Products	1 065	990	1 037	- 76	48	-7.1	4.8
Total Products	5 114	4 602	4 942	- 512	340	-10.0	7.4

Other Non-OECD

In **Africa**, oil demand is likely to have risen 540 kb/d in 3Q20 (relative to 2Q20), although data has yet to be finalised. In 4Q20, demand should rise another 230 kb/d q-o-q, more than the seasonal trend, but is likely to remain around 170 kb/d below last year's level.

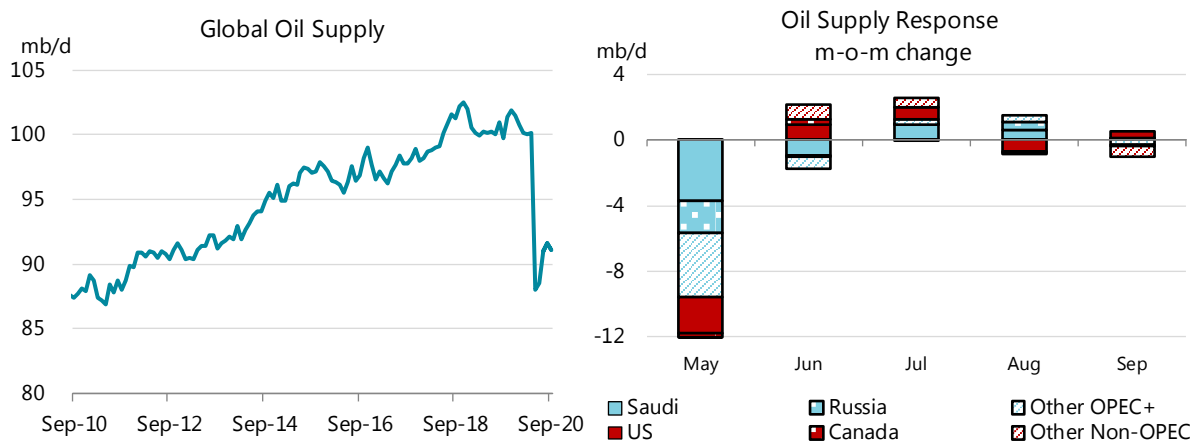
Consumption in **Latin America** is estimated to have risen by 900 kb/d q-o-q in 3Q20, despite the ongoing spread of Covid-19 on the continent. However, deliveries remained 500 kb/d below 2019 levels. In 4Q20, demand is likely to increase by another 190 kb/d from 3Q20 (while normally slightly declining in 4Q).

In the countries of the **Former Soviet Union**, overall demand rose 710 kb/d qoq in 3Q20 but remained down 210 kb/d on year-ago levels. Finally, in the **Middle East**, oil consumption increased by an even more significant 1.1 mb/d in 3Q20 (relative to 2Q20), but was partly driven by seasonal factors as the y-o-y decline narrowed by only 10 kb/d to 610 kb/d on year-ago level.

Non-OECD: Demand by Region							
(thousand barrels per day)							
	Demand			Annual Chg (kb/d)		Annual Chg (%)	
	1Q20	2Q20	3Q20	2Q20	3Q20	2Q20	3Q20
Africa	4 254	3 338	3 883	- 980	- 286	-22.7	-6.9
Asia	25 507	25 547	27 059	-2 602	- 583	-9.2	-2.1
FSU	4 618	4 035	4 742	- 658	- 206	-14.0	-4.2
Latin America	5 755	4 891	5 789	-1 302	- 504	-21.0	-8.0
Middle East	7 775	7 004	8 113	-1 122	- 610	-13.8	-7.0
Non-OECD Europe	736	615	771	- 160	- 16	-20.6	-2.1
Total Products	48 644	45 431	50 356	-6 824	-2 206	-13.1	-4.2

Supply

World oil supply fell to 91.1 mb/d in September after the UAE reduced production and field maintenance cut output in the North Sea and Brazil. The declines more than offset a bounce back in United States production from hurricane shut-ins during August, leaving global output in September down 0.6 mb/d month on month (m-o-m) and 8.7 mb/d below a year ago. For October, a strike in Norway and Hurricane Delta in the US Gulf briefly knocked out substantial volumes, but any losses are likely to be offset by further gains from Libya, should its cease-fire hold, and if OPEC+ members produce at their agreed targets.

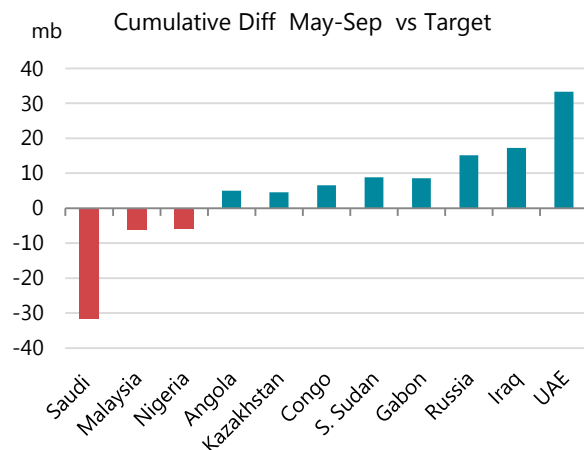


Given the foregoing caveats, fourth quarter world supply is set to rise towards 92 mb/d from an average 91.3 mb/d in 3Q20. Of the top three producers, the US is expected to decline by 160 kb/d vs 3Q20 while Saudi Arabia and Russia add more than 300 kb/d between them. For the year as a whole, Russian output will be down 1 mb/d versus 2019, the US 0.7 mb/d and Saudi Arabia 0.6 mb/d. Total non-OPEC production is expected to drop by 2.6 mb/d before posting a modest recovery in 2021 of around 0.4 mb/d.

OPEC+ boosts compliance

A sharp supply cut from the UAE helped to boost overall OPEC+ compliance to 103% in September versus 98% in August, with all major producers apart from Russia pumping at or below their targets. The 10 OPEC members taking part in cuts turned in a compliance rate of 106% in September, while non-OPEC members delivered a rate of 99%.

Compliance with the agreed targets has averaged 95% for the May-September period and countries that over produced in recent months have agreed



to compensate by pumping less. Our calculations show that despite September's stricter adherence to the supply pact, previously non-compliant producers must cut output by more than 100 mb. The largest reductions would be required from the UAE (33 mb), Iraq (17 mb) and Russia (15 mb). By contrast, Saudi Arabia, Malaysia and Nigeria have out-performed versus their targets.

OPEC+ Crude Oil Production ¹							
(million barrels per day)							
	Aug 2020 Supply	Sep 2020 Supply	Supply Baseline ²	September Compliance	Average Compliance	May-July Target	Aug-Dec Target ⁵
Algeria	0.86	0.86	1.06	102%	102%	0.82	0.86
Angola	1.26	1.22	1.53	110%	90%	1.18	1.25
Congo	0.30	0.30	0.33	42%	37%	0.25	0.27
Equatorial Guinea	0.12	0.10	0.13	117%	71%	0.10	0.10
Gabon	0.19	0.19	0.19	-9%	-43%	0.14	0.15
Iraq	3.65	3.65	4.65	118%	88%	3.59	3.80
Kuwait	2.27	2.30	2.81	99%	102%	2.17	2.30
Nigeria	1.37	1.35	1.83	143%	110%	1.41	1.50
Saudi Arabia	8.94	8.98	11.00	101%	109%	8.49	8.99
UAE	3.02	2.58	3.17	102%	67%	2.45	2.59
Total OPEC 10	21.98	21.53	26.68	106%	96%	20.60	21.82
Iran ³	1.95	1.97					
Libya ³	0.10	0.14					
Venezuela ³	0.39	0.44					
Total OPEC	24.42	24.08					
Azerbaijan	0.58	0.59	0.72	101%	100%	0.55	0.59
Kazakhstan	1.38	1.37	1.71	110%	92%	1.32	1.40
Oman	0.72	0.72	0.88	102%	103%	0.68	0.72
Russia	9.05	9.08	11.00	96%	96%	8.49	8.99
Others ⁴	0.87	0.90	1.11	102%	93%	0.85	0.90
Total Non-OPEC	12.61	12.65	15.42	99%	94%	11.90	12.60
Total OPEC+	34.59	34.18	42.10	103%	95%	32.50	34.42

1 Excludes condensates.

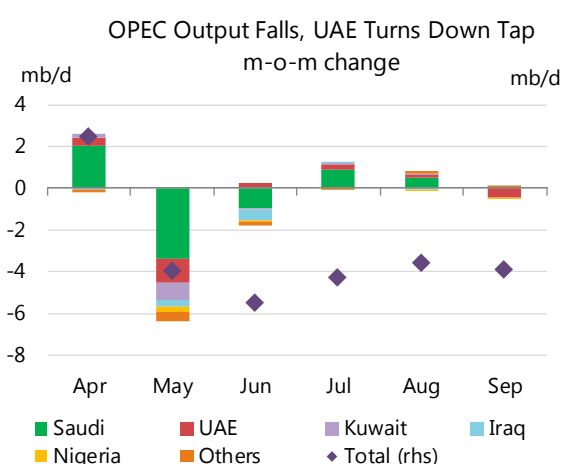
2 Based on Oct-2018, except for Saudi and Russia which each have an 11 mb/d baseline.

5 Table excludes Mexico, who only cut production in May and June.

3 Iran, Libya, Venezuela exempt from cuts.

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

As for OPEC crude production, the UAE led the group's m-o-m decline in September with output falling 340 kb/d to 24.08 mb/d, down 4.3 mb/d year-on-year (y-o-y). Output from other

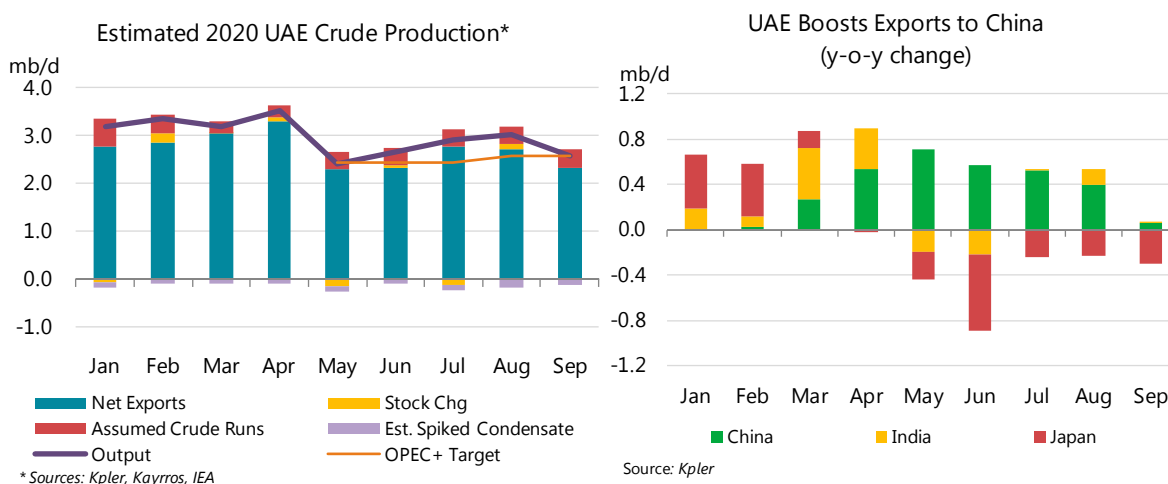


OPEC members taking part in supply cuts held broadly steady, while Libya and Venezuela posted notable increases.

Production in the UAE tumbled 440 kb/d in September to 2.58 mb/d, just below its OPEC+ target. Net crude oil exports plunged by 380 kb/d m-o-m to 2.3 mb/d, according to *Kpler* data, while *Kayyros* reported that crude stocks drew by 6 kb/d in September. We assume 120 kb/d of condensates was spiked into crude oil streams versus

170 kb/d during August when output of associated gas was ramped up to meet higher power generation requirements. Our estimate for crude throughput in domestic refineries remains at 370 kb/d.

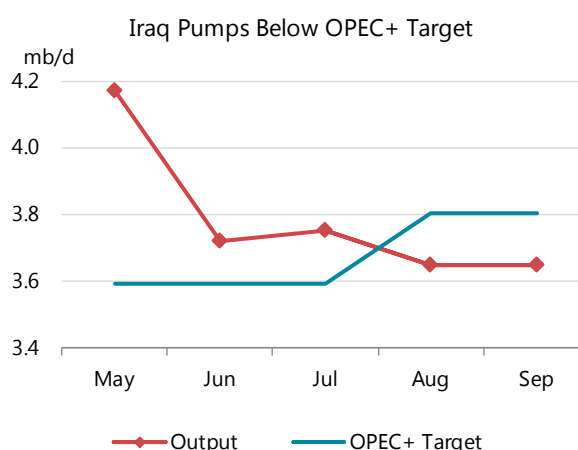
Still lower production could be on the way in the fourth quarter. Abu Dhabi National Oil Co reportedly plans a 30% cut in October term contract volumes for all of its crude grades and a 25% cut in November. During the first three quarters of this year, the UAE's exports to China increased substantially versus a year ago, edged higher to India and fell to its biggest lifter Japan, where demand has trended lower.



Output in neighbouring Gulf countries was marginally higher during September. Supply in **Saudi Arabia** edged up 40 kb/d to 8.98 mb/d, just shy of its target. Shipments of crude to world markets rose to around 6.1 mb/d in September, while the Kingdom's power generation requirement is thought to have eased from seasonally elevated levels in August. Refinery throughput is believed to have held above the 2 mb/d mark that was crossed in July for the first time since February (see *Refining*).

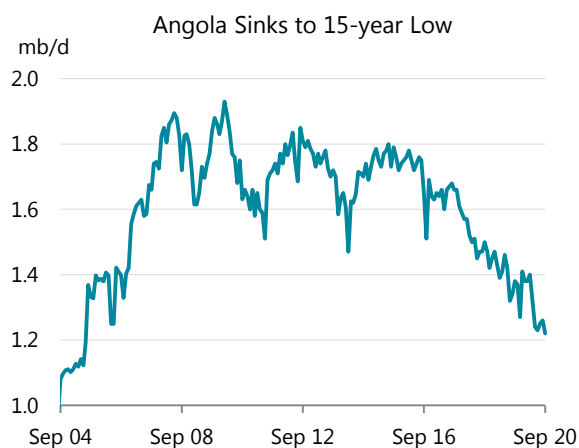
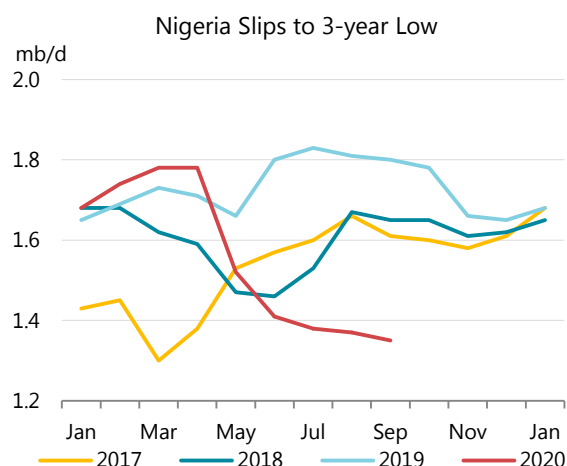
Kuwaiti production rose by 30 kb/d to 2.3 mb/d in September and was 350 kb/d below a year ago. Oil policy is not expected to change following the death of Kuwaiti ruler Sheikh Sabah al Ahmad al-Sabah. He is succeeded by his brother Sheikh Nawaf al Ahmad al-Sabah. Kuwait is a staunch supporter of the OPEC+ agreement.

For a second straight month, **Iraq** pumped below its target to make up for previous non-compliance. Output held steady at 3.65 mb/d in September, down 1.1 mb/d on a year ago. Shrinking oil revenues have driven Iraq's budget deficit to over \$3 billion per month, according to Finance Minister Ali Allawi.



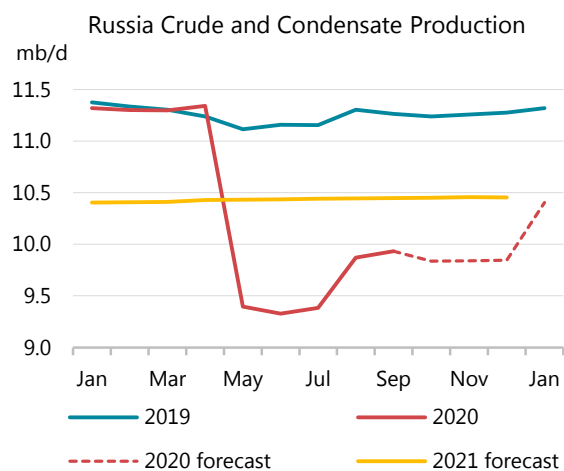
Nigeria continues to produce well below its OPEC+ target. Output in September dipped to 1.35 mb/d, down 450 kb/d on a year ago and the lowest level since 2017. In a bid to cut costs, Chevron Nigeria plans to reduce its local workforce by 25%. **Angola** has begun to make up for previously pumping in excess of its quota. Output in September fell below its OPEC+ target to a 15-year low of 1.22 mb/d, down 160 kb/d on a year ago.

Elsewhere in West Africa, **Congo** and **Gabon** were the only OPEC members that continued to over-produce in September. Output held steady m-o-m at 300 kb/d in Congo and at 190 kb/d in Gabon. Supply in **Equatorial Guinea** dipped to 100 kb/d. In North Africa, **Algerian** output held steady at 860 kb/d, a touch below its target.



Russia's compliance with the OPEC+ production cut slipped to 96% in September, down from 97% in August. Output of crude oil and gas condensate rose by 60 kb/d to 9.93 mb/d. Most of the gain stemmed from rising gas condensate production, excluded from the OPEC+ deal, with crude oil supply estimated at 9.08 mb/d compared with the ceiling of 8.993 mb/d. During the May-September period, Russia's production exceeded its quota by around 100 kb/d on average, or 15 mb in total. Oil output is set to rise by more than 500 kb/d in January as the OPEC+ cuts ease.

Crude oil exports to countries outside the former Soviet Union totalled 3.995 mb/d in September, slightly up from August, but down from 5.076 mb/d a year ago. Shipments via the Transneft pipeline system dropped significantly year-on-year (y-o-y), largely as a result of the OPEC+ deal, which forced producers to cut output from less efficient wells at traditional fields connected to the Transneft system. According to tanker tracking data from *Kpler*, seaborne Urals exports eased by roughly 100 kb/d m-o-m to 1 mb/d, 0.9 mb/d lower than a year ago.



Crude and condensate supply from **Kazakhstan** is estimated to have fallen by 40 kb/d in September to 1.6 mb/d. Part of the decline stemmed from the Karachaganak gas condensate field, which is excluded from the OPEC+ agreement. Crude oil production is assessed at 1.37 mb/d, 30 kb/d below its target. CPC loadings for September show shipments from Tengiz slipping 70 kb/d m-o-m to 480 kb/d. Karachaganak loadings fell by 40 kb/d m-o-m to 187 kb/d, while Kashagan held steady at around 280 kb/d.

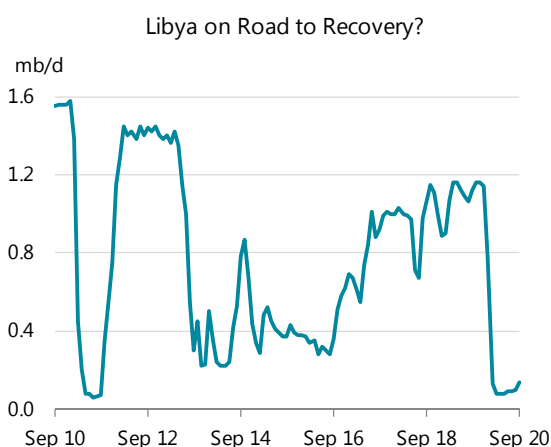
Azerbaijan's crude oil production held steady at 585 kb/d in September, perfectly in line with its agreed output target. The BP operated Azeri-Chirag-Gunashli fields contributed 460 kb/d, or 78% of the total, with Socar fields pumping the remaining 126 kb/d. Including condensates from the Shah Deniz gas field, also operated by BP, crude and condensate production was estimated at 675 kb/d. The Ministry of Energy stopped publishing condensate production figures in May. According to an operational update from BP, Shah Deniz produced 15.4 mb of condensate during the first half of 2020, or 85 kb/d on average.

Concerns are growing that the conflict with Armenia over the disputed Nagorno-Karabakh region could disrupt crude production and exports if key infrastructure is damaged. In early October, Azerbaijan's defence ministry claimed a cluster bomb had been fired near a stretch of the 1.2 mb/d Baku-Tbilisi-Ceyhan (BTC) pipeline. Armenia says it is not targeting oil and gas infrastructure. According to BP, BTC pumped around 620 kb/d of crude and condensate on average during the first half of 2020.

Exempt from OPEC+ cuts

Libya, Venezuela and Iran raised output by a combined 110 kb/d during September. Output in **Iran** edged up to 1.97 mb/d, 210 kb/d below a year ago. The volume of oil stored at sea held steady at 65 mb at the end of September.

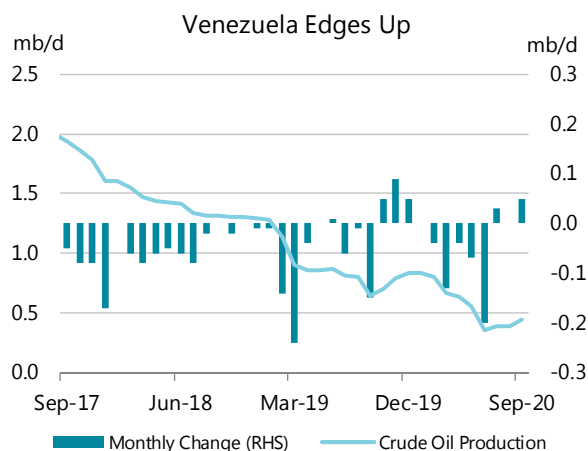
Output in **Libya** has risen progressively in recent weeks to around 300 kb/d currently from 140 kb/d in September (up 40 kb/d m-o-m) after forces led by General Khalifa Haftar eased an eight-month blockade of exports. Oil output was roughly 1.2 mb/d prior to the blockade. Assuming there are no setbacks, we expect a gradual recovery towards that level, with supply rising to around 500 kb/d over the coming weeks. Exports are increasing after the reopening of the Marsa El Hariga, Brega and Zueitina terminals. Shipments have yet to restart from the Ras Lanuf, Es Sider and Zawiya oil terminals. Libya's National Oil Corp (NOC) has warned that some production facilities, pipelines and storage tanks were severely damaged. Earlier cease fires and prospective peace deals have seen NOC ramp up quickly only for the situation to deteriorate. It is unclear how long-lasting this latest resumption will be.



For now, output has resumed from oil fields in the east operated by Sirte Oil Co and Arabian Gulf Oil Co (Agoco). Agoco previously pumped 300 kb/d while Sirte Oil Co produced around 30 kb/d. The resumption of output from these fields, in addition to the offshore Bouri and Al-Jurf fields, which pumped 80 kb/d between them during the blockade, would lift flows above 400 kb/d. On 11 October, NOC lifted *force majeure* on the core El-Sharara field with initial output of 40 kb/d. Before the blockade, the southwestern field operated by Repsol was producing around 300 kb/d. The Zawiya refinery reportedly will have priority access to crude from Sharara. It is unclear when the neighbouring Elephant field, operated by Eni, will come back on line. It previously pumped about 80 kb/d.

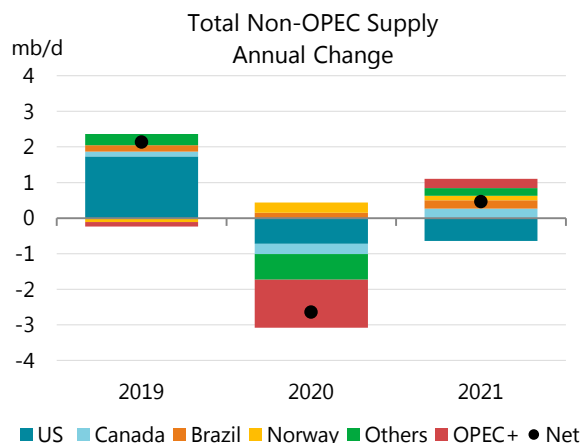
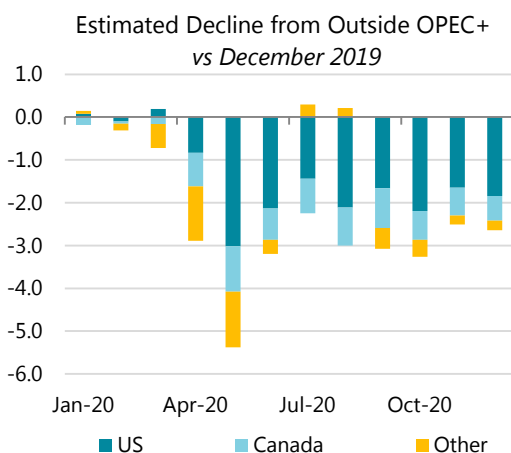
Crude production in **Venezuela** rose 50 kb/d in September to 440 kb/d, but was down 210 kb/d on a year ago. Any near-term upside appears to be capped at around the 600 kb/d mark given the toll taken by US financial sanctions, poor reservoir management and chronic underinvestment. For the sake of comparison, Venezuela was producing 1.9 mb/d in September 2017.

However, after shipments to world markets rose to a five-month high of close to 500 kb/d in September and following two straight months of hefty stock draws, Petroleos de Venezuela (PDVSA) has reportedly raised crude blending and upgrading levels. The Petropiar upgrader, a joint venture with Chevron, was producing around 115 kb/d, according to *Reuters*. PDVSA's upgraders turn extra-heavy oil from the Orinoco belt into crude for export, but they have been operating irregularly due to dwindling exports and have been plagued with technical issues. The Sinovensa blending plant, operated with CNPC, produced 160 kb/d, *Reuters* reported.



Outages stall non-OPEC recovery

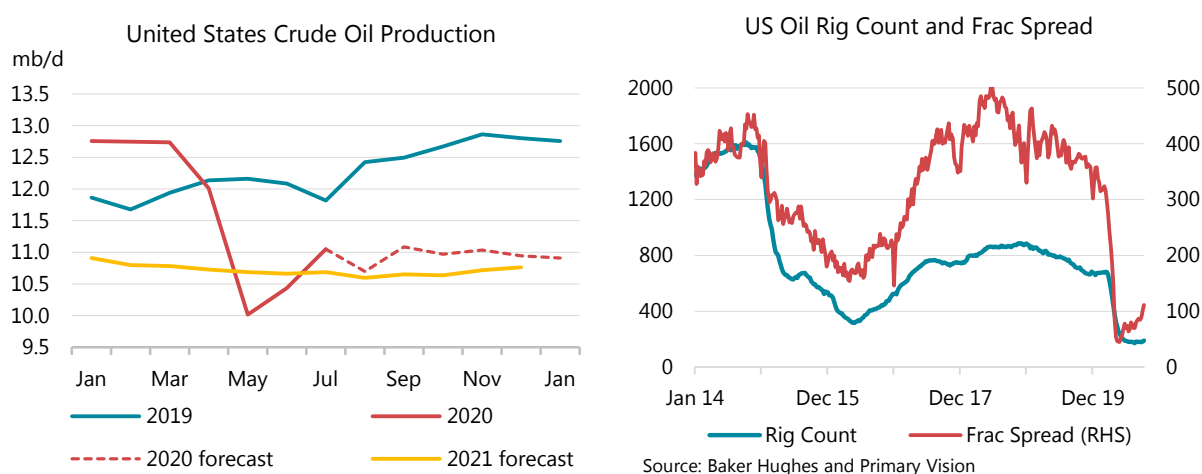
For oil producers outside of the OPEC+ pact, a number of outages during September saw output fall for a second month running. Heavy maintenance in Brazil and Norway as well as seasonally lower biofuels production more than offset rising output in the US. Industrial action in Norway and the landfall of Hurricane Delta on the US Gulf Coast impacted October production. For the year as a whole, output from non-OPEC producers outside the pact is set to fall by 1.2 mb/d, or half the total non-OPEC decline. Total non-OPEC oil supply is expected to grow by only 440 kb/d in 2021 as OPEC+ output cuts remain in place and steep spending cuts take their toll elsewhere.



US oil production rebounded in September, as offshore platforms restarted following precautionary storm shut-ins during August and as fracking activity improved across tight oil

basins. Crude oil production is estimated to have reached 11.1 mb/d, up nearly 400 kb/d from August, but still 1.7 mb/d lower than end-2019 levels.

Output looks set to fall again in October, as yet another storm forced massive precautionary shut-ins in the Gulf of Mexico. Hurricane Delta, which made landfall in Louisiana on 9 October as a Category 2 storm, led oil and gas producers to evacuate 276 platforms and halt nearly 1.7 mb/d of oil output. The shutdowns come less than two months after Hurricane Laura battered the region, leading to an output loss of more than 400 kb/d on average during August. Offshore production, which had already fallen from nearly 2 mb/d at the start of the year, to 1.6 mb/d over the May-July period due to weak demand and anti-Covid measures, is estimated at around 1.4 mb/d for both August and October. With the hurricane season winding down, offshore output is set to recover, further supported by the ramping up of various projects including Shell's 175 kb/d Appomattox platform

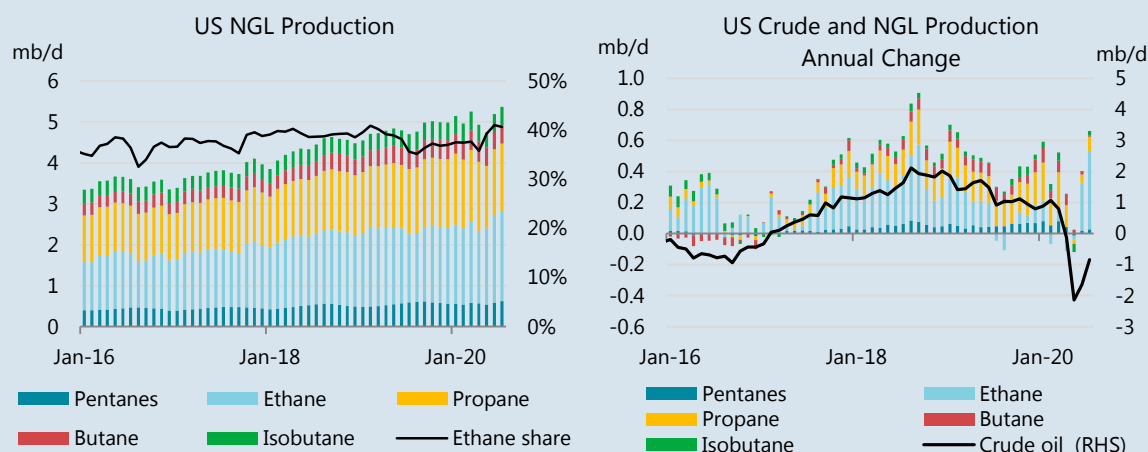


As for the US onshore, September saw a modest recovery in drilling rates, with the number of rigs targeting oil formations rising by 9 to 189. While that is still down more than 70% from pre-Covid levels, completion rates saw a more substantial rebound. The frac spread count, which is a good measure of new wells brought on line, rose by 26 to 111. This suggests that operators are drawing down their inventory of drilled but uncompleted wells, which will go some way to offset the base decline in the coming months. As noted in last month's *Report*, however, current activity levels are still too low to sustain a substantive recovery in onshore oil production. Without further increases in activity, output is expected to decline through 2021. For now, we estimate US crude oil production will fall by roughly 0.7 mb/d in both 2020 and 2021 to average 11.35 mb/d in 2020 and 10.8 mb/d next year.

Box 1. US NGL production sets new records despite lackluster crude oil market

While US crude oil and natural gas supply struggles to recover from the collapse in demand, drilling and investments earlier this year, production of natural gas liquids (NGLs) has surprised with its resilience. Supported by more favorable ethane extraction economics, output reached record levels in July. Since then, however, weak demand and bloated inventories have put renewed pressure on propane and ethane prices. Moreover, with oil production set to resume declines after curtailed volumes have been restored, NGL supply is expected to ease from recent highs.

Following an m-o-m increase of 450 kb/d in June, supply of propane, butane, natural gasoline and ethane from fractionation plants increased by another 170 kb/d in July, the latest month for which finalised data is available. At 5.37 mb/d, total NGL production was up an impressive 660 kb/d on a year ago, in stark contrast to the 835 kb/d y-o-y decline recorded for crude oil. At the same time, dry natural gas production lagged year-ago levels by 3%, with steeper declines expected from August through year-end according to EIA's latest *Short Term Energy Outlook*.



The majority of the increase stemmed from ethane, of which production in July was 0.5 mb/d, or 30%, higher than a year ago. By comparison, other gas liquids rose by a more modest 2-7%. The NGL market can only absorb part of the ethane extracted from the total pool of liquids produced with raw natural gas due to logistical bottlenecks and the price of the ethane versus competing feedstocks. The natural gas price sets the floor for ethane prices, below which residual ethane volumes are left in the gas stream. In June and July, the share of ethane in total NGL output rose above 40% for the first time since March 2019. While that is significantly higher than a year ago, it falls short of the 43% share seen in early 2012, suggesting substantial volumes are still being rejected.

The start up of a slew of new petrochemical projects in recent years has boosted US ethane demand. In July, ethane consumption surged to 1.86 mb/d, some 370 kb/d higher than a year ago. Ethane exports rose strongly over the 2014-18 period, but have since 2019 hovered in a 250-300 kb/d range, with Canada, India, UK and Norway being the largest buyers. Shipments are set to get another boost, especially to China, following the start up of the Orbit Ethane Export Terminal in Texas later this year. The terminal, developed by Energy Transfer and Satellite Petrochemical (a US subsidiary of a Chinese petrochemical company), will have the capacity to export 175 kb/d.

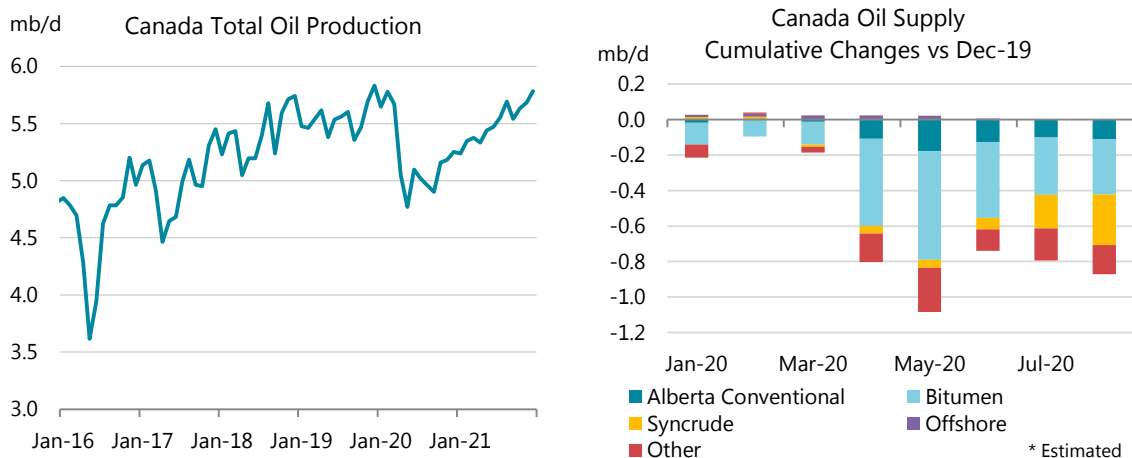
The onset of colder weather in the northern hemisphere will boost propane demand in the coming months. Bloated inventories will likely continue to weigh on prices however. According to preliminary data, US propane stocks breached the 100 mb mark for the first time in September.

While ethane recovery could increase further depending on demand and relative pricing, overall NGL production is expected to decline in 2021 as crude oil production slumps. Following a gain of 220 kb/d in 2020, total NGL supply could fall by 120 kb/d next year.

Canadian oil supply eased by 70 kb/d in August as synthetic crude production fell by 95 kb/d m-o-m to 890 kb/d. By contrast, raw bitumen production that was not sent for upgrading inched up 10 kb/d to 1.66 mb/d. Offshore production rose by 20 kb/d to 280 kb/d on higher flows from the Hibernia platform. The Terra Nova field remained closed.

Output is estimated to have slipped further in September following the partial shutdown of Inter Pipeline's 880 kb/d Polaris diluent line due to a leak. While flows on the pipeline were restored by mid-September, several companies had already stopped or curtailed production as a result of the disruption to the supply of diluents needed to transport the bitumen to market. Imperial Oil Limited halted operations at its Kearl oil sands mining operation. Suncor said it would reduce rates at its Firebag in-situ production site for four weeks from end-August as maintenance originally scheduled for 2022 was pulled forward. By contrast, Suncor and its partners, Total and Teck Resources, restarted the second primary extraction train at its Fort Hills site in September, adding approximately 120-130 kb/d by year-end.

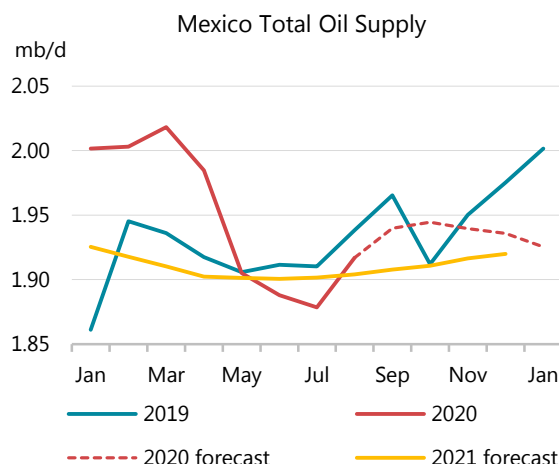
At 4.95 mb/d in August, total supply was 885 kb/d below end 2019 levels. Production is expected to recover gradually through 2021. According to weekly US oil statistics, Canadian crude oil exports to the US averaged 3.2 mb/d in September. While that is roughly 200 kb/d more than in May, it is still some 200 kb/d lower than during the same period a year ago and 0.5 mb/d less than the volumes shipped at the end of 2019.



Mexican crude and condensate production rose by 40 kb/d in August, to 1.7 mb/d, as output at Maloob, rebounded and priority fields continued to ramp up. Output at Maloob, Mexico's largest producer, rose to 316 kb/d in August from 276 kb/d in July but was nevertheless down 83 kb/d on a year ago. Production from Pemex's priority fields increased by 38 kb/d in August to 109 kb/d, including some 30 kb/d of condensates from the Ixachi and Quesqui fields. Output at the Mulach field, that started up in March, climbed to 28 kb/d. Ixachi inched up to 15 kb/d while Tlacame rose to 11 kb/d. Including gas liquids, total Mexican production was 1.9 mb/d, 20 kb/d below year-ago levels.

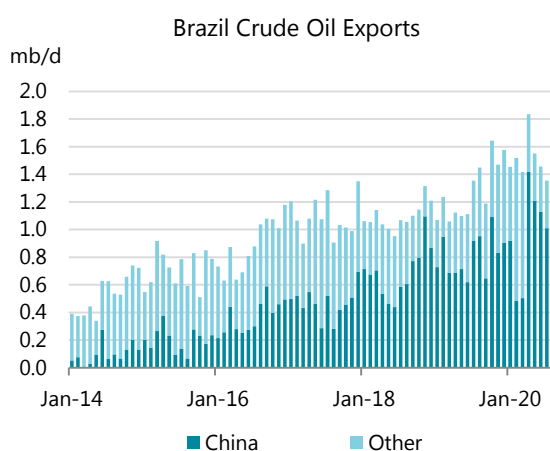
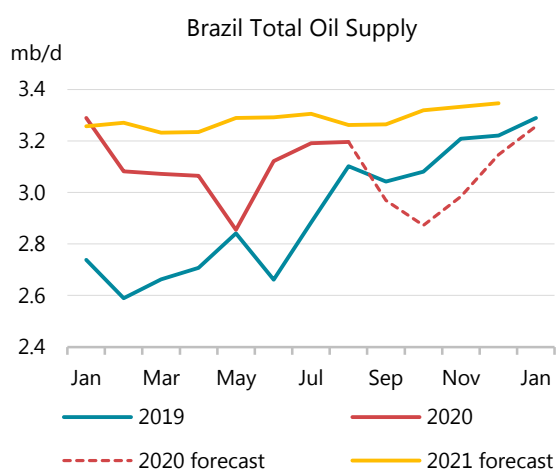
For its 2021 budget, Pemex was allocated Ps 544 bn (\$25.3m bn), an increase of 4% from 2020. The majority of the spend will be invested in exploration and production activities, including exploration of the Uchukil shallow-water acreage following on from last year's Quesqui discovery. Production in the Ixachi onshore, gas-rich field received the largest budget allocations for new projects. Mature fields including Cantarell and Ku-Maloob-Zaap will receive a combined Ps 69.6 bn.

Crude and condensate output is expected to rise further towards year-end as priority fields continue to ramp up. Steep declines at mature fields will nevertheless offset this, leaving total output relatively steady both in 2020 and 2021 at around 1.7 mb/d. As noted in last month's *Report*, in an updated draft federal budget published in early September, Pemex cut its 2021 production forecast from 2.03 mb/d to 1.86 mb/d. The 2024 forecast was cut from 2.6 mb/d to 2.28 mb/d.



Brazilian oil production held steady in August at around 3.2 mb/d, in line with our previous forecast. Output was 94 kb/d higher than a year ago, as pre-salt fields continued to perform strongly. In particular, the Buzios field produced more than 600 kb/d, up 265 kb/d y-o-y, while production at the recently commissioned Berbiagao and Atapu fields contributed 120 kb/d between them. In all, production from the Santos basin rose 300 kb/d y-o-y.

Supplies from the more mature Campos Basin, meanwhile, fell 175 kb/d y-o-y to 870 kb/d. The Equinor operated Peregrino field has been shut down since April due to operational issues with one of its gas turbines. Significant output declines were also reported for the Jubarte and Marlim fields.



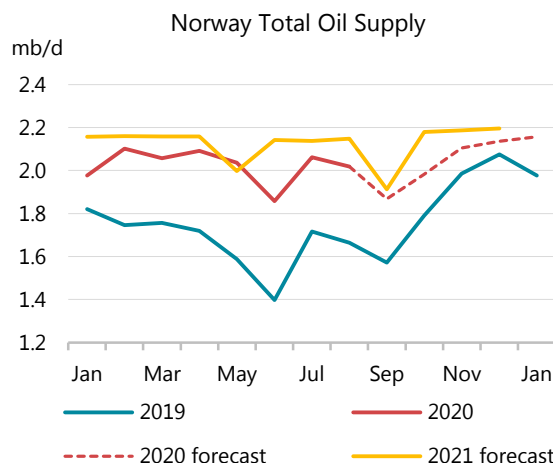
Source: Kpler

While no official data is yet available for September and October, production is estimated to have declined as maintenance ramped up at a number of fields. In its latest investor update, Petrobras said it planned eight "big stoppages" of 15 days or more for the September-November period. Petrobras said that the maintenance work, that was postponed from the first half of the year due to Covid-19, would result in lower production during 2H20 compared with the first half even as some of the work has already been concluded. Export data from *Kpler* show crude shipments from Brazil falling by 200 kb/d m-o-m in September to 1.2 mb/d.

Norwegian oil production is estimated to have fallen below its self-imposed production cap of 1.73 mb/d in September as maintenance cut output at the Johan Sverdrup, Troll and Alvheim fields. Loadings data show shipments from the Mongstad terminal that handles Sverdrup crude

dropped to 320 kb/d last month, from 490 kb/d in August and 570 kb/d in July. Troll shipments fell 40% m-o-m to 80 kb/d while Alvheim volumes slipped 30% to around 50 kb/d.

While initial loading programmes had anticipated a recovery in output in October, the increase was likely smaller than planned as a strike by oil workers forced some fields to shut. Six fields halted operations in early October. The fields, which included Gina Krog, Gjoa, Gudrun, Kvitebjorn, Vega and Valemon produced 110 kb/d of crude oil and 80 kb/d and NGLs in July. A significant amount of gas production was also affected. In addition to the six fields shut, another seven had been scheduled to close, including the Johan Sverdrup field from 14 October. On 10 October, Norwegian oil firms struck a deal with labour union officials, ending the 10-day strike that had threatened to shut down up to 25% of the country's oil and gas production. Following the wage deal, operations are expected to resume in coming days. Meanwhile, planned maintenance at the Gullfaks and Statfjord fields will also restrict output.



Under Norway's self-imposed production cut, any volumes not produced in any one month can be produced later, suggesting output could be above the 1.73 mb/d ceiling from October through December before the deal expires at the start of 2021. As such, we have slightly raised our forecast for the end of the year. Norwegian oil production is forecast to rise by 275 kb/d in 2020 and a further 115 kb/d in 2021 when output reaches 2.1 mb/d.

UK crude and condensate production inched up 20 kb/d in August to 955 kb/d, but from a downwardly revised July level. Output is estimated to have plunged by more than 100 kb/d in September, however, as maintenance capped flows. Tanker tracking data from *Kpler* show shipments to world markets falling by 200 kb/d m-o-m to a six month low of 750 kb/d, although this includes some Ekofisk volumes that are piped to and exported from the UK's Teesside terminal. The biggest decline came from Forties shipments, which dropped by 100 kb/d to a three-year low of 130 kb/d. Forties' largest field, Buzzard, produced 82 kb/d in July. Ineos revised September–December Buzzard production lower for a second consecutive month, with output set to average 84 kb/d, 3.5% lower than in the same period last year. UK production is expected to rise from October, supported by the start-up of BP's 20 kb/d Vorlich field and further increases from its Clair Ridge and Schiehallion fields.

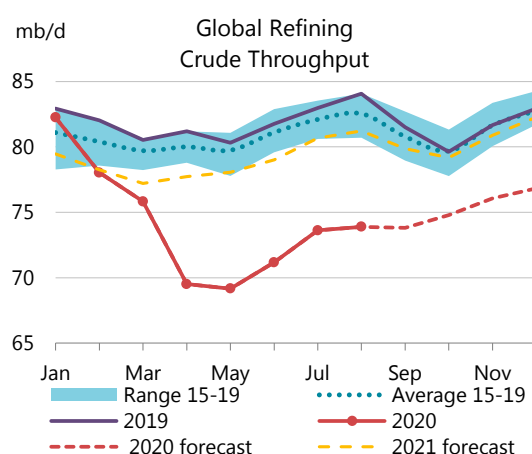
The outlook for **Chinese** crude oil production has been raised for the remainder of 2020 and 2021 following another month of strong output. In August, crude supply rose by 44 kb/d to 3.9 mb/d and was 110 kb/d higher than a year earlier. The increase stemmed mostly from the Shaanxi province which suffered a drop in output in July. Production could rise further in September after CNOOC brought on line its South China Sea Liuhua 16-2 field. The project is expected to reach peak production of around 70 kb/d in 2022. Even so, lower prices and investment cuts are expected to take their toll on output. After two years of gains, declines are expected to resume in 2021 with Chinese production forecast to decline by 60 kb/d on average.

Refining

Overview

Stronger than expected July data from several non-OECD countries resulted in a significant upward revision for the month, with global throughput up 2.4 mb/d from the June level. The recovery might have run out of steam in August and September with our estimates showing a flat trend. In 4Q20, throughput is forecast to increase by 2.1 mb/d quarter-on-quarter, following the trajectory of demand for premium refined fuels such as gasoline, diesel and kerosene. Nevertheless, runs will be almost 3 mb/d below the levels required to balance the product markets, leading to stock draws. For now, implied product stock draws in July-September have lagged those for crude, undermining their support for refinery margins.

In 2021, global refinery throughput is expected to rebound by 4.9 mb/d, only just above the two thirds of the 7.2 mb/d lost in 2020, erasing all the growth that has occurred since 2015. It is hard to overstate how bleak the outlook is for refiners in many regions with an underlying structural decline in demand. Not that the overcapacity problem is new; it has been in the making for several years. For many refineries that will have to be shut down, mothballed or converted into non-petroleum operations, Covid-19 will be an aggravating factor, but not the main cause of death.

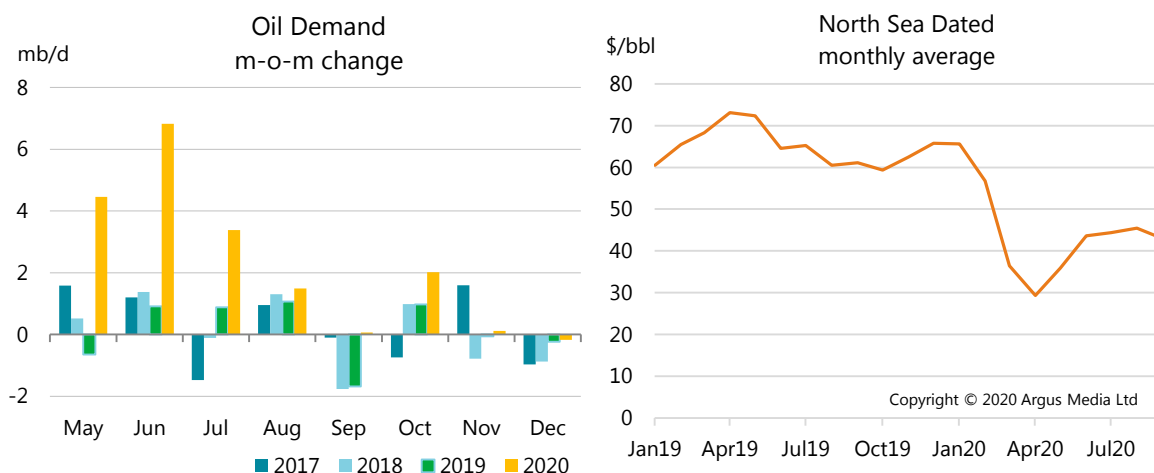


Global Refinery Crude Throughput ¹												
	2019	1Q20	2Q20	Aug 20	Sep 20	3Q20	Oct 20	Nov 20	Dec 20	4Q20	2020	2021
Americas	19.1	18.4	15.3	16.5	15.6	16.3	16.3	16.8	16.9	16.7	16.6	18.2
Europe	12.2	11.7	9.9	10.7	10.7	10.6	10.5	10.6	10.7	10.6	10.7	11.0
Asia Oceania	6.8	6.7	5.5	5.7	5.6	5.6	5.7	5.9	6.0	5.9	5.9	6.1
Total OECD	38.1	36.7	30.8	32.9	31.9	32.4	32.5	33.3	33.6	33.1	33.3	35.3
FSU	6.8	6.9	6.1	6.4	6.3	6.4	6.5	6.7	6.7	6.6	6.5	6.9
Non-OECD Europe	0.6	0.5	0.4	0.4	0.5	0.4	0.5	0.5	0.5	0.5	0.4	0.5
China	13.0	11.9	13.5	14.0	13.9	13.9	13.8	13.9	13.9	13.9	13.3	13.8
Other Asia	10.3	10.6	8.6	8.2	8.9	8.6	9.2	9.4	9.6	9.4	9.3	10.1
Latin America	3.2	3.1	2.6	3.2	3.2	3.1	3.2	3.2	3.2	3.2	3.0	3.3
Middle East	7.7	6.9	6.1	6.7	7.0	6.8	7.0	7.1	7.1	7.1	6.7	7.5
Africa	2.0	2.1	1.7	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.1
Total Non-OECD	43.6	41.9	39.1	40.9	41.8	41.3	42.2	42.7	43.1	42.7	41.2	44.1
Total	81.7	78.6	69.8	73.8	73.7	73.7	74.7	76.0	76.7	75.8	74.5	79.4
<i>Year-on-year change</i>	<i>-0.4</i>	<i>-3.1</i>	<i>-11.1</i>	<i>-10.2</i>	<i>-7.7</i>	<i>-9.1</i>	<i>-4.8</i>	<i>-5.6</i>	<i>-6.1</i>	<i>-5.5</i>	<i>-7.2</i>	<i>4.9</i>

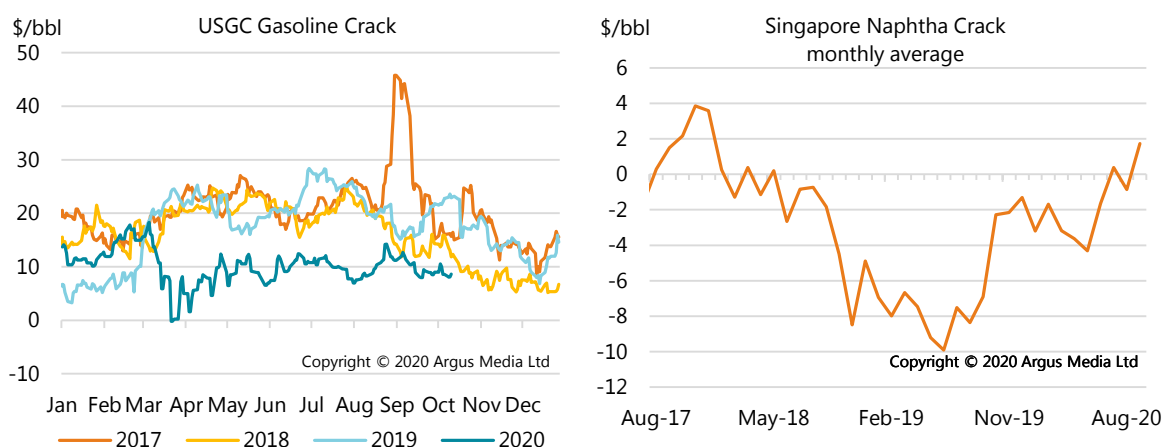
¹ Preliminary and estimated runs based on capacity, known outages, economic runcuts and global demand forecast

Product cracks and refinery margins

Our demand estimate for September suggests that the recovery came to an abrupt halt, affecting product prices and refinery economics. This is not yet a reason to question the sustainability of the demand recovery. In September, oil consumption resisted the seasonal inertia that typically sees large month-on-month (m-o-m) declines after the conclusion of the northern hemisphere summer season. In normal circumstances, maintenance outages, and occasional hurricanes, in September-October offer support to product cracks and refinery margins.



The fall in crude prices in September, the first since April, offered only episodic support to product cracks, indicating that weak product markets are still the driving force in oil pricing. If our 4Q20 demand forecast materialises, the demand recovery will halt again after a brief burst in October, under the weight of seasonal trends. This does not bode well for refinery margins, even as individual product cracks may benefit from localised mobility improvements and winter heating demand.



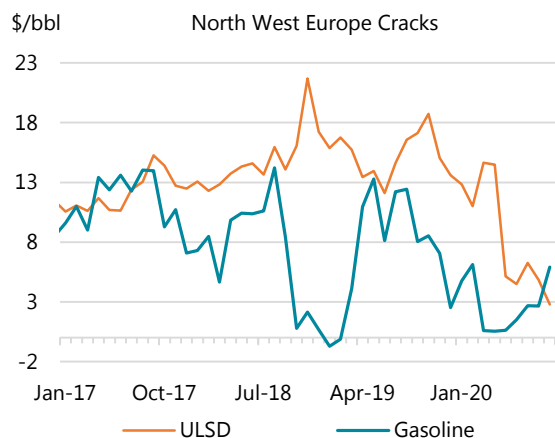
With the exception of the United States, light distillate cracks significantly improved in all regions. In the US, cracks remain at double-digits levels, well above other benchmarks, inherently limiting any significant upside. Despite a 20 mb draw in the last two months, US

gasoline stocks are comfortably above historical average levels. European gasoline cracks were supported by sluggish US refining activity with PADD 3 (US Gulf Coast) runs still affected by hurricane shutdowns.

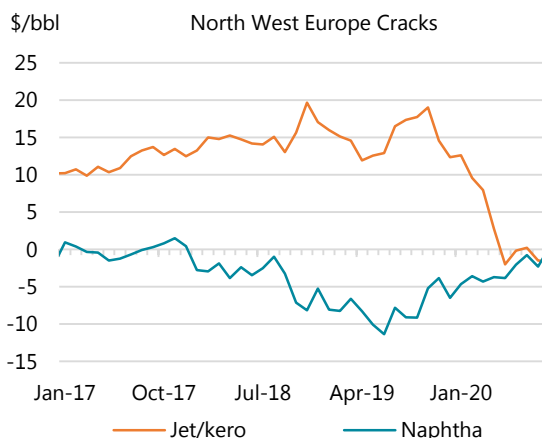
Spot Product Prices															
(monthly and weekly averages, \$/bbl)															
	Jul	Aug	Sep	Sep-Aug Chg	%	Week Ending						Jul	Aug	Sep	Chg
						11 Sep	18 Sep	25 Sep	02 Oct	09 Oct					
Rotterdam, Barges FOB											Differential to North Sea Dated				
Gasoline EBOB oxy	45.95	47.41	46.48	-0.93	-2.0	45.18	46.35	46.45	46.18	47.89	2.68	2.63	5.90	3.27	
Naphtha	42.51	42.42	40.78	-1.64	-3.9	38.61	40.69	41.28	41.40	43.80	-0.76	-2.36	0.20	2.55	
Jet/Kerosene	43.50	43.37	38.95	-4.42	-10.2	37.16	38.96	39.32	39.32	42.26	0.23	-1.41	-1.63	-0.22	
ULSD 10ppm	49.53	49.70	43.36	-6.34	-12.8	42.31	43.09	42.57	42.81	45.26	6.26	4.92	2.78	-2.14	
Gasoil 0.1%	47.76	48.12	42.19	-5.93	-12.3	40.87	42.03	41.57	41.96	44.35	4.50	3.34	1.61	-1.74	
VGO 2.0%	45.86	47.68	43.33	-4.35	-9.1	42.04	42.94	43.25	42.14	43.77	2.59	2.90	2.75	-0.16	
Fuel Oil 0.5%	46.72	48.07	45.32	-2.74	-5.7	43.45	45.14	45.29	45.87	47.48	3.46	3.29	4.74	1.45	
LSFO 1%	40.99	43.09	40.11	-2.99	-6.9	38.13	39.51	40.62	40.55	42.26	-2.28	-1.69	-0.48	1.21	
HSFO 3.5%	37.06	40.86	37.37	-3.50	-8.6	36.49	37.29	36.72	35.95	37.03	-6.21	-3.91	-3.22	0.70	
Mediterranean, FOB Cargoes											Differential to Urals				
Premium Unl 10 ppm	46.72	48.29	47.44	-0.85	-1.8	46.20	47.37	47.33	46.86	48.08	2.44	3.28	6.46	3.18	
Naphtha	41.56	41.49	39.21	-2.28	-5.5	36.62	38.92	40.00	40.55	43.15	-2.72	-3.52	-1.77	1.75	
Jet Aviation fuel	42.64	42.56	37.51	-5.04	-11.8	35.26	37.35	38.18	38.56	41.69	-1.64	-2.45	-3.47	-1.02	
ULSD 10ppm	49.73	49.58	43.14	-6.44	-13.0	41.25	42.90	42.92	43.41	45.72	5.45	4.57	2.16	-2.42	
Gasoil 0.1%	48.49	48.26	42.28	-5.98	-12.4	40.34	41.95	42.29	42.85	45.14	4.21	3.25	1.30	-1.95	
LSFO 1%	42.02	44.03	40.89	-3.13	-7.1	38.84	40.15	41.44	41.77	43.49	-2.25	-0.98	-0.09	0.89	
HSFO 3.5%	37.03	39.10	35.74	-3.36	-8.6	34.81	35.66	35.52	35.00	35.84	-7.25	-5.91	-5.25	0.66	
US Gulf, FOB Pipeline											Differential to WTI Houston				
Super Unleaded	51.99	53.59	51.53	-2.05	-3.8	49.36	49.85	0.00	0.00	0.00	10.26	10.39	11.12	0.73	
Unleaded	48.51	50.50	48.10	-2.40	-4.7	46.02	46.69	0.00	0.00	0.00	6.79	7.30	7.69	0.39	
Jet/Kerosene	45.65	46.86	42.52	-4.35	-9.3	41.24	42.51	41.26	42.18	45.00	3.92	3.67	2.10	-1.56	
ULSD 10ppm	50.07	50.06	45.57	-4.49	-9.0	44.00	45.58	44.93	45.20	47.63	8.34	6.86	5.15	-1.71	
Heating Oil	43.81	43.88	40.34	-3.54	-8.1	38.22	40.13	40.42	41.13	43.20	2.08	0.68	-0.08	-0.76	
No. 6 3%*	37.06	40.08	35.99	-4.10	-10.2	34.55	36.20	35.75	35.48	36.86	-4.66	-3.11	-4.43	-1.31	
Singapore, FOB Cargoes											Differential to Dubai				
Premium Unleaded	46.56	48.18	47.27	-0.91	-1.9	45.37	47.44	47.87	48.12	47.76	3.38	4.28	5.82	1.54	
Naphtha	43.60	43.08	43.19	0.10	0.2	42.07	43.01	43.28	42.72	43.64	0.41	-0.82	1.74	2.56	
Jet/Kerosene	43.92	43.28	39.37	-3.91	-9.0	37.15	38.79	40.10	40.53	42.20	0.74	-0.62	-2.08	-1.46	
Gasoil 0.001%	50.10	49.46	44.19	-5.27	-10.7	43.13	43.59	43.56	43.41	44.65	6.92	5.56	2.74	-2.82	
Fuel Oil 0.5%	49.55	50.68	47.79	-2.89	-5.7	45.50	47.52	48.09	48.76	49.80	6.37	6.78	6.34	-0.43	
HSFO 180 CST	39.36	42.20	39.61	-2.60	-6.2	38.01	39.11	39.40	39.22	39.60	-3.82	-1.70	-1.84	-0.14	
HSFO 380 CST 4%	39.06	41.26	38.59	-2.66	-6.5	37.3	38.3	38.1	37.8	38.0	-4.12	-2.64	-2.85	-0.21	

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* Waterborne



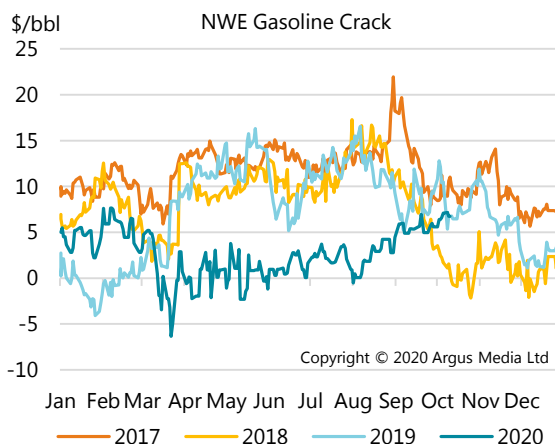
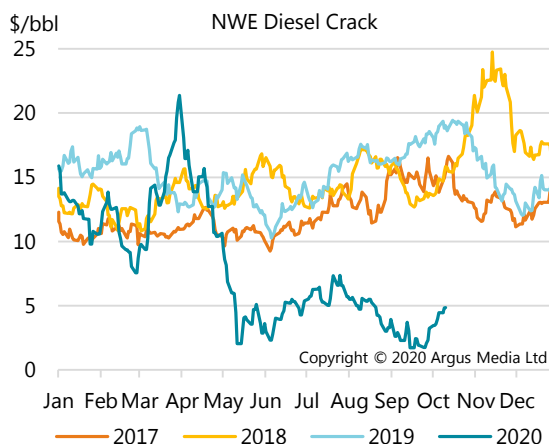
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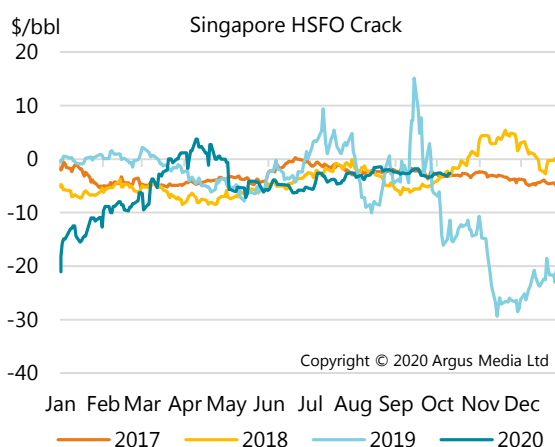
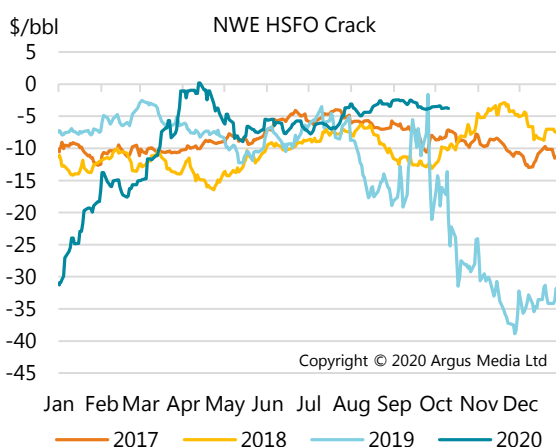
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In Singapore, weak refining output is supporting gasoline and naphtha cracks as East of Suez demand for these products has recovered faster than for middle distillates. Unlike the US or Europe, the product demand barrel East of Suez is more balanced, with light and middle distillates accounting for similar shares.

In September, the weakness in the middle distillates complex did not abate, but spread further from kerosene to diesel and gasoil. Diesel cracks in Europe and Singapore essentially halved from August, falling to the lowest levels ever recorded. For the first time since 2Q17, in both regions, gasoline cracks surged above diesel values. Correspondingly, naphtha cracks turned positive and overtook jet/kerosene prices.



In normal circumstances, the counter-seasonal strength of gasoline cracks would not be expected to last long, due to the switch to cheaper winter specification grades in Europe and the US. However, with demand for middle distillates in the doldrums, gasoline and naphtha will need to support refinery economics. It is less of an issue in the US and Asia, where refinery yields are either skewed towards light distillates or balanced, but it is a major issue in Europe where middle distillate yields are 1.5 times higher than light distillate yields. Diesel seems to be joining kerosene in pricing as an increasingly unwanted by-product, where support mostly comes from refinery run cuts.

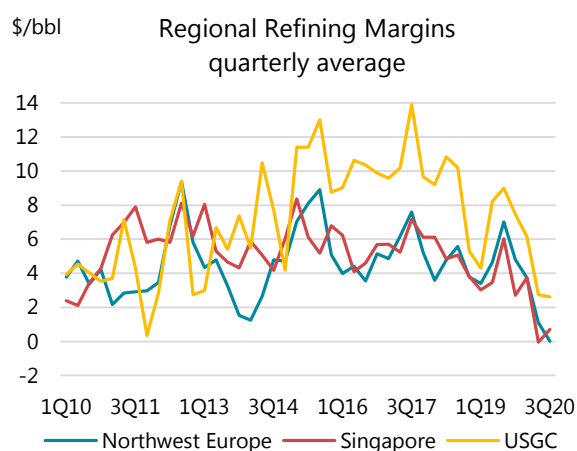
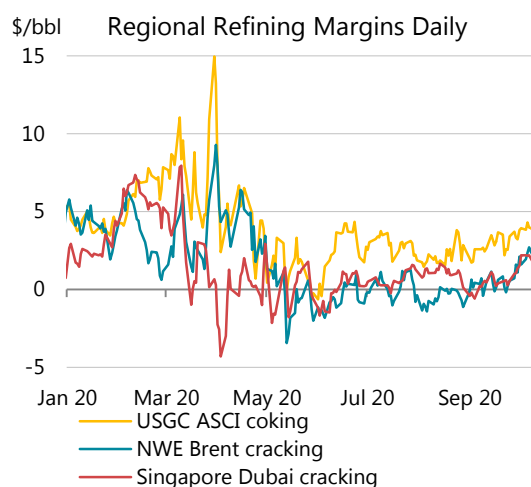


Fuel oil gains last month were more measured and seemed to be a technical consequence of lower crude oil prices. Singapore HSFO cracks were down slightly m-o-m, as the appetite for high sulphur bunker fuels waned in favour of lower sulphur grades.

IEA/KBC Global Indicator Refining Margins ¹											
	Monthly Average				Change	Average for week ending:					
	Jun 20	Jul 20	Aug 20	Sep 20	Sep-Aug	11 Sep	18 Sep	25 Sep	02 Oct	09 Oct	
NW Europe											
Brent (Cracking)	-0.58	0.18	-0.57	0.42	↑	0.99	0.22	0.42	0.30	1.42	2.32
Urals (Cracking)	-2.34	-0.58	0.13	0.52	↑	0.39	0.63	0.83	0.05	1.10	2.06
Brent (Hydroskimming)	-1.43	-0.81	-1.33	-0.52	↑	0.81	-0.82	-0.63	-0.54	0.56	1.37
Urals (Hydroskimming)	-4.38	-2.79	-1.42	-1.21	↑	0.21	-0.99	-0.87	-1.79	-0.95	-0.21
Mediterranean											
Es Sider (Cracking)	0.71	1.29	0.41	1.01	↑	0.60	0.58	1.06	1.03	2.05	2.85
Urals (Cracking)	-2.23	-0.38	-0.54	-0.28	↑	0.26	-0.49	-0.07	-0.38	0.70	1.67
Es Sider (Hydroskimming)	-0.17	0.30	-0.22	0.54	↑	0.76	0.02	0.45	0.67	1.74	2.44
Urals (Hydroskimming)	-4.61	-2.85	-2.55	-2.09	↑	0.46	-2.12	-1.88	-2.23	-1.30	-0.68
US Gulf Coast											
Mars (Cracking)	-0.17	0.48	0.36	0.90	↑	0.54	0.74	1.33	1.13	1.49	1.98
50/50 HLS/LLS (Coking)	4.81	5.09	4.61	5.21	↑	0.60	5.04	5.38	4.85	5.95	6.67
50/50 Maya/Mars (Coking)	2.59	2.53	1.54	2.34	↑	0.80	2.21	2.67	2.35	3.15	3.98
ASCI (Coking)	2.45	2.84	2.20	2.81	↑	0.61	2.58	3.24	2.84	3.59	3.97
US Midwest											
30/70 WCS/Bakken (Cracking)	8.09	7.99	7.24	6.13	↓	-1.11	6.31	6.33	6.08	7.61	5.40
Bakken (Cracking)	10.05	9.63	7.58	7.27	↓	-0.31	7.95	7.44	6.85	8.71	6.46
WTI (Coking)	9.14	9.16	7.65	6.47	↓	-1.18	7.47	6.74	6.04	7.50	5.56
30/70 WCS/Bakken (Coking)	9.94	9.41	8.17	7.29	↓	-0.88	7.56	7.40	7.16	8.93	6.62
Singapore											
Dubai (Hydroskimming)	-3.77	-2.61	-2.17	-2.58	↓	-0.41	-2.49	-2.36	-2.74	-2.05	-1.65
Tapis (Hydroskimming)	1.10	-0.63	-0.81	3.02	↑	3.83	2.49	2.86	3.26	4.46	4.29
Dubai (Hydrocracking)	0.01	0.65	1.06	0.42	↓	-0.64	0.36	0.63	0.49	1.41	2.06
Tapis (Hydrocracking)	1.62	-0.56	-1.24	2.59	↑	3.83	2.24	2.45	2.79	3.89	3.63

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)



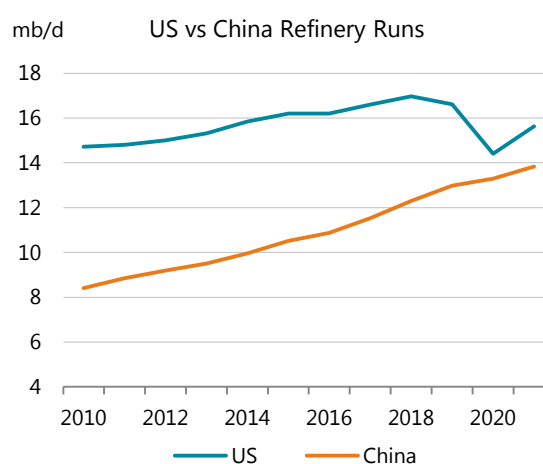
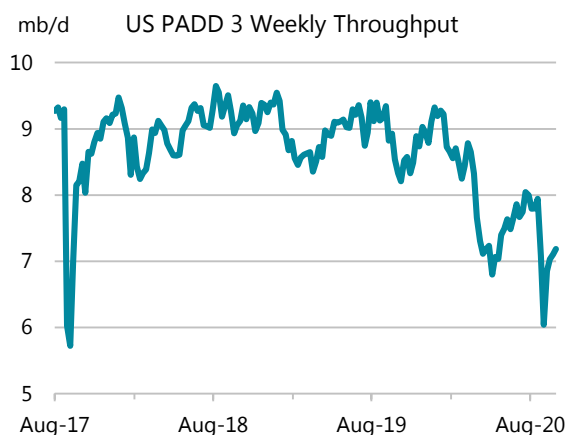
Refinery margins increased m-o-m in Europe, with Brent cracking margins turning positive again. US Gulf Coast margins were up on light distillate cracks and lower refinery fuel costs. US

Midwest margins declined for the fourth consecutive month, but they remain the highest among our regional indicators. PADD 2 refining activity has seen the most robust recovery, but margins have retreated from their double-digit levels due to the narrowing discounts of Canadian and local crude grades to WTI. In Singapore, Dubai-based margins fell on lower middle distillate cracks and stable high sulphur fuel oil prices.

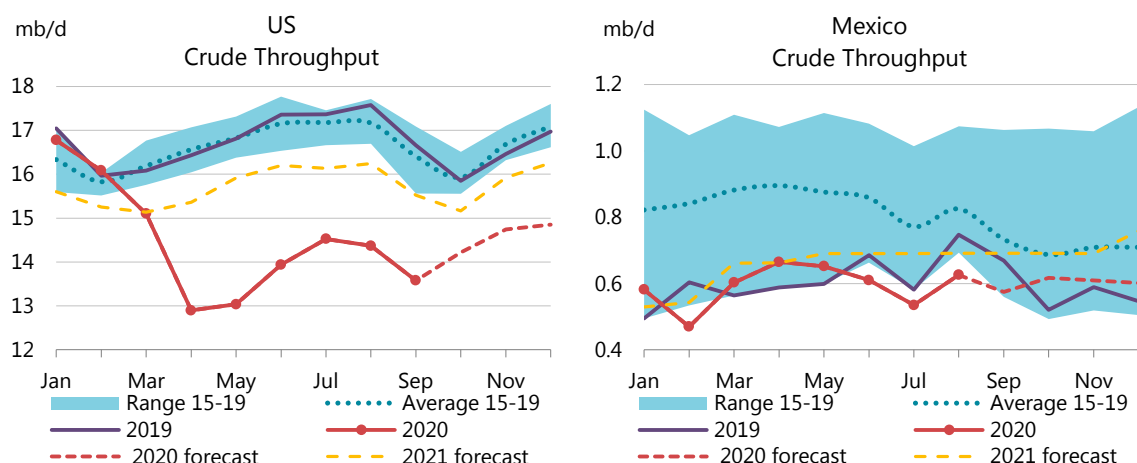
Nevertheless, Brent and Dubai cracking margins in 3Q20 fell to the lowest in the past decade, not far from the historical lows recorded earlier. Several refiners in Europe reported negative margin indicators in their 3Q20 quarterly earnings calls. US margins are relatively more robust thanks to more attractive local crude differentials and significantly higher yields of gasoline and lower diesel yields. But they too fell to their lowest quarterly average levels since 2011.

Regional refining outlook

US throughput in September fell 0.8 mb/d m-o-m as Hurricane Laura cut PADD 3 refining activity by 0.6 mb/d. A second hurricane, Delta, followed largely the path of Laura, with a landfall in Louisiana on 9 October. Several Port Arthur, Texas, refineries reportedly suffered structural damage from the winds. Lake Charles area refiners said the second hurricane would delay the restart of refineries shut previously. Otherwise, announced maintenance outages in October are relatively low in volume, supporting a higher throughput forecast compared to September. This forecast is also justified by the continued recovery in transport fuel demand, in contrast to the regular seasonal pattern.



US refining activity had a period of spectacular growth in 2010-18, albeit not as fast as China's, fuelled by the shale oil boom and growing markets in Mexico and Latin America. The trend reversed before the Covid-19-induced demand losses; indeed in 2019, runs fell 350 kb/d y-o-y. In the first nine months of 2020, throughputs have decreased by 2.3 mb/d y-o-y, although some improvement is expected in 4Q20. In 2021, only half of the lost volumes are forecast to be restored. US refining activity may never return to its record 2018 level. The largest independent refiner, Marathon, plans 2 050 job cuts, as it streamlines operations and after the previously announced closure of two refineries.



Mexican throughput was up 90 kb/d in August. The government said a coker will be installed at the 315 kb/d Tula refinery next year, at a cost of \$2.5 billion, along with repairs to the Cadereyta refinery's coker. **Canadian** throughput for both July and August was provisionally reported at 1.5 mb/d, up by 200 kb/d from June.

Refinery Crude Throughput and Utilisation in OECD Countries

(million barrels per day)

	Mar 20	Apr 20	May 20	Jun 20	Jul 20	Aug 20	Change from Jul 20	Aug 19	Utilisation rate ¹ Aug 20	Aug 19
US ²	15.00	12.80	12.94	13.84	14.43	14.27	-0.16	-3.20	75%	92%
Canada	1.62	1.36	1.39	1.31	1.52	1.53	0.01	-0.36	76%	94%
Chile	0.20	0.15	0.13	0.10	0.10	0.12	0.02	-0.09	53%	91%
Mexico	0.59	0.66	0.64	0.60	0.53	0.62	0.09	-0.12	37%	45%
OECD Americas³	17.41	14.96	15.10	15.85	16.57	16.54	-0.03	-3.77	72%	89%
France	0.48	0.50	0.55	0.69	0.77	0.71	-0.05	-0.42	58%	92%
Germany	1.65	1.55	1.74	1.73	1.74	1.72	-0.02	-0.09	85%	90%
Italy	1.12	1.00	0.97	1.00	1.09	1.21	0.12	-0.30	70%	87%
Netherlands	1.02	1.07	0.86	0.77	0.85	0.85	0.00	-0.31	66%	90%
Spain	1.21	1.06	1.07	0.99	1.02	1.08	0.06	-0.34	76%	100%
United Kingdom	1.02	0.83	0.83	0.78	0.87	0.84	-0.03	-0.27	66%	88%
Other OECD Europe	4.56	4.18	3.91	3.78	4.13	4.27	0.15	-0.41	82%	90%
OECD Europe	11.05	10.18	9.93	9.73	10.45	10.68	0.23	-2.14	74%	89%
Japan	2.84	2.57	2.07	2.06	2.11	2.33	0.22	-0.84	66%	89%
South Korea	2.85	2.63	2.63	2.69	2.67	2.67	-0.01	-0.26	76%	83%
Other Asia Oceania	0.80	0.70	0.61	0.63	0.57	0.68	0.10	-0.10	78%	90%
OECD Asia Oceania	6.49	5.91	5.31	5.37	5.36	5.68	0.32	-1.20	71%	86%
OECD Total	34.95	31.05	30.33	30.95	32.38	32.90	0.51	-7.11	73%	88%

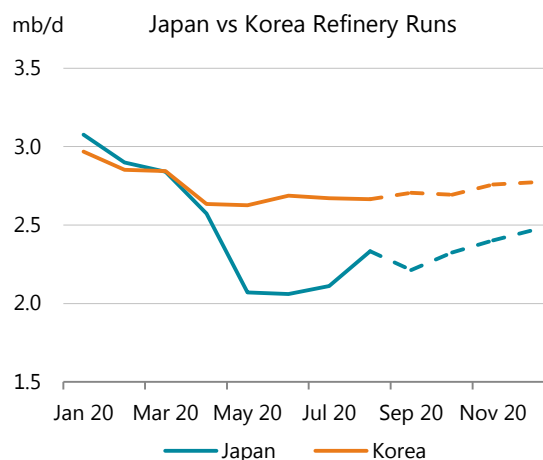
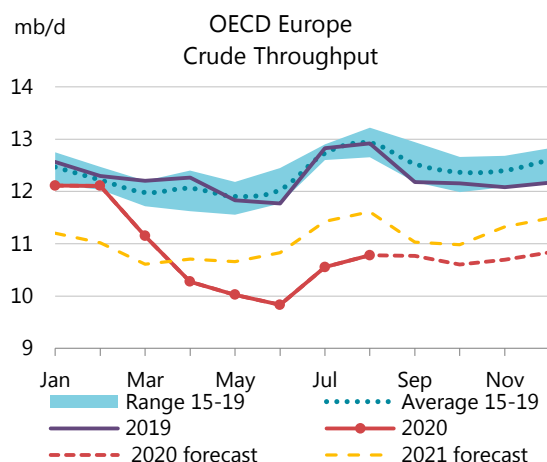
¹ Expressed as a percentage, based on crude throughput and current operable refining capacity

² US\$50

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

In Europe, August throughputs increased by another 0.2 mb/d and are likely to have remained flat in September. Strikes at two **French** refineries did not last long and will not have a major impact. In contrast, regional runs are expected to fall again in October on maintenance. **Spanish** refiner CEPSA mothballed a 100 kb/d crude distillation unit at the Huelva refinery due to low margins. Nordic refiners took turns to announce major changes in strategy to accommodate the new demand realities and decarbonisation challenges. **Finland's** Neste said it will eventually close refining operations at Naantali, the smaller of its domestic plants, and increase the share of renewables processing at Porvoo. The company is already a leading

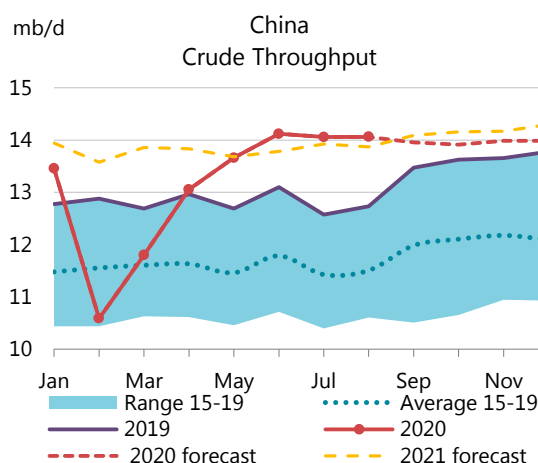
supplier of liquid renewable fuels. Neighbouring **Sweden's** Preem announced the scrapping of a hydrocracker project at their Lysekil refinery in favour of directing the investments into renewable fuel production at both its plants.



OECD Asia refiners registered their largest monthly gain in August, some 320 kb/d, mainly thanks to higher runs in **Japan**. **Korean** runs were relatively flat in the summer, but this was largely due to a smaller decline in activity since the start of the pandemic. Since May, Korean activity significantly surpassed Japanese levels, but the latter are expected to recover more by the end of the year as they ramp up runs to meet winter heating demand. The **Australian** government announced plans to support refining activity in the country, with details to be released later.

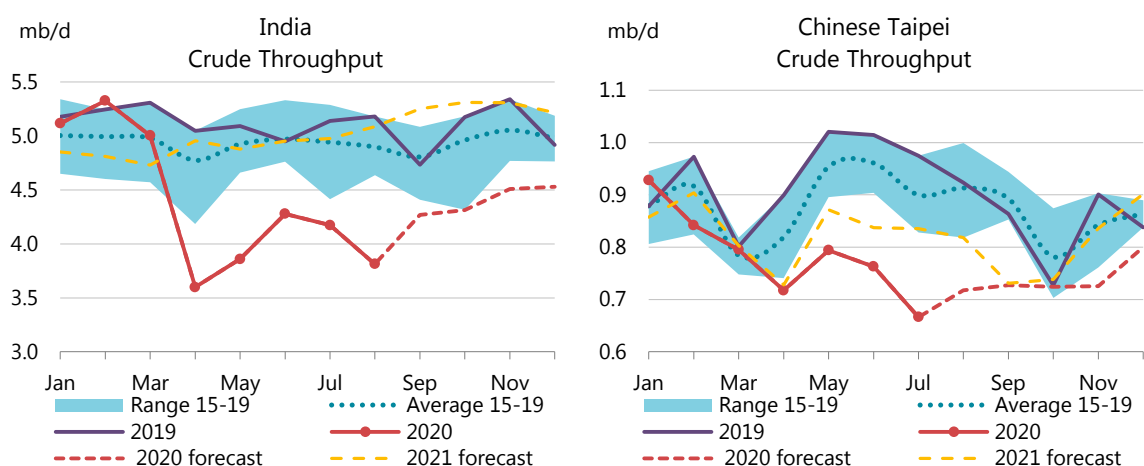
Chinese throughput in August was essentially unchanged at just under 14 mb/d, a touch below June's record level. As imports fell to 11.2 mb/d from June's record 12.9 mb/d, customs data reported an acceleration of imports in a product category called "diluted bitumen". The 450 kb/d and 380 kb/d imported in July and August, respectively were intended potentially as a secondary unit feedstock. Meanwhile, higher asphalt yields in recent months imply an increased use of heavier feedstocks.

However, with the vast majority of "diluted bitumen" imports coming from Malaysia, the exact nature of the product and its provenance is hard to establish. Malaysia does not report asphalt/bitumen production statistics, but the volumes seen in July and August are well above the capacity of its refineries. The country's statistics report bitumen exports to China in value terms, from which the implied volumes appear to be a tenth of what Chinese customs report as imports from Malaysia. There has been a hypothesis that some of these volumes could be heavy crudes with a high asphaltene content that allowed importing companies to avoid Chinese crude import quotas by presenting the cargoes as oil products. Malaysia is a major transshipment hub for both oil and products, but *Vortexa* data show that Malaysian liquid



outflows to China, including crude oil, clean and dirty products, were below the reported numbers for Chinese diluted bitumen imports from the country. It is indeed possible that some of these volumes could be crude oil, potentially sourced elsewhere, but we have not yet adjusted our crude imports and throughput numbers while we undertake further research.

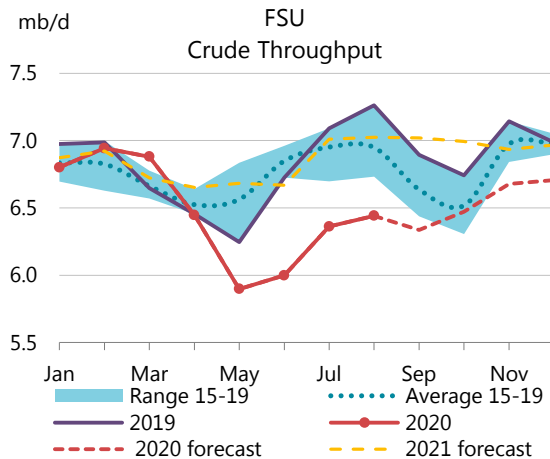
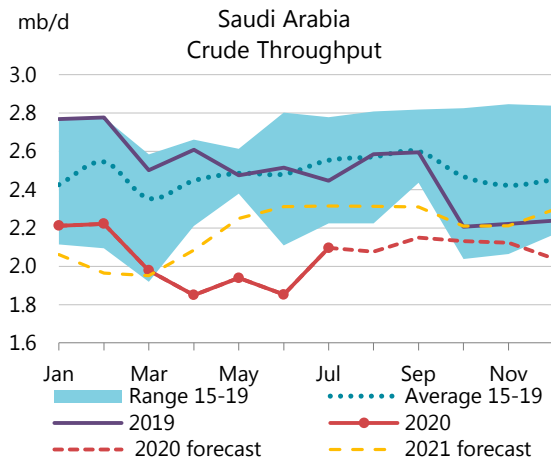
Indian refinery throughput fell for the second consecutive month in August, erasing all the gains made since May. The activity of private, export-oriented refiners was slightly up m-o-m, with state-owned refiners, catering for the domestic market, cutting runs by 0.4 mb/d. Demand for transport fuels also fell for the second consecutive month in August, after an initial rebound from April's lows. In September, state-owned refiners said they were ramping up runs to meet more robust domestic demand.



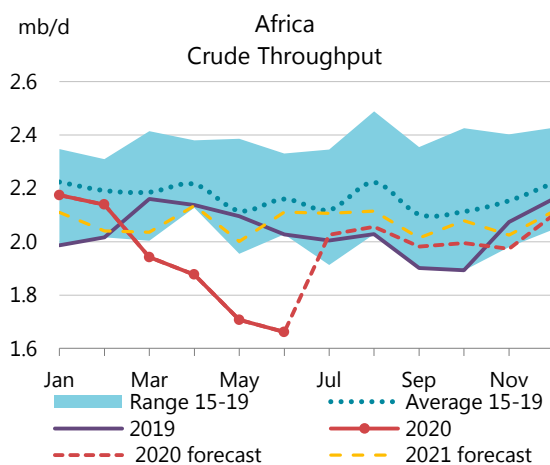
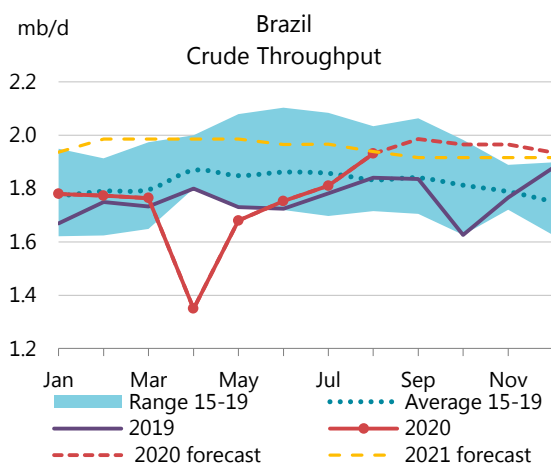
Elsewhere in Asia, refining activity remained subdued, with the exception of **Brunei**, where the 165 kb/d Hengyi refinery that started up late last year, is operating at close to capacity. **Chinese Taipei** throughputs in July were the lowest in nine years. In the **Philippines**, Petron, the owner of the country's sole remaining operating refinery, said it will consider closing the plant as it protests against feedstock import duties and fuel sales taxes. **Indonesia** revised up its May-June submissions to JODI by a substantial 200-300 kb/d. The national oil company Pertamina announced projects aimed at equipping two of its refineries to produce biofuels.

In the Middle East, runs in July saw the largest monthly gains since the start of the pandemic. In particular, **Saudi Arabian** throughput rose 240 kb/d m-o-m, crossing the 2 mb/d mark for the first time since February. Overall for the region, runs are back to March levels, which seems faster than elsewhere, especially when compared to developed economies. But this merely shows how low throughput levels already were in March, affected by exceptionally large maintenance that took place at several large refineries in the region.

In the Former Soviet Union, refinery throughputs are still below April levels. Only **Russia** has so far reported data for August, showing runs edging up 90 kb/d m-o-m. According to the preliminary data for September, the recovery stopped with maintenance kicking in. **Belarus** reported very strong runs in July, at 390 kb/d, reflecting the normalisation of Russian crude supplies that were disrupted earlier this year.



In Latin America, August runs were assessed just above March levels, confirming the recovery in refining activity. For a continent that saw throughputs declining every year since 2013, this is a remarkable development. However, it comes down almost entirely to better than expected performance in **Brazil**, where in August, refiners processed their highest volumes since 2016. Petrobras may also outperform its international refining peers if it succeeds with its refinery divestment programme. It received equivalent bids from Sinopec and a domestic alliance of two companies for its 210 kb/d Repar refinery and will hold a tie-breaking auction. **Ecuador** is also seeking bids for the country's largest refinery operatorship contract, due to be awarded in February.

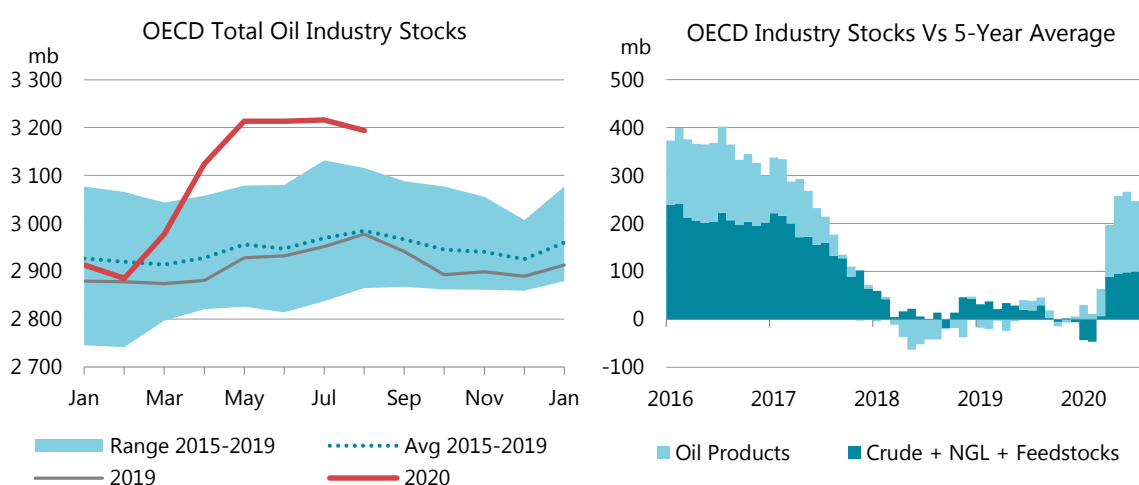


Our assessment of African refinery throughput based on reported July values for **Algeria**, **Angola** and **Egypt** and estimates for the rest of the continent show a strong 365 kb/d m-o-m gain. **South Africa**, for which we do not have refinery throughput data, is estimated to have raised runs in July after shutdowns in 2Q20. **Libya's** Zawya refinery, too, reportedly came back online in July after several months of shutdowns.

Stocks

Overview

In August, total OECD industry stocks fell by 22.1 mb (0.71 mb/d) month-on-month (m-o-m) to 3 194 mb, 209.1 mb above their five-year average. The draw was counter-seasonal and was the first fall after five consecutive monthly increases since February. In terms of forward demand, industry stocks covered 71.3 days, a decrease of one day m-o-m but 8.5 days above the five-year average.



OECD industry crude inventories drew in August in all three regions by a combined 25.1 mb to 1 200 mb. The OECD Americas region led the way with a fall of 18.4 mb, more than double the usual decrease. Europe and Asia Oceania also saw crude stocks fall by 5 mb and 1.7 mb, respectively, in line with the seasonal trend.

Oil product inventories built by 9.2 mb to 1 642 mb in August. Other oil stocks led with a 24.4 mb increase, notably in the Americas (20.4 mb). Middle distillate inventories also rose by 2 mb, but this was much less than the usual increase for the month (16.6 mb). By contrast, gasoline and fuel oil stocks fell by 13.8 mb and 3.4 mb, respectively.

Preliminary Industry Stock Change in August 2020 and Second Quarter 2020												
	August 2020 (preliminary)				August 2020 (preliminary)				Second 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	-18.4	-5.0	-1.7	-25.1	-0.6	-0.2	-0.1	-0.8	0.5	0.1	0.3	1.0
Gasoline	-14.5	0.3	0.5	-13.8	-0.5	0.0	0.0	-0.4	-0.1	0.0	0.0	-0.1
Middle Distillates	-3.7	0.5	5.2	2.0	-0.1	0.0	0.2	0.1	0.5	0.5	0.0	1.0
Residual Fuel Oil	-1.5	-0.2	-1.7	-3.4	0.0	0.0	-0.1	-0.1	0.1	0.0	0.0	0.1
Other Products	20.4	1.4	2.6	24.4	0.7	0.0	0.1	0.8	0.4	-0.1	0.1	0.4
Total Products	0.6	2.0	6.6	9.2	0.0	0.1	0.2	0.3	0.9	0.5	0.0	1.4
Other Oils ¹	-7.6	-1.7	3.1	-6.2	-0.2	-0.1	0.1	-0.2	0.1	0.1	0.0	0.2
Total Oil	-25.4	-4.7	8.0	-22.1	-0.8	-0.2	0.3	-0.7	1.5	0.7	0.4	2.6

¹ Other oils includes NGLs, feedstocks and other hydrocarbons.

In September, preliminary data show that crude stocks in the United States fell by 6.5 mb m-o-m, when they typically decrease by 0.7 mb. Total product stocks in the US increased by 2.8 mb, led by other products (mainly propane). European crude stocks rose by 3.3 mb, notably in the Scandinavian countries (3.7 mb). Total oil product stocks in Europe also built, by 3.1 mb. Japanese crude stocks fell by 1.8 mb m-o-m and product stocks built by 0.1 mb.

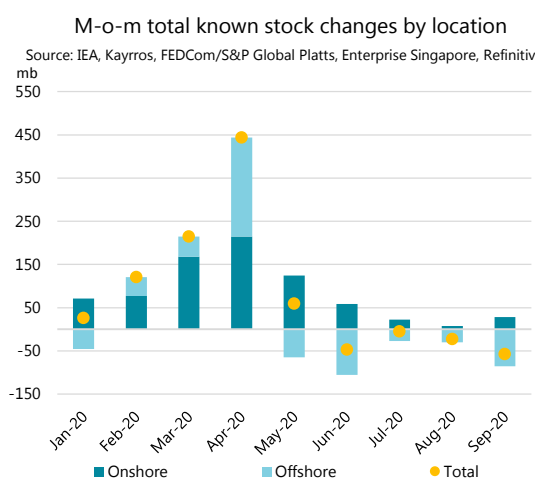
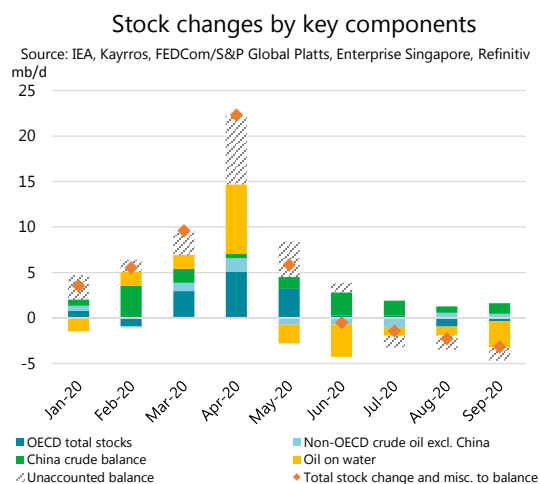
In this *Report*, we have made a preliminary 3Q20 estimate of crude and product stock changes and compared them to the IEA's implied oil balance. The estimate uses revised OECD data for July and available indicators for other regions and components.

Updated 1H20 and preliminary 3Q20 implied balance (mb/d, m-o-m)										
	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	1H20	Jul-20	Aug-20	Sep-20*
OECD industry crude oil, NGLs and feedstocks	-0.70	0.45	2.22	3.10	0.71	-0.32	0.91	-0.01	-1.01	-0.37
OECD industry product stocks	1.47	-1.42	0.75	1.80	2.17	0.32	0.87	0.10	0.30	0.20
OECD government stocks	0.03	0.07	-0.03	0.20	0.32	0.28	0.14	0.16	-0.24	-0.19
Non-OECD crude oil excl. China	0.54	-0.14	0.92	1.48	-0.72	-0.74	0.22	-1.07	0.57	0.46
Independent product stocks (Fujairah and Singapore)	0.28	0.14	0.00	0.12	0.25	-0.12	0.11	-0.10	-0.06	-0.11
Crude oil on water including floating storage	-1.22	1.00	0.80	6.04	-0.66	-2.94	0.49	-0.84	-1.28	-2.59
Products on water including floating storage	-0.25	0.50	0.70	1.61	-1.43	-0.58	0.08	-0.03	0.30	-0.27
Total known stock change excluding China (as above)	0.14	0.60	5.37	14.35	0.63	-4.10	2.83	-1.80	-1.42	-2.87
IEA estimate - Chinese crude balance	0.70	3.57	1.55	0.44	1.30	2.54	1.66	1.64	0.69	1.15
Total known and estimated stock change	0.83	4.17	6.92	14.80	1.93	-1.57	4.49	-0.16	-0.73	-1.71
Total stock change and misc. to balance**	3.52	5.51	9.60	22.32	5.84	-0.53	7.70	-1.43	-2.28	-3.20
Unaccounted balance	2.68	1.34	2.68	7.53	3.91	1.04	3.20	-1.27	-1.55	-1.49

* OECD stocks are extrapolated using data from Energy Information Administration, Euroilstock and Petroleum Association of Japan for September

** Assessed supply minus assessed demand from the IEA oil market balance.

Crude oil and products on water, including floating storage, rose by 88.6 mb (0.49 mb/d) in 1H20, according to tanker tracking data from *Refinitiv*. Since May, offshore stocks, which are a cost sensitive option for storage, have drawn. Preliminary data for 3Q20 showed that oil on water fell by 142.9 mb or -1.55 mb/d. As these stocks drew, the oil moved onland.



In 1H20, OECD industry crude stocks, including NGLs and feedstocks, rose by 165.4 mb (0.91 mb/d). The Americas saw the majority of the build, accounting for 125.7 mb, or 0.69 mb/d. In addition to this, the US government made a decision in April to allow access to its Strategic Petroleum Reserve (SPR) by private companies to temporarily store up to 23 mb of crude until March 2021. By mid-July, more than 20 mb of industry-owned crude oil was stored in the SPR. OECD industry product stocks built 158.6 mb (0.87 mb/d). Product stocks in the Americas and Europe rose by 69.6 mb (0.38 mb/d) and 85.4 mb (0.47 mb/d), respectively.

During 3Q20, OECD industry stocks of crude oil, NGLs and feedstocks fell by 42.8 mb (-0.46 mb/d) according to extrapolated data from the *Energy Information Administration*, *Euroilstock* and *Petroleum Association of Japan*. On the other hand, product stocks increased by 18.3 mb (0.2 mb/d) in the period.

For non-OECD economies, excluding China, crude oil inventories rose by 40.7 mb (0.22 mb/d) in the first half of 2020 according to satellite data from *Kayrros*. The implied crude stock balance in China in 1H20, as calculated by the IEA, was 302.6 mb (1.66 mb/d). Independent product stocks in Fujairah and Singapore rose by 9.5 mb and 10.9 mb, respectively.

Overall, taking these various data sources together, our assessment shows 4.49 mb/d of reported oil stock builds in 1H20. This accounts for more than half of the large “total stock change and miscellaneous to balance” figure of 7.70 mb/d for the same period (assessed supply minus assessed demand from the IEA oil market balance).

OECD stock data for July were revised down by 8.9 mb to 3 216 mb. The largest adjustment was for crude oil inventories in Europe that were reduced by 11.1 mb. Crude stocks in the Americas and Asia Oceania regions were revised up by 2.3 mb and 3.5 mb, respectively. Total product stocks in July were also revised down by 12.7 mb mainly due to changes in Europe. June figures were revised up by 1.9 mb overall.

Revisions versus September 2020 Oil Market Report								
(million barrels)								
	Americas		Europe		Asia Oceania		OECD	
	Jun-20	Jul-20	Jun-20	Jul-20	Jun-20	Jul-20	Jun-20	Jul-20
Crude Oil	-0.9	2.3	0.6	-11.1	0.0	3.5	-0.3	-5.3
Gasoline	-0.1	1.4	0.0	-3.0	0.0	-0.2	-0.1	-1.8
Middle Distillates	-1.3	1.0	0.0	-6.8	0.0	0.0	-1.4	-5.7
Residual Fuel Oil	-0.6	0.8	-0.2	-2.0	0.0	0.5	-0.8	-0.8
Other Products	0.0	-7.3	0.0	3.1	0.0	-0.2	0.0	-4.4
Total Products	-2.0	-4.1	-0.2	-8.7	0.0	0.1	-2.2	-12.7
Other Oils ¹	4.4	8.3	0.0	0.5	0.0	0.3	4.4	9.1
Total Oil	1.6	6.5	0.4	-19.3	0.0	3.9	1.9	-8.9

¹ Other oils includes NGLs, feedstocks and other hydrocarbons.

Recent OECD industry stock changes

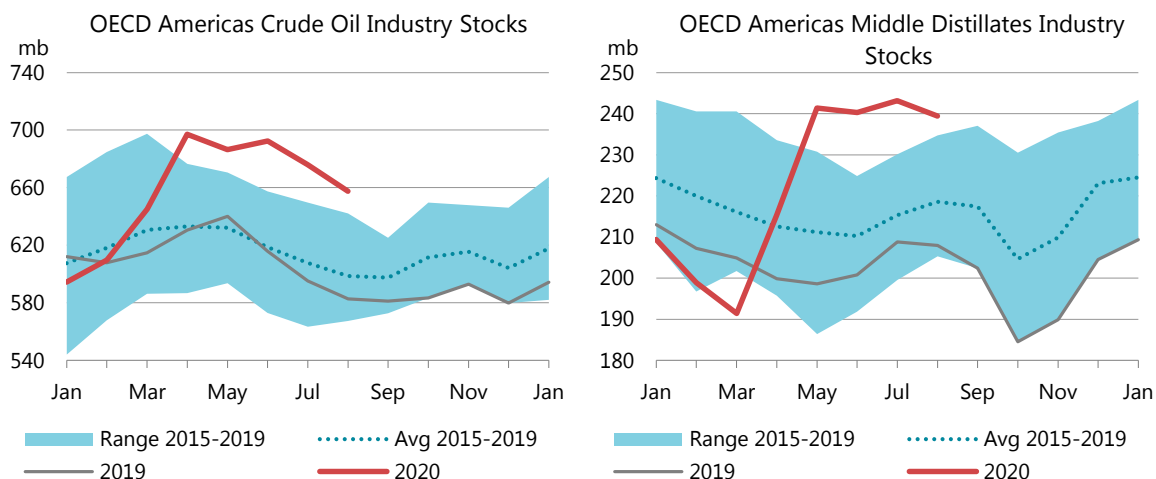
OECD Americas

Industry stocks in the OECD Americas region fell by 25.4 mb m-o-m in August to 1 685 mb, but remained 122.3 mb above the five-year average. The decrease was counter-seasonal for the month (usually they build by 6 mb) due to larger than usual crude stock draws.

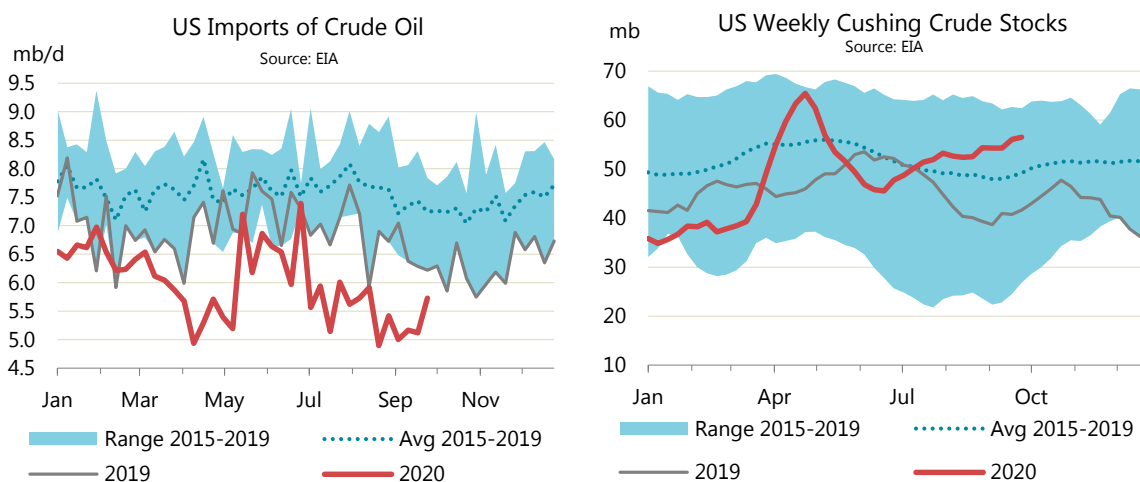
Crude oil inventories fell by 18.4 mb (0.59 mb/d) m-o-m and stood at 658 mb, 58.9 mb above the five-year average. The draw was larger than usual because of lower crude imports (-290 kb/d m-o-m in August to 5.6 mb/d) and a decline in offshore production due to Hurricane Laura.

Oil product stocks built by a modest 0.6 mb compared with the usual build of 10.7 mb owing to a large fall in gasoline stocks (-14.5 mb vs a five-year average decrease of 3.1 mb). Middle

distillate inventories fell counter-seasonally by 3.7 mb but they stood 20.8 mb above the five-year average. Fuel oil stocks also decreased by 1.5 mb. On the contrary, other product stocks (mainly propane) rose 20.4 mb, nearly double the usual increase for the month, offsetting the aforementioned draws.



Weekly data from the *US Energy Information Administration* showed that crude oil stocks fell 6.5 mb (0.22 mb/d) in September, partly due to a fall in imports of 385 kb/d m-o-m to 5.2 mb/d. PADD 3 led the fall with 6.9 mb. Crude stocks in Cushing, Oklahoma, built by 3.1 mb to 56.4 mb, representing a capacity utilisation rate of 71%.



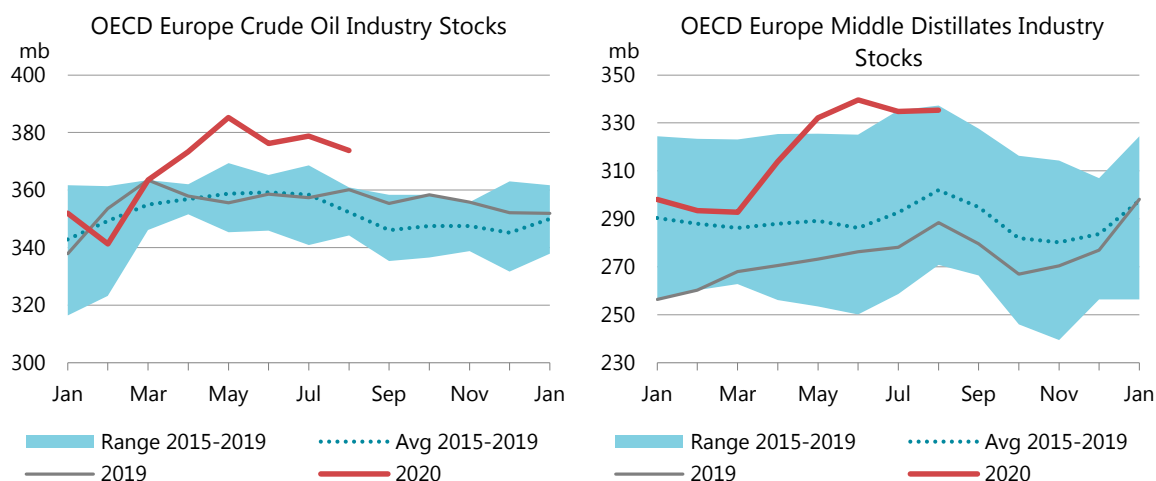
Stocks held in the US SPR fell by 5.7 mb m-o-m in September to 642.3 mb, utilising 90% of the 714 mb design capacity. In April, the *US Department of Energy* offered SPR storage capacity to the private sector. By mid-July more than 20 mb of industry-owned crude oil was stored in the SPR, taking the total volume held by the facility to 656.1 mb, representing about 92% of the capacity.

Total product stocks rose by 2.8 mb in September, led by a 16.4 mb build in "other oil" stocks (including propane). In contrast, gasoline and middle distillate inventories fell by 6.4 mb and 4.4 mb, respectively. Residual fuel oil stocks also drew by 2.7 mb.

OECD Europe

In August, industry stocks in OECD Europe drew by 4.7 mb to 1 085 mb, which was 92.8 mb above the five-year average. The decrease was counter-seasonal for the month due to lower than average product stock builds.

Crude oil inventories fell by 5 mb to 374 mb, in line with the seasonal trend, and were 21.5 mb above the five-year average. Crude stocks decreased by 2.3 mb in France and 2.1 mb in the UK while those in Germany and the Netherlands built by 3.7 mb and 3.5 mb, respectively.



Total oil product stocks built by 2 mb in August, versus a typical build of 10.4 mb. Middle distillate stocks rose by a modest 0.5 mb, less than the five-year average of 9.3 mb. Motor gasoline and other oil inventories also increased by 0.3 mb and 1.4 mb, respectively. Fuel oil inventories fell counter-seasonally by 0.2 mb.

Preliminary September data from *Euroilstock* showed overall inventories building by 6.4 mb. Crude oil stocks rose 3.3 mb, notably in Scandinavian countries (a combined 3.7 mb for Finland, Norway and Sweden) and Portugal (0.9 mb) while those in Germany fell by 1.5 mb. Total oil product stocks also built by 3.1 mb. Gasoline, middle distillates and naphtha stocks rose by 0.8 mb, 1.9 mb and 1.3 mb, respectively. Fuel oil inventories fell by 0.8 mb.

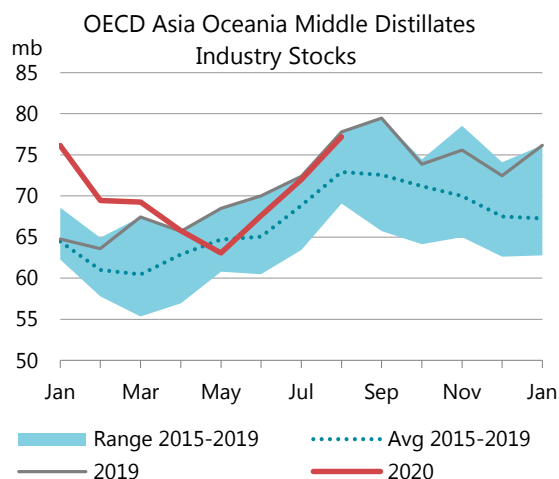
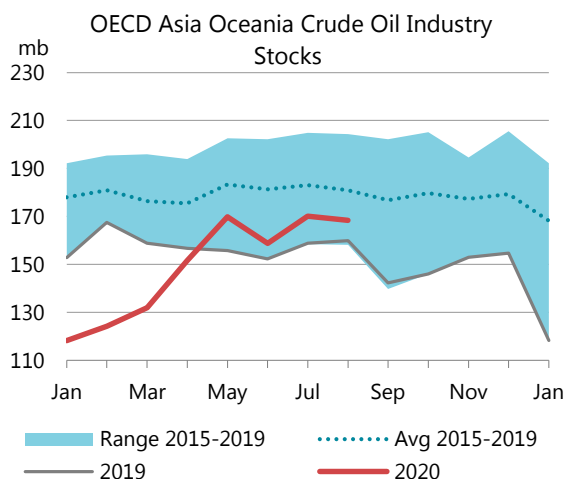
OECD Asia Oceania

Total industry stocks in the OECD Asia Oceania region built by 8 mb in August to 424 mb as an increase in product stocks offset a fall in crude inventories. Crude stocks fell by 1.7 mb in line with the normal seasonal pattern. Crude inventories in Korea decreased counter-seasonally by 3.5 mb. Japanese crude oil stocks, which typically draw by 2.5 mb for the month, built by 0.5 mb.

Oil product stocks in the region built by 6.6 mb in August. Middle distillate inventories rose by 5.2 mb. Gasoline stocks rose counter-seasonally by 0.5 mb. Other oil stocks built by 2.6 mb. In contrast, fuel oil inventories fell by 1.7 mb.

Preliminary data for September from the *Petroleum Association of Japan* showed crude oil inventories falling by 1.8 mb m-o-m, less than the five-year average decrease of 3.4 mb, partly

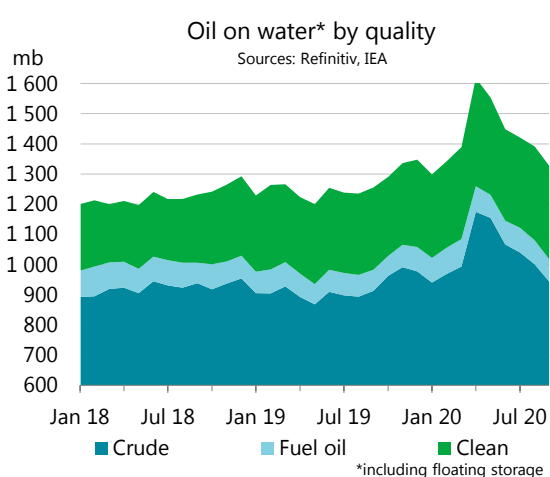
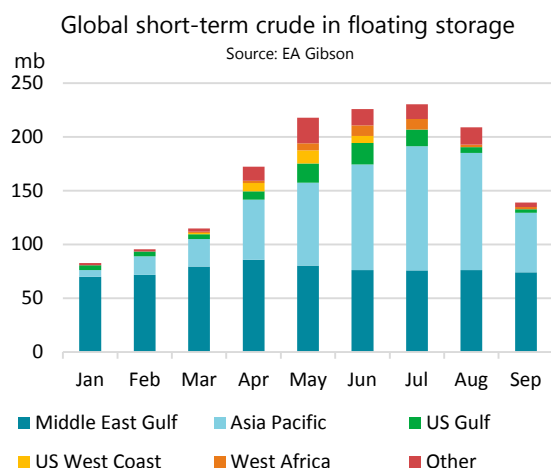
due to lower refinery runs (-120 kb/d m-o-m in September). Total product stocks were largely unchanged (+0.1 mb). Middle distillate inventories increased by 0.8 mb. Gasoline stocks also built by a modest 0.1 mb. Fuel oil and other product stocks, mainly naphtha, fell by 0.5 mb and 0.2 mb, respectively.



Other stock developments

In September, volumes of crude oil held in cost-sensitive floating storage fell sharply by 70 mb (2.33 mb/d) to 139.1 mb, according to data from *EA Gibson*. Crude oil stored in the Asia Pacific fell by a large 53.7 mb and stood at 55.3 mb. Floating storage in the Mediterranean decreased by 3.2 mb. In both North West Europe and the US Gulf, floating storage fell by 2.3 mb. Stocks in the Middle East Gulf also drew, by 2 mb to 74 mb.

Globally, 54 VLCCs and 19 Suezmaxes were used for floating storage at end-September. In Iran, 30 VLCCs and five Suezmax ships remained in use.

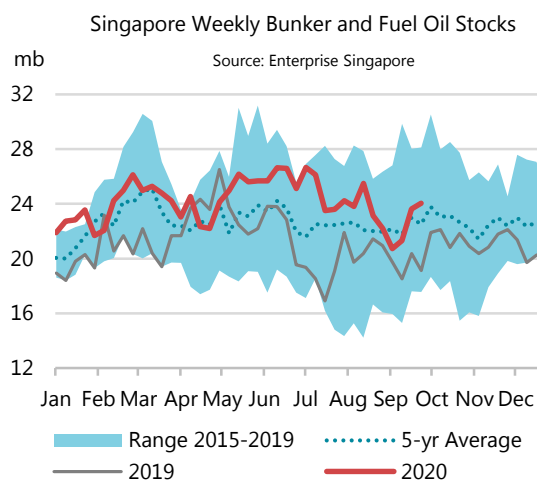
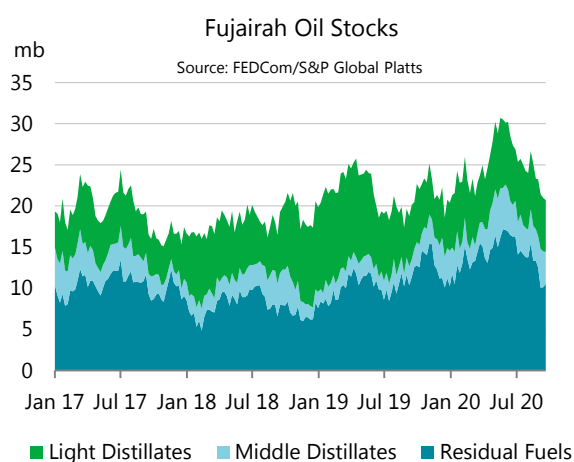


Volumes of oil on water (including floating storage), based on data from *Refinitiv*, fell by 30.2 mb (0.97 mb/d) in August. These decreases include 39.6 mb for crude oil and 1.7 mb for fuel oil. Clean product volumes on water rose by 11.2 mb. According to tanker tracking data from *Kpler*, seaborne crude oil exports from Iraq and the US fell by 8.1 mb and 6.1 mb, respectively. Nigeria and Norway also cut crude oil exports by more than 5 mb each in August. Preliminary

September data show a further 60 mb decrease in oil on water volumes due to lower crude exports from major producers, notably the UAE (-17 mb m-o-m in September according to *Kpler*).

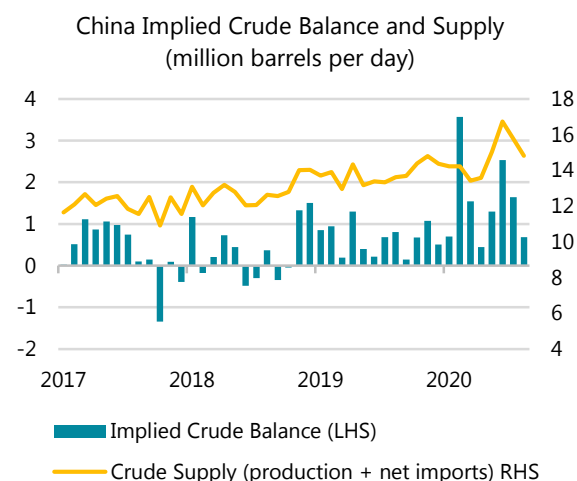
In Fujairah, stocks fell in September by 4.2 mb m-o-m to 20.9 mb, according to data from *FEDCom* and *S&P Global Platts*. End-month stocks fell to a nine-month low owing to a recovery seen in marine fuel demand and a seasonal increase for fuel oil use in power plants to meet air conditioning demand. Residual fuel stocks drew by 3.1 mb. Light distillate inventories also fell by 1.1 mb while middle distillate stocks were unchanged.

Inventories in Singapore, the world's largest bunkering hub, rose by 1 mb in September based on data from *Enterprise Singapore*. Total inventories stood at 52.9 mb. Builds in residual fuel stocks (+1.6 mb) offset draws in light (-0.3 mb) and middle distillates (-0.3 mb) inventories.



The Chinese implied crude balance increased by 21.3 mb (0.69 mb/d) in August, according to data derived from reported crude production, refinery runs and net crude imports. Refinery runs were largely unchanged at 13.9 mb/d. China's net crude imports fell by 0.9 mb/d, but remained high at 11.05 mb/d, pushing up the implied crude stocks number.

Total oil stocks in 18 non-OECD economies covered by the *JODI-Oil* database rose 3 mb m-o-m in July. Crude stocks in Angola increased by 3.9 mb. Romania and Chinese Taipei built by 0.9 mb each. On the contrary, crude stocks in Iraq fell by 4.1 mb. For oil products, they increased by a combined 1.4 mb, led by Thailand and Hong Kong China (1.2 mb each). Bahrain built its inventories by 0.7 mb, while Romania's stocks fell by 1.2 mb.

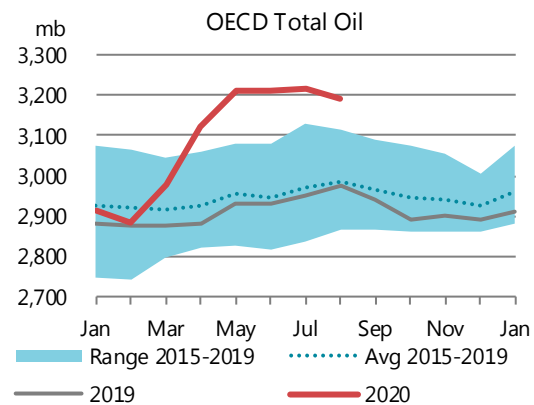
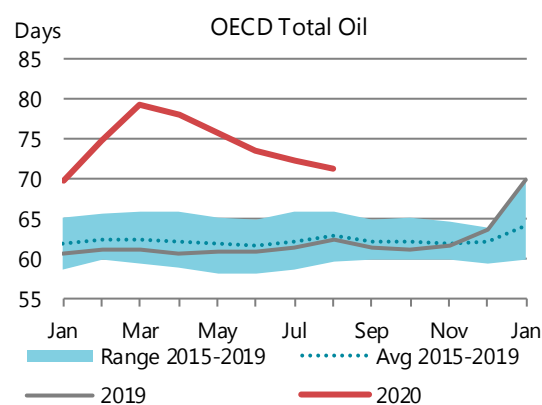
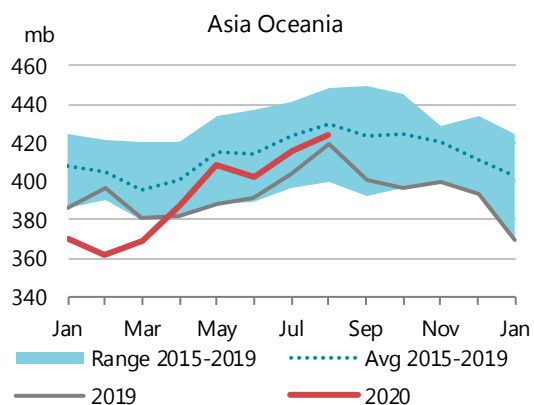
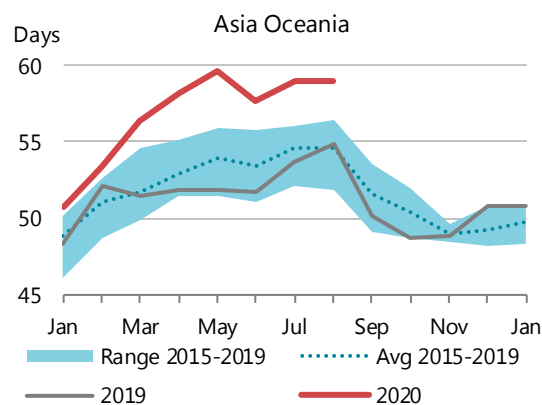
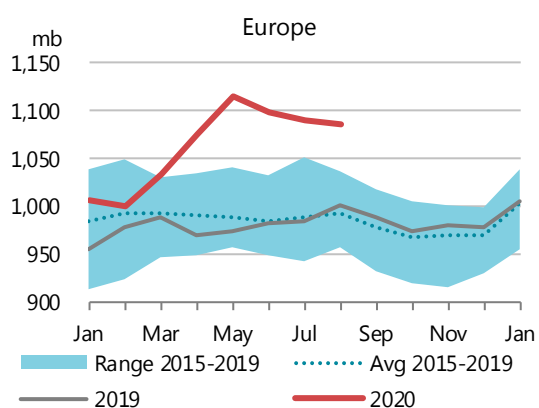
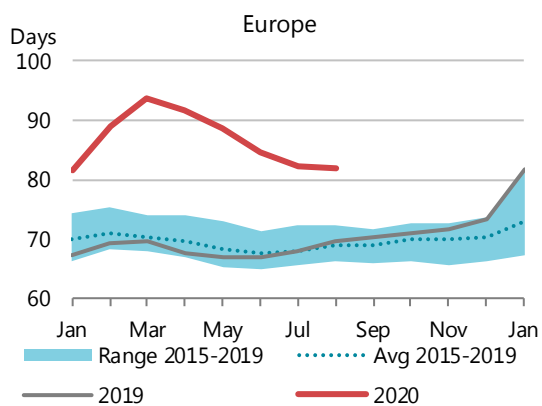
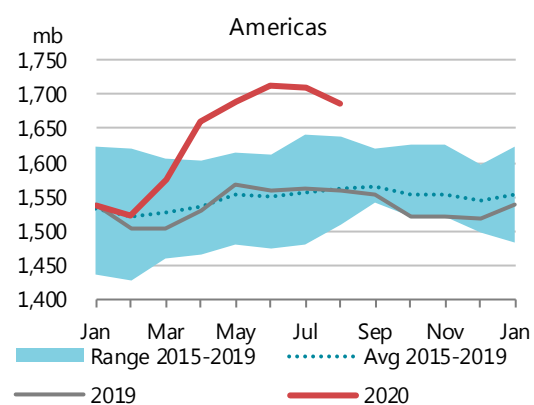
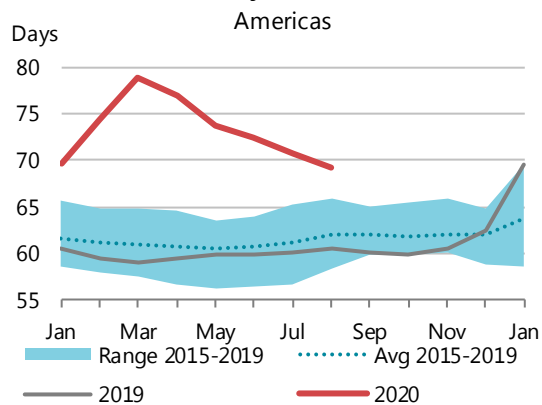


Regional OECD End-of-Month Industry Stocks

(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

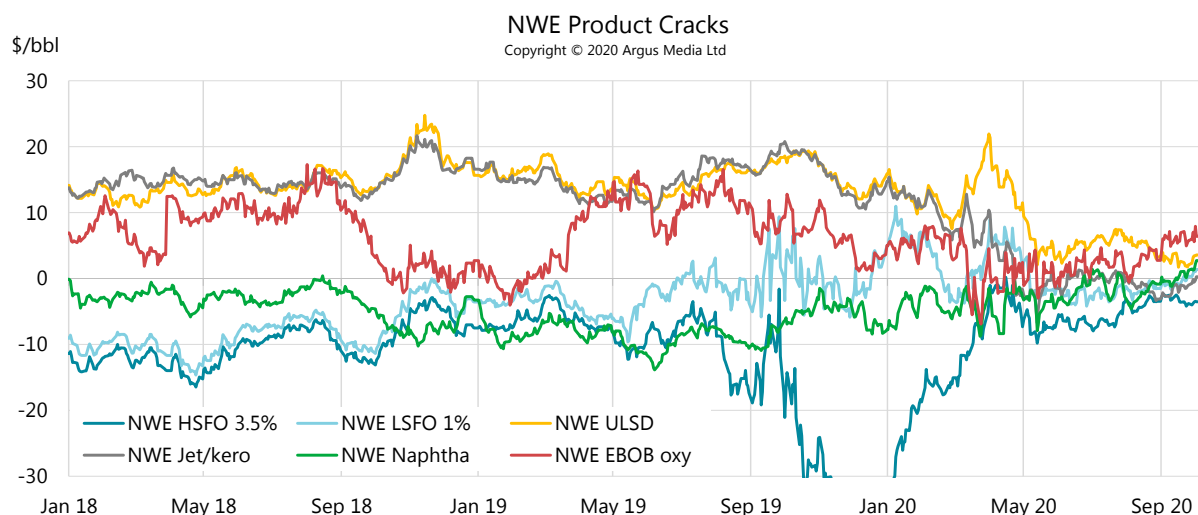
Crude futures fell on average in September versus August, reflecting a sharp sell-off into the first week of September after financial markets peaked around August 25th (ICE Brent -\$3.15/bbl and NYMEX WTI -\$2.76/bbl month-on-month (m-o-m) to \$41.87/bbl and \$39.63/bbl, respectively). The sell-off drove prices lower through the week of 7 September, after which they underwent an irregular rebound. This culminated in a sharp move higher in the first week of October when prices rose around 10% (ICE Brent +\$1.50/bbl and NYMEX WTI +\$1.15/bbl week-on-week to \$42.42/bbl and \$40.33/bbl, respectively). The early-October price surge reflects the anticipated impact of the Hurricane Delta that made landfall on the United States Gulf Coast near Louisiana late on Friday 9 October. By end-week some 1.7 mb/d of offshore US Gulf of Mexico crude production capacity was offline for security reasons, but in the event there appears to have been little damage. Despite looking toward a seasonal winter uptick in demand, the renewed surge in Covid-19 cases across many regions threatens to undermine the outlook while incremental supply gains (Libya, Venezuela, Russia, etc.) partly offset OPEC+ efforts to restrain crude supply.

Available data on crude stocks through end-September show a steady overall draw. However, as in the previous 4-5 months, this reflects offshore stocks coming onshore and preventing a significant draw in visible onshore stocks that tend to be a key driver of the crude price structure. Between 1 September and 9 October, the contango narrowed slightly for both NYMEX WTI and ICE Brent. The contango reflects this persistent onshore stock overhang. Using preliminary data for September, OECD commercial stocks of crude and products in days of cover remain over 10% above their 5-year average. While this might favour a deeper crude price contango, the forward price curve has been compressed versus prompt futures due to producer hedging programmes to protect future revenues (notably Mexico).

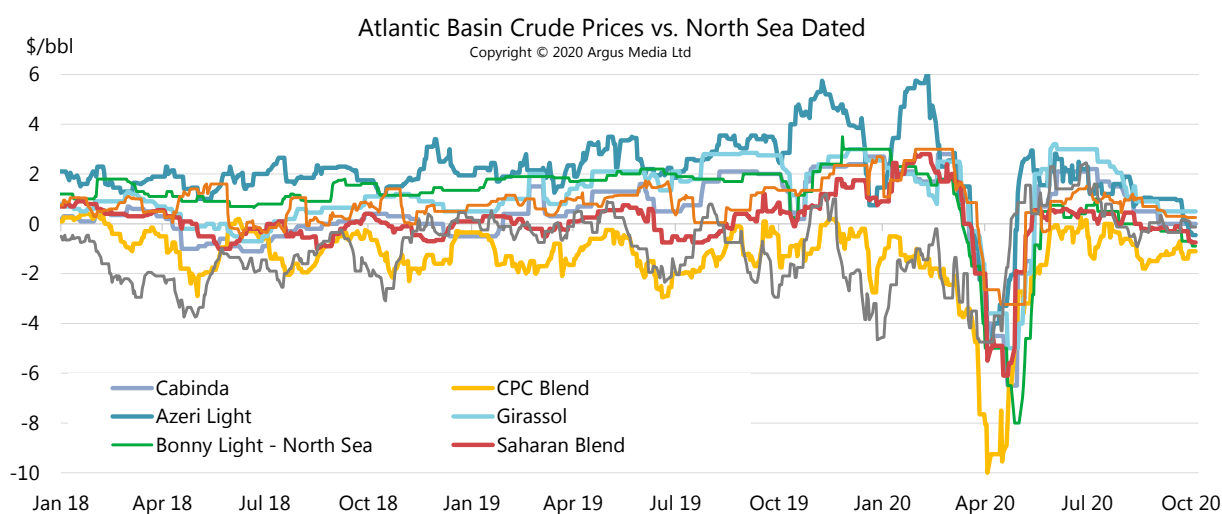
Since the global financial crisis, Chinese product prices have been fixed at a \$40/bbl crude price equivalent whenever crude prices fall below \$40/bbl (indexed to an average of Brent, WTI, and Dubai). This leads to substantial guaranteed refinery margins when the price falls below \$40/bbl, though the Chinese government requested in 2020 that state refiners pay the resulting surplus profits into a state fund. After prices fell below \$40/bbl (9 March) Chinese refiners dominated the crude market until their buying slowed as prices rose above this threshold (beginning of June).

Loading and exports typically come 10-60 days after transacting a crude sale and 30-45 days before deliveries and discharging. In China's case, they provide a good indication of the rapid reaction by China's refiners to the fall in prices (notably because arrival data has been spread of several weeks due to discharging delays in Chinese ports).

According to Kpler data, crude exports loaded for China surged in April and May to 13.8 mb/d (+4.8 mb/d or +53% vs. the 2019 average), but fell back in June to 11.3 mb/d. China-destined loadings continued to slide into July (-1.7 mb/d m-o-m), August (-1.5 mb/d) and September (-0.4 mb/d) and Kpler forecasts a continued slide in October (-0.9 mb/d). At 6.9 mb/d, Kpler's forecast loadings destined for China in October would be at the lowest level since August 2017 and just half the 13.8 mb/d of exports to China in April and May this year after prices collapsed.



The huge swings in Chinese crude buying highlight their important role in the current tenuous crude market balance. Rising crude prices in July and August (above \$40/bbl), along with a backlog of crude cargo discharging and a huge build in on-land crude stocks, have encouraged Chinese refiners to cut purchases until more favourable market conditions develop. Hence, the recent rise of supply to the market (particularly from Libya) will struggle to find buyers – notably with refinery maintenance in October and November - until lower prices attract more aggressive Chinese buying.

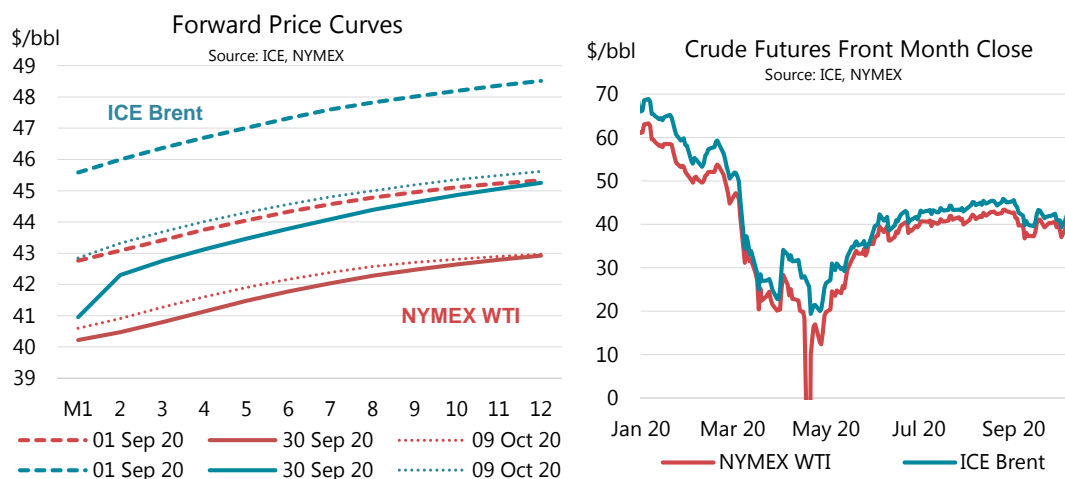


Available data on product stocks through end-September show that they have stagnated or increased slightly in recent months. Worldwide refinery output has more than kept pace with overall demand. The collapse in demand caused by Covid-19, combined with new refinery capacity coming on-stream in 2020, has left the market with a substantial capacity overhang. Product cracks reflect the cost of refining as well as scarcity premiums related to supplying the market. Oil product scarcity premiums have virtually disappeared for naphtha, jet, and gasoil leaving only the marginal production costs (roughly a few dollars for most straight-run products). On the other hand, gasoline has slightly higher cracks, reflecting the extra cost of conversion capacity operations and perhaps a modest recovery in its scarcity premium due to the pick-up in car use.

Crude's value in the physical market is set by the marginal buyer. This buyer, typically a simple refinery, generates value without conversion units. As a result, the exceptionally narrow range of cracks for naphtha, jet, gasoil and fuel oil has dragged today's crude price differentials into a very tight range as well.

Futures markets

After falling between 25 August and 8 September, prompt ICE Brent crude futures stagnated for a week around \$40/bbl before rebounding by \$3/bbl and finishing the month in a series of \$2/bbl swings that eventually pushed prices to a low of \$39.3/bbl on 2 October. They subsequently made a massive weekly increase to \$43/bbl. Prices rebounded following the 17 September Joint Market Monitoring Committee meeting when OPEC+ ministers called for greater discipline and evoked their new 3Cs mantra, "Cut, comply, and compensate." Prices fluctuated from 18 to 25 September on economic uncertainties and efforts to negotiate a new US fiscal stimulus package. In the week to 2 October, news that the US President had contracted Covid and a blockage on the fiscal stimulus package combined to undermine markets in general. However, prices rose in the week to 9 October on concerns over Hurricane Delta's impact on USGC crude production, the deepening Norwegian oil strike (which has now ended), and renewed efforts to agree a US fiscal stimulus package.



Monthly average prices for ICE Brent futures fell -\$3.15/bbl m-o-m in September to an average of \$41.87/bbl, but rebounded to \$45.42/bbl in the first week of October. Monthly average prices for NYMEX WTI 1st line futures fell \$2.76/bbl m-o-m in September to an average \$39.63/bbl and rose to \$40.33/bbl in the first full week of October.

Forward price curves for both NYMEX WTI and ICE Brent dropped from 1 September to 9 October, with slightly deeper declines at the back of the curve versus the front. Prompt contracts fell \$2.73/bbl for ICE Brent and \$2.16/bbl for NYMEX WTI while contracts for the 12th forward month fell \$2.90/bbl and \$2.36/bbl, respectively. The 12-month contango eased by \$0.2/bbl to \$2.37/bbl for NYMEX WTI and by \$0.64/bbl to \$2.30/bbl for ICE Brent. The contango hit its widest point in the second week of September.

The flattening price curve reflects producers hedging future revenues by selling barrels forward across the curve, pressuring prices at the back versus the front of the curve. This includes US producers that have revived drilling and fracking activity as well as the Mexican government's

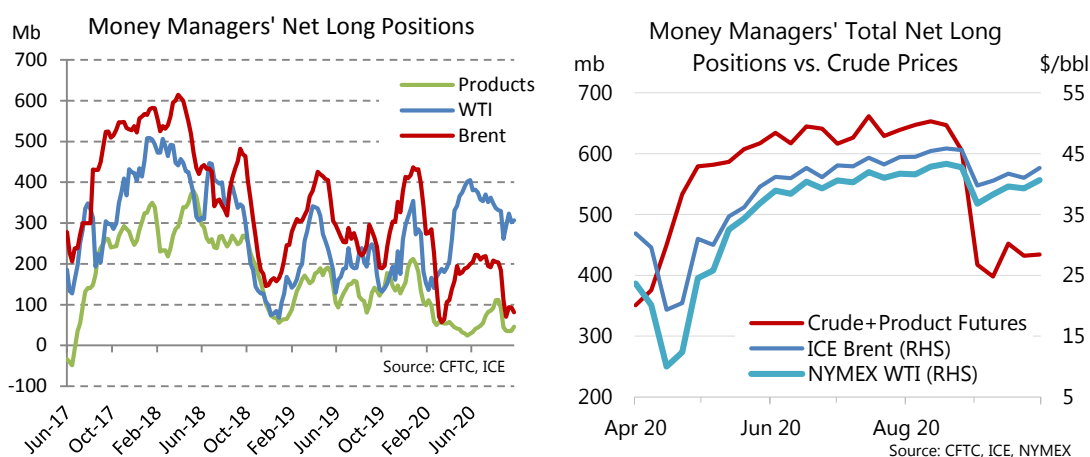
annual program to hedge crude export revenues. As of 9 October, WTI futures were below \$45/bbl through the next 5 years.

The prompt NYMEX WTI discount to ICE Brent narrowed in September by \$0.4/bbl m-o-m to -\$2.24/bbl on average. The discount widened through the second week of September before narrowing to -\$2.09/bbl in the first week of October. The narrow spread hampered the transatlantic arbitrage, favouring higher US crude exports to Asia in September.

The m-o-m decline of product futures in September outstripped that of crude futures, leading to a sharp narrowing of the product cracks. The prompt NYMEX RBOB crack fell -\$1.17/bbl to \$9.77/bbl, but rebounded to \$10.62/bbl in the first week of October, while that for NYMEX ULSD fell -\$1.97/bbl to \$7.71/bbl and ICE Gasoil cracks fell -\$2.68/bbl to just \$2.26/bbl. The cracks reflect the persistent product supply overhang, high product stocks, and uncertain demand perspectives.

Money managers cut their overall net long positions in crude and products over the month from 1 September to 6 October. Deep cuts through 15 September rapidly reduced net long positions, after which they mostly stagnated. The adjustments reflect both lower long positions and higher short positions as the oil demand recovery has slowed and crude supply has risen in the international market. While net long positions for Brent and oil products have fallen to some of the lowest levels of the past 4 years, WTI net positions remain at relatively high levels. The latter likely reflects a tighter overall US mid-continent crude market and drawdowns in regional crude stocks versus the much looser international crude market.

Outright long positions for money managers on Brent futures fell -23% m-o-m while short positions rose by over 43%. For WTI futures, outright long positions for money managers fell -5% m-o-m while short positions rose 4%. As a result, net long positions for Brent fell -56% m-o-m while those for WTI fell -7%.



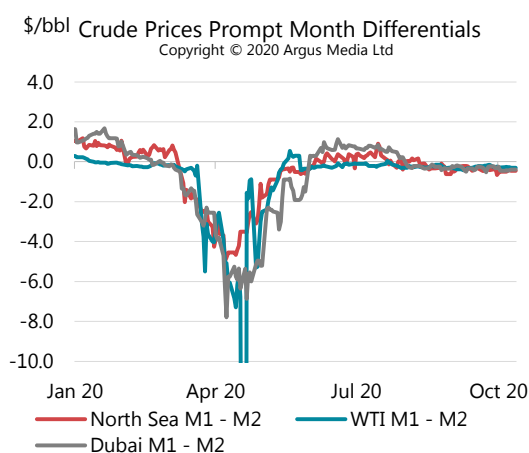
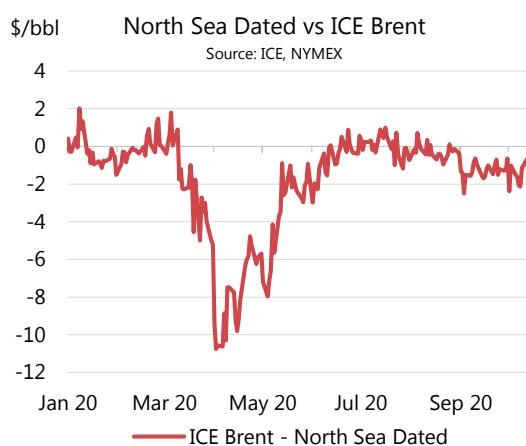
On outright positions for product futures, ICE gasoil longs fell -16% m-o-m while shorts rose 80% for a net impact of -85%. The weakness in ICE gasoil futures highlights the pessimism regarding the international gasoil balance and the overhang of kerosene supply. For NYMEX ULSD, longs rose 36% m-o-m but shorts rose 26% which narrowed the net short position by 1%. For NYMEX RBOB futures, longs fell -12% m-o-m while shorts rose 5% for an overall impact of -18% on net long positions. The recent flattening of the US mobility recovery and rising Covid cases in some regions have weakened perspectives in the gasoline market.

Prompt Month Oil Futures Prices											
(monthly and weekly averages, \$/bbl)											
	Jul	Aug	Sep	Sep-Aug Avg Chg	% Chg	Week Commencing:					
						31 Aug	07 Sep	14 Sep	21 Sep	28 Sep	05 Oct
NYMEX											
Light Sweet Crude Oil (WTI)	40.77	42.39	39.63	-2.76	-6.5	41.60	37.36	39.56	39.88	39.18	40.33
RBOB	52.66	53.33	49.40	-3.93	-7.4	51.11	46.35	49.52	49.83	49.77	50.95
ULSD	51.98	52.04	47.34	-4.70	-9.0	49.85	45.73	47.27	46.65	47.07	49.29
ULSD (\$/mmbtu)	9.17	9.18	8.35	-0.83	-9.0	8.79	8.06	8.34	8.23	8.30	8.69
Henry Hub Natural Gas (\$/mmbtu)	1.77	2.34	2.28	-0.06	-2.7	2.54	2.35	2.21	2.04	2.43	2.62
ICE											
Brent	43.22	45.02	41.87	-3.15	-7.0	44.40	40.49	41.76	41.76	40.92	42.42
Gasoil	49.60	49.96	44.13	-5.83	-11.7	47.06	42.85	44.15	43.38	43.41	45.46
Prompt Month Differentials											
NYMEX WTI - ICE Brent	-2.45	-2.63	-2.24	0.39		-2.80	-3.13	-2.20	-1.88	-1.74	-2.09
NYMEX ULSD - WTI	11.21	9.65	7.71	-1.94		8.25	8.37	7.71	6.77	7.89	8.96
NYMEX RBOB - WTI	11.89	10.94	9.77	-1.17		9.51	8.99	9.96	9.95	10.59	10.62
NYMEX 3-2-1 Crack (RBOB)	11.66	10.51	9.08	-1.43		9.09	8.79	9.21	8.89	9.69	10.06
NYMEX ULSD - Natural Gas (\$/mmbtu)	7.40	6.84	6.07	-0.77		6.25	5.71	6.13	6.19	5.87	6.07
ICE Gasoil - ICE Brent	6.38	4.94	2.26	-2.68		2.66	2.36	2.39	1.62	2.49	3.04

Source: ICE, NYMEX.

Spot crude oil prices

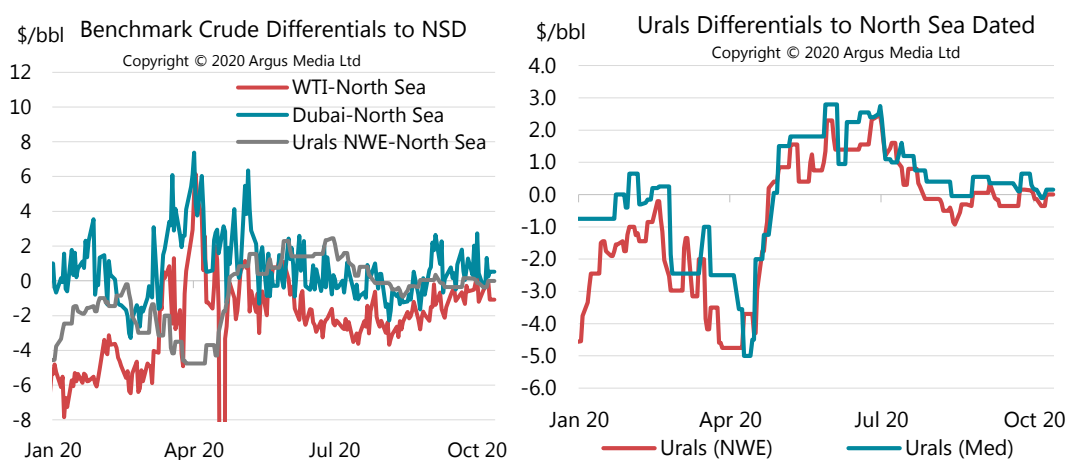
The North Sea Dated discount to ICE Brent deepened from -\$0.23/bbl in August to -\$1.29/bbl in September and to -\$1.58/bbl in the first 9 days of October. The deepening discount highlights the complex supply overhang in the international crude market: refiners are at the peak of their refinery maintenance activity; Chinese buyers are side-lined by ambiguous price incentives; Libya and other OPEC members such as Iraq and Venezuela are exporting incremental barrels; and onland crude storage remains saturated. Prices got a brief fillip from the threat of lost production in the week of 5 October (Norwegian oil workers' strike, Hurricane Delta in the USGC), but that has ended as quickly as it began.



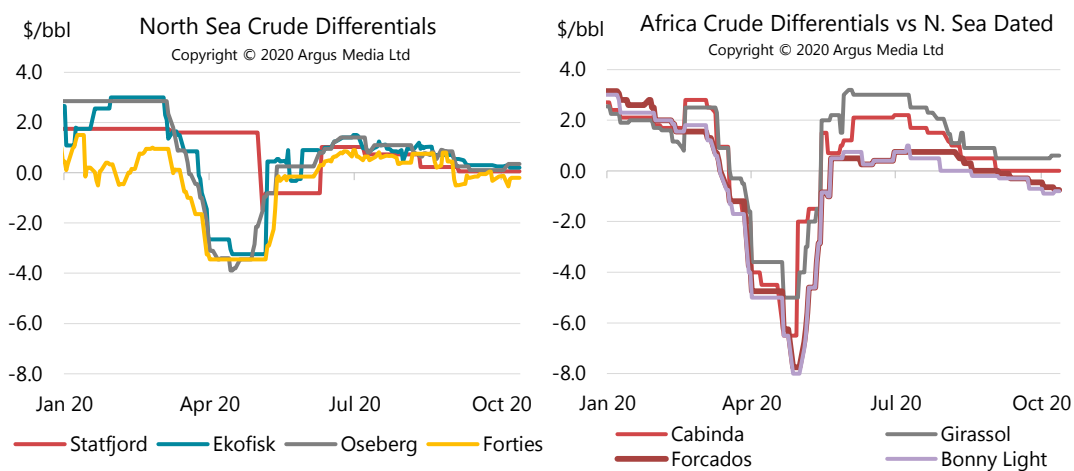
Average monthly North Sea Dated prices fell -\$4.20/bbl from \$44.78/bbl in August to \$40.58/bbl in September, hitting their weakest point at \$38.05/bbl on 14 September. Monthly average prompt Dubai prices fell from \$43.90/bbl in August to \$41.45/b in September (-\$2.45/bbl m-o-m) and to \$40.71/bbl in October. They flipped from a -\$0.88/bbl discount vs. North Sea Dated in August to a \$0.87/bbl premium reflecting strong sour crude markets and confirmation by the UAE that it will reduce its exports by 30% in October and 25% in November compared with term allocations. WTI at Cushing saw more support since August than North Sea Dated,

with monthly average prices only falling -\$2.76/bbl m-o-m to \$39.60/bbl on average in September, then rebounding to \$40.33/bbl in the first week of October. The WTI discount to North Sea Dated narrowed sharply from -\$1.58/bbl in August to -\$0.17/bbl in September, and flipped to a premium of \$0.20/bbl in October. Compared to the supply pressure in the North Sea market, the US midcontinent remains tighter following the recent decline in regional production.

Oversupplied markets continue to weight on the forward discounts of the physical marker grades (1st vs. 2nd month forward). Brent and Dubai swung from premiums in June and July to steadily increasing discounts. North Sea Dated spreads skidded to -\$0.15/bbl in August, -\$0.36/bbl in September, and -\$0.48/bbl in October to date, while Dubai flipped to -\$0.28/bbl in August, -\$0.32/bbl in September and -\$0.41/bbl in October. WTI is the least discounted in October at -\$0.28/bbl, as the midcontinent market balance looks possibly tighter.



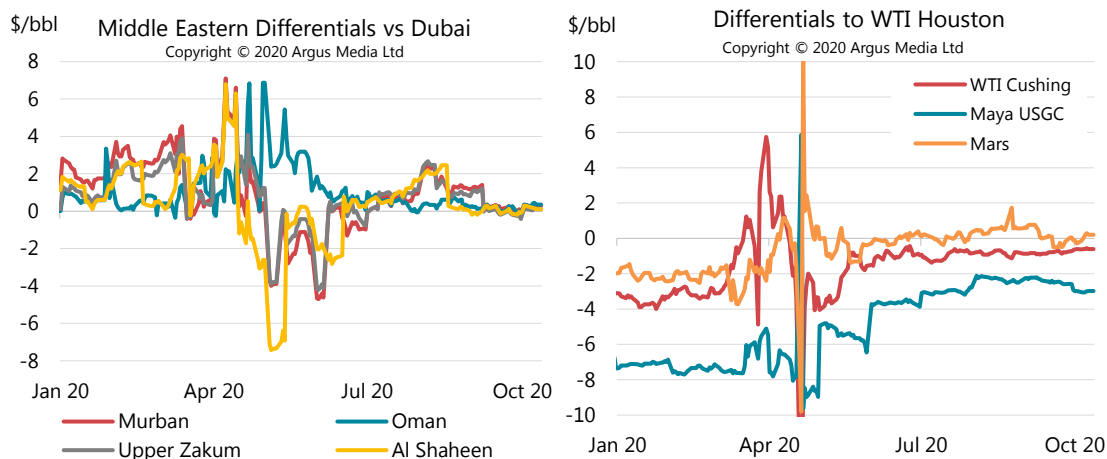
As already discussed in the opening paragraphs to this section the crude price differentials for sweet and sour crudes alike have converged in an increasingly narrow range in recent weeks for reasons related to the overhang of crude and products in the market. Urals crude price discounts to North Sea Dated in North West Europe remained in a tight range, narrowing by -\$0.23/bbl m-o-m to -\$0.08/bbl in September, with a slight premium at end-month.



September saw a continued weakening of sweet crude price differentials versus North Sea Dated for both the North Sea and West Africa regions, again reflecting the trends already described above.

In the North Sea, Forties fell $-\$0.83/\text{bbl}$ m-o-m and flipped to a discount of $-\$0.20/\text{bbl}$ in September. Statfjord fell $-\$0.30/\text{bbl}$ to $\$0.08/\text{bbl}$, Ekofisk premiums fell $-\$0.53/\text{bbl}$ to $\$0.35/\text{bbl}$, and Oseberg premiums fell $-\$0.65/\text{bbl}$ to $\$0.17/\text{bbl}$. The more gasoil-rich crudes suffered the bigger declines.

West African differentials fell in September. Forcados flipped to a discount of $-\$0.25/\text{bbl}$ versus North Sea Dated after falling $-\$0.56/\text{bbl}$ m-o-m. Qua Ibo, Brass River and Bonny Light discounts widened by around $\$0.35/\text{bbl}$ to $-\$0.46/\text{bbl}$, $-\$0.58/\text{bbl}$, $-\$0.40/\text{bbl}$, respectively. Discounts for Nigerian sweet grades deepened as the month progressed to clear unsold cargoes (at the end of the first decade of September around 25% the month's loading program remained unsold). Premiums for Angolan grades, Girassol and Cabinda, suffered sharper declines, falling $-\$0.54/\text{bbl}$ and $-\$0.64/\text{bbl}$, respectively, to $\$0.52/\text{bbl}$ and $\$0.02/\text{bbl}$. After falling throughout August differentials were relatively flat, as Angola reduced its loading program to respect its OPEC+ quota.



Like other grades, Middle East crude price differentials show a remarkable convergence toward the marker grade, Dubai. After moving higher in July and August, differentials versus Dubai for Murban, Upper Zakum, and Qatari Al Shaheen fell sharply in September ($-\$1.13/\text{bbl}$ to $\$0.43/\text{bbl}$, $-\$1.24/\text{bbl}$ to $\$0.20/\text{bbl}$, and $-\$1.15/\text{bbl}$ to 2 cts/bbl, respectively). Differentials collapsed as crude demand remains weak. Barrels sold in September are for cargoes loading in October or November.

Mars differentials to WTI at Houston fell sharply by $-\$0.49/\text{bbl}$ m-o-m to $\$0.09/\text{bbl}$ in September; prices flipped to discounts in September before rebounding to a premium again in early October. The USGC region remains undersupplied in sour crude like Mars, notably via imports. This has sustained the value of Mars as well as Maya and WCS at robust levels versus WTI at Houston. The geographic differentials between WTI at Cushing (delivery point for the NYMEX WTI contract) and its valuation in Houston remains quite stable (reflecting unconstrained pipeline capacity).

Spot Crude Oil Prices and Differentials											
(monthly and weekly averages, \$/bbl)											
	Jul	Aug	Sep	Sep-Aug Avg Chg	% Chg	Week Commencing:					
						31 Aug	07 Sep	14 Sep	21 Sep	28 Sep	05 Oct
Crudes											
North Sea Dated	43.27	44.78	40.58	-4.20	-9.4	42.50	39.41	40.35	40.56	39.60	40.72
North Sea Mth 1	43.52	44.98	41.52	-3.45	-7.7	43.74	40.37	41.26	41.36	40.53	41.84
WTI (Cushing) Mth 1	40.76	42.36	39.60	-2.76	-6.5	41.60	37.36	39.56	39.78	39.18	40.33
WTI (Houston) Mth 1	41.72	43.19	40.41	-2.78	-6.4	42.47	38.25	40.36	40.56	39.84	40.92
Urals (NWE)	44.01	44.46	40.50	-3.96	-8.9	42.62	39.19	40.00	40.61	39.61	40.51
Urals (Mediterranean)	44.28	45.01	40.98	-4.02	-8.9	43.00	39.76	40.70	40.99	39.89	40.74
Dubai	43.18	43.90	41.45	-2.45	-5.6	44.58	40.00	40.71	41.43	40.75	40.99
Tapis (Dated)	45.61	46.30	39.48	-6.82	-14.7	42.09	38.36	39.30	39.38	38.39	39.51
Differentials to Futures											
North Sea Dated vs. ICE Brent	0.05	-0.24	-1.29	-1.05		-1.90	-1.08	-1.41	-1.20	-1.32	-1.70
WTI (Cushing) Mth1 vs. NYMEX	-0.02	-0.03	-0.03	0.00		0.00	0.00	0.00	-0.10	0.00	0.00
Differential to North Sea Dated											
WTI (Houston)	-1.54	-1.58	-0.17	1.41		-0.03	-1.16	0.00	0.00	0.24	0.20
Urals (NWE)	0.75	-0.32	-0.08	0.23		0.13	-0.22	-0.35	0.05	0.01	-0.21
Urals (Mediterranean)	1.01	0.23	0.40	0.17		0.50	0.35	0.35	0.43	0.29	0.02
Dubai	-0.08	-0.88	0.87	1.74		2.09	0.59	0.36	0.87	1.14	0.27
Tapis (Dated)	2.35	1.52	-1.10	-2.62		-0.41	-1.05	-1.05	-1.18	-1.21	-1.21
Prompt Month Differential											
Forward Cash Brent Mth1-Mth2	0.22	-0.15	-0.36	-0.20		-0.41	-0.22	-0.37	-0.38	-0.48	-0.46
Forward WTI Cushing Mth1-Mth2	-0.16	-0.25	-0.28	-0.03		-0.34	-0.37	-0.26	-0.19	-0.27	-0.28
Forward Dubai Mth1-Mth2	0.59	-0.28	-0.32	-0.04		-0.25	-0.38	-0.33	-0.35	-0.31	-0.43

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Freight

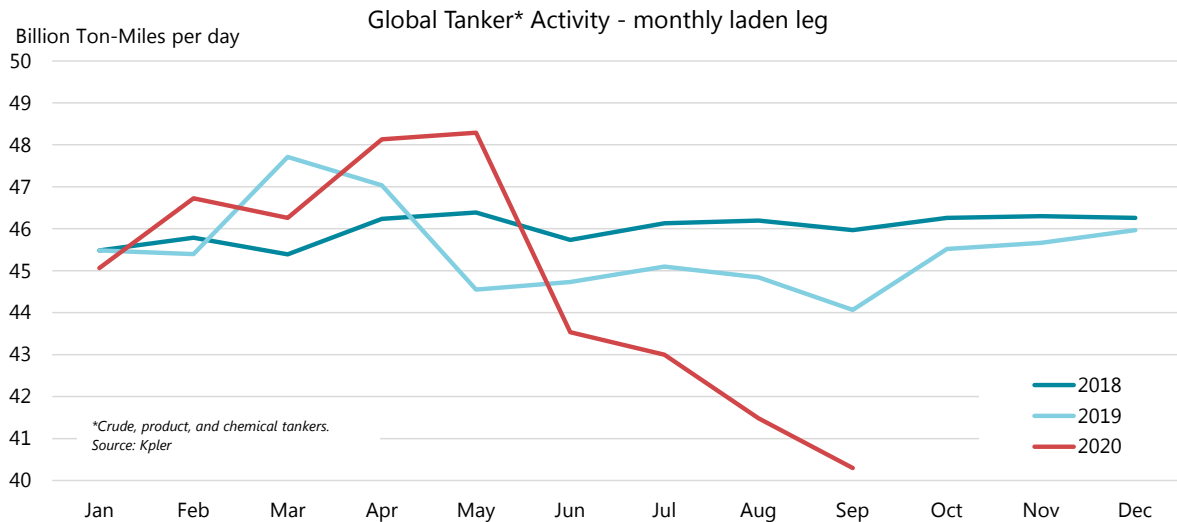
Tanker freight costs remained at record low levels in September. Data from Kpler reveal that ton-miles of tanker activity have fallen to exceptionnally low levels (see graph below). Activity increased sharply in April and May due to the proliferation of floating storage for crude and products. However, as floating storage has fallen tanker activity has declined overall, reaching in September 2020 a level 13% below the average level in the first half of the year and 11% below the 2019 average. Despite the decline, floating storage volumes remain significant at end-September, amounting globally to 185% of their average levels in 2019. Excluding the unusual activity in the Middle East (largely Iranian volumes) and in China (port discharging delays due to the massive level of crude imports) floating storage activity still sits at 137% of its average 2019 level and 215% of the average 2018 level.

The tanker capacity overhang has arisen from the sharp drop in chartering activity due to weak demand and related cuts to crude production. Tanker owners have had no relief in 2020 from the usual scrapping of older ships as it has fallen to its lowest level since 1997, according to Argus. After an intense period of scrapping in 2018 a rebound in chartering between October 2019 and April 2020 stalled it. Subsequently, a collapse in demolition activity in Pakistan and India due to the Covid-19 crisis as well as a fall in scrap iron values has kept ships in activity. In combination with weak scrapping, delivery of some 90 new crude tankers in 2020 could potentially expand the fleet by 2-3%.

By 2021, ship broker *EA Gibson* estimates that some 10% of active tankers will be over 20 years old. *Alphatanker's* analysis suggest that by end-2020 over 20% of VLCCs and over 30% of Aframaxes will be 15 years or older. This will complicate chartering for those players, such as many oil companies, that do not use tankers over 15 years old for safety reasons.

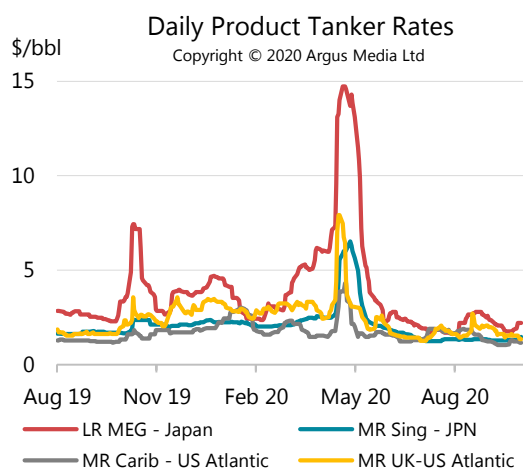
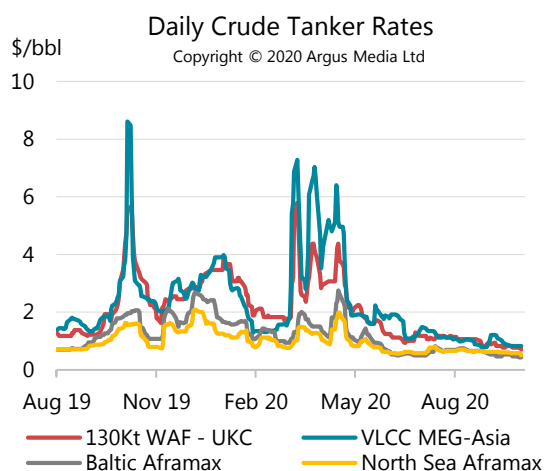
Alphatanker sees the accumulation of older ships and the persistent overhang of capacity in 2021 (due to a slow recovery in oil demand) combining to provoke an increase in scrapping to

levels near the 2018 peak. Overall tanker capacity could shrink appreciably as order books across all categories have fallen to below average levels in the past 12 months due to regulatory uncertainty, notably the International Maritime Organisation's objective of cutting the carbon intensity of shipping by 40% in 2030 and by 70% in 2050.



Crude tanker activity measured in daily ton-miles fell -4.7% from August to September, mainly due to the Suezmaxes and VLCCs as cargoes destined for India and China fell. The combination of more crude tankers released from floating storage, OPEC+ efforts to reign-in production to quota levels, and slower refiner buying due to the fall maintenance season has maintained pressure on chartering requirements.

Dirty tanker freight costs continued their steady slide, despite a mid-month bounce for some segments. Rates on 130kt Suezmaxes on the West Africa UK route and on Aframaxes in the Baltic fell due to slower Russian exports and weak European refinery demand. By early October, most segments had fallen around 13% versus September averages. Current freight rates generally do not cover costs for most operators.



Clean product tanker freight costs fell on average from August to September, in a steady week-on-week decline, but suffered less than crude tankers. Product tanker activity measured in daily ton-miles stagnated from August to September. After a sharp move higher in August, rates fell sharply in September on the Middle East to Asia route for LR. MR rates on the transatlantic

route also dropped in mid-September, but recovered by end-month due to higher US demand for gasoline from Europe during the refinery maintenance season.

Freight Costs										
(monthly and weekly averages, \$/bbl)										
	Jul	Aug	Sep	Sep-Aug		Week Ending				
				Chg	%	11 Sep	18 Sep	25 Sep	02 Oct	09 Oct
Crude Tankers										
VLCC MEG-Asia	1.27	1.04	0.96	-0.08	-7.8	1.02	1.09	0.88	0.83	0.83
130Kt WAF - UKC	1.14	1.09	0.86	-0.23	-21.4	0.93	0.83	0.77	0.77	0.77
Baltic Aframax	0.61	0.69	0.55	-0.14	-20.9	0.53	0.47	0.53	0.47	0.44
North Sea Aframax	0.65	0.67	0.62	-0.05	-7.8	0.62	0.62	0.60	0.58	0.58
Product Tankers										
LR MEG - Japan	38.41	60.58	54.93	-5.64	-9.3	56.00	55.50	54.00	55.00	56.00
MR Sing - JPN	1.88	2.22	2.21	-0.01	-0.6	2.36	2.06	1.77	1.77	2.21
MR Carib - US Atlantic	1.31	1.34	1.31	-0.03	-2.4	1.32	1.28	1.28	1.32	1.36
MR UK-US Atlantic	1.63	1.74	1.18	-0.56	-32.3	1.23	1.04	1.04	1.29	1.17

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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	25.7	25.4	25.5	26.0	25.8	25.7	24.3	20.0	23.3	24.3	23.0	23.9	24.2	25.0	25.1	24.6
Europe	14.4	14.3	14.0	14.2	14.7	14.1	14.3	13.3	11.0	13.1	13.2	12.7	13.0	13.4	14.0	13.7	13.5
Asia Oceania	8.1	8.0	8.2	7.4	7.6	8.0	7.8	7.8	6.5	6.8	7.5	7.1	7.8	7.0	7.2	7.6	7.4
Total OECD	47.7	48.0	47.7	47.1	48.3	47.9	47.7	45.4	37.6	43.2	45.0	42.8	44.7	44.7	46.2	46.4	45.5
NON-OECD DEMAND																	
FSU	4.7	4.7	4.6	4.7	4.9	4.9	4.8	4.6	4.0	4.7	4.8	4.5	4.5	4.6	4.9	4.8	4.7
Europe	0.8	0.8	0.7	0.8	0.8	0.8	0.8	0.7	0.6	0.8	0.8	0.7	0.7	0.7	0.8	0.8	0.8
China	12.5	13.0	13.1	13.8	13.8	14.1	13.7	11.9	14.2	14.4	14.3	13.7	14.2	14.5	14.4	14.6	14.4
Other Asia	13.7	14.0	14.5	14.4	13.8	14.4	14.3	13.7	11.4	12.6	13.5	12.8	13.8	13.8	13.4	14.0	13.7
Americas	6.4	6.2	6.1	6.2	6.3	6.2	6.2	5.8	4.9	5.8	6.0	5.6	5.8	5.9	6.1	6.2	6.0
Middle East	8.3	8.3	8.1	8.1	8.7	8.3	8.3	7.8	7.0	8.1	7.7	7.7	7.8	7.9	8.4	7.9	8.0
Africa	4.2	4.3	4.3	4.3	4.2	4.3	4.3	4.3	3.3	3.9	4.1	3.9	4.1	4.0	4.0	4.1	4.1
Total Non-OECD	50.4	51.2	51.5	52.3	52.6	53.0	52.3	48.6	45.4	50.4	51.2	48.9	50.9	51.5	52.1	52.4	51.7
Total Demand¹	98.1	99.2	99.2	99.4	100.8	100.9	100.1	94.1	83.0	93.6	96.1	91.7	95.6	96.1	98.2	98.8	97.2
OECD SUPPLY																	
Americas	20.5	23.0	24.1	24.5	24.7	25.6	24.7	25.7	22.9	23.1	23.2	23.7	23.2	23.2	23.3	23.5	23.3
Europe	3.5	3.5	3.5	3.2	3.2	3.5	3.3	3.6	3.5	3.4	3.6	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	0.5	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	27.1	27.4	27.8	27.5	27.3	27.5	27.8	27.5
NON-OECD SUPPLY																	
FSU	14.3	14.6	14.8	14.4	14.6	14.7	14.6	14.8	13.2	12.8	12.9	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	4.0	4.0	4.0	4.0	4.0	4.0	3.9	3.9	3.9
Other Asia	3.5	3.4	3.4	3.3	3.2	3.2	3.3	3.2	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Americas	5.1	5.1	5.1	5.2	5.5	5.6	5.3	5.6	5.1	5.4	5.4	5.4	5.6	5.6	5.6	5.7	5.6
Middle East	3.1	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.1	3.1	3.1	3.1	3.2	3.2	3.2	3.2	3.2
Africa	1.4	1.4	1.5	1.5	1.4	1.5	1.5	1.4	1.4	1.4	1.3	1.4	1.3	1.3	1.3	1.3	1.3
Total Non-OECD⁴	31.5	31.7	32.0	31.6	31.9	32.2	31.9	32.3	29.9	29.7	29.8	30.4	30.9	30.9	30.8	30.8	30.8
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	2.5	3.0	2.6	2.6	2.3	2.9	3.2	2.8	2.8
Total Non-OPEC Supply	60.7	63.5	64.6	65.2	65.9	66.9	65.6	66.7	61.4	62.1	62.2	63.1	63.1	63.5	63.8	63.7	63.5
OPEC²																	
Crude	31.5	31.4	30.1	29.6	29.0	29.3	29.5	28.2	25.6	24.1							
NGLs	5.4	5.5	5.5	5.5	5.4	5.4	5.4	5.4	5.2	5.1	5.1	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	30.8	29.2							
Total Supply	97.5	100.4	100.2	100.2	100.3	101.6	100.6	100.3	92.2	91.3							
STOCK CHANGES AND MISCELLANEOUS																	
Reported OECD																	
Industry	-0.4	0.1	0.0	0.6	0.1	-0.6	0.0	0.9	2.6								
Government	-0.1	-0.1	0.1	-0.1	0.0	-0.1	0.0	0.0	0.3								
Total	-0.5	0.0	0.1	0.5	0.1	-0.7	0.0	0.9	2.9								
Floating storage/Oil in transit	0.4	0.0	-0.3	-0.1	0.0	0.9	0.1	0.5	0.7								
Miscellaneous to balance ⁵	-0.4	1.1	1.3	0.4	-0.6	0.5	0.4	4.8	5.7								
Total Stock Ch. & Misc	-0.6	1.1	1.0	0.8	-0.5	0.7	0.5	6.2	9.2	-2.3							
Memo items:																	
Call on OPEC crude + Stock ch. ⁶	32.0	30.2	29.1	28.7	29.5	28.6	29.0	22.0	16.5	26.4	28.8	23.4	27.2	27.3	29.1	29.8	28.4

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

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

¹ When submitting their monthly oil statistics, OECD Member countries periodically update data for prior periods. Similar updates to non-OECD data can occur.

Table 2
SUMMARY OF GLOBAL OIL DEMAND

	2018	1Q19	2Q19	3Q19	4Q19	2019	1Q20	2Q20	3Q20	4Q20	2020	1Q21	2Q21	3Q21	4Q21	2021
Demand (mb/d)																
Americas	25.73	25.44	25.51	26.02	25.82	25.70	24.34	20.03	23.33	24.27	23.00	23.93	24.22	24.98	25.07	24.56
Europe	14.32	14.03	14.20	14.68	14.09	14.25	13.35	11.01	13.05	13.22	12.66	13.01	13.42	14.01	13.72	13.54
Asia Oceania	7.95	8.22	7.41	7.55	7.99	7.79	7.75	6.54	6.82	7.48	7.15	7.79	7.02	7.16	7.63	7.40
Total OECD	47.99	47.70	47.12	48.25	47.90	47.75	45.44	37.58	43.20	44.98	42.81	44.73	44.66	46.15	46.42	45.50
Asia	27.03	27.69	28.15	27.64	28.44	27.98	25.51	25.55	27.06	27.80	26.48	27.94	28.31	27.77	28.63	28.16
Middle East	8.29	8.06	8.13	8.72	8.33	8.31	7.78	7.00	8.11	7.73	7.66	7.77	7.94	8.42	7.87	8.00
Americas	6.24	6.11	6.19	6.29	6.25	6.21	5.76	4.89	5.79	5.98	5.61	5.82	5.87	6.14	6.16	6.00
FSU	4.68	4.55	4.69	4.95	4.91	4.78	4.62	4.03	4.74	4.75	4.54	4.48	4.58	4.93	4.84	4.71
Africa	4.25	4.33	4.32	4.17	4.29	4.28	4.25	3.34	3.88	4.11	3.90	4.12	4.03	4.00	4.09	4.06
Europe	0.76	0.74	0.77	0.79	0.78	0.77	0.74	0.62	0.77	0.77	0.72	0.75	0.74	0.80	0.80	0.77
Total Non-OECD	51.25	51.49	52.25	52.56	52.99	52.33	48.64	45.43	50.36	51.15	48.91	50.88	51.46	52.06	52.39	51.70
World	99.24	99.19	99.37	100.81	100.90	100.07	94.08	83.02	93.56	96.13	91.71	95.61	96.11	98.21	98.81	97.20
of which: US\$0	20.50	20.36	20.46	20.72	20.63	20.54	19.32	16.08	18.75	19.40	18.39	19.05	19.34	19.90	20.07	19.60
Europe 5*	8.23	8.13	8.13	8.32	8.03	8.15	7.63	5.92	7.19	7.44	7.05	7.45	7.59	7.83	7.74	7.65
China	13.00	13.15	13.75	13.82	14.08	13.70	11.85	14.15	14.41	14.30	13.68	14.17	14.54	14.37	14.59	14.41
Japan	3.79	4.05	3.39	3.43	3.74	3.65	3.69	2.89	3.14	3.60	3.33	3.81	3.15	3.25	3.62	3.46
India	4.96	5.24	5.18	4.88	5.16	5.11	5.06	4.03	4.41	4.91	4.60	5.06	5.03	4.67	5.02	4.94
Russia	3.50	3.43	3.51	3.74	3.63	3.58	3.53	3.09	3.57	3.52	3.43	3.36	3.45	3.72	3.57	3.52
Brazil	2.98	2.96	2.99	3.11	3.12	3.04	2.92	2.60	2.95	3.08	2.89	2.88	2.96	3.04	3.08	2.99
Saudi Arabia	3.06	2.90	2.99	3.42	3.03	3.08	2.90	2.73	3.22	2.91	2.94	2.85	3.06	3.27	2.91	3.02
Canada	2.53	2.30	2.31	2.57	2.49	2.42	2.33	1.88	2.27	2.30	2.19	2.26	2.29	2.47	2.38	2.35
Korea	2.57	2.58	2.43	2.54	2.63	2.55	2.51	2.42	2.32	2.42	2.42	2.52	2.44	2.44	2.47	2.47
Mexico	2.01	2.07	2.07	2.06	2.00	2.05	1.98	1.50	1.70	1.90	1.77	1.91	1.93	1.92	1.93	1.92
Iran	1.98	1.98	1.94	1.93	2.00	1.96	1.84	1.69	1.79	1.80	1.78	1.90	1.83	1.84	1.83	1.85
Total	69.11	69.14	69.16	70.53	70.54	69.85	65.53	58.98	65.72	67.58	64.47	67.22	67.60	68.72	69.20	68.19
% of World	69.6%	69.7%	69.6%	70.0%	69.9%	69.8%	69.7%	71.0%	70.2%	70.3%	70.3%	70.3%	70.3%	70.0%	70.0%	70.2%
Annual Change (% per annum)																
Americas	2.4	-0.3	-0.1	-0.1	0.1	-0.1	-4.3	-21.5	-10.3	-6.0	-10.5	-1.7	20.9	7.1	3.3	6.8
Europe	-0.7	-0.6	-0.6	-0.2	-0.4	-0.5	-4.9	-22.5	-11.1	-6.2	-11.2	-2.6	21.9	7.3	3.8	7.0
Asia Oceania	-2.4	-4.1	-2.7	-1.1	0.1	-2.0	-5.7	-11.7	-9.7	-6.3	-8.2	0.5	7.3	5.0	1.9	3.5
Total OECD	0.7	-1.1	-0.6	-0.3	-0.1	-0.5	-4.7	-20.2	-10.5	-6.1	-10.3	-1.6	18.8	6.8	3.2	6.3
Asia	3.2	3.8	3.5	2.7	4.2	3.5	-7.9	-9.2	-2.1	-2.3	-5.4	9.5	10.8	2.6	3.0	6.3
Middle East	-0.1	0.1	-2.9	1.1	2.8	0.3	-3.6	-13.8	-7.0	-7.2	-7.9	0.0	13.3	3.8	1.8	4.5
Americas	-2.0	-0.6	0.0	-0.5	-0.6	-0.4	-5.8	-21.0	-8.0	-4.3	-9.8	1.0	19.9	6.1	3.0	7.0
FSU	0.6	2.2	2.2	1.6	2.1	2.0	1.4	-14.0	-4.2	-3.1	-5.0	-2.9	13.4	4.0	1.8	3.8
Africa	2.3	0.6	1.2	0.6	0.2	0.6	-1.8	-22.7	-6.9	-4.0	-8.9	-3.2	20.6	2.9	-0.6	4.1
Europe	-0.7	1.6	4.8	2.4	-0.8	1.9	-0.6	-20.6	-2.1	-0.7	-6.0	1.8	20.3	3.7	2.8	6.5
Total Non-OECD	1.6	2.2	1.7	1.7	2.8	2.1	-5.5	-13.1	-4.2	-3.5	-6.5	4.6	13.3	3.4	2.4	5.7
World	1.2	0.6	0.6	0.7	1.4	0.8	-5.1	-16.5	-7.2	-4.7	-8.4	1.6	15.8	5.0	2.8	6.0
Annual Change (mb/d)																
Americas	0.61	-0.07	-0.02	-0.04	0.03	-0.02	-1.10	-5.48	-2.69	-1.55	-2.70	-0.41	4.19	1.65	0.80	1.56
Europe	-0.10	-0.09	-0.08	-0.03	-0.06	-0.07	-0.68	-3.19	-1.63	-0.88	-1.59	-0.34	2.41	0.96	0.50	0.88
Asia Oceania	-0.20	-0.36	-0.21	-0.08	0.00	-0.16	-0.47	-0.86	-0.73	-0.50	-0.64	0.04	0.48	0.34	0.15	0.25
Total OECD	0.32	-0.51	-0.31	-0.15	-0.03	-0.25	-2.26	-9.53	-5.05	-2.93	-4.94	-0.71	7.07	2.95	1.45	2.69
Asia	0.85	1.00	0.94	0.71	1.15	0.95	-2.18	-2.60	-0.58	-0.65	-1.50	2.44	2.76	0.71	0.83	1.68
Middle East	-0.01	0.01	-0.24	0.10	0.23	0.02	-0.29	-1.12	-0.61	-0.60	-0.65	0.00	0.93	0.31	0.14	0.35
Americas	-0.13	-0.04	0.00	-0.03	-0.04	-0.03	-0.36	-1.30	-0.50	-0.27	-0.61	0.06	0.98	0.35	0.18	0.39
FSU	0.03	0.10	0.10	0.08	0.10	0.09	0.06	-0.66	-0.21	-0.15	-0.24	-0.13	0.54	0.19	0.09	0.17
Africa	0.09	0.02	0.05	0.02	0.01	0.03	-0.08	-0.98	-0.29	-0.17	-0.38	-0.14	0.69	0.11	-0.02	0.16
Europe	-0.01	0.01	0.04	0.02	-0.01	0.01	0.00	-0.16	-0.02	-0.01	-0.05	0.01	0.12	0.03	0.02	0.05
Total Non-OECD	0.83	1.11	0.88	0.89	1.44	1.08	-2.85	-6.82	-2.21	-1.84	-3.42	2.24	6.03	1.70	1.24	2.80
World	1.15	0.60	0.57	0.74	1.41	0.83	-5.10	-16.36	-7.26	-4.77	-8.36	1.53	13.10	4.65	2.68	5.48
Revisions to Oil Demand from Last Month's Report (mb/d)																
Americas	0.00	-0.01	-0.01	0.00	0.01	0.00	0.03	0.03	-0.36	-0.09	-0.10	-0.13	-0.03	-0.03	-0.05	-0.06
Europe	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.08	0.04	0.03	0.02	-0.05	0.01	0.00
Asia Oceania	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.16	-0.04	-0.05	-0.01	-0.01	-0.01	-0.03	-0.02
Total OECD	-	-0.01	-0.01	0.00	0.01	-0.00	0.03	0.02	-0.45	-0.05	-0.11	-0.11	-0.01	-0.09	-0.08	-0.07
Asia	0.00	-0.06	-0.07	-0.01	-0.03	-0.04	0.09	-0.06	0.34	0.11	0.12	0.12	0.27	0.05	-0.03	0.10
Middle East	0.00	-0.02	-0.02	-0.02	-0.02	-0.02	-0.01	-0.01	-0.04	0.02	-0.01	0.00	-0.01	0.00	-0.01	-0.01
Americas	0.00	0.03	0.00	0.00	-0.01	0.00	0.02	0.01	-0.01	0.00	0.01	0.03	0.01	0.01	0.00	0.01
FSU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.01	0.01	-0.04	-0.02	-0.01	0.02	-0.01
Africa	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	-0.01	0.00	0.00	0.00	0.02	0.05	0.01	0.02
Europe	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Non-OECD	-0.00	-0.05	-0.09	-0.03	-0.06	-0.06	0.10	-0.05	0.31	0.13	0.12	0.11	0.28	0.09	-0.00	0.12
World	-0.00	-0.05	-0.10	-0.03	-0.06	-0.06	0.13	-0.03	-0.14	0.09	0.01	0.00	0.27	-0.00	-0.08	0.05
Revisions to Oil Demand Growth from Last Month's Report (mb/d)																
World	0.00	-0.06	-0.10	-0.01	-0.05	-0.06	0.19	0.07	-0.11	0.14	0.07	-0.13	0.30	0.14	-0.17	0.03

* France, Germany, Italy, Spain and UK

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

	Latest month vs.										
	2018	2019	3Q19	4Q19	1Q20	2Q20	May 20	Jun 20	Jul 20 ²	Jun 20	Jul 19
Americas											
LPG and ethane	3.70	3.84	3.58	4.10	4.13	3.50	3.52	3.36	3.54	0.18	-0.02
Naphtha	0.32	0.24	0.26	0.22	0.25	0.21	0.20	0.22	0.25	0.02	0.00
Motor gasoline	11.17	11.09	11.37	10.99	10.16	8.38	8.44	9.77	9.98	0.21	-1.43
Jet and kerosene	2.03	2.09	2.19	2.08	1.87	0.79	0.68	0.92	1.12	0.20	-1.11
Gasoil/diesel oil	5.43	5.40	5.28	5.43	5.27	4.58	4.63	4.62	4.75	0.14	-0.48
Residual fuel oil	0.60	0.56	0.64	0.49	0.41	0.38	0.32	0.45	0.54	0.09	-0.13
Other products	2.48	2.48	2.71	2.51	2.25	2.20	2.26	2.39	2.39	0.00	-0.26
Total	25.73	25.70	26.02	25.82	24.34	20.03	20.05	21.73	22.57	0.84	-3.43
Europe											
LPG and ethane	1.19	1.17	1.15	1.12	1.22	0.98	0.88	1.05	1.15	0.10	-0.06
Naphtha	1.04	1.01	0.95	1.02	1.06	1.06	1.09	1.04	1.07	0.04	0.09
Motor gasoline	2.00	2.04	2.16	2.04	1.82	1.45	1.38	1.86	2.11	0.25	-0.09
Jet and kerosene	1.52	1.55	1.73	1.48	1.25	0.40	0.42	0.40	0.60	0.20	-1.11
Gasoil/diesel oil	6.45	6.45	6.58	6.53	6.22	5.36	5.24	5.79	6.19	0.40	-0.50
Residual fuel oil	0.88	0.83	0.83	0.75	0.71	0.64	0.64	0.64	0.69	0.05	-0.15
Other products	1.25	1.20	1.28	1.17	1.06	1.11	1.03	1.25	1.27	0.02	-0.03
Total	14.32	14.25	14.68	14.09	13.35	11.01	10.66	12.02	13.08	1.05	-1.85
Asia Oceania											
LPG and ethane	0.73	0.76	0.70	0.80	0.82	0.69	0.71	0.62	0.67	0.05	-0.06
Naphtha	1.99	1.96	1.98	1.96	1.93	1.75	1.77	1.75	1.79	0.04	-0.18
Motor gasoline	1.55	1.53	1.59	1.52	1.40	1.25	1.22	1.42	1.45	0.03	-0.08
Jet and kerosene	0.92	0.91	0.74	1.00	0.99	0.40	0.38	0.35	0.37	0.02	-0.34
Gasoil/diesel oil	1.90	1.92	1.86	1.96	1.83	1.78	1.80	1.84	1.76	-0.07	-0.11
Residual fuel oil	0.51	0.42	0.39	0.43	0.45	0.41	0.41	0.39	0.38	0.00	-0.01
Other products	0.35	0.29	0.30	0.31	0.32	0.26	0.26	0.23	0.19	-0.03	-0.11
Total	7.95	7.79	7.55	7.99	7.75	6.54	6.56	6.59	6.62	0.03	-0.89
OECD											
LPG and ethane	5.62	5.77	5.43	6.02	6.18	5.17	5.11	5.04	5.37	0.33	-0.14
Naphtha	3.34	3.21	3.18	3.20	3.25	3.02	3.06	3.01	3.11	0.10	-0.09
Motor gasoline	14.71	14.66	15.12	14.55	13.38	11.08	11.03	13.05	13.54	0.49	-1.59
Jet and kerosene	4.47	4.55	4.66	4.56	4.11	1.59	1.48	1.66	2.08	0.42	-2.57
Gasoil/diesel oil	13.77	13.77	13.72	13.92	13.32	11.72	11.67	12.24	12.71	0.47	-1.09
Residual fuel oil	1.99	1.81	1.85	1.66	1.57	1.43	1.37	1.48	1.61	0.13	-0.28
Other products	4.08	3.98	4.29	3.98	3.63	3.57	3.55	3.86	3.85	-0.02	-0.41
Total	47.99	47.75	48.25	47.90	45.44	37.58	37.27	40.34	42.27	1.93	-6.17

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

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

² Latest official OECD submissions (MOS).

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

	2018	2019	3Q19	4Q19	1Q20	2Q20	May 20	Jun 20	Jul 20 ²	Latest month vs.	
										Jun 20	Jul 19
United States³											
LPG and ethane	2.87	2.94	2.71	3.18	3.22	2.71	2.75	2.54	2.80	0.26	0.10
Naphtha	0.23	0.21	0.22	0.19	0.20	0.16	0.16	0.19	0.20	0.02	-0.01
Motor gasoline	9.33	9.31	9.52	9.16	8.49	7.11	7.19	8.29	8.46	0.17	-1.08
Jet and kerosene	1.71	1.75	1.80	1.76	1.58	0.69	0.60	0.79	0.97	0.18	-0.88
Gasoil/diesel oil	4.15	4.10	3.96	4.12	3.96	3.51	3.53	3.49	3.61	0.12	-0.30
Residual fuel oil	0.32	0.28	0.33	0.27	0.17	0.15	0.08	0.23	0.34	0.11	0.00
Other products	1.89	1.96	2.19	1.95	1.70	1.75	1.80	1.92	1.95	0.03	-0.24
Total	20.50	20.54	20.72	20.63	19.32	16.08	16.10	17.44	18.32	0.89	-2.41
Japan											
LPG and ethane	0.37	0.35	0.28	0.36	0.40	0.31	0.31	0.26	0.28	0.02	-0.03
Naphtha	0.73	0.73	0.70	0.76	0.70	0.62	0.60	0.61	0.63	0.03	-0.06
Motor gasoline	0.88	0.85	0.92	0.84	0.78	0.69	0.63	0.78	0.82	0.04	-0.05
Jet and kerosene	0.50	0.48	0.34	0.55	0.61	0.22	0.18	0.17	0.19	0.02	-0.12
Diesel	0.44	0.44	0.44	0.44	0.41	0.39	0.36	0.40	0.40	0.00	-0.04
Other gasoil	0.34	0.33	0.30	0.34	0.34	0.29	0.28	0.28	0.29	0.01	-0.02
Residual fuel oil	0.27	0.23	0.22	0.24	0.23	0.20	0.18	0.19	0.19	0.00	-0.03
Other products	0.26	0.24	0.24	0.22	0.23	0.18	0.18	0.17	0.18	0.01	-0.07
Total	3.79	3.65	3.43	3.74	3.69	2.89	2.73	2.86	2.98	0.12	-0.41
Germany											
LPG and ethane	0.11	0.12	0.13	0.11	0.11	0.11	0.11	0.09	0.10	0.01	-0.04
Naphtha	0.27	0.27	0.23	0.30	0.29	0.27	0.26	0.26	0.30	0.04	0.05
Motor gasoline	0.49	0.50	0.51	0.50	0.46	0.39	0.39	0.44	0.51	0.06	-0.01
Jet and kerosene	0.22	0.22	0.23	0.21	0.18	0.06	0.06	0.07	0.09	0.02	-0.14
Diesel	0.76	0.77	0.79	0.76	0.72	0.65	0.64	0.69	0.77	0.08	-0.04
Other gasoil	0.31	0.35	0.35	0.33	0.44	0.44	0.45	0.36	0.29	-0.06	-0.07
Residual fuel oil	0.06	0.05	0.05	0.04	0.04	0.04	0.04	0.04	0.06	0.02	0.00
Other products	0.10	0.09	0.11	0.08	0.08	0.07	0.06	0.07	0.09	0.02	-0.02
Total	2.33	2.36	2.41	2.33	2.32	2.03	2.02	2.02	2.21	0.19	-0.27
Italy											
LPG and ethane	0.10	0.10	0.09	0.11	0.11	0.07	0.06	0.08	0.09	0.01	0.00
Naphtha	0.13	0.10	0.10	0.10	0.08	0.09	0.08	0.11	0.11	0.01	0.01
Motor gasoline	0.18	0.18	0.19	0.19	0.15	0.13	0.13	0.18	0.20	0.02	0.02
Jet and kerosene	0.11	0.11	0.14	0.11	0.07	0.03	0.03	0.04	0.05	0.02	-0.09
Diesel	0.47	0.44	0.44	0.45	0.36	0.27	0.27	0.38	0.44	0.06	-0.03
Other gasoil	0.08	0.07	0.08	0.08	0.06	0.07	0.06	0.06	0.07	0.01	-0.01
Residual fuel oil	0.07	0.06	0.07	0.06	0.06	0.05	0.05	0.06	0.06	0.01	-0.01
Other products	0.14	0.14	0.15	0.14	0.12	0.12	0.11	0.14	0.16	0.02	0.00
Total	1.27	1.20	1.26	1.23	1.02	0.82	0.79	1.04	1.19	0.15	-0.12
France											
LPG and ethane	0.12	0.13	0.11	0.13	0.14	0.10	0.09	0.10	0.13	0.02	0.02
Naphtha	0.10	0.11	0.10	0.08	0.11	0.14	0.14	0.14	0.13	-0.01	0.02
Motor gasoline	0.19	0.20	0.22	0.20	0.18	0.13	0.12	0.20	0.24	0.04	0.01
Jet and kerosene	0.17	0.17	0.19	0.16	0.14	0.04	0.04	0.04	0.07	0.03	-0.12
Diesel	0.69	0.68	0.69	0.69	0.65	0.54	0.53	0.72	0.80	0.09	0.05
Other gasoil	0.24	0.23	0.24	0.23	0.22	0.16	0.18	0.10	0.07	-0.03	-0.16
Residual fuel oil	0.05	0.05	0.05	0.03	0.03	0.02	0.02	0.03	0.03	0.00	-0.02
Other products	0.12	0.12	0.14	0.11	0.08	0.08	0.08	0.09	0.12	0.03	-0.04
Total	1.69	1.69	1.76	1.63	1.54	1.22	1.20	1.43	1.59	0.16	-0.25
United Kingdom											
LPG and ethane	0.15	0.14	0.12	0.10	0.15	0.14	0.13	0.15	0.17	0.03	0.01
Naphtha	0.03	0.03	0.03	0.03	0.04	0.05	0.05	0.05	0.02	-0.03	-0.01
Motor gasoline	0.28	0.29	0.29	0.29	0.27	0.15	0.09	0.21	0.23	0.02	-0.05
Jet and kerosene	0.33	0.33	0.34	0.33	0.32	0.11	0.12	0.08	0.10	0.02	-0.23
Diesel	0.52	0.51	0.51	0.51	0.49	0.31	0.23	0.36	0.46	0.09	-0.03
Other gasoil	0.14	0.14	0.15	0.14	0.12	0.11	0.11	0.10	0.11	0.01	-0.04
Residual fuel oil	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.02	0.00	-0.01
Other products	0.12	0.12	0.12	0.11	0.10	0.08	0.07	0.10	0.10	0.00	-0.03
Total	1.61	1.57	1.57	1.52	1.52	0.97	0.82	1.06	1.20	0.14	-0.37
Canada											
LPG and ethane	0.39	0.44	0.43	0.43	0.41	0.41	0.40	0.42	0.33	-0.09	-0.12
Naphtha	0.05	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.01	0.00	0.00
Motor gasoline	0.88	0.83	0.91	0.89	0.78	0.62	0.61	0.78	0.78	0.00	-0.13
Jet and kerosene	0.16	0.18	0.23	0.17	0.14	0.04	0.02	0.06	0.07	0.01	-0.15
Diesel	0.26	0.26	0.26	0.26	0.27	0.27	0.26	0.27	0.26	-0.01	0.01
Other gasoil	0.37	0.34	0.38	0.35	0.33	0.24	0.27	0.26	0.29	0.02	-0.06
Residual fuel oil	0.04	0.04	0.04	0.03	0.04	0.03	0.04	0.01	0.02	0.00	-0.02
Other products	0.37	0.31	0.30	0.34	0.34	0.25	0.26	0.26	0.26	-0.01	0.03
Total	2.53	2.42	2.57	2.49	2.33	1.88	1.88	2.08	2.02	-0.07	-0.45

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	2Q20	3Q20	4Q20	1Q21	2Q21	Jul 20	Aug 20	Sep 20
OPEC											
Crude Oil											
Saudi Arabia	9.80			9.31	8.78				8.44	8.94	8.98
Iran	2.36			1.96	1.94				1.90	1.95	1.97
Iraq	4.71			4.13	3.68				3.75	3.65	3.65
UAE	3.18			2.87	2.84				2.92	3.02	2.58
Kuwait	2.68			2.45	2.25				2.18	2.27	2.30
Angola	1.39			1.26	1.24				1.25	1.26	1.22
Nigeria	1.73			1.57	1.37				1.38	1.37	1.35
Libya	1.09			0.08	0.11				0.09	0.10	0.14
Algeria	1.02			0.87	0.84				0.81	0.86	0.86
Congo	0.33			0.31	0.30				0.30	0.30	0.30
Gabon	0.21			0.21	0.19				0.20	0.19	0.19
Equatorial Guinea	0.11			0.11	0.11				0.12	0.12	0.10
Venezuela	0.87			0.52	0.41				0.39	0.39	0.44
Total Crude Oil	29.49			25.65	24.08				23.73	24.42	24.08
<i>of which Neutral Zone¹</i>	<i>0.00</i>			<i>0.10</i>	<i>0.13</i>				<i>0.06</i>	<i>0.16</i>	<i>0.18</i>
Total NGLs²	5.44	5.20	5.30	5.17	5.09	5.14	5.29	5.31	5.00	5.13	5.13
Total OPEC³	34.94			30.82	29.16				28.73	29.55	29.21
NON-OPEC⁴											
OECD											
Americas											
United States	17.24	16.57	15.86	15.96	16.23	16.07	15.98	15.85	16.53	15.85	16.30
Mexico	1.93	1.95	1.91	1.93	1.91	1.94	1.92	1.90	1.88	1.92	1.94
Canada	5.54	5.21	5.51	4.97	4.96	5.20	5.32	5.41	5.02	4.95	4.90
Chile	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Europe											
UK	1.13	1.10	1.11	1.11	1.02	1.12	1.13	1.05	1.07	1.05	0.95
Norway	1.74	2.02	2.13	2.00	1.98	2.07	2.16	2.10	2.06	2.02	1.87
Others	0.46	0.44	0.44	0.43	0.44	0.45	0.44	0.44	0.44	0.44	0.45
Asia Oceania											
Australia	0.53	0.55	0.56	0.54	0.56	0.57	0.57	0.56	0.52	0.57	0.58
Others	0.46	0.48	0.49	0.47	0.49	0.50	0.50	0.49	0.46	0.50	0.51
Others	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.06	0.08	0.07
Total OECD	28.59	27.84	27.53	26.94	27.11	27.43	27.53	27.33	27.52	26.81	27.00
NON-OECD											
Former USSR											
Russia	14.64	13.43	13.67	13.23	12.78	12.94	13.63	13.66	12.40	12.96	12.99
Azerbaijan	11.58	10.56	10.78	10.35	10.06	10.18	10.75	10.77	9.72	10.21	10.27
Kazakhstan	0.77	0.70	0.72	0.68	0.67	0.68	0.72	0.72	0.64	0.68	0.68
Others	1.94	1.82	1.80	1.84	1.69	1.72	1.81	1.80	1.68	1.72	1.68
Asia											
China	0.35	0.36	0.36	0.36	0.36	0.35	0.36	0.36	0.36	0.36	0.36
Malaysia	7.16	7.02	6.94	6.98	6.94	7.00	7.03	7.00	6.95	6.96	6.91
India	3.88	3.98	3.95	3.97	3.99	3.99	3.99	4.00	3.96	4.00	4.00
Indonesia	0.67	0.61	0.66	0.56	0.58	0.64	0.66	0.66	0.58	0.57	0.58
Others	0.80	0.74	0.70	0.74	0.74	0.71	0.71	0.70	0.76	0.72	0.72
Europe	0.77	0.73	0.71	0.74	0.72	0.73	0.72	0.71	0.73	0.73	0.69
Others	1.04	0.95	0.92	0.96	0.93	0.92	0.95	0.92	0.92	0.94	0.92
Americas											
Brazil	0.12	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
Argentina	5.33	5.38	5.64	5.10	5.42	5.36	5.63	5.63	5.47	5.50	5.29
Colombia	2.90	3.07	3.28	3.01	3.12	3.00	3.25	3.27	3.19	3.20	2.97
Ecuador	0.64	0.62	0.63	0.59	0.60	0.62	0.63	0.63	0.60	0.60	0.61
Others	0.89	0.78	0.73	0.76	0.75	0.75	0.75	0.74	0.74	0.75	0.75
Middle East											
Oman	0.54	0.49	0.55	0.35	0.53	0.54	0.55	0.55	0.53	0.54	0.54
Qatar	0.36	0.42	0.45	0.39	0.42	0.45	0.46	0.45	0.41	0.41	0.43
Others	3.19	3.13	3.18	3.13	3.09	3.11	3.19	3.18	3.07	3.09	3.10
Africa	0.98	0.95	0.97	0.95	0.92	0.93	0.97	0.97	0.90	0.93	0.93
Egypt	1.91	1.89	1.92	1.89	1.90	1.90	1.93	1.93	1.90	1.90	1.90
Others	0.31	0.28	0.29	0.29	0.27	0.28	0.29	0.29	0.27	0.27	0.28
Africa											
Egypt	1.46	1.37	1.29	1.39	1.37	1.31	1.31	1.30	1.37	1.36	1.37
Others	0.63	0.60	0.57	0.61	0.60	0.59	0.59	0.58	0.60	0.60	0.60
Others	0.82	0.76	0.71	0.78	0.77	0.72	0.72	0.72	0.77	0.75	0.78
Total Non-OECD	31.90	30.44	30.83	29.95	29.71	29.82	30.89	30.88	29.37	29.99	29.77
Processing gains ⁵	2.35	2.21	2.35	1.97	2.29	2.28	2.35	2.35	2.31	2.33	2.23
Global Biofuels	2.80	2.59	2.82	2.51	2.99	2.63	2.33	2.91	3.09	2.99	2.88
TOTAL NON-OPEC	65.64	63.08	63.52	61.37	62.10	62.17	63.10	63.47	62.29	62.11	61.88
TOTAL SUPPLY	100.57			92.19	91.26				91.03	91.66	91.09

¹ Neutral Zone production is already 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	2Q20	3Q20	4Q20	1Q21	2Q21	Jul 20	Aug 20	Sep 20
United States											
Alaska	466	448	435	409	443	462	462	442	444	441	443
California	455	412	387	413	400	397	393	389	400	402	399
Texas	5070	4878	4340	4733	4743	4636	4438	4332	4735	4731	4764
Federal Gulf of Mexico ²	1897	1742	2024	1695	1570	1745	1953	2007	1649	1369	1697
Other US Lower 48	4360	3871	3571	3566	3752	3699	3612	3554	3756	3738	3763
NGLs ³	4825	5044	4926	4956	5142	4951	4964	4940	5369	4995	5058
Other Hydrocarbons	169	174	174	186	176	179	156	186	175	175	178
Total	17242	16568	15858	15959	16226	16068	15976	15850	16528	15851	16303
Canada											
Alberta Light/Medium/Heavy	487	416	378	367	400	403	402	390	405	394	402
Alberta Bitumen	1837	1626	1833	1462	1608	1576	1536	1738	1651	1662	1507
Saskatchewan	487	442	489	385	411	480	499	492	400	407	428
Other Crude	489	502	497	511	482	497	494	492	459	485	501
NGLs	961	958	995	950	950	962	991	1026	972	975	903
Other Upgraders	172	169	177	174	149	172	188	171	152	138	156
Synthetic Crudes	1111	1092	1139	1122	958	1109	1209	1104	982	887	1006
Total	5544	5205	5508	4971	4958	5199	5319	5414	5020	4947	4903
Mexico											
Crude	1705	1728	1711	1710	1700	1733	1714	1701	1665	1707	1730
NGLs	218	214	194	211	207	203	200	196	209	206	206
Total	1927	1946	1910	1926	1911	1940	1918	1901	1879	1917	1940
UK											
Brent Fields	44	32	25	40	24	27	29	28	25	24	21
Forties Fields	327	292	260	307	223	297	291	225	290	238	138
Ninian Fields	37	34	28	37	34	32	31	25	35	34	33
Flotta Fields	57	52	47	55	50	50	49	45	47	51	51
Other Fields	590	602	662	588	602	625	645	640	575	617	613
NGLs	79	88	89	88	93	91	90	89	98	91	91
Total	1134	1100	1110	1115	1025	1121	1135	1052	1069	1055	947
Norway⁵											
Ekofisk-Ula Area	138	134	138	125	133	138	143	138	136	131	132
Oseberg-Troll Area	259	228	215	233	207	215	218	212	228	217	176
Statfjord-Gullfaks Area	237	241	241	244	253	230	245	241	264	248	247
Haltenbanken Area	283	270	284	266	260	266	274	280	251	266	262
Sleipner-Frigg Area	429	730	778	745	720	760	776	777	774	768	615
Other Fields	91	130	200	95	124	186	220	174	112	118	144
NGLs	299	290	270	287	286	280	283	276	296	270	291
Total	1737	2024	2128	1996	1983	2074	2158	2098	2061	2018	1867
Other OECD Europe											
Denmark	101	72	67	70	70	68	66	64	72	70	68
Italy	78	77	97	71	78	85	93	99	76	76	80
Turkey	58	60	60	61	61	60	60	60	61	60	60
Other	95	91	90	91	88	95	93	91	71	96	96
NGLs	8	7	6	6	6	6	6	6	6	6	6
Non-Conventional Oils	125	134	124	129	139	132	125	125	150	130	136
Total	465	441	444	428	441	445	443	444	436	439	447
Australia											
Gippsland Basin	9	9	9	9	9	9	9	9	9	9	9
Cooper-Eromanga Basin	34	36	33	36	35	34	34	33	35	35	35
Carnarvon Basin	72	108	121	110	118	124	123	122	114	114	125
Other Crude	246	210	205	202	202	210	208	206	183	212	212
NGLs	98	118	124	111	124	125	125	124	115	129	129
Total	458	480	491	468	488	503	499	494	457	499	510
Other OECD Asia Oceania											
New Zealand	24	19	19	18	18	20	19	19	18	18	20
Japan	4	4	4	4	5	5	4	4	5	4	5
NGLs	12	11	10	11	11	10	10	10	11	12	10
Non-Conventional Oils	28	36	37	36	36	37	37	37	31	42	35
Total	69	70	70	70	70	71	70	70	64	76	70
OECD											
Crude Oil	20469	19499	19252	18660	18823	19161	19133	19030	18945	18744	18779
NGLs	6508	6736	6621	6629	6826	6636	6676	6675	7084	6691	6701
Non-Conventional Oils ⁴	1610	1609	1655	1652	1461	1632	1718	1628	1494	1376	1515
Total	28588	27844	27528	26941	27111	27430	27527	27332	27523	26811	26996

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			
	Apr2020	May2020	Jun2020	Jul2020	Aug2020*	Aug2017	Aug2018	Aug2019	3Q2019	4Q2019	1Q2020	2Q2020
OECD INDUSTRY-CONTROLLED STOCKS¹												
OECD Americas												
Crude	697.1	686.3	692.5	676.0	657.6	618.4	567.5	582.8	-0.38	-0.01	0.71	0.52
Motor Gasoline	284.7	285.9	280.9	277.1	262.6	255.2	267.8	258.4	-0.02	0.24	0.11	-0.10
Middle Distillate	215.3	241.3	240.3	243.2	239.4	216.5	205.3	208.0	0.02	0.02	-0.14	0.54
Residual Fuel Oil	42.8	46.3	46.7	43.1	41.6	38.5	34.2	34.4	0.00	0.00	0.04	0.07
Total Products ³	770.7	812.1	819.0	827.3	828.0	754.8	743.4	764.0	0.23	-0.14	-0.19	0.90
Total⁴	1660.7	1690.4	1713.0	1710.7	1685.4	1575.2	1508.9	1557.9	-0.07	-0.38	0.55	1.51
OECD Europe												
Crude	373.3	385.3	376.2	378.7	373.8	344.3	351.1	360.1	-0.03	-0.04	0.13	0.14
Motor Gasoline	103.7	101.7	99.9	94.6	94.9	90.1	83.4	87.4	-0.04	0.06	0.09	0.00
Middle Distillate	313.8	332.1	339.7	334.8	335.3	311.9	270.9	288.5	0.04	-0.03	0.17	0.51
Residual Fuel Oil	70.7	74.6	73.8	74.0	73.8	61.8	58.1	64.3	0.07	-0.07	0.13	0.03
Total Products ³	609.6	633.5	631.4	621.6	623.6	578.4	527.2	554.2	0.07	-0.03	0.44	0.50
Total⁴	1075.6	1114.8	1098.1	1089.5	1084.8	994.4	956.7	1000.5	0.06	-0.11	0.61	0.72
OECD Asia Oceania												
Crude	151.6	169.9	158.8	170.1	168.4	195.1	158.2	159.9	-0.11	0.13	-0.25	0.29
Motor Gasoline	31.1	28.6	26.9	27.4	27.8	24.6	24.9	25.7	0.01	0.00	0.01	-0.01
Middle Distillate	65.8	63.1	67.6	72.0	77.2	69.1	73.1	77.8	0.10	-0.08	-0.04	-0.02
Residual Fuel Oil	18.4	17.4	17.4	18.3	16.6	19.6	18.6	19.8	0.01	-0.04	0.02	-0.01
Total Products ³	172.2	174.2	179.0	183.4	190.0	181.5	175.1	192.8	0.20	-0.20	0.00	0.04
Total⁴	387.9	408.3	402.3	415.8	423.8	441.6	399.2	419.0	0.11	-0.08	-0.27	0.37
Total OECD												
Crude	1222.0	1241.5	1227.4	1224.8	1199.8	1157.7	1076.8	1102.8	-0.52	0.09	0.59	0.95
Motor Gasoline	419.4	416.2	407.7	399.0	385.2	369.9	376.0	371.6	-0.05	0.30	0.21	-0.10
Middle Distillate	594.9	636.5	647.6	649.9	651.9	597.5	549.3	574.3	0.16	-0.08	0.00	1.03
Residual Fuel Oil	131.8	138.2	137.9	135.5	132.0	119.8	110.9	118.5	0.08	-0.10	0.18	0.09
Total Products ³	1552.4	1619.7	1629.3	1632.4	1641.5	1514.6	1445.7	1511.1	0.51	-0.37	0.25	1.44
Total⁴	3124.2	3213.4	3213.3	3216.0	3193.9	3011.2	2864.8	2977.4	0.10	-0.57	0.89	2.60
OECD GOVERNMENT-CONTROLLED STOCKS⁵												
OECD Americas												
Crude	637.8	648.3	656.0	656.1	648.4	678.8	660.0	644.8	0.00	-0.11	0.00	0.23
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	209.2	208.1	208.4	208.4	208.7	208.1	211.2	205.8	-0.01	0.01	-0.01	0.02
Products	276.7	276.5	276.8	281.5	281.3	269.1	272.7	275.3	-0.02	-0.01	0.03	0.02
OECD Asia Oceania												
Crude	377.3	377.1	377.3	377.2	377.5	385.0	383.3	378.6	-0.02	0.00	0.00	0.00
Products	38.9	39.0	39.0	39.4	39.4	38.0	38.7	38.9	0.00	0.00	0.00	0.00
Total OECD												
Crude	1224.3	1233.6	1241.8	1241.8	1234.6	1271.9	1254.5	1229.2	-0.03	-0.09	-0.01	0.25
Products	317.6	317.5	317.8	322.9	322.6	309.1	313.5	316.2	-0.01	-0.01	0.03	0.02
Total⁴	1543.3	1553.1	1561.6	1566.7	1559.3	1584.5	1571.1	1547.7	-0.05	-0.10	0.02	0.27

* estimated

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 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)

	March			April			May			June			July		
	2019	2020	%	2019	2020	%	2019	2020	%	2019	2020	%	2019	2020	%
United States²															
Crude	458.9	482.5	5.1	469.8	529.2	12.6	481.1	521.0	8.3	463.4	531.9	14.8	441.6	519.3	17.6
Motor Gasoline	236.6	260.8	10.2	230.9	257.3	11.4	235.8	258.2	9.5	229.9	253.3	10.2	235.4	249.3	5.9
Middle Distillate	175.6	168.3	-4.2	171.1	192.4	12.4	171.2	218.0	27.3	173.5	218.9	26.2	182.8	220.7	20.7
Residual Fuel Oil	29.2	34.4	17.8	28.9	36.5	26.3	30.2	39.4	30.5	30.5	39.6	29.8	30.7	36.3	18.2
Other Products	181.8	195.9	7.8	192.3	208.0	8.2	210.5	218.8	3.9	225.7	232.6	3.1	233.6	246.7	5.6
Total Products	623.2	659.4	5.8	623.2	694.2	11.4	647.7	734.4	13.4	659.6	744.4	12.9	682.5	753.0	10.3
Other ³	163.2	178.9	9.6	170.6	174.1	2.1	178.2	170.1	-4.5	181.2	176.5	-2.6	185.0	178.7	-3.4
Total	1245.3	1320.8	6.1	1263.6	1397.5	10.6	1307.0	1425.5	9.1	1304.2	1452.8	11.4	1309.1	1451.0	10.8
Japan															
Crude	95.5	84.4	-11.6	94.1	97.4	3.5	97.2	98.6	1.4	91.9	91.0	-1.0	102.6	94.1	-8.3
Motor Gasoline	10.3	11.7	13.6	9.7	13.1	35.1	9.8	12.5	27.6	9.5	11.5	21.1	9.6	11.9	24.0
Middle Distillate	26.9	27.5	2.2	25.8	29.0	12.4	27.4	30.5	11.3	28.2	31.9	13.1	31.0	33.0	6.5
Residual Fuel Oil	8.0	6.4	-20.0	7.9	7.6	-3.8	8.0	7.6	-5.0	7.8	7.5	-3.8	7.7	7.4	-3.9
Other Products	30.6	33.4	9.2	30.9	32.9	6.5	33.8	37.1	9.8	35.8	36.6	2.2	37.0	36.0	-2.7
Total Products	75.8	79.0	4.2	74.3	82.6	11.2	79.0	87.7	11.0	81.3	87.5	7.6	85.3	88.3	3.5
Other ³	47.1	51.8	10.0	51.4	55.0	7.0	50.8	55.5	9.3	53.1	55.7	4.9	53.8	53.6	-0.4
Total	218.4	215.2	-1.5	219.8	235.0	6.9	227.0	241.8	6.5	226.3	234.2	3.5	241.7	236.0	-2.4
Germany															
Crude	47.8	51.5	7.7	48.7	50.8	4.3	48.6	50.2	3.3	47.7	50.1	5.0	49.8	48.8	-2.0
Motor Gasoline	10.7	11.1	3.7	9.2	9.8	6.5	10.1	10.1	0.0	11.9	9.6	-19.3	11.7	8.9	-23.9
Middle Distillate	23.6	23.2	-1.7	23.5	21.8	-7.2	22.7	25.9	14.1	24.8	25.0	0.8	23.8	25.3	6.3
Residual Fuel Oil	7.0	7.0	0.0	7.1	7.6	7.0	7.0	7.4	5.7	6.8	7.8	14.7	6.6	7.2	9.1
Other Products	10.9	9.7	-11.0	10.3	9.5	-7.8	10.1	9.9	-2.0	10.4	9.4	-9.6	10.5	9.6	-8.6
Total Products	52.2	51.0	-2.3	50.1	48.7	-2.8	49.9	53.3	6.8	53.9	51.8	-3.9	52.6	51.0	-3.0
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	100.0	102.5	2.5	98.8	99.5	0.7	98.5	103.5	5.1	101.6	101.9	0.3	102.4	99.8	-2.5
Italy															
Crude	42.2	44.8	6.2	43.1	42.4	-1.6	40.4	39.8	-1.5	45.0	41.6	-7.6	42.2	43.2	2.4
Motor Gasoline	13.0	13.9	6.9	11.1	14.1	27.0	11.0	12.9	17.3	11.3	13.0	15.0	11.5	11.5	0.0
Middle Distillate	30.3	32.9	8.6	29.9	33.7	12.7	29.3	33.0	12.6	28.0	32.9	17.5	28.0	31.2	11.4
Residual Fuel Oil	8.4	9.3	10.7	8.7	9.5	9.2	8.6	9.0	4.7	8.7	9.2	5.7	8.9	8.0	-10.1
Other Products	12.7	17.2	35.4	12.1	17.8	47.1	11.7	18.6	59.0	12.4	17.8	43.5	12.0	17.4	45.0
Total Products	64.4	73.3	13.8	61.8	75.1	21.5	60.6	73.5	21.3	60.4	72.9	20.7	60.4	68.1	12.7
Other ³	14.7	16.8	14.3	14.8	17.8	20.3	16.2	16.6	2.5	13.8	17.5	26.8	15.1	17.8	17.9
Total	121.3	134.9	11.2	119.7	135.3	13.0	117.2	129.9	10.8	119.2	132.0	10.7	117.7	129.1	9.7
France															
Crude	14.9	11.7	-21.5	12.9	11.5	-10.9	13.7	14.2	3.6	15.8	11.9	-24.7	13.5	14.0	3.7
Motor Gasoline	4.5	4.9	8.9	3.8	5.3	39.5	4.5	4.5	0.0	5.9	4.9	-16.9	5.7	4.5	-21.1
Middle Distillate	20.4	22.5	10.3	20.9	20.2	-3.3	21.7	20.1	-7.4	21.1	22.9	8.5	19.6	22.0	12.2
Residual Fuel Oil	1.4	1.2	-14.3	0.9	1.2	33.3	0.8	0.9	12.5	0.9	1.6	77.8	1.2	1.6	33.3
Other Products	4.5	4.8	6.7	4.0	4.8	20.0	3.9	4.7	20.5	4.3	4.1	-4.7	4.4	4.2	-4.5
Total Products	30.8	33.4	8.4	29.6	31.5	6.4	30.9	30.2	-2.3	32.2	33.5	4.0	30.9	32.3	4.5
Other ³	8.0	8.2	2.5	7.4	9.6	29.7	7.6	9.3	22.4	8.5	8.7	2.4	8.0	8.7	8.7
Total	53.7	53.3	-0.7	49.9	52.6	5.4	52.2	53.7	2.9	56.5	54.1	-4.2	52.4	55.0	5.0
United Kingdom															
Crude	31.4	29.3	-6.7	31.4	30.3	-3.5	29.2	30.0	2.7	31.1	32.1	3.2	26.9	33.1	23.0
Motor Gasoline	10.3	10.6	2.9	9.8	10.8	10.2	9.0	9.2	2.2	8.7	9.5	9.2	9.2	9.8	6.5
Middle Distillate	24.2	27.2	12.4	25.9	31.5	21.6	24.9	31.3	25.7	24.3	32.3	32.9	26.6	32.1	20.7
Residual Fuel Oil	1.3	1.7	30.8	1.4	1.5	7.1	1.3	1.3	0.0	1.4	1.8	28.6	1.1	1.5	36.4
Other Products	5.1	6.7	31.4	6.2	6.9	11.3	6.1	6.7	9.8	6.6	6.3	-4.5	6.4	7.1	10.9
Total Products	40.9	46.2	13.0	43.3	50.7	17.1	41.3	48.5	17.4	41.0	49.9	21.7	43.3	50.5	16.6
Other ³	8.6	7.6	-11.6	9.7	8.1	-16.5	8.8	7.6	-13.6	8.9	7.9	-11.2	9.5	7.8	-17.9
Total	80.9	83.1	2.7	84.4	89.1	5.6	79.3	86.1	8.6	81.0	89.9	11.0	79.7	91.4	14.7
Canada⁴															
Crude	122.8	140.3	14.3	125.3	145.4	16.0	126.2	142.0	12.5	121.0	137.5	13.6	120.5	133.1	10.5
Motor Gasoline	14.8	17.2	16.2	14.6	15.6	6.8	14.4	15.0	4.2	13.9	15.6	12.2	14.2	15.5	9.2
Middle Distillate	16.9	12.9	-23.7	17.1	12.0	-29.8	15.5	12.6	-18.7	14.9	12.5	-16.1	15.9	13.1	-17.6
Residual Fuel Oil	2.4	2.8	16.7	2.2	2.8	27.3	1.6	2.5	56.3	2.0	2.6	30.0	2.0	2.7	35.0
Other Products	11.6	10.2	-12.1	11.4	10.6	-7.0	11.2	10.3	-8.0	9.6	9.4	-2.1	10.6	8.4	-20.8
Total Products	45.7	43.1	-5.7	45.3	41.0	-9.5	42.7	40.4	-5.4	40.4	40.1	-0.7	42.7	39.7	-7.0
Other ³	17.7	14.3	-19.2	18.4	18.5	0.5	18.5	21.4	15.7	20.5	24.8	21.0	22.0	28.4	29.1
Total	186.2	197.7	6.2	189.0	204.9	8.4	187.4	203.8	8.8	181.9	202.4	11.3	185.2	201.2	8.6

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 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 barrels¹ and 'days'²)

	End June 2019		End September 2019		End December 2019		End March 2020		End June 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	182.0	71	185.6	75	181.3	78	197.6	105	202.3	-
Chile	11.0	31	12.3	33	11.5	30	11.9	43	12.4	-
Mexico	39.6	19	34.3	18	20.9	13	22.8	18	23.3	-
United States ⁴	1951.0	94	1945.2	94	1918.8	99	1957.7	122	2110.9	-
Total⁴	2205.6	85	2199.5	86	2154.7	90	2212.1	112	2371.0	102
OECD Asia Oceania										
Australia	45.8	39	44.8	37	42.6	37	42.7	46	41.3	-
Israel	-	-	-	-	-	-	-	-	-	-
Japan	547.7	160	551.6	147	551.9	150	534.9	185	553.8	-
Korea	204.4	81	210.2	80	206.3	82	196.5	81	213.4	-
New Zealand	10.4	60	10.1	53	9.2	52	11.0	95	10.1	-
Total	808.4	107	816.6	102	810.0	105	785.1	120	818.6	120
OECD Europe⁵										
Austria	21.4	73	20.9	79	22.0	88	24.3	109	24.1	-
Belgium	49.1	76	47.5	71	45.7	70	47.9	86	50.1	-
Czech Republic	20.4	87	21.4	101	22.3	117	24.0	148	23.2	-
Denmark	24.8	152	28.2	170	26.9	191	29.2	220	34.1	-
Estonia	2.7	93	2.7	90	3.9	131	2.6	99	4.4	-
Finland	38.9	188	39.2	192	36.4	172	38.7	194	39.7	-
France	169.2	96	160.4	99	158.6	103	162.5	134	165.5	-
Germany	278.7	116	276.6	118	277.0	119	278.5	137	279.2	-
Greece	29.0	84	32.0	107	29.4	107	35.7	147	38.3	-
Hungary	23.8	128	24.9	139	26.2	161	26.2	162	26.2	-
Ireland	9.8	62	8.8	54	9.7	61	10.3	95	12.3	-
Italy	129.4	103	134.9	109	128.3	126	145.2	177	142.3	-
Latvia	3.9	92	3.6	97	2.5	80	2.7	84	3.4	-
Lithuania	6.2	85	8.0	121	6.9	121	7.3	116	7.7	-
Luxembourg	0.6	10	0.6	10	0.6	11	0.7	16	0.7	-
Netherlands	147.0	172	149.1	162	145.6	153	147.1	176	174.4	-
Norway	26.6	130	27.1	162	23.8	131	28.5	160	27.3	-
Poland	77.8	107	79.3	113	81.2	127	83.2	137	82.3	-
Portugal	24.8	96	24.1	97	24.3	111	25.7	152	22.0	-
Slovak Republic	11.2	127	11.7	141	12.3	153	12.5	163	12.1	-
Slovenia	5.1	87	4.8	91	5.3	114	5.2	112	5.4	-
Spain	126.0	95	123.1	94	124.8	102	127.4	145	128.0	-
Sweden	41.9	126	42.8	157	44.5	174	46.1	205	72.4	-
Switzerland	30.7	133	32.1	139	32.3	149	33.4	182	34.4	-
Turkey	87.0	78	88.0	89	88.3	100	89.4	112	86.0	-
United Kingdom	81.1	52	78.3	51	81.2	54	83.1	85	89.8	-
Total	1467.2	100	1470.0	105	1460.0	109	1517.2	138	1585.3	121
Total OECD	4481.2	93	4486.1	94	4424.7	98	4514.5	121	4775.0	111
DAYS OF IEA Net Imports⁶ -		215		214		212		217		259

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 entepot stocks where known) they include stocks held by industry to meet IEA, EU and national emergency reserves commitments and are subject to government control in emergencies.

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

³ End June 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/inetimports.asp). Net exporting IEA countries are excluded.

TOTAL OECD STOCKS

CLOSING STOCKS	Total	Government ¹ controlled Millions of Barrels	Industry	Total	Government ¹ controlled Days of Fwd. Demand ²	Industry
2Q2017	4614	1590	3024	96	33	63
3Q2017	4553	1579	2974	94	33	62
4Q2017	4428	1569	2860	92	33	59
1Q2018	4395	1577	2818	93	33	59
2Q2018	4389	1575	2814	91	33	58
3Q2018	4438	1570	2868	93	33	60
4Q2018	4427	1552	2875	93	33	61
1Q2019	4432	1557	2875	94	33	61
2Q2019	4481	1549	2932	93	32	61
3Q2019	4486	1544	2942	94	32	62
4Q2019	4425	1535	2889	98	34	64
1Q2020	4515	1537	2977	121	41	80
2Q2020	4775	1562	3213	111	36	74

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 2Q2020 (when latest forecasts are used).

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

	2017	2018	2019	3Q19	4Q19	1Q20	2Q20	May 20	Jun 20	Jul 20	Year Earlier	
											Jul 19	change
Saudi Light & Extra Light												
Americas	0.59	0.66	0.20	0.08	0.23	0.49	0.41	0.46	0.30	0.03	-	-
Europe	0.69	0.69	0.68	0.71	0.56	0.56	0.79	0.94	0.50	0.38	0.83	-0.45
Asia Oceania	1.56	1.45	1.42	1.33	1.32	1.41	1.36	1.44	1.29	1.61	1.33	0.28
Saudi Medium												
Americas	0.33	0.30	0.12	0.10	0.06	0.06	0.39	0.22	0.55	-	0.04	-
Europe	0.01	0.01	0.02	0.04	0.02	0.05	0.03	0.06	0.00	-	-	-
Asia Oceania	0.37	0.41	0.23	0.24	0.19	0.22	0.26	0.25	0.28	0.24	0.25	-0.01
Canada Heavy												
Americas	2.23	2.41	2.27	2.29	2.33	2.64	2.14	2.02	2.09	2.30	2.35	-0.05
Europe	0.02	0.04	0.04	0.05	0.04	0.04	0.02	0.03	0.00	0.02	0.04	-0.03
Asia Oceania	-	0.00	0.00	0.01	0.01	-	-	-	-	-	-	-
Iraqi Basrah Light²												
Americas	0.63	0.50	0.31	0.32	0.21	0.26	0.05	-	0.16	-	0.30	-
Europe	0.76	0.76	0.85	0.96	0.59	0.62	0.60	0.71	0.47	0.43	0.92	-0.49
Asia Oceania	0.40	0.43	0.37	0.24	0.39	0.27	0.20	0.17	0.14	0.12	0.25	-0.12
Kuwait Blend												
Americas	0.11	0.02	-	-	-	-	-	-	-	-	-	-
Europe	0.20	0.13	0.11	0.17	0.10	0.08	0.09	0.09	0.07	0.02	0.15	-0.13
Asia Oceania	0.68	0.66	0.61	0.64	0.57	0.63	0.67	0.65	0.62	0.38	0.55	-0.17
Iranian Light												
Americas	-	-	-	-	-	-	-	-	-	-	-	-
Europe	0.27	0.16	0.00	-	-	-	-	-	-	-	-	-
Asia Oceania	0.01	0.01	0.00	-	-	-	-	-	-	-	-	-
Iranian Heavy³												
Americas	-	-	-	-	-	-	-	-	-	-	-	-
Europe	0.52	0.35	0.04	-	-	-	-	-	-	-	-	-
Asia Oceania	0.57	0.28	0.14	-	-	-	-	-	-	-	-	-
BFOE												
Americas	0.02	0.00	0.00	0.01	-	-	-	-	-	-	-	-
Europe	0.45	0.35	0.37	0.34	0.45	0.48	0.32	0.24	0.56	0.55	0.33	0.22
Asia Oceania	0.10	0.09	0.01	0.02	-	-	0.02	0.07	-	-	-	-
Kazakhstan												
Americas	-	-	-	-	-	-	-	-	-	-	-	-
Europe	0.75	0.75	0.76	0.75	0.67	0.80	0.68	0.61	0.73	0.63	0.89	-0.26
Asia Oceania	0.10	0.19	0.18	0.22	0.15	0.10	0.07	0.07	0.04	0.03	0.24	-0.20
Venezuelan 22 API and heavier												
Americas	0.48	0.44	0.05	-	-	-	-	-	-	-	-	-
Europe	0.04	0.03	0.09	0.09	0.09	0.03	0.04	0.06	0.03	0.12	0.06	0.05
Asia Oceania	-	-	-	-	-	-	-	-	-	-	-	-
Mexican Maya												
Americas	0.58	0.63	0.51	0.52	0.46	0.55	0.53	0.64	0.51	0.52	0.51	0.01
Europe	0.20	0.21	0.19	0.17	0.17	0.13	0.15	0.13	0.10	0.16	0.20	-0.04
Asia Oceania	0.07	0.08	0.13	0.13	0.14	0.14	0.10	0.06	0.13	0.12	0.13	0.00
Russian Urals												
Americas	0.01	0.01	0.01	0.02	-	-	-	-	-	-	-	-
Europe	1.64	1.40	1.37	1.50	1.23	1.40	1.10	1.09	1.18	0.84	1.62	-0.78
Asia Oceania	0.01	0.00	-	-	-	-	-	-	-	-	-	-
Cabinda and Other Angola												
North America	0.07	0.06	0.01	-	-	-	0.03	-	-	-	-	-
Europe	0.11	0.14	0.15	0.20	0.13	0.18	0.11	0.09	0.10	0.05	0.22	-0.17
Pacific	0.01	0.01	0.00	-	0.01	-	-	-	-	-	-	-
Nigerian Light⁴												
Americas	0.04	0.01	0.03	0.05	-	-	-	-	-	-	-	-
Europe	0.39	0.53	0.51	0.48	0.50	0.50	0.39	0.33	0.48	0.53	0.26	0.27
Asia Oceania	0.02	0.02	0.02	0.03	0.02	0.04	0.01	-	-	0.01	0.03	-0.02
Libya Light and Medium												
Americas	0.02	-	0.00	-	-	-	-	-	-	-	-	-
Europe	0.54	0.62	0.67	0.73	0.70	0.20	0.03	0.04	0.04	0.02	0.72	-0.70
Asia Oceania	0.03	0.02	0.03	0.04	0.02	0.04	-	-	-	-	0.04	-

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	3Q19	4Q19	1Q20	2Q20	May 20	Jun 20	Jul 20	Year Earlier	
											Jul 19	% change
Crude Oil												
Americas	4361	3759	2698	2654	2292	2097	2134	2233	2519	1864	2490	-25%
Europe	9902	9814	9872	10309	9589	9309	7879	7871	7347	8099	10463	-23%
Asia Oceania	6849	6697	6542	6365	6520	6372	5298	4991	4616	5291	6603	-20%
Total OECD	21112	20269	19111	19329	18401	17779	15311	15094	14482	15255	19556	-22%
LPG												
Americas	20	22	26	21	28	31	28	34	21	38	22	76%
Europe	432	457	434	408	438	533	310	253	299	473	394	20%
Asia Oceania	551	553	582	608	586	647	551	634	481	556	582	-5%
Total OECD	1003	1032	1042	1037	1052	1210	889	920	801	1067	998	7%
Naphtha												
Americas	19	8	5	5	5	7	7	5	12	7	3	161%
Europe	369	391	347	310	396	421	468	545	421	363	255	42%
Asia Oceania	978	1021	993	1031	1061	1109	1044	1143	1125	1022	1017	1%
Total OECD	1366	1420	1345	1347	1462	1536	1519	1694	1558	1393	1274	9%
Gasoline³												
Americas	727	773	817	957	669	507	499	440	712	553	1101	-50%
Europe	153	110	112	92	90	112	130	152	201	84	64	30%
Asia Oceania	102	113	114	117	110	103	111	77	164	253	87	189%
Total OECD	983	996	1043	1165	869	722	741	669	1077	890	1253	-29%
Jet & Kerosene												
Americas	171	140	175	206	170	164	146	135	137	157	212	-26%
Europe	504	509	520	558	496	422	325	356	359	246	542	-55%
Asia Oceania	80	89	76	69	94	119	35	9	41	44	75	-42%
Total OECD	755	738	771	832	760	704	507	500	537	447	829	-46%
Gasoil/Diesel												
Americas	77	124	118	72	117	77	115	132	97	72	107	-33%
Europe	1337	1339	1298	1276	1253	1263	1281	1272	1463	1319	1272	4%
Asia Oceania	196	253	262	270	286	281	346	315	402	403	264	52%
Total OECD	1610	1716	1678	1618	1656	1622	1743	1719	1962	1793	1643	9%
Heavy Fuel Oil												
Americas	131	161	116	85	127	156	153	94	165	87	96	-9%
Europe	233	197	223	240	206	283	268	295	250	433	257	68%
Asia Oceania	146	162	101	116	80	108	46	4	41	139	90	54%
Total OECD	510	520	440	441	413	546	467	392	457	659	443	49%
Other Products												
Americas	717	679	713	792	809	704	542	496	587	653	877	-26%
Europe	1012	1011	865	830	723	664	609	632	541	544	779	-30%
Asia Oceania	263	263	268	260	273	288	215	194	221	202	273	-26%
Total OECD	1991	1952	1846	1882	1804	1656	1366	1323	1349	1400	1929	-27%
Total Products												
Americas	1862	1908	1971	2138	1924	1645	1491	1336	1731	1568	2418	-35%
Europe	4040	4013	3798	3714	3602	3698	3391	3505	3533	3462	3563	-3%
Asia Oceania	2316	2454	2397	2470	2490	2654	2349	2375	2476	2620	2390	10%
Total OECD	8218	8374	8166	8323	8016	7997	7231	7217	7740	7650	8370	-9%
Total Oil												
Americas	6223	5666	4669	4793	4216	3742	3625	3569	4250	3432	4907	-30%
Europe	13942	13827	13670	14023	13191	13007	11270	11376	10880	11562	14025	-18%
Asia Oceania	9164	9151	8939	8836	9010	9027	7647	7366	7092	7911	8993	-12%
Total OECD	29330	28644	27278	27652	26418	25775	22542	22312	22222	22905	27926	-18%

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	3Q19	4Q19	1Q20	2Q20	May 20	Jun 20	Jul 20	Year Earlier		
											Jul 19	% change	
Crude Oil													
Americas	4235	3606	2553	2519	2203	2047	2048	2142	2381	1837	2388	-23%	
Europe	9436	9088	8913	9383	8397	8026	6784	6777	6617	6984	9396	-26%	
Asia Oceania	6553	6249	5914	5695	5795	5690	4799	4576	4253	4998	5881	-15%	
Total OECD	20224	18943	17380	17598	16395	15764	13631	13495	13251	13819	17665	-22%	
LPG													
Americas	16	15	23	21	25	25	22	23	18	33	22	50%	
Europe	337	350	303	274	282	303	232	226	235	255	258	-1%	
Asia Oceania	205	158	74	65	54	46	57	83	56	47	63	-25%	
Total OECD	557	523	400	360	362	373	311	333	310	335	343	-2%	
Naphtha													
Americas	16	4	2	3	2	1	2	4	0	0	1	-97%	
Europe	350	360	320	284	348	398	456	535	413	322	225	43%	
Asia Oceania	931	924	898	975	941	924	831	853	858	864	964	-10%	
Total OECD	1297	1288	1220	1261	1291	1323	1289	1392	1271	1187	1190	0%	
Gasoline ³													
Americas	213	271	308	386	234	168	213	222	339	250	445	-44%	
Europe	149	105	108	89	87	108	125	150	198	76	64	18%	
Asia Oceania	102	90	88	97	101	86	81	34	139	206	86	139%	
Total OECD	464	466	504	572	421	362	420	405	676	532	596	-11%	
Jet & Kerosene													
Americas	67	56	39	55	34	58	60	62	49	37	67	-45%	
Europe	436	445	464	473	446	356	288	320	315	218	491	-56%	
Asia Oceania	80	89	76	69	94	119	35	9	41	44	75	-42%	
Total OECD	583	590	579	596	573	533	383	391	405	298	634	-53%	
Gasoil/Diesel													
Americas	50	100	86	58	82	61	92	97	90	53	94	-44%	
Europe	1086	1160	1124	1026	1168	1148	1165	1174	1274	1152	1033	12%	
Asia Oceania	195	253	261	264	286	281	340	306	394	382	249	54%	
Total OECD	1331	1513	1471	1349	1537	1490	1598	1576	1758	1588	1376	15%	
Heavy Fuel Oil													
Americas	123	147	102	81	107	124	107	61	109	83	96	-13%	
Europe	218	185	202	210	191	268	253	279	236	417	224	86%	
Asia Oceania	146	162	100	114	80	108	46	4	41	139	90	54%	
Total OECD	487	493	404	405	378	500	406	344	387	639	410	56%	
Other Products													
Americas	542	522	542	615	646	611	453	427	497	569	651	-13%	
Europe	731	702	629	615	510	364	382	398	343	396	609	-35%	
Asia Oceania	186	182	184	175	198	199	144	131	156	127	178	-29%	
Total OECD	1459	1406	1355	1404	1354	1174	978	956	997	1092	1439	-24%	
Total Products													
Americas	1026	1115	1103	1219	1129	1047	948	896	1103	1025	1375	-25%	
Europe	3307	3307	3150	2971	3031	2946	2902	3082	3014	2836	2905	-2%	
Asia Oceania	1845	1857	1681	1758	1755	1762	1535	1419	1686	1811	1707	6%	
Total OECD	6179	6279	5934	5948	5915	5756	5386	5396	5803	5672	5987	-5%	
Total Oil													
Americas	5261	4721	3656	3738	3332	3095	2996	3038	3483	2862	3764	-24%	
Europe	12744	12395	12062	12354	11429	10972	9686	9859	9631	9820	12301	-20%	
Asia Oceania	8398	8106	7595	7453	7550	7452	6334	5995	5940	6809	7588	-10%	
Total OECD	26403	25223	23314	23545	22310	21519	19016	18891	19054	19491	23652	-18%	

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	3Q19	4Q19	1Q20	2Q20	May 20	Jun 20	Jul 20	Year Earlier	
											Jul 19	% change
Crude Oil												
Americas	126	153	145	135	89	50	86	91	139	26	101	-74%
Europe	466	726	959	926	1192	1283	1095	1094	729	1116	1067	5%
Asia Oceania	296	448	628	670	725	682	499	415	363	294	722	-59%
Total OECD	888	1326	1731	1731	2007	2015	1681	1599	1231	1436	1890	-24%
LPG												
Americas	4	7	3	0	3	6	6	10	3	6	0	na
Europe	95	107	131	134	156	230	78	27	63	218	136	60%
Asia Oceania	346	395	508	543	532	601	494	550	425	509	519	-2%
Total OECD	445	508	642	678	690	837	578	588	491	732	656	12%
Naphtha												
Americas	3	4	3	3	3	6	5	2	12	7	2	333%
Europe	19	31	27	26	48	23	11	11	8	41	30	36%
Asia Oceania	47	97	96	57	120	185	213	289	267	158	52	203%
Total OECD	69	132	125	86	171	213	229	302	286	206	84	146%
Gasoline³												
Americas	514	502	509	571	436	339	286	218	373	303	656	-54%
Europe	5	5	4	2	3	4	5	2	3	8	0	7354%
Asia Oceania	0	23	26	20	9	17	30	43	25	47	1	4127%
Total OECD	519	530	539	593	448	360	321	264	401	357	657	-46%
Jet & Kerosene												
Americas	104	84	136	151	137	106	87	73	88	120	145	-17%
Europe	68	64	56	85	50	65	37	37	44	28	50	-44%
Asia Oceania	0	0	0	0	0	0	0	0	0	0	0	na
Total OECD	172	148	192	236	186	171	124	109	132	149	196	-24%
Gasoi/Diesel												
Americas	28	25	32	14	35	16	22	35	7	19	13	43%
Europe	250	178	174	250	85	115	116	98	189	167	239	-30%
Asia Oceania	1	0	1	5	0	0	6	10	8	20	16	29%
Total OECD	279	203	207	269	120	132	144	143	204	206	267	-23%
Heavy Fuel Oil												
Americas	8	15	14	4	20	31	46	34	56	5	0	na
Europe	15	12	21	30	15	15	15	15	14	16	33	-53%
Asia Oceania	0	0	1	2	0	0	0	0	0	0	0	na
Total OECD	23	27	36	36	35	46	61	49	70	20	33	-39%
Other Products												
Americas	175	157	171	177	163	93	90	70	89	84	227	-63%
Europe	280	308	236	216	213	299	228	234	198	148	169	-12%
Asia Oceania	77	81	83	85	75	89	70	63	65	75	95	-21%
Total OECD	532	546	490	477	451	481	388	367	352	308	491	-37%
Total Products												
Americas	836	793	867	920	795	597	543	441	628	543	1042	-48%
Europe	733	706	649	743	571	752	489	424	519	626	658	-5%
Asia Oceania	470	597	716	712	735	892	813	956	790	809	683	18%
Total OECD	2039	2095	2232	2375	2101	2241	1845	1821	1937	1978	2383	-17%
Total Oil												
Americas	962	945	1012	1055	884	647	629	532	766	570	1143	-50%
Europe	1199	1432	1608	1669	1763	2034	1585	1517	1249	1742	1725	1%
Asia Oceania	766	1044	1343	1382	1461	1574	1312	1371	1153	1102	1405	-22%
Total OECD	2927	3421	3963	4107	4108	4256	3526	3420	3168	3414	4273	-20%

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	3Q19	4Q19	1Q20	2Q20	May 20	Jun 20	Jul 20	Year Earlier Jul 19 change	
OECD Americas												
Venezuela	618	506	81	-	-	-	-	-	-	-	-	-
Other Central & South America	928	795	867	888	849	823	625	462	618	776	992	-216
North Sea	124	150	143	135	89	50	83	80	139	26	101	-75
Other OECD Europe	-	1	2	-	-	-	4	11	-	-	-	-
Non-OECD Europe	-	-	-	-	-	-	-	-	-	-	-	-
Former Soviet Union	121	145	189	209	143	146	42	4	75	87	179	-92
Saudi Arabia	1043	983	601	555	501	545	1015	1241	1283	673	524	148
Kuwait	144	78	45	22	26	37	-	-	-	67	20	48
Iran	-	-	-	-	-	-	-	-	-	-	-	-
Iraq	605	519	331	332	292	284	176	242	146	136	350	-213
Oman	14	-	-	-	-	-	-	-	-	-	-	-
United Arab Emirates	20	5	3	11	-	-	9	-	28	5	-	-
Other Middle East	2	-	-	-	-	-	-	-	-	-	-	-
West Africa ²	497	317	267	332	244	118	146	148	169	71	229	-159
Other Africa	214	196	137	127	92	56	24	45	25	9	62	-53
Asia	26	61	32	43	54	40	12	-	36	13	32	-19
Other	4	3	0	-	0	-	-	-	-	-	-	-
Total	4361	3759	2698	2654	2292	2097	2134	2233	2519	1864	2490	-626
of which Non-OECD	4235	3606	2553	2519	2203	2047	2048	2142	2381	1837	2388	-551
OECD Europe												
Canada	45	81	60	73	65	115	67	104	28	75	45	30
Mexico + USA	419	645	900	853	1127	1167	1029	989	702	1040	1022	19
Venezuela	67	57	106	102	104	33	40	63	38	129	73	55
Other Central & South America	160	132	118	124	156	229	151	94	88	148	85	63
Non-OECD Europe	9	12	14	11	25	34	13	13	15	19	9	10
Former Soviet Union	4437	4149	4240	4410	4186	4131	3190	2945	3393	3415	4764	-1349
Saudi Arabia	750	818	792	868	624	716	1052	1300	582	514	878	-364
Kuwait	201	137	97	143	53	90	64	69	55	92	165	-73
Iran	801	536	74	41	32	18	-	-	-	-	50	-
Iraq	995	962	1124	1189	862	828	839	891	760	861	1206	-345
Oman	-	-	-	-	-	-	-	-	-	-	-	-
United Arab Emirates	6	2	2	-	7	-	-	-	-	-	-	-
Other Middle East	1	-	3	2	-	-	16	24	25	-	7	-
West Africa ²	960	1115	1140	1179	1134	1317	876	852	989	1134	967	168
Other Africa	1045	1161	1180	1301	1204	599	438	392	512	484	1191	-707
Asia	2	-	-	-	-	-	-	-	-	-	-	-
Other	5	9	13	0	12	10	108	141	162	171	-	-
Total	9903	9816	9863	10296	9590	9287	7883	7879	7348	8083	10462	-2379
of which Non-OECD	9436	9088	8913	9383	8397	8026	6784	6777	6617	6984	9396	-2412
OECD Asia Oceania												
Canada	-	3	5	6	12	-	-	-	-	-	-	-
Mexico + USA	199	344	613	642	705	674	457	316	337	294	722	-428
Venezuela	8	-	-	-	-	-	-	-	-	-	-	-
Other Central & South America	35	35	48	51	23	79	96	150	45	77	76	1
North Sea	97	100	10	22	8	8	42	99	26	-	-	-
Other OECD Europe	-	-	-	-	-	-	-	-	-	-	-	-
Non-OECD Europe	-	-	-	-	-	-	-	-	-	-	-	-
Former Soviet Union	413	435	435	488	392	402	218	231	134	158	490	-333
Saudi Arabia	2166	2040	1878	1793	1751	1844	1790	1871	1739	2171	1762	408
Kuwait	671	672	666	705	615	668	704	666	647	400	574	-174
Iran	543	274	137	-	-	-	-	-	-	-	-	-
Iraq	402	435	364	244	381	267	201	172	136	125	248	-124
Oman	42	56	59	70	46	35	-	-	-	49	95	-46
United Arab Emirates	1147	1098	1256	1257	1416	1434	1018	911	942	1093	1265	-172
Other Middle East	390	450	449	516	463	454	345	387	255	403	448	-45
West Africa ²	66	95	56	29	45	96	46	-	53	31	34	-2
Other Africa	92	105	90	96	108	79	26	38	21	51	148	-97
Non-OECD Asia	325	319	220	184	230	198	109	81	120	96	199	-103
Other	253	235	255	262	325	134	245	68	162	344	541	-197
Total	6849	6697	6542	6365	6520	6372	5298	4991	4616	5291	6603	-1312
of which Non-OECD	6553	6249	5914	5695	5795	5690	4799	4576	4253	4998	5881	-884
Total OECD Trade												
of which Non-OECD	21113	20271	19103	19316	18402	17757	15314	15102	14484	15238	19555	-4317
	20224	18943	17380	17598	16395	15764	13631	13495	13251	13819	17665	-3847

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	3Q19	4Q19	1Q20	2Q20	May 20	Jun 20	Jul 20	Year Earlier	
											Jul 19	change
OECD Americas												
Venezuela	18	23	4	-	-	-	-	-	-	-	-	-
Other Central & South America	42	64	83	105	61	28	65	85	96	52	122	-70
ARA (Belgium Germany Netherlands)	178	167	189	233	155	119	126	89	195	104	229	-126
Other Europe	326	323	293	309	267	201	131	102	165	198	386	-188
FSU	84	80	100	125	119	57	49	12	108	53	148	-95
Saudi Arabia	1	11	7	4	-	4	6	2	15	36	-	-
Algeria	-	1	-	-	-	10	2	-	7	4	-	-
Other Middle East & Africa	24	19	14	25	8	9	8	8	14	5	32	-27
Singapore	10	8	5	12	-	-	2	-	7	-	17	-
OECD Asia Oceania	10	13	28	29	14	21	30	27	13	1	40	-39
Non-OECD Asia (excl. Singapore)	63	84	116	135	77	63	88	116	108	100	155	-55
Other	3	0	0	0	0	-	-	-	-	-	-	-
Total²	759	794	838	978	701	512	508	440	728	553	1130	-577
of which Non-OECD	213	271	308	386	234	168	213	222	339	250	445	-195
OECD Europe												
OECD Americas	4	4	3	1	3	2	4	1	3	7	-	-
Venezuela	-	0	0	0	-	-	1	3	-	-	0	-
Other Central & South America	3	5	3	2	4	7	1	2	0	-	5	-
Non-OECD Europe	15	11	18	23	18	21	15	11	24	31	7	23
FSU	89	70	62	47	60	57	51	98	24	37	40	-3
Saudi Arabia	0	2	0	1	-	-	7	-	22	-	1	-
Algeria	1	0	0	-	1	-	3	-	8	-	-	-
Other Middle East & Africa	5	4	8	4	17	3	5	0	14	5	4	1
Singapore	2	2	3	2	2	2	1	1	2	2	2	0
OECD Asia Oceania	1	1	1	1	0	1	1	1	-	1	0	1
Non-OECD Asia (excl. Singapore)	3	2	0	0	0	0	0	-	-	-	0	-
Other	41	20	21	17	-5	28	53	50	111	16	12	5
Total²	163	122	121	100	101	122	141	168	209	100	73	28
of which Non-OECD	149	105	108	89	87	108	125	150	198	76	64	11
OECD Asia Oceania												
OECD Americas	-	4	6	20	1	8	8	19	3	0	1	-1
Venezuela	-	-	-	-	-	-	-	-	-	-	-	-
Other Central & South America	0	-	-	-	-	-	-	-	-	-	-	-
ARA (Belgium Germany Netherlands)	-	13	14	-	9	9	1	-	-	22	-	-
Other Europe	-	7	5	-	-	1	22	24	21	25	-	-
FSU	-	1	0	-	-	1	7	-	1	-	-	-
Saudi Arabia	0	0	1	-	-	-	-	-	-	-	-	-
Algeria	-	-	-	-	-	-	-	-	-	-	-	-
Other Middle East & Africa	5	1	-	-	-	-	-	-	-	-	-	-
Singapore	52	49	46	49	63	49	40	8	94	111	39	71
Non-OECD Asia (excl. Singapore)	30	19	21	26	17	18	21	7	24	74	28	46
Other	15	20	21	22	21	20	20	19	20	19	19	0
Total²	102	114	114	117	110	104	118	77	164	250	87	163
of which Non-OECD	102	90	88	97	101	86	81	34	139	206	86	120
Total OECD Trade²	1024	1029	1073	1194	912	738	767	685	1100	904	1290	-387
of which Non-OECD	464	466	504	572	421	362	420	405	676	532	596	-64

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	3Q19	4Q19	1Q20	2Q20	May 20	Jun 20	Jul 20	Year Earlier	
											Jul 19	change
OECD Americas												
Venezuela	2	4	1	-	-	-	-	-	-	-	-	-
Other Central and South America	13	30	38	47	41	25	34	22	40	25	59	-34
ARA (Belgium Germany Netherlands)	7	6	5	2	18	7	-	-	-	-	-	-
Other Europe	3	3	2	2	1	1	11	10	3	3	3	0
FSU	6	16	6	3	11	1	22	32	-	-	10	-
Saudi Arabia	2	17	3	-	-	3	-	-	-	15	-	-
Algeria	-	-	-	-	-	-	-	-	-	-	-	-
Other Middle East and Africa	4	8	2	-	-	4	-	-	-	-	-	-
Singapore	0	1	0	-	-	-	-	-	-	-	-	-
OECD Asia Oceania	18	15	24	10	16	8	11	25	4	16	10	6
Non-OECD Asia (excl. Singapore)	22	23	30	8	30	28	31	42	42	13	25	-12
Other	0	-	7	-	-	-	6	-	8	-	-	-
Total²	77	124	118	72	117	77	115	132	97	72	107	-36
of which Non-OECD	50	100	86	58	82	61	92	97	90	53	94	-41
OECD Europe												
OECD Americas	222	154	138	214	54	89	84	64	154	146	201	-55
Venezuela	-	-	-	-	-	-	-	-	-	-	-	-
Other Central and South America	3	4	0	-	-	2	1	-	2	3	-	-
Non-OECD Europe	48	39	41	40	48	27	27	42	28	42	59	-17
FSU	732	714	683	648	670	816	630	675	593	622	609	13
Saudi Arabia	160	225	205	188	203	113	223	183	306	189	179	11
Algeria	-	-	0	-	0	-	7	-	15	-	-	-
Other Middle East and Africa	72	76	83	70	77	79	66	65	95	57	63	-6
Singapore	15	14	27	39	34	16	29	43	17	15	38	-23
OECD Asia Oceania	28	25	36	36	31	27	32	34	35	21	38	-17
Non-OECD Asia (excl. Singapore)	125	151	152	95	199	150	95	45	98	93	125	-32
Other	21	12	10	16	8	-21	123	174	149	153	28	124
Total²	1427	1413	1376	1347	1324	1297	1317	1325	1491	1340	1340	0
of which Non-OECD	1086	1160	1124	1026	1168	1148	1165	1174	1274	1152	1033	119
OECD Asia Oceania												
OECD Americas	1	-	1	5	-	-	6	10	8	20	16	5
Venezuela	-	-	-	-	-	-	-	-	-	-	-	-
Other Central and South America	0	-	-	-	-	-	-	-	-	-	-	-
ARA (Belgium Germany Netherlands)	-	-	-	-	-	-	0	-	-	-	-	-
Other Europe	-	-	-	-	-	-	-	-	-	-	-	-
FSU	5	4	4	4	3	3	3	4	1	2	5	-3
Saudi Arabia	-	3	-	-	-	-	-	-	-	-	-	-
Algeria	-	-	-	-	-	-	-	-	-	-	-	-
Other Middle East and Africa	1	8	7	-	11	0	22	14	52	19	-	-
Singapore	87	141	111	96	133	78	96	102	93	98	89	10
Non-OECD Asia (excl. Singapore)	96	91	133	158	134	194	209	181	234	241	151	90
Other	7	5	5	6	5	6	10	5	15	22	5	17
Total²	196	253	262	270	286	281	346	315	402	403	264	138
of which Non-OECD	195	253	261	264	286	281	340	306	394	382	249	134
Total OECD Trade²	1701	1790	1756	1689	1727	1655	1778	1772	1991	1815	1712	103
of which Non-OECD	1331	1513	1471	1349	1537	1490	1598	1576	1758	1588	1376	212

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	3Q19	4Q19	1Q20	2Q20	May 20	Jun 20	Jul 20	Year Earlier	
											Jul 19	change
OECD Americas												
Venezuela	16	6	0	-	-	-	-	-	-	-	-	-
Other Central and South America	1	2	7	8	11	5	5	4	4	4	14	-10
ARA (Belgium Germany Netherlands)	-	0	-	-	-	-	-	-	-	-	-	-
Other Europe	0	0	0	1	-	3	0	-	1	8	-	-
FSU	1	0	-	-	-	-	-	-	-	-	-	-
Saudi Arabia	2	1	2	-	-	3	7	6	-	-	-	-
Algeria	0	-	-	-	-	1	1	-	-	-	-	-
Other Middle East and Africa	3	2	10	15	11	11	4	1	10	17	29	-13
Singapore	2	6	3	4	-	13	1	-	3	-	1	-
OECD Asia Oceania	104	84	136	151	137	103	87	73	87	112	145	-33
Non-OECD Asia (excl. Singapore)	30	27	14	28	11	21	31	41	15	16	23	-7
Other	13	11	3	-	-	4	11	10	17	-	-	-
Total²	171	140	175	206	170	164	146	135	137	157	212	-55
of which Non-OECD	67	56	39	55	34	58	60	62	49	37	67	-30
OECD Europe												
OECD Americas	20	32	20	32	16	35	14	2	11	8	24	-17
Venezuela	5	1	-	-	-	-	-	-	-	-	-	-
Other Central and South America	2	2	1	-	0	0	-	-	-	-	-	-
Non-OECD Europe	3	6	2	1	-	-	-	-	-	3	2	2
FSU	33	40	45	53	32	33	17	7	16	20	57	-37
Saudi Arabia	94	98	105	106	115	54	47	86	53	15	121	-105
Algeria	12	9	11	17	14	12	13	21	16	10	8	2
Other Middle East and Africa	207	197	199	172	196	174	128	135	162	135	230	-95
Singapore	28	25	29	36	34	21	6	2	15	32	19	13
OECD Asia Oceania	48	32	36	53	34	31	23	35	33	21	26	-5
Non-OECD Asia (excl. Singapore)	53	69	73	89	51	67	40	33	34	33	55	-22
Other	1	1	2	3	5	-2	38	37	20	-29	3	-32
Total²	508	512	523	561	497	423	326	357	359	248	544	-297
of which Non-OECD	436	445	464	473	446	356	288	320	315	218	491	-274
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	25	20	25	5	-	10	9	20	-10
Non-OECD Asia (excl. Singapore)	34	26	29	27	39	52	15	1	11	24	48	-23
Other	22	33	26	17	35	42	16	8	20	10	8	2
Total²	80	89	76	69	94	119	35	9	41	44	75	-31
of which Non-OECD	80	89	76	69	94	119	35	9	41	44	75	-31
Total OECD Trade²	758	741	774	835	761	705	507	501	538	449	832	-383
of which Non-OECD	583	590	579	596	573	533	383	391	405	298	634	-335

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	3Q19	4Q19	1Q20	2Q20	May 20	Jun 20	Jul 20	Year Earlier	
											Jul 19	change
OECD Americas												
Venezuela	16	42	7	-	-	-	-	-	-	-	-	-
Other Central and South America	71	72	50	38	53	71	67	22	87	27	53	-26
ARA (Belgium Germany Netherlands)	5	7	6	1	9	6	16	-	22	0	-	-
Other Europe	3	7	8	3	11	25	30	34	34	4	-	-
FSU	24	23	30	40	27	49	33	28	23	18	36	-18
Saudi Arabia	-	-	2	-	-	-	-	-	-	21	-	-
Algeria	1	-	8	1	17	8	0	0	-	-	2	-
Other Middle East and Africa	9	7	5	2	14	1	3	-	-	18	5	12
Singapore	3	-	1	-	-	-	3	10	-	-	-	-
OECD Asia Oceania	-	-	-	-	-	-	-	-	-	-	-	-
Non-OECD Asia (excl. Singapore)	1	0	0	-	-	-	-	-	-	-	-	-
Other	0	2	-	-	-	-	-	-	-	-	-	-
Total²	131	161	117	85	131	161	153	94	165	87	96	-8
of which Non-OECD	123	147	102	81	107	124	107	61	109	83	96	-13
OECD Europe												
OECD Americas	6	4	7	14	4	9	10	9	10	14	13	1
Venezuela	-	-	-	-	-	-	-	-	-	-	-	-
Other Central and South America	2	3	5	4	4	5	-	-	-	2	5	-3
Non-OECD Europe	17	17	21	17	20	5	10	9	9	14	21	-7
FSU	195	154	154	167	145	152	145	170	130	201	156	45
Saudi Arabia	0	1	-	-	-	-	7	-	20	-	-	-
Algeria	1	1	0	-	-	1	7	17	-	-	-	-
Other Middle East and Africa	23	15	19	27	17	14	13	9	22	8	38	-29
Singapore	-	-	1	2	2	1	4	4	5	2	-	-
OECD Asia Oceania	9	8	14	16	11	7	5	7	4	2	20	-18
Non-OECD Asia (excl. Singapore)	1	0	3	4	0	-	-	-	-	-	-	-
Other	-8	5	8	6	4	91	67	57	64	179	10	169
Total²	246	208	232	256	208	285	268	282	264	422	262	159
of which Non-OECD	218	185	202	210	191	268	253	279	236	417	224	193
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	3	14	11	9	-	-	5	9	-4
Saudi Arabia	-	-	1	3	-	-	-	-	-	-	-	-
Algeria	1	-	-	-	-	-	-	-	-	-	-	-
Other Middle East and Africa	18	23	27	49	24	42	14	-	-	75	27	48
Singapore	58	37	25	26	16	25	10	-	16	29	47	-18
Non-OECD Asia (excl. Singapore)	59	85	40	33	26	30	13	4	25	31	8	23
Other	0	0	1	0	-	-	-	-	-	-	-	-
Total²	146	162	101	116	80	108	46	4	41	139	90	49
of which Non-OECD	146	162	100	114	80	108	46	4	41	139	90	49
Total OECD Trade²	523	531	450	457	419	553	468	380	470	649	449	200
of which Non-OECD	487	493	404	405	378	500	406	344	387	639	410	229

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	4Q19	1Q20	2Q20	3Q20	Apr 20	May 20	Jun 20	Jul 20	Aug 20	Sep 20
CRUDE OIL PRICES													
IEA CIF Average Import¹													
IEA Americas	48.58	60.02	56.93	54.71	44.57	24.30		18.05	21.44	33.36	38.57		
IEA Europe	53.26	70.52	64.25	63.40	53.74	28.32		20.99	26.25	38.37	42.93		
IEA Asia Oceania	54.13	72.46	66.38	65.68	64.01	30.10		35.42	25.02	29.23	38.81		
IEA Total	52.05	67.77	62.75	61.66	53.85	27.59		24.13	24.51	34.63	40.58		
FOB Spot													
North Sea Dated	54.16	71.27	64.12	63.06	50.02	29.57	42.82	18.57	29.00	40.08	43.27	44.78	40.58
Brent (Asia) Mth 1	54.86	72.23	64.86	62.49	52.63	36.46	44.20	29.37	35.94	43.65	44.35	45.44	42.92
WTI (Cushing) Mth 1	50.78	65.20	57.03	56.88	45.57	27.95	40.90	16.52	28.57	38.30	40.76	42.36	39.60
Urals (Mediterranean)	53.26	70.17	64.31	63.40	48.97	30.29	43.39	16.50	30.84	42.36	44.28	45.01	40.98
Dubai (1st month)	53.15	69.65	63.49	62.00	50.41	31.17	42.80	21.33	30.98	40.71	43.18	43.90	41.45
Tapis (Dated)	61.20	73.69	69.16	70.08	56.06	28.66	43.69	17.91	26.40	40.78	45.61	46.30	39.48
PRODUCT PRICES													
Rotterdam, Barges FOB													
Premium Unl 10 ppm	65.80	78.78	71.35	69.21	53.77	30.56	46.58	19.35	29.59	41.59	45.95	47.41	46.48
Naphtha	54.19	68.70	56.27	57.90	45.86	26.52	41.90	15.31	25.02	38.01	42.51	42.42	40.78
Jet/Kerosene	65.92	86.39	79.24	78.51	60.06	29.76	41.92	21.35	26.88	39.90	43.50	43.37	38.95
ULSD 10ppm	66.28	86.22	79.45	78.96	62.85	37.55	47.49	33.12	34.10	44.56	49.53	49.70	43.36
Gasoil 0.1 %	64.68	84.28	77.73	76.91	61.41	36.43	45.99	31.27	33.19	43.92	47.76	48.12	42.19
LSFO 1%	48.72	63.22	62.21	62.83	52.84	30.10	41.34	24.01	27.74	37.67	40.99	43.09	40.11
HSFO 3.5%	45.63	61.13	50.31	33.35	33.39	24.05	38.33	15.97	21.56	33.55	37.06	40.86	37.37
Mediterranean, FOB Cargoes													
Premium Unl 10 ppm	65.83	79.41	71.31	70.45	54.91	31.91	47.45	20.52	31.10	42.98	46.72	48.29	47.44
Naphtha	52.74	66.08	54.43	55.36	43.27	23.72	40.74	10.50	22.73	36.60	41.56	41.49	39.21
Jet Aviation Fuel	65.04	85.37	77.76	76.48	58.08	27.43	40.88	17.43	25.01	38.62	42.64	42.56	37.51
ULSD 10ppm	66.20	86.03	79.05	78.23	61.86	36.15	47.45	29.00	33.60	44.84	49.73	49.58	43.14
Gasoil 0.1 %	64.60	84.74	77.70	76.72	60.94	34.06	46.32	26.77	30.48	43.78	48.49	48.26	42.28
LSFO 1%	49.91	64.31	63.90	65.32	54.94	31.39	42.26	25.62	29.02	38.68	42.02	44.03	40.89
HSFO 3.5%	47.22	62.06	52.17	37.35	35.67	24.32	37.23	16.27	22.22	33.44	37.03	39.10	35.74
US Gulf, FOB Pipeline													
Super Unleaded	73.82	85.71	79.24	75.52	60.05	39.80	52.55	28.44	40.66	49.85	51.99	53.59	51.53
Unleaded	67.98	80.10	72.28	68.37	54.57	34.95	49.24	23.20	35.09	46.05	48.51	50.50	48.10
Jet/Kerosene	65.40	85.12	78.81	77.90	58.25	32.58	45.02	24.53	31.07	41.64	45.65	46.86	42.52
ULSD 10 ppm	67.93	85.94	79.09	78.46	61.81	38.27	48.59	33.30	35.32	45.70	50.07	50.06	45.57
No. 6 3% ²	46.03	60.20	52.57	39.32	35.91	24.69	37.70	17.02	23.88	32.77	37.06	40.08	35.99
Singapore, FOB Cargoes													
Premium Unleaded	67.96	80.21	72.55	75.03	56.85	33.23	47.32	20.49	33.44	45.21	46.56	48.18	47.27
Naphtha	53.99	67.50	57.15	60.13	47.72	28.05	43.29	17.86	26.49	39.06	43.60	43.08	43.19
Jet/Kerosene	65.28	85.05	77.26	75.99	58.88	30.73	42.13	21.35	28.94	41.16	43.92	43.28	39.37
Gasoil 0.05%	65.65	84.33	77.23	76.32	61.38	36.58	47.00	28.85	34.04	46.05	49.82	48.10	43.30
HSFO 180 CST	50.84	67.04	58.62	43.51	43.14	29.24	40.35	23.36	26.72	36.91	39.36	42.20	39.61
HSFO 380 CST 4%	50.01	66.01	57.57	42.63	41.71	27.95	39.59	22.59	25.33	35.22	39.06	41.26	38.59

¹ IEA CIF Average Import price for July 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.

² Waterborne

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Table 14
MONTHLY AVERAGE END-USER PRICES FOR PETROLEUM PRODUCTS

September 2020

NATIONAL CURRENCY *							US DOLLARS						
Total	% change from		Ex-Tax	% change from		Total	% change from		Ex-Tax	% change from			
Price	Aug-20	Sep-19		Price	Aug-20		Sep-19	Price		Aug-20	Sep-19	Price	Aug-20
GASOLINE ¹ (per litre)													
France	1.330	- 0.1	- 11.0	0.417	-0.2	-24.9	1.567	-0.5	-4.8	0.491	-0.6	-19.6	
Germany	1.288	- 0.1	- 8.5	0.455	-0.2	-13.8	1.518	-0.5	-2.1	0.536	-0.6	-7.7	
Italy	1.392	- 0.5	- 11.7	0.413	-1.4	-26.8	1.640	-0.9	-5.4	0.487	-1.8	-21.6	
Spain	1.165	-	- 11.1	0.490	-	-19.7	1.373	-0.4	-4.8	0.577	-0.4	-14.0	
United Kingdom	1.134	0.4	- 10.9	0.365	0.6	-24.1	1.469	-1.0	-6.6	0.473	-0.8	-20.4	
Japan	135.3	0.1	- 5.8	68.7	0.1	-10.2	1.282	0.5	-4.2	0.651	0.6	-8.6	
Canada	1.059	- 0.6	- 12.0	0.632	-0.6	-19.0	0.801	-0.5	-11.8	0.478	-0.6	-18.8	
United States	0.577	0.2	- 15.8	0.450	0.2	-19.4	0.577	0.2	-15.8	0.450	0.2	-19.4	
AUTOMOTIVE DIESEL FOR NON COMMERCIAL USE (per litre)													
France	1.205	- 2.4	- 15.9	0.395	-6.0	-32.5	1.420	-2.8	-10.0	0.465	-6.3	-27.7	
Germany	1.052	- 2.9	- 15.7	0.436	-5.8	-24.7	1.240	-3.2	-9.8	0.514	-6.2	-19.4	
Italy	1.271	- 1.1	- 13.4	0.425	-2.5	-27.5	1.498	-1.5	-7.3	0.501	-2.9	-22.4	
Spain	1.039	- 2.0	- 14.3	0.480	-3.4	-23.0	1.224	-2.4	-8.2	0.566	-3.8	-17.5	
United Kingdom	1.182	0.1	- 10.4	0.405	0.2	-22.0	1.531	-1.3	-6.0	0.525	-1.1	-18.2	
Japan	115.8	0.1	- 7.4	74.7	0.1	-10.2	1.097	0.5	-5.7	0.708	0.5	-8.6	
Canada	0.977	- 2.2	- 18.7	0.605	-3.2	-27.6	0.739	-2.1	-18.6	0.458	-3.1	-27.5	
United States	0.638	- 0.6	- 19.9	0.490	-0.8	-24.5	0.638	-0.6	-19.9	0.490	-0.8	-24.5	
DOMESTIC HEATING OIL (per litre)													
France	0.693	- 4.0	- 25.5	0.421	-5.3	-31.9	0.816	-4.3	-20.3	0.496	-5.7	-27.1	
Germany	0.459	- 3.1	- 35.3	0.335	-3.7	-37.5	0.541	-3.5	-30.8	0.394	-4.0	-33.1	
Italy	1.090	- 2.4	- 16.8	0.490	-4.3	-26.9	1.284	-2.8	-11.0	0.578	-4.7	-21.8	
Spain	0.518	- 5.3	- 33.9	0.332	-6.8	-39.8	0.611	-5.7	-29.2	0.391	-7.1	-35.6	
United Kingdom	0.432	- 7.7	- 28.2	0.300	-10.2	-35.0	0.559	-9.0	-24.8	0.389	-11.5	-31.9	
Japan ²	81.0	0.1	- 9.4	72.2	0.1	-9.7	0.767	0.5	-7.8	0.684	0.5	-8.1	
Canada	0.869	- 2.4	- 22.8	0.755	-2.4	-23.8	0.657	-2.3	-22.7	0.571	-2.3	-23.6	
United States	-	-	-	-	-	-	-	-	-	-	-	-	
LOW SULPHUR FUEL OIL FOR INDUSTRY ³ (per kg)													
France	0.441	- 2.7	- 19.6	0.301	-3.9	-26.3	0.519	-3.0	-13.9	0.355	-4.2	-21.1	
Germany	-	-	-	-	-	-	-	-	-	-	-	-	
Italy	0.351	- 3.0	- 24.2	0.320	-3.3	-25.9	0.414	-3.4	-18.8	0.377	-3.6	-20.7	
Spain	0.307	2.6	- 29.2	0.290	2.8	-30.3	0.362	2.2	-24.2	0.342	2.4	-25.4	
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 Sep-Aug	Average for week ending:				
	Jun 20	Jul 20	Aug 20	Sep 20			11 Sep	18 Sep	25 Sep	02 Oct	09 Oct
NW Europe											
Brent (Cracking)	-0.58	0.18	-0.57	0.42	↑	0.99	0.22	0.42	0.30	1.42	2.32
Urals (Cracking)	-2.34	-0.58	0.13	0.52	↑	0.39	0.63	0.83	0.05	1.10	2.06
Brent (Hydroskimming)	-1.43	-0.81	-1.33	-0.52	↑	0.81	-0.82	-0.63	-0.54	0.56	1.37
Urals (Hydroskimming)	-4.38	-2.79	-1.42	-1.21	↑	0.21	-0.99	-0.87	-1.79	-0.95	-0.21
Mediterranean											
Es Sider (Cracking)	0.71	1.29	0.41	1.01	↑	0.60	0.58	1.06	1.03	2.05	2.85
Urals (Cracking)	-2.23	-0.38	-0.54	-0.28	↑	0.26	-0.49	-0.07	-0.38	0.70	1.67
Es Sider (Hydroskimming)	-0.17	0.30	-0.22	0.54	↑	0.76	0.02	0.45	0.67	1.74	2.44
Urals (Hydroskimming)	-4.61	-2.85	-2.55	-2.09	↑	0.46	-2.12	-1.88	-2.23	-1.30	-0.68
US Gulf Coast											
Mars (Cracking)	-0.17	0.48	0.36	0.90	↑	0.54	0.74	1.33	1.13	1.49	1.98
50/50 HLS/LLS (Coking)	4.81	5.09	4.61	5.21	↑	0.60	5.04	5.38	4.85	5.95	6.67
50/50 Maya/Mars (Coking)	2.59	2.53	1.54	2.34	↑	0.80	2.21	2.67	2.35	3.15	3.98
ASCI (Coking)	2.45	2.84	2.20	2.81	↑	0.61	2.58	3.24	2.84	3.59	3.97
US Midwest											
30/70 WCS/Bakken (Cracking)	8.09	7.99	7.24	6.13	↓	-1.11	6.31	6.33	6.08	7.61	5.40
Bakken (Cracking)	10.05	9.63	7.58	7.27	↓	-0.31	7.95	7.44	6.85	8.71	6.46
WTI (Coking)	9.14	9.16	7.65	6.47	↓	-1.18	7.47	6.74	6.04	7.50	5.56
30/70 WCS/Bakken (Coking)	9.94	9.41	8.17	7.29	↓	-0.88	7.56	7.40	7.16	8.93	6.62
Singapore											
Dubai (Hydroskimming)	-3.77	-2.61	-2.17	-2.58	↓	-0.41	-2.49	-2.36	-2.74	-2.05	-1.65
Tapis (Hydroskimming)	1.10	-0.63	-0.81	3.02	↑	3.83	2.49	2.86	3.26	4.46	4.29
Dubai (Hydrocracking)	0.01	0.65	1.06	0.42	↓	-0.64	0.36	0.63	0.49	1.41	2.06
Tapis (Hydrocracking)	1.62	-0.56	-1.24	2.59	↑	3.83	2.24	2.45	2.79	3.89	3.63

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

	May-20	Jun-20	Jul-20	Jul-19	Jul 20 vs Previous Month	Jul 20 vs Previous Year	Jul 20 vs 5 Year Average	5 Year Average
OECD Americas								
Naphtha	1.3	1.3	1.4	1.3	0.1	0.1	-0.2	1.6
Motor gasoline	43.2	46.0	45.8	44.3	-0.2	1.5	0.8	45.0
Jet/kerosene	3.3	4.7	5.1	10.0	0.4	-4.8	-4.4	9.5
Gasoil/diesel oil	34.1	30.6	30.3	27.7	-0.3	2.7	2.3	28.0
Residual fuel oil	2.8	2.9	2.4	3.0	-0.5	-0.6	-0.9	3.4
Petroleum coke	4.6	4.5	4.5	4.4	0.1	0.2	0.0	4.6
Other products	14.4	14.1	14.1	13.8	0.0	0.3	1.0	13.1
OECD Europe								
Naphtha	9.4	8.5	8.6	8.0	0.2	0.6	1.1	7.6
Motor gasoline	17.4	19.8	20.3	20.4	0.5	-0.1	-0.3	20.6
Jet/kerosene	4.1	4.3	4.4	9.8	0.1	-5.4	-4.7	9.1
Gasoil/diesel oil	43.7	43.6	44.1	39.7	0.5	4.5	4.4	39.8
Residual fuel oil	8.5	7.4	6.8	8.2	-0.6	-1.4	-2.1	8.9
Petroleum coke	1.5	1.5	1.5	1.4	0.0	0.1	0.2	1.3
Other products	17.1	17.1	16.8	15.6	-0.3	1.2	1.4	15.4
OECD Asia Oceania								
Naphtha	16.4	15.8	16.3	15.8	0.4	0.5	1.2	15.1
Motor gasoline	18.9	20.6	21.4	21.6	0.8	-0.2	-0.8	22.2
Jet/kerosene	12.9	11.9	12.3	14.9	0.3	-2.6	-2.7	15.0
Gasoil/diesel oil	31.4	32.7	31.9	30.6	-0.7	1.4	2.3	29.7
Residual fuel oil	8.4	7.8	7.1	6.1	-0.6	1.1	0.2	6.9
Petroleum coke	0.5	0.5	0.4	0.5	-0.1	-0.1	-0.1	0.4
Other products	13.0	12.6	12.9	12.6	0.3	0.3	0.4	12.5
OECD Total								
Naphtha	6.6	6.1	6.3	6.0	0.2	0.3	0.4	5.9
Motor gasoline	30.5	33.2	33.4	32.7	0.2	0.7	0.3	33.1
Jet/kerosene	5.3	5.8	6.1	10.8	0.3	-4.7	-4.2	10.3
Gasoil/diesel oil	36.8	35.1	35.1	32.0	-0.1	3.0	3.0	32.1
Residual fuel oil	5.7	5.2	4.7	5.2	-0.6	-0.6	-1.1	5.8
Petroleum coke	2.9	2.8	2.8	2.7	0.0	0.1	0.1	2.8
Other products	15.0	14.8	14.7	14.2	0.0	0.6	1.0	13.8

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	1Q20	2Q20	3Q20	Jul 20	Aug 20	Sep 20
ETHANOL									
OECD Americas¹	1078	1064	948	1057	736	968	958	965	980
United States	1048	1029	915	1025	703	934	926	931	946
Other	30	35	33	32	32	34			
OECD Europe²	87	85	76	97	70	76	108	60	60
France	13	15	12	17	11	13	25	7	7
Germany	13	12	11	17	14	9	22	3	3
Spain	9	9	7	7	4	8	5	9	9
United Kingdom	9	4	4	8	5	4	11	0	0
Other	42	45	42	47	37	42			
OECD Asia Oceania³	4	5	6	5	4	6	5	7	7
Australia	4	4	4	5	3	5	4	5	5
Other	0	1	1	1	1	1			
Total OECD Ethanol	1169	1154	1029	1160	810	1050	1071	1032	1047
Total Non-OECD Ethanol	728	814	755	284	906	1109	1156	1147	1021
Brazil	557	621	559	105	707	905	952	943	818
China	56	67	70	52	70	74			
Argentina	19	19	16	16	16	16			
Other	95	107	111	111	113	113	204	204	204
TOTAL ETHANOL	1897	1968	1785	1443	1717	2158	2226	2178	2068
BIODIESEL									
OECD Americas¹	126	119	120	112	120	124	128	122	122
United States	121	113	113	109	117	116	124	112	112
Other	5	6	6	3	3	8			
OECD Europe²	268	290	261	256	246	277	306	263	263
France	49	52	45	47	42	48	57	44	44
Germany	62	66	56	55	55	59	68	54	54
Italy	14	18	30	27	27	33			
Spain	36	40	30	26	24	34	31	35	35
Other	107	115	100	102	97	104	115	98	98
OECD Asia Oceania³	14	16	15	9	18	17	19	16	16
Australia	1	1	1	1	1	1	1	2	2
Other	13	15	14	8	17	16			
Total OECD Biodiesel	408	425	395	377	384	419	452	402	402
Total Non-OECD Biodiesel	315	402	413	413	413	413	413	413	413
Brazil	92	102	108	104	100	117	122	126	102
Argentina*	47	42	24	24	24	24			
Other	176	259	281	285	289	272			
TOTAL BIODIESEL	723	827	808	790	797	832	865	815	815
GLOBAL BIOFUELS	2620	2796	2593	2233	2513	2990	3092	2993	2882

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.

Publishing Schedule – 2021

- Tuesday 19 January
- Thursday 11 February
- Wednesday 17 March
- Wednesday 14 April
- Wednesday 12 May
- Friday 11 June⁽¹⁾
- Tuesday 13 July
- Thursday 12 August⁽²⁾
- Tuesday 14 September
- Thursday 14 October
- Tuesday 16 November
- Tuesday 14 December

⁽¹⁾. Supply/demand forecasts will be extended to 2022.

⁽²⁾. The *Annual Statistical Supplement 2021 Edition* will be published in conjunction with the report dated **12 August 2021**.

"*Oil 2021 – Analysis and Forecast to 2026*" will be published on 1 March 2021.

NB: On each of these dates, the report will be released at 10H00 Paris local time.

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Next Issue: 12 November 2020

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