

Oil Market Report

11 June 2021

- Global oil demand is set to return to pre-pandemic levels by the end of 2022, rising 5.4 mb/d in 2021 and a further 3.1 mb/d next year. The OECD accounts for 1.3 mb/d of 2022 growth while non-OECD countries contribute 1.8 mb/d. Jet and kerosene demand will see the largest increase (+1.5 mb/d y-o-y), followed by gasoline (+660 kb/d y-o-y) and gasoil/diesel (+520 kb/d y-o-y).
- World oil supply is expected to grow at a faster rate in 2022, with the US driving gains of 1.6 mb/d from producers outside the OPEC+ alliance. That leaves room for OPEC+ to boost crude oil production by 1.4 mb/d above its July 2021-March 2022 target to meet demand growth. In 2021, oil output from non-OPEC+ is set to rise 710 kb/d, while total oil supply from OPEC+ could increase by 800 kb/d if the bloc sticks with its existing policy.
- Global refinery throughput in 2021 is expected to recover half of the 7.4 mb/d fall in 2020, lagging behind demand growth for refined products as surplus inventories are drawn down. In 2022, refining activity is forecast to increase by 2.4 mb/d. 3.8 mb/d of new capacity coming on line over 2021-22 will be partially offset by 2.3 mb/d of announced closures or conversions to bio-refineries.
- OECD industry stocks held relatively steady in April, at 2 926 mb, but fell 1.6 mb below the pre-Covid 2015-19 average for the first time in more than a year. May preliminary data for the US, Europe and Japan show that industry stocks rose by a combined 17.2 mb. Crude oil held in short-term floating storage declined by 6.8 mb to 99.4 mb in May, its lowest since February 2020.
- Crude prices rose on bullish oil fundamentals and financial markets over the past month, while backwardation steepened on both benchmark crude futures contracts reflecting anticipation of tighter markets ahead. North Sea Dated rose \$3.95/bbl in May to \$68.54/bbl and reached \$69.84/bbl in the first week of June. Tanker freight costs remained weak overall during May.



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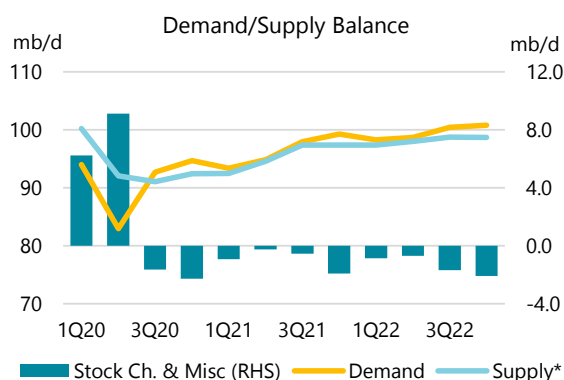
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Recovery stays the course

Our first detailed look at 2022 balances confirms earlier expectations that OPEC+ needs to open the taps to keep the world oil markets adequately supplied. Global oil demand will continue to recover and, in the absence of further policy changes, by end-2022 reach 100.6 mb/d. Non-OPEC+ production is also set to rise, but gains are nowhere near the levels needed to prevent further stockdraws. In April, OECD total industry stocks fell 61.3 mb below their 2016-2020 average. The pace at which the OPEC+ cuts can be unwound will depend not only on the success in containing the spread of the virus and demand growth but also the timing of the eventual return of Iranian barrels to the market.

Following a record decline of 8.6 mb/d in 2020, global oil demand is forecast to rebound by 5.4 mb/d in 2021 and a further 3.1 mb/d next year, to average 99.5 mb/d. By end-2022, demand should surpass pre-Covid levels. The recovery will be uneven not only amongst regions but across sectors and products. While the end of the pandemic is in sight in advanced economies, slow vaccine distribution could still jeopardise the recovery in non-OECD countries. The aviation sector will be the slowest to recover as some travel restrictions are likely to stay in place until the pandemic is brought firmly under control. Gasoline demand is also expected to lag pre-Covid levels, as continued teleworking practices and a rising share of electric and more efficient vehicles provide an offset to increased mobility. Petrochemicals will be boosted by robust demand for plastics, while global trade supports bunker demand.



* Assumes 100% compliance with OPEC+ deal

Meeting the expected demand growth is unlikely to be a problem. Even after boosting oil production by around 2 mb/d over the May-July period, OPEC+ will have 6.9 mb/d of effective spare capacity. If sanctions on Iran are lifted, an additional 1.4 mb/d could be brought to market in relatively short order. As for those producers outside the alliance, output growth is set to accelerate from 700 kb/d in 2021 to 1.6 mb/d next year. The US leads 2022 gains, adding more than 900 kb/d to total supply, followed by Canada, Brazil and Norway. That leaves non-OPEC+ output well above 2019 levels. By contrast, even if OPEC+ producers were to fill the gap created by demand growth, the bloc's output would still be more than 2 mb/d below the 2019 average.

The refining sector, meanwhile, is expected to remain under pressure. In 2022, demand for refined products will still be below 2017 levels. Following net capacity additions of 3.3 mb/d over the 2017-20 period, a further 1.5 mb/d of new net crude distillation capacity will come online in 2021-22. This means that global average utilisation rates reach 78%, limiting any rebound in refinery margins from the depressed 2020-21 levels.

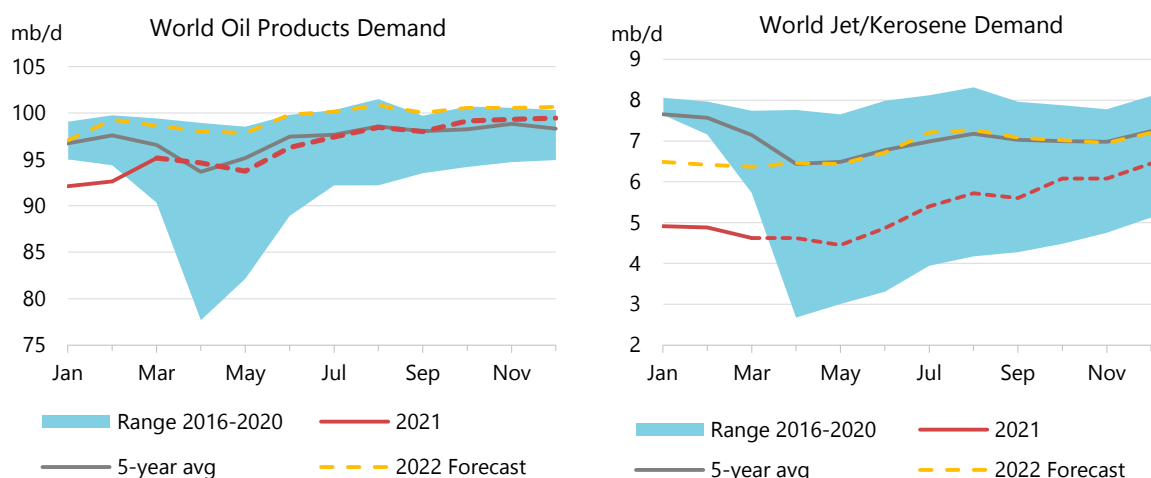
The forecast also highlights the challenges outlined in the IEA's recently released *Net Zero by 2050 - A Roadmap for the Global Energy Sector*. This roadmap notes that most pledges by countries are not yet underpinned by near-term policies and measures. In the meantime, oil demand looks set to continue to rise, underlining the enormous effort required to get on track to reach stated ambitions.

Demand

Overview

This *Report* sees the first release of our monthly oil demand forecasts for 2022. We forecast consumption next year to rise by 3.1 mb/d, with OECD demand contributing 1.3 mb/d of that growth and non-OECD the remaining 1.8 mb/d. Jet and kerosene demand (+1.5 mb/d y-o-y) will see the largest increase thanks to the resumption of flights, followed by gasoline (+660 kb/d y-o-y) and gasoil/diesel (+520 kb/d y-o-y).

We expect oil demand to reach pre-pandemic levels by 4Q22. However, this hides the fact that some sectors will see significant growth, whereas others will still be in deficit. LPG/ethane deliveries, for example, were already 6% above 2Q19 levels in 2Q21, in our estimates, and will be about 5% higher than pre-Covid levels throughout 2022. By contrast, jet fuel and kerosene demand will still be 16% below 2019 levels by the middle of 2022 and around 11% below by the end of the year, owing to the slow reopening of borders. Gasoline and gasoil/diesel are both forecast to be within 1% of their pre-pandemic levels by early next year. Continued teleworking in OECD countries (expected to be around one to two days per week), higher electric vehicle sales and increased car efficiencies for new models will weigh on growth.



Global oil consumption is now on a more stable footing after the number of Covid-19 cases in the world's third largest oil consumer India began to ebb, and with further evidence that consumers in the OECD are using cars and planes in greater numbers. In June, oil demand is forecast to rise by a significant 2.5 mb/d month-on-month (m-o-m), one of the largest monthly gains recorded in the past year, and by 7.4 mb/d year-on-year (y-o-y). Most of the increase will occur in transport fuels such as gasoline and jet fuel in India, the US and other large oil consumers. Vaccination campaigns in Europe and North America, which represent 40% of global oil demand, have supported the growth. Demand is likely to grow by a further 1.2 mb/d m-o-m in July and 1 mb/d m-o-m in August, as the Northern Hemisphere summer holiday season supports increased travel.

However, the recent surge in Covid-19 cases in countries as varied as Argentina, Brazil, India, Malaysia and Thailand serves as a reminder that the pandemic is not over, and that further

demand declines are likely in countries with low virus immunity. Global oil demand fell by an estimated 510 kb/d m-o-m in April and 880 kb/d m-o-m in May because of Covid outbreaks. In addition, a widespread return of the global aviation industry to normal capacity appears off the cards until most countries have reached herd immunity, which may not happen until late 2022.

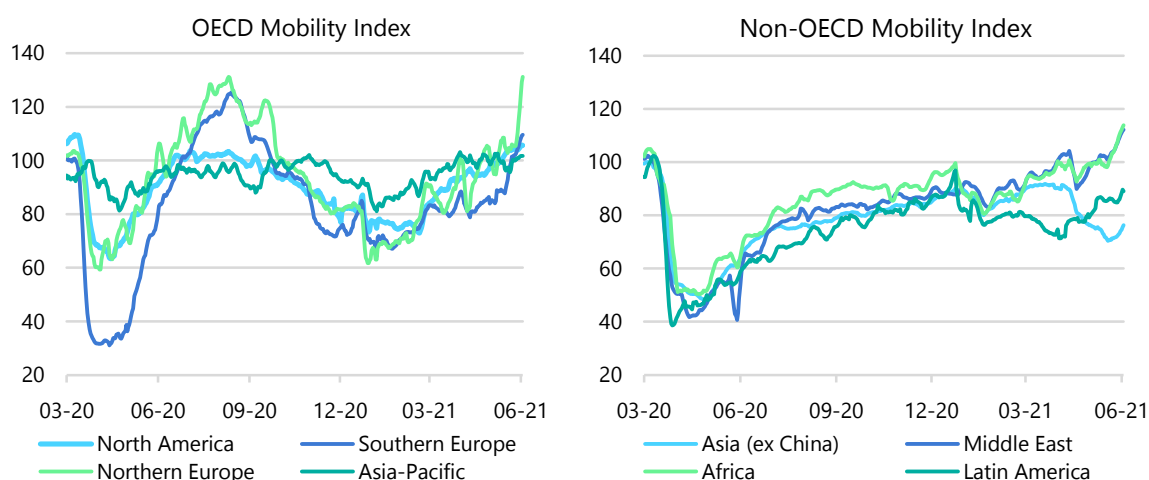
Our 2021 oil demand forecast has been revised down by just 50 kb/d since last month's *Report*, with annual growth now estimated at 5.4 mb/d, to 96.4 mb/d. Demand in 1H21 was adjusted higher by 200 kb/d on average following the submission of more complete data. However, we have reduced our forecasts for 3Q21 and 4Q21 by 290 kb/d and 300 kb/d, respectively, owing to slow vaccination campaigns in non-OECD economies (see *Uneven vaccine distribution could jeopardise non-OECD oil demand recovery*).

Global Oil Demand (2020-2022)																
	(million barrels per day)*															
	1Q20	2Q20	3Q20	4Q20	2020	1Q21	2Q21	3Q21	4Q21	2021	1Q22	2Q22	3Q22	4Q22	2022	
Africa	4.2	3.3	3.8	4.0	3.8	4.0	3.9	3.9	4.0	3.9	4.1	3.9	4.0	4.1	4.0	
Americas	30.1	24.9	28.5	29.1	28.2	28.6	30.1	31.2	31.3	30.3	30.4	31.1	32.0	31.5	31.3	
Asia/Pacific	33.1	32.0	33.7	35.6	33.6	35.8	34.9	35.3	36.9	35.7	37.3	36.9	36.4	37.7	37.1	
Europe	14.1	11.6	13.6	13.3	13.2	12.6	13.8	14.3	14.2	13.7	13.8	14.2	14.6	14.0	14.1	
FSU	4.6	4.0	4.8	4.8	4.6	4.6	4.6	4.9	5.0	4.8	4.8	4.6	5.0	5.1	4.9	
Middle East	7.8	7.0	8.2	7.8	7.7	7.6	7.6	8.4	7.9	7.9	7.9	7.9	8.4	8.1	8.1	
World	93.9	82.9	92.6	94.6	91.0	93.3	94.9	98.0	99.3	96.4	98.3	98.6	100.3	100.6	99.5	
Annual Chg (%)	-4.9	-16.2	-7.8	-5.9	-8.7	-0.6	14.4	5.7	4.9	5.9	5.3	4.0	2.4	1.3	3.2	
Annual Chg (mb/d)	-4.8	-16.0	-7.9	-5.9	-8.6	-0.6	12.0	5.3	4.7	5.3	5.0	3.8	2.4	1.3	3.1	
Changes from last OMR (mb/d)	0.1	0.0	0.0	-0.1	0.0	0.2	0.2	-0.3	-0.3	-0.1						

* Including biofuels

Fundamentals

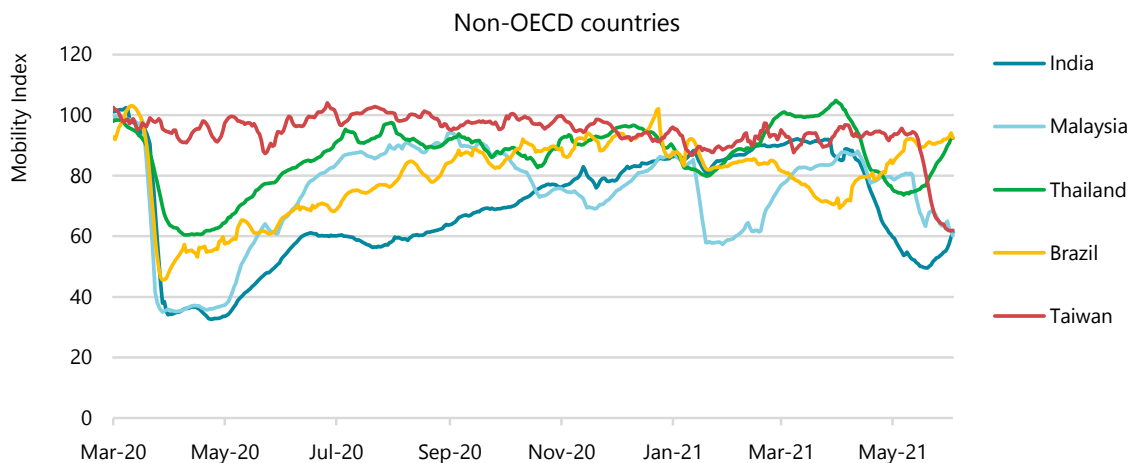
The strong economic recovery continues apace, supported by the relaxation of Covid restrictions in countries that reached higher levels of vaccinations. The IHS Global PMI composite index reached a 15-year high of 58.4 in May. The "output" and "new orders" components of the index rose at the fastest rates since April 2006. The US and Europe are expanding at the quickest pace, while growth in China eased and Japan and India, hit by renewed Covid cases, contracted.



Mobility jumped in OECD economies, and in particular in Europe, with the relaxation of Covid restrictions. In Europe and the US, recent targeted lockdowns have succeeded in keeping the

pandemic under control and vaccinations are now allowing countries to reopen. In Asia-Pacific, a new wave of infections in Japan has forced the country to re-introduce stricter measures.

In non-OECD countries, the situation is contrasted. A resurgence of Covid cases in Asia forced a sharp reduction in mobility in May. The drop in mobility was particularly critical in India and Thailand, but the situation appears to be improving now. Our mobility index for India, based on Google Mobility data, reached a low in mid-May as the number of Covid cases exploded and most states introduced strict restrictions, but has since recovered as the number of cases abated. Malaysia and Taiwan have recently implemented strong measures to control the spreading of the virus. Mobility appears to have stabilised in Brazil.



The negative impact on world economic growth from countries suffering from renewed Covid cases has been more than offset by booming activity in those achieving a certain level of vaccination saturation or with strict controls to contain Covid. Recent prompt indicators and swift vaccination progress in Europe and the US have led to an upward revision to global economic growth. World growth has been revised higher for 2021, at close to 6.4%, according to the latest Oxford Economics forecast. The OECD's economic outlook released at the end of May expects global growth in 2021 to be around 5.8%, an upward revision from December projections of 4.2%.

In 2022, Oxford Economics forecasts global growth to remain robust, albeit at a slower pace than 2021, increasing by 4.6% (versus 4.5% by OECD). The outlook for the US is particularly strong at 4.5% in 2022, although slower than the exceptional 7.7% growth expected for 2021, supported by the \$2.7 trillion American Job Plan. Growth in the Eurozone economies is set to accelerate, from 4.2% in 2021 to 4.8% in 2022. One of the reasons for the very strong growth expected in the second half of 2021 and in 2022 is the huge excess of savings accumulated by households in the richest countries through support schemes and the forced reduction of spending during the Covid period (estimated at more than 10% of GDP in some large countries). These savings are likely to support consumer spending on road trips and air travel when restrictions on mobility are fully lifted. Growth in China, by contrast, should slow to 5.5% in 2022 compared with 8.9% in 2021, as fiscal and monetary policies become more restrictive. For the second half of 2021 and 2022, key uncertainties remain on certain sectors/behaviours that could have a significant impact on oil demand, forcing us to take some strong assumptions.

Aviation is expected to begin recovering in 2H21 after a slow start to the year. The International Air Travel Association (IATA) expects the total number of air passengers to reach 52% of 2019 levels in 2021, rising to 88% of pre-Covid levels in 2022 and exceeding 2019 levels in 2023. This

recovery will be driven initially by domestic flights. The number of passengers on domestic routes should exceed 2019 levels (104%) by 2022. By contrast, the total number of passengers on international flights will represent only 68% of 2019 levels in 2022. Since domestic passengers travel fewer kilometres than international passengers on average, the total Revenue Passenger Kilometre (RPK) metric will remain at only 43% of 2019 levels in 2021. The drop in RPKs will be different across regions, largely as a result of the size of the domestic market. While the average decline versus 2019 will be 57% in 2021, RPK will decrease by 41% in North America and 66% in Europe. In our projections, we combined the results of available air transport forecasts to assess the recovery in jet/kerosene demand in 2021 and 2022. Under our current assumptions, jet and kerosene demand will remain 1.1 mb/d below 2019 levels in 2022 (900 kb/d in 4Q22).

A number of changes that emerged from the pandemic are expected to remain a feature of demand for the near term. It now appears certain that some teleworking will remain. In order to assess the impact of teleworking on gasoline demand (and some diesel demand in particular in Europe) we have to evaluate (1) the share of commuting demand in gasoline and diesel demand, (2) the proportion of commuters that could work from home and (3) the percentage of work they will do from home. For the OECD countries, we estimated the share of commuting in gasoline demand at 20% to 30 %, the share of commuting staff that can work from home at 20% to 40% and, as a general rule, we took the assumption that these employees will spend one to two days at home. Few non-OECD countries are likely to experience a surge in teleworking. Under these assumptions, teleworking would reduce world gasoline demand by 300 kb/d to 350 kb/d.

Battery electric vehicles (BEVs) and plug in hybrid electric vehicles (PHEVs) sales rose from 2.1 million units in 2019 to 3 million in 2020. BEVs represented two-third (67%) % of the total. The sales of electric cars was particularly impressive in Europe, rising by 142% compared with 2019 to reach 1.4 million, outpacing electric car sales in China (1.16 million) for the first time since 2015. Electric car sales in Europe reached 10% of total car sales, supported by the entering into force of the new CO₂ emission standards for car manufacturers, a broader offering of electric car models and strong direct purchase incentives that got increased during the pandemic. With 295 000 electric car sales, the US is well behind. The rest of the world registered 150 000 electric car sales. In the first four months of 2021, the share of EVs in European car sales rose to 15%. Over the January to April 2021 period, BEV accounted for 7% of European car sales and PHEV 8%. In the short term, EVs remain largely a China and Europe phenomena, however, and even with a very strong growth, the impact of EV sales on world gasoline and diesel demand may be relatively limited in the time horizon of our forecast (the new EVs would save 50-70 kb/d per year). In addition to electric cars, two and three wheelers and electric buses would also save some transport fuel. Improvement in the internal combustion engine (ICE) car fleet efficiency, as older cars get retired and replaced by new, and more efficient vehicles may have a stronger impact.

We also collected information on project start-ups and feedstock use to estimate the impact of petrochemical developments on LPG/ethane and naphtha demand over the forecast period. Petrochemical demand has been relatively spared from the Covid crisis in 2020, as the need for medical equipment and packaging offset a drop of demand in the manufacturing sector. Demand should remain strong in 2021, but growth is expected to slow in 2022. The US and China lead the petrochemical industry's expansion over the forecast period.

Finally, we made some assumptions on behavioural changes likely to occur with the re-opening of economies as the Covid crisis abates, which includes strong demand for road transportation

during the summer (pent up demand), the impact of reduced air travel availability (positive for gasoline demand), and the use of stimulus money and/or extra savings.

All that is likely to depend on the progress of vaccination campaigns and, in particular, we looked at the question of herd immunity.

Box 1. Uneven vaccine distribution could jeopardise non-OECD oil demand recovery

Non-OECD oil demand has recovered slower than in the OECD in recent months due to a significant surge in Covid-19 cases in some countries (Argentina, Brazil, India, Malaysia, Thailand). The uneven distribution of vaccines at the global level means that this situation could persist in the second half of 2021 and into 2022, unless access to vaccines improves. Indications from vaccine manufacturers suggest the theoretical supply should suffice to vaccinate everyone on earth by 1Q22 or 2Q22.

The availability of vaccines against the Covid-19 virus is likely to increase dramatically in the second half of 2021 should manufacturers ramp-up output as they indicate. An estimated 2.3 billion doses had been produced at the end of May, up from just 125 million at the end of 2020. Cumulative production is likely to increase to 6 billion doses by the end of September and 9.7 billion doses by end-December, based on public plans from manufacturers compiled by the IEA.

This is enough to vaccinate everyone once or more than 60% of the world's population twice in 2021, thus considerably reducing the impact of the pandemic on economic activity and mobility. Global vaccine manufacturing capacity is likely to continue to increase throughout the second half of 2021, reaching an estimated 1.3 billion doses per month by the end of December. In 2022, further capacity increases are certain as manufacturers continue to gain experience and with more vaccines likely to gain approval from regulators.

In practice, however, available doses have not been distributed evenly, leaving open the possibility that the virus will continue to spread. Some countries and regions multiplied orders to ensure access to vaccines as they became available, limiting residual availabilities. Not all orders have been delivered to date and orders may be withdrawn or donated once populations are adequately vaccinated. The European Union has already entered purchase agreements for up to 2.9 billion doses, the US for 1.2 billion doses and Canada for 380 million doses, more than enough to vaccinate their entire populations, according to purchase data. By contrast, India has bought just 380 million doses and will receive an additional 100 million under the World Health Organisation's COVAX initiative in 1H21, not enough to cover its population of 1.4 billion. The same picture emerges in other parts of Asia, Africa and Latin America.

We estimate a country's likelihood of reaching 60% immunity based on the number of vaccinations to date, the recent pace of vaccinations multiplied by a factor dependent on how many doses the country has ordered. Based on this model, Israel is likely to reach 60% of its population vaccinated by June, the UK and the US by July and the EU by August, although in practice immunity will be even higher in all regions including the number of people who have caught the virus. The same figures show that India is unlikely to reach herd immunity until late in 2022, meaning that new Covid-outbreaks could occur in 2H21 or 2022. Most African countries have not ordered enough jabs to reach the 60% threshold at all in 2021 or 2022.

We have taken this into account in our demand model by constraining the potential fuel demand growth of some non-OECD economies, whereas for OECD countries we assume a fairly quick return to normalcy except in the aviation sector.

Advanced economies are likely to donate vaccines as availability increases and a significant proportion of their population becomes vaccinated. The question is whether such donations will come in time to avoid further epidemic surges. While the end of the pandemic is in sight in advanced economies, developing countries are not yet done with the Covid-19 pandemic.

OECD

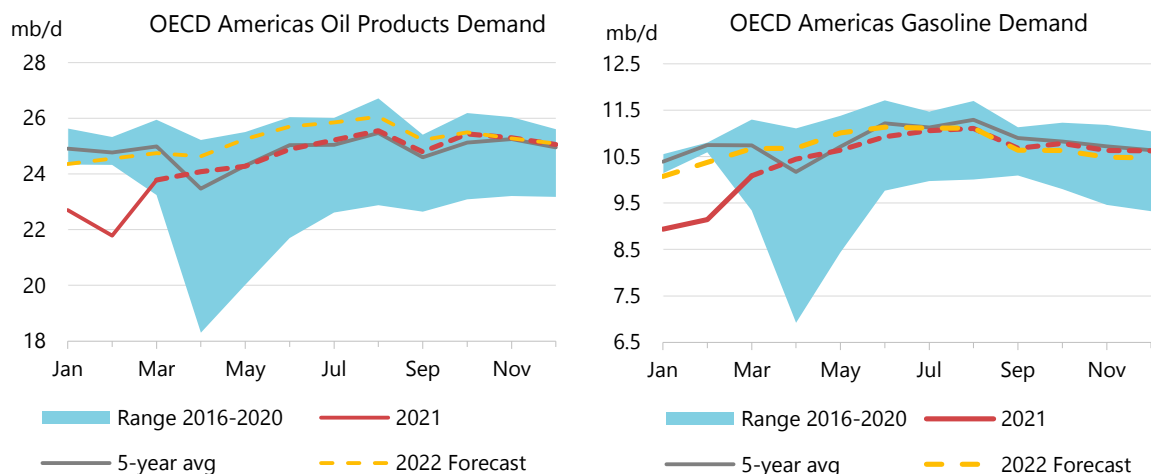
OECD oil demand surged by 2 mb/d m-o-m in March, the latest month for which full data is available. This was the highest monthly rate of growth registered since June 2020. The vast majority of the growth occurred in the US (+1.8 mb/d m-o-m), where gasoline demand and petrochemical cracker activity picked up substantially following the February Freeze that had a deep impact on southern US states. Oil consumption also rose by 160 kb/d m-o-m in Turkey, 130 kb/d in Mexico, 100 kb/d in Spain and 80 kb/d in Germany. Preliminary figures for April point to a further 350 kb/d m-o-m gain, helped by falling Covid-19 cases and less restrictive social distancing measures in many countries.

OECD Americas

Oil consumption in the OECD Americas rose by a significant 2 mb/d m-o-m in March, largely on the back of a return of US demand to more normal levels following the end of the cold weather wave that had affected parts of the country in February, including disrupting ethane cracker operations. LPG and ethane deliveries increased by 170 kb/d m-o-m as a 340 kb/d m-o-m gain in the US offset a 160 kb/d decline in Canada.

Gasoline demand rose by an impressive 940 kb/d m-o-m in March, the highest rate of growth since June 2020. While some of the gains were seasonal, it also reflected increased mobility amid reduced Covid-19 cases and higher vaccinations rates, as well as a recovery from the cold weather storm in Texas. US vehicle miles travelled rose by 6% m-o-m in March on a seasonally adjusted basis, and were up by 18% on the year, according to the US Department of Transportation.

The US (+1.8 mb/d m-o-m) was responsible for the bulk of total oil demand gains in March, but deliveries also rose by 130 kb/d m-o-m in Mexico, helped by higher diesel and gasoline sales, and by 90 kb/d in Chile, while they fell in Canada.



In April, oil demand in the region increased for the third straight month, by 290 kb/d to 24.1 mb/d, equivalent to around 95% of its pre-pandemic level. US deliveries rose 370 kb/d m-o-m with gasoline (+325 kb/d m-o-m) once again outpacing normal seasonal increases, reflecting mobility on the rise. Demand seasonally contracted m-o-m in Canada and Chile. US jet/kerosene demand rose by 30 kb/d and, at 1.2 mb/d, hit its highest level since March 2020, before the pandemic took hold. Figures from the Department for Transportation suggest that passenger plane traffic was up another 15% in May, even if it remained one-third below pre-pandemic levels.

We expect OECD Americas oil demand to maintain a robust pace of growth of 780 kb/d quarter-on-quarter (q-o-q) in 3Q21. While oil demand typically increases in the third quarter, this is a higher rate than usual. Gasoline and jet fuel (+280 kb/d q-o-q each) will be responsible for a significant share of the increase, as the northern hemisphere summer incentivises travel amid a high vaccination count in much of North America.

Ethane demand will be supported by new crackers coming on stream during the forecast period. The 1 mt/y Total-Borealis-Nova-chemical plant and the 1.8 mt/y ExxonMobil-Sabir cracker should start operation in Texas. And a 1.6 mt/y Shell cracker is expected to come online in Pennsylvania.

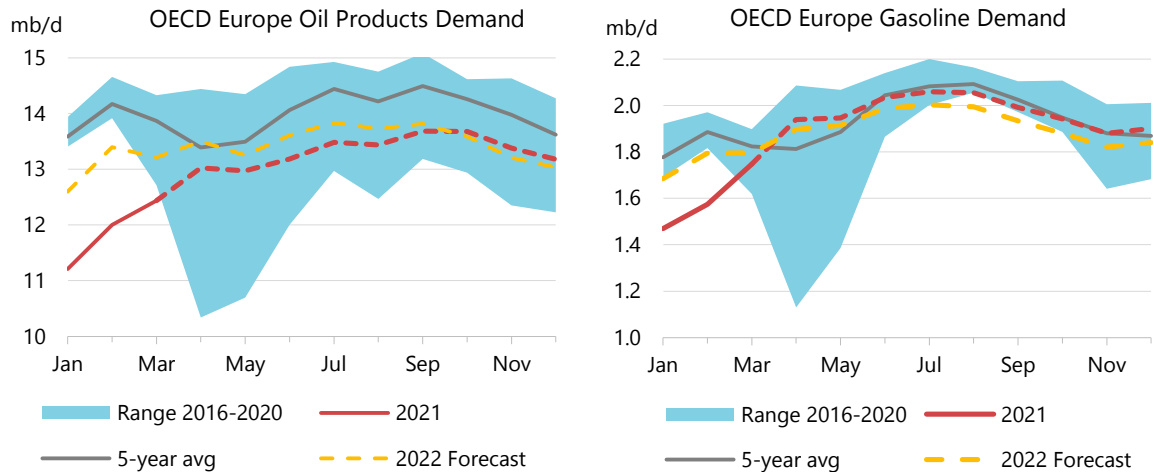
Gasoline in 2H21 and 2022 will be supported by the vaccine rollout, fiscal stimulus and large excess savings from households. The American Job Plan will support GDP and consumer mobility in 2022. Efficiency gains and teleworking will, however, constrain gasoline demand growth in 2022. We expect an average of 1.5 days of teleworking per week among the 40% employees that can do their work from home.

We forecast the region's oil demand to rise by a further 770 kb/d on average in 2022, with jet/kerosene (+330 kb/d y-o-y) and gasoline (+270 kb/d y-o-y) once again providing the lion's share of growth. By the end of the year, demand for all fuels should be at or above pre-pandemic levels, except for jet fuel/kerosene, which will maintain a roughly 180 kb/d shortfall explained largely by reduced international travel.

OECD Europe

OECD European oil demand increased by 440 kb/d m-o-m in March to reach 12.4 mb/d. Transport fuels, such as diesel (+300 kb/d m-o-m) and gasoline (+170 kb/d) contributed to the

increase. Preliminary figures point to a further increase of 590 kb/d in April, which means that the region's oil demand was still below its October 2020 level when the second lockdown started. In April, deliveries rose m-o-m in Germany (+150 kb/d) and Italy (+70 kb/d), but fell in France (-55 kb/d).



European personal mobility improved substantially through April and May in line with reduced Covid-19 cases and the gradual phasing out of social distancing measures in some countries. The significant progress made in recent weeks in the continent's vaccination programmes has contributed. Google data showed overall movements up around 9-15% in the week ending 30 May versus pre-Covid January 2020 levels in France, Germany and the UK. At the start of June, movements were up 13-29%. Mobility had been down as much as 20% in all three countries during parts of March. Other European countries, such as Italy, Spain and the Netherlands, show similar trends. Across the continent, work movements remain well below pre-pandemic levels, by around one fifth, with many employees set to telework full-time until September 2021.

We expect European oil consumption to rise seasonally by 470 kb/d q-o-q in 3Q21, with jet fuel (+240 kb/d q-o-q) and gasoil/diesel (+160 kb/d) being the primary drivers. Demand is now forecast to rise by 540 kb/d overall in 2021, recouping just 30% of the volume lost to the pandemic.

Progress in vaccinations should allow countries to remove the most stringent mobility restrictions in 3Q21. Transport fuel demand should be supported by pent up demand in 2H21 and 2022. More than in any other region, however, because of strict CO₂ emission standards for car manufacturers, efficiency gains and the penetration of electric cars will slow the growth in gasoline and diesel demand. Teleworking will also cut commuting demand for the 35% to 40% of the employees that can work from home. Petrochemical feedstock consumption rose significantly during the Covid crisis, supported by the demand for medical equipment and packaging. In 2022, naphtha demand should remain stagnant.

In 2022, we forecast European oil deliveries to increase by a further 420 kb/d, thus remaining 850 kb/d below pre-Covid levels on average for the year. Unlike in the Americas, we expect diesel, gasoline and jet fuel consumption to maintain a shortfall compared with the pre-pandemic volumes due to a combination of factors such as higher vehicle fuel efficiency, EV penetration, and reduced work mobility, amongst others.

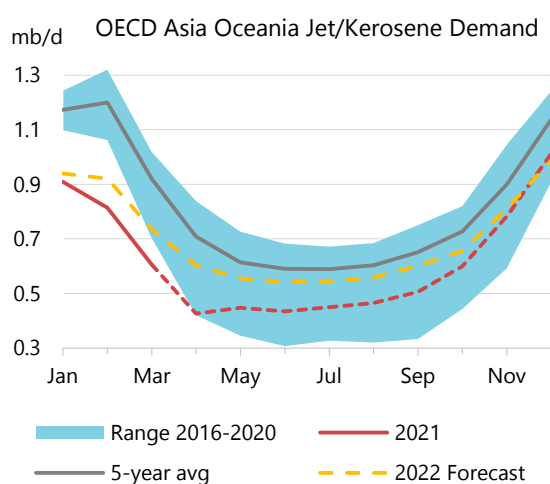
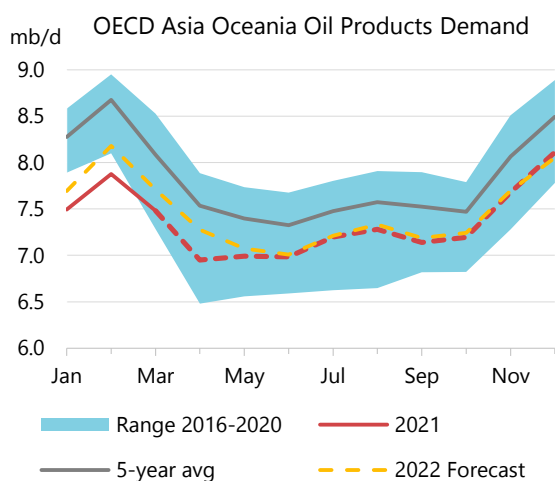
OECD Asia Oceania

Oil demand in OECD Asia Oceania fell seasonally by 400 kb/d m-o-m in March on reduced kerosene burn (-210 kb/d). However, gasoline consumption was also down a touch (-10 kb/d) and gasoil/diesel deliveries fell (-70 kb/d m-o-m), likely as a result of ongoing social distancing measures amid a rise in Covid cases in some countries. The region has generally coped better with the Covid-19 pandemic than the Americas and Europe, hence its oil consumption has been less affected. However, it is generally lagging behind the Americas and Europe in its vaccination campaigns.

Japan's oil deliveries declined by 250 kb/d m-o-m in March and then by a further 350 kb/d in April, which was the heaviest m-o-m decrease registered since May 2020. A large portion of the fall was in kerosene for seasonal reasons, but petrochemical feedstocks LPG and naphtha also showed large reductions. Data from Google showed overall mobility in Japan for April down by 8% versus January 2020 levels, and in May by 10%. In Korea, by contrast, mobility in April was up 29% versus the January 2020 level, and by 31% in May. In Australia, mobility was still down by 6-7% in both months. New Zealand, which has controlled the pandemic better, showed mobility flat or up versus January 2020 levels.

We forecast oil demand to increase q-o-q by 230 kb/d in 3Q21, however this will not be enough to offset the large 2Q21 decrease (-630 kb/d) and demand will only surpass 1Q21 levels in 4Q21. 2021 consumption is on course to rise by 290 kb/d, less than half the decline registered in 2020.

In Japan, the economy should accelerate in 2H21, supporting stronger oil demand. The slow vaccine rollout is however introducing a risk and transport fuel demand could be impacted by mobility restriction measures. Efficiency improvement will reduce gasoline demand but teleworking will remain limited in 2022.



In 2022, we expect demand to expand by just 110 kb/d y-o-y and to remain below pre-pandemic levels. A shortfall will remain in gasoline, diesel and jet/kerosene in particular.

OECD Demand based on Adjusted Preliminary Submissions - April 21

(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	10.45	51.0	1.38	80.7	4.78	16.8	3.90	7.6	0.51	42.5	3.07	20.4	24.08	31.6
US*	8.98	52.3	1.24	71.5	3.98	16.2	3.09	8.8	0.30	56.0	2.26	22.0	19.85	33.0
Canada	0.70	45.0	0.08	200.7	0.25	-5.6	0.36	-13.6	0.04	7.7	0.52	22.2	1.96	17.9
Mexico	0.69	39.2	0.04	781.2	0.37	43.0	0.39	19.7	0.15	28.4	0.26	4.1	1.89	31.1
OECD Europe	1.94	71.7	0.69	74.0	4.64	39.7	1.16	16.6	0.74	13.2	3.86	0.4	13.03	26.0
Germany	0.43	25.0	0.07	22.3	0.68	10.0	0.13	7.9	0.06	28.9	0.78	-11.3	2.15	4.1
United Kingdom	0.26	60.5	0.19	39.2	0.47	39.9	0.15	6.2	0.02	49.4	0.26	17.8	1.35	33.6
France	0.18	176.8	0.09	169.7	0.68	75.0	0.14	15.0	0.03	54.9	0.36	-9.5	1.47	44.3
Italy	0.24	199.4	0.06	277.7	0.35	111.3	0.09	47.2	0.05	8.1	0.34	26.1	1.13	76.8
Spain	0.11	323.7	0.07	549.3	0.45	103.9	0.07	10.0	0.12	10.4	0.39	8.0	1.20	53.1
OECD Asia & Oceania	1.40	25.8	0.47	1.3	1.40	10.3	0.67	-10.1	0.44	-0.5	2.57	5.0	6.95	7.3
Japan	0.77	17.2	0.25	-18.8	0.42	6.8	0.31	-12.9	0.23	3.9	1.22	6.4	3.20	3.9
Korea	0.24	8.4	0.13	25.2	0.44	10.9	0.29	-9.5	0.18	-12.2	1.12	2.3	2.40	2.5
Australia	0.30	63.3	0.07	114.4	0.49	9.1	0.05	-8.0	0.01	100.9	0.11	11.5	1.05	25.4
OECD Total	13.79	50.5	2.53	56.5	10.82	24.6	5.73	6.8	1.68	16.2	9.49	7.4	44.06	25.4

* Including US territories

Non-OECD

Non-OECD oil demand rose by 2.6 mb/d y-o-y in 1Q21, almost offsetting a drop of 2.7 mb/d y-o-y in 1Q20 and only 110 kb/d below 2019 levels. However, Covid outbreaks developed in some of the largest oil consumers in 2Q21, pushing non-OECD demand back 1.4 mb/d below 2019 levels.

Growth is projected to resume in 3Q21 and non-OECD demand is expected to outpace 2019 levels in 4Q21, reaching a level 330 kb/d higher than in 4Q19. Overall, non-OECD oil demand will rise by 2.7 mb/d in 2021 and 1.8 mb/d in 2022, to 53.4 mb/d, 1.4 mb/d above 2019 levels.

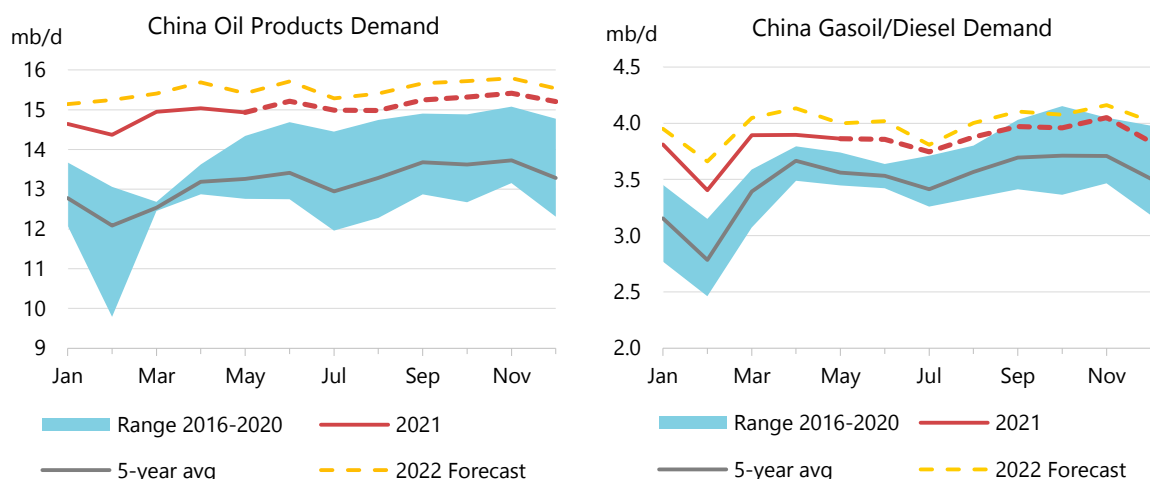
Non-OECD: Demand by Product

(thousand barrels per day)

	Demand			Annual Chg (kb/d)		Annual Chg (%)	
	2020	2021	2022	2021	2022	2021	2022
LPG & Ethane	7 283	7 465	7 607	182	143	2.5%	1.9%
Naphtha	3 189	3 406	3 483	217	77	6.8%	2.3%
Motor Gasoline	10 826	11 809	12 215	983	406	9.1%	3.4%
Jet Fuel & Kerosene	2 078	2 296	3 004	218	708	10.5%	30.8%
Gas/Diesel Oil	14 244	15 024	15 428	779	405	5.5%	2.7%
Residual Fuel Oil	4 324	4 420	4 481	96	61	2.2%	1.4%
Other Products	7 021	7 201	7 190	180	-11	2.6%	-0.1%
Total Products	48 966	51 621	53 409	2 655	1 788	5.4%	3.5%

China

Chinese oil consumption rose 90 kb/d m-o-m and 1.4 mb/d y-o-y in April. Gasoil/diesel demand increased 150 kb/d y-o-y, while gasoline deliveries were 500 kb/d higher than a year ago. Jet fuel/kerosene demand was up by 640 kb/d y-o-y on booming domestic flights. Chinese oil demand in April is estimated to be 1.5 mb/d above 2019 levels.



In May, manufacturing activity in China declined slightly, in part due to the closure of factories for the seven-day “golden week” holiday. The country also experienced a small resurgence of Covid cases in Guangdong. Demand is forecast to rise by 1.1 mb/d in 2021 on average, after a small increase of 250 kb/d in 2020. Gasoline and jet-kerosene demand will post very strong gains this year, more than offsetting their decline in 2020.

The pace of vaccine rollout is accelerating in China, and the country could reach herd immunity in 3Q21. In 2022, as if Covid spreading is under control, household mobility should increase significantly supporting transport fuel demand. Infrastructure and construction development should slow, however, providing less support to gasoil demand than in 2H20. China has put as a long-term objective in its 14th Five Year Plan (2021-2025) ecology and decarbonisation, calling for less rapid but higher-quality growth. The sales of electric cars reached 1.16 million vehicles in 2020 and should post rapid growth in 2021 and 2022. Petrochemical growth will remain very strong in 2021 but should slow in 2022.

In 2022, demand growth is expected to return to more normal levels, slowing to 470 kb/d on lower economic growth and as government support to energy intensive industries diminishes.

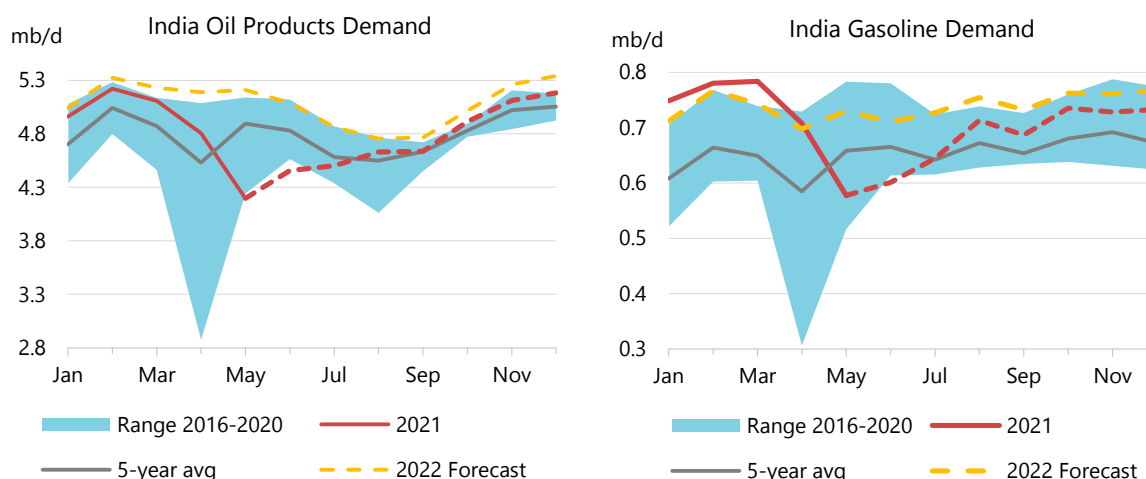
China: Demand by Product							
(thousand barrels per day)							
	Demand			Annual Chg (kb/d)		Annual Chg (%)	
	2020	2021	2022	2021	2022	2021	2022
LPG & Ethane	1 814	2 024	2 084	209	61	11.5	3.0
Naphtha	1 412	1 509	1 547	97	38	6.9	2.5
Motor Gasoline	3 211	3 564	3 668	353	104	11.0	2.9
Jet Fuel & Kerosene	712	846	912	134	67	18.8	7.9
Gas/Diesel Oil	3 625	3 849	3 999	223	150	6.2	3.9
Residual Fuel Oil	428	440	474	12	34	2.8	7.6
Other Products	2 722	2 795	2 815	73	20	2.7	0.7
Total Products	13 926	15 027	15 501	1 101	473	7.9	3.2

India

Indian demand began falling in March (-110 kb/d m-o-m) and plunged in April (-300 kb/d m-o-m) as a second wave of Covid-19 led authorities to impose increasingly stringent measures to contain the spread of the virus and as people sheltered at home. Most of the demand decline in

April was seen in gasoil/diesel and gasoline (-80 kb/d m-o-m each), but all oil products were affected.

In May, deliveries fell even further, by 610 kb/d m-o-m, with steep declines in demand for gasoil (-330 kb/d m-o-m) and gasoline (-130 kb/d), according to provisional data. In June we forecast a small increase in oil demand, as the number of cases declined sharply from mid-May and as mobility started to recover.



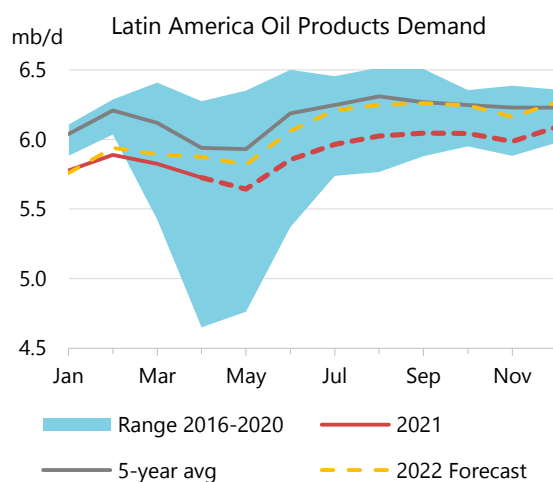
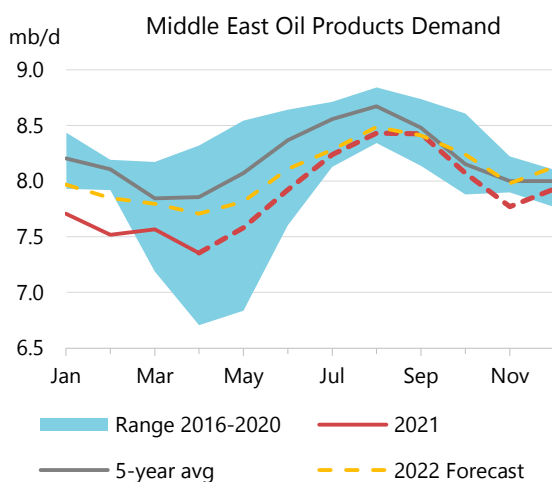
We expect deliveries to fall by 600 kb/d q-o-q in 2Q21 and to rise by 100 kb/d in 3Q21. Indian growth is forecast at 270 kb/d overall in 2021, implying that total annual oil demand will remain around 180 kb/d short of its pre-pandemic level. In 2022, growth should remain relatively weak, at around 280 kb/d. This is based on the assumption that India will only reach a rate of vaccination of 60% by the end of 2022 and that renewed waves of Covid and mobility restrictions are likely to occur over the coming 18 months given the challenges of vaccinating the country's massive population.

India: Demand by Product							
(thousand barrels per day)							
	Demand			Annual Chg (kb/d)		Annual Chg (%)	
	2020	2021	2022	2021	2022	2021	2022
LPG & Ethane	858	856	859	- 2	2	-0.2%	0.3%
Naphtha	316	336	344	20	9	6.4%	2.6%
Motor Gasoline	670	706	760	36	54	5.4%	7.6%
Jet Fuel & Kerosene	130	157	213	26	56	20.3%	35.9%
Gas/Diesel Oil	1 384	1 519	1 650	135	131	9.8%	8.6%
Residual Fuel Oil	205	209	215	3	7	1.7%	3.2%
Other Products	971	1 026	1 059	55	33	5.7%	3.2%
Total Products	4 534	4 808	5 100	275	292	6.1%	6.1%

Other Non-OECD

Oil consumption is forecast to fall counter-seasonally by 190 kb/d q-o-q in 2Q21 in **Africa** as the pandemic continues to weigh on several large regional fuel consumers. Demand should rise in the second half of the year, despite the slow vaccine rollout on the continent. African demand is expected to increase by 130 kb/d in 2021 and 80 kb/d in 2022 as the level of vaccinations will remain modest. In the **Middle East**, oil deliveries are forecast to rise by only 20 kb/d q-o-q in

2Q21, but should increase seasonally by 750 kb/d in 3Q21, helped by crude oil and fuel oil burning in the power sector. The region's vaccination rates are expected to accelerate in coming weeks and months. Oil demand in the Middle East is forecast to rise by 140 kb/d in 2021 and by 190 kb/d in 2022. Direct crude use will be reduced during the summer 2022 as some countries are moving to natural gas or renewable energies. Oil demand in the **Former Soviet Union** should increase by 220 kb/d in 2021 and 100 kb/d in 2022.

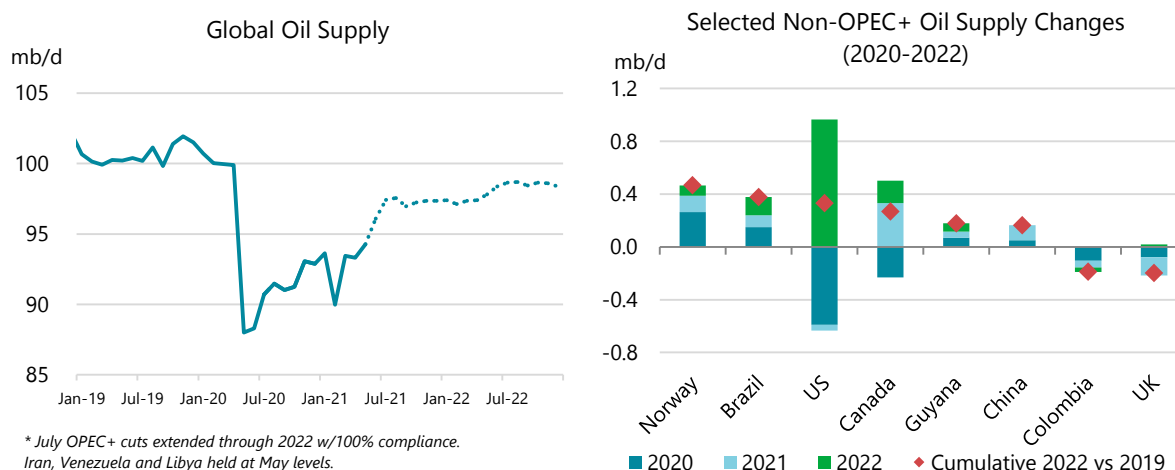


Recent measures to contain the resurgence of Covid cases in Thailand, Malaysia and Chinese Taipei are likely to take their toll on demand in 2Q21. After a fall of 1.38 mb/d in 2020, **non-OECD Asia** (ex-China but including India) consumption will regain 750 kb/d in 2021. Oil demand in the region is forecast to increase by 780 kb/d in 2022. Vaccinations are projected to be very uneven across the countries in the region, and Covid waves could reduce mobility and demand over the forecast period. **Latin American** demand dropped by 620 kb/d in 2020 and is expected to rebound by only 300 kb/d in 2021 and 160 kb/d in 2022. The largest countries in the group should achieve a high vaccination rate at the start of 2022.

Supply

Overview

World oil supply is on track to grow at a far faster pace in 2022, with the United States – after two years of declines – emerging as the driving force behind gains from producers outside the OPEC+ alliance (non-OPEC+). An increase of 1.6 mb/d is expected from non-OPEC+, while demand is projected to expand by 3.1 mb/d next year as the world returns to normal from Covid-19. Those forecasts imply that in 2022 there is scope for the 24-member OPEC+ group, led by Saudi Arabia and Russia, to ramp up crude supply by 1.4 mb/d above its July 2021-March 2022 target. This year, oil output from non-OPEC+ is expected to rise by 710 kb/d, while total oil production from OPEC+ could increase by 800 kb/d if the bloc sticks with its existing policy.

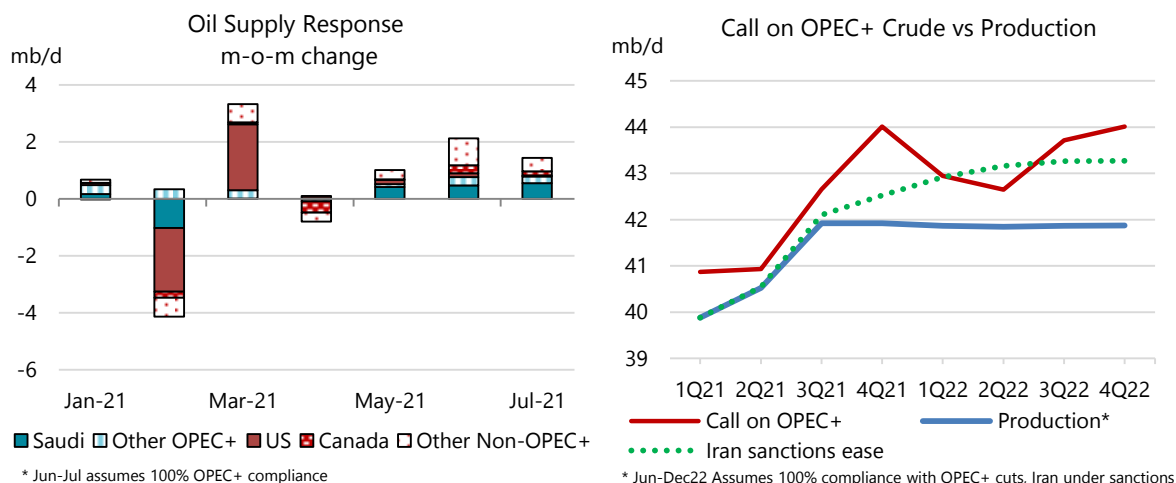


So far, that has been the case. At their 1 June virtual meeting, OPEC+ ministers swiftly approved the final tranche of the May-July 2.1 mb/d supply increase. They may be in for more lengthy discussions when they meet again on 1 July to review policy. While our balances suggest the market looks relatively balanced through the second quarter, a chasm between supply and demand develops in the second half of the year – particularly in the fourth quarter.

And then there is the issue of Iran's return if and when sanctions are eased. Should an agreement be reached in the coming weeks to restore the nuclear deal, Iranian crude supply could rise by 750 kb/d to 3.15 mb/d by the end of this year and ramp up to full capacity of 3.8 mb/d by the second half of 2022 (see *Iran: Oil supply wild card*). If that happens, Iran may rank as the world's largest source of oil supply growth in 2022.

The boost in non-OPEC+ oil supply next year comes despite financial constraints and mounting pressure from climate activists and shareholders on major oil companies and independents. But with oil above \$70/bbl, there may be more incentive to turn up the taps. From North America to Brazil to Norway, companies are spending billions to raise annual average output above pre-Covid levels. In 2022, the US, the world's largest oil producer, is due to add 970 kb/d, Canada 170 kb/d, Brazil 140 kb/d and Norway 80 kb/d. Those gains would help push total non-OPEC+ output to 48.2 mb/d in 2022, more than 1 mb/d above 2019.

At least for now, higher supply from non-OPEC+ and the monthly OPEC+ adjustment effort is helping to restore balance in the world oil market. Saudi Arabia led global oil output higher during May as it began a staged phase out of its extra voluntary cutback along with an overall easing of OPEC+ cuts. At 94.3 mb/d, world oil supply was up 960 kb/d month-on-month (m-o-m), and 6.3 mb/d above May 2020 when OPEC+ began its record supply cut. This month, global output is expected to rise significantly as the Kingdom and other OPEC+ members continue to unwind cuts and Norway, Canada and Brazil bounce back from maintenance.



As for OPEC+ crude oil, production rose 320 kb/d in May to 40.4 mb/d. That left the bloc's effective spare capacity, excluding shut-in Iranian supply, at 8.4 mb/d. By July, the third month of OPEC+ scheduled increases, effective spare capacity could edge down to a still hefty 6.9 mb/d (see *OPEC+ has plenty to spare through 2022*). At that point, the group may have to consider tapping into it. The third quarter sees the call on OPEC+ crude oil rising by 1.7 mb/d to 42.7 mb/d, 2.3 mb/d more than the group pumped during May. The requirement for OPEC+ crude climbs a further 1.4 mb/d to reach 44 mb/d during the fourth quarter. Even in a scenario which foresees increasing volumes from Iran, provided a deal were to be reached to restore the nuclear deal and sanctions eased, OPEC+ would still produce more than 1 mb/d below the call during the fourth quarter if it sticks with existing supply curbs. For 2022, the call on OPEC+ crude rises to 43.3 mb/d compared to 42.1 mb/d this year.

OPEC+ rises as Saudi ramps up

Saudi Arabia began during May to phase out its voluntary reduction along with an overall easing of cuts by OPEC+. Crude supply from the 24-member producer group rose 320 kb/d m-o-m to 40.4 mb/d. Gains were limited by losses in several African countries and slightly lower output from non-OPEC members, including Russia. Overall compliance with supply cuts during May remained strong at 114%, as core Gulf producers pumped below target and rates improved from non-OPEC members.

The Saudi supply boost helped to raise OPEC crude output by 370 kb/d m-o-m to 25.43 mb/d, while crude flows from the group's non-OPEC countries (including Russia) declined 50 kb/d to 14.96 mb/d. During June, cuts from OPEC+ producers are due to ease by 700 kb/d and a further 840 kb/d is expected to be unwound in July. By the end of July OPEC+ cuts will shrink to 5.8 mb/d from the record 9.7 mb/d when they were first enforced in May 2020.

OPEC+ Crude Oil Production ¹								
(million barrels per day)								
	Apr 2021 Supply	May 2021 Supply	May Compliance	May 2021 Target	Jun 2021 Target	Jul 2021 Target	Sustainable Capacity ²	Spare Cap vs May
Algeria	0.87	0.89	98%	0.89	0.90	0.91	1.01	0.12
Angola	1.18	1.13	162%	1.28	1.30	1.32	1.18	0.05
Congo	0.27	0.27	106%	0.27	0.28	0.28	0.31	0.04
Equatorial Guinea	0.12	0.11	85%	0.11	0.11	0.11	0.12	0.01
Gabon	0.19	0.18	23%	0.16	0.16	0.16	0.21	0.03
Iraq	3.95	3.96	93%	3.91	3.95	4.02	4.92	0.96
Kuwait	2.32	2.36	100%	2.36	2.39	2.43	2.94	0.58
Nigeria	1.37	1.34	166%	1.54	1.55	1.58	1.74	0.40
Saudi Arabia	8.14	8.48	143%	9.23	9.35	9.50	12.14	3.66
UAE	2.61	2.64	104%	2.66	2.69	2.74	3.83	1.19
Total OPEC 10	21.02	21.36	124%	22.40	22.67	23.03	28.40	7.04
Iran ³	2.40	2.40					3.80	1.40
Libya ³	1.14	1.14					1.18	0.04
Venezuela ³	0.50	0.53					0.58	0.05
Total OPEC	25.06	25.43					33.97	8.54
Azerbaijan	0.59	0.59	116%	0.60	0.61	0.62	0.66	0.08
Kazakhstan	1.53	1.51	81%	1.46	1.47	1.48	1.67	0.16
Mexico ⁴	1.70	1.67		1.75	1.75	1.75	1.67	0.00
Oman	0.73	0.74	101%	0.74	0.75	0.76	0.87	0.13
Russia	9.54	9.52	94%	9.42	9.46	9.50	10.40	0.88
Others ⁵	0.92	0.95	91%	0.93	0.94	0.96	1.00	0.06
Total Non-OPEC	15.01	14.96	94%	14.90	14.98	15.06	16.27	1.31
Total OPEC+	40.07	40.39	114%	37.30	37.65	38.09	50.24	9.85

1 Excludes condensates.

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

3 Iran, Libya, Venezuela exempt from cuts.

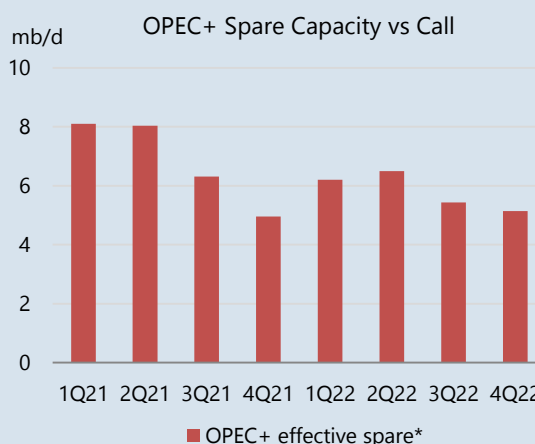
4 Mexico only cut production in May and June 2020.

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

Box 2. OPEC+ has plenty to spare through 2022

Despite more than a year of steep output cuts, heavyweight producers such as Saudi Arabia, the UAE and Russia are spending money to expand or at least sustain capacity. For OPEC, production capacity is expected to rise 200 kb/d to 34.3 mb/d in 2022 as additional capacity from low-cost reserves in the Middle East offsets further losses in Angola and Nigeria. Saudi Arabia and Kuwait are expected to continue to build up production in the shared Neutral Zone, the UAE raises capacity at the Upper Zakum field, among others, and Iraq further develops its giant southern fields.

Non-OPEC producers that are part of the alliance are expected to keep investing enough to keep capacity broadly stable at 16.3 mb/d, although Kazakh capacity could get a boost next year if the Tengiz field is expanded as planned. Taken altogether, OPEC+ capacity is expected to reach 50.55 mb/d in 2022 versus 50.37 mb/d in 2021.

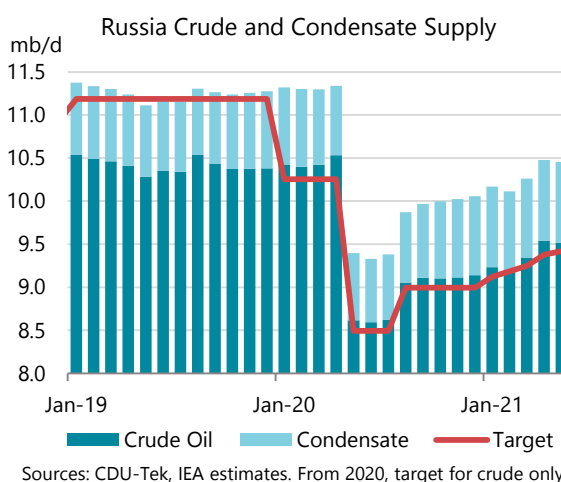
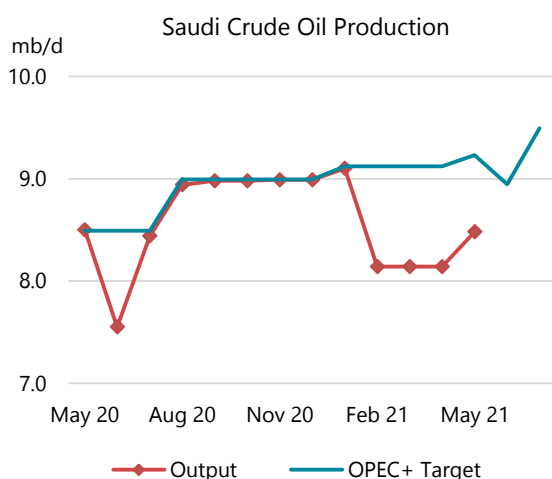


*Excludes shut-in Iranian crude

At the same time, the call on OPEC+ crude is expected to rise by 1.2 mb/d to 43.3 mb/d in 2022. But it is the fourth quarters of both this year and next when the call on OPEC+ crude climbs to 44 mb/d - the highest point in the year. OPEC+ effective spare capacity (excluding shut-in Iranian crude) in 2021 would fall to 5 mb/d in the fourth quarter but in 2022 it could stand at 5.1 mb/d given the planned capacity expansions. Saudi Arabia holds the lion's share of the spare capacity with nearly 40%. Russia, the UAE and Iraq account for roughly 10% each.

	2021	2022	Change		2021	2022	Change
Saudi Arabia	12.19	12.25	0.06	Russia	10.40	10.40	
Iraq	4.93	5.02	0.09	Kazakhstan	1.67	1.67	
UAE	3.82	3.92	0.10	Azerbaijan	0.66	0.64	-0.02
Iran	3.80	3.80		Oman	0.87	0.87	
Kuwait	2.98	3.04	0.06	Bahrain	0.19	0.19	
Nigeria	1.75	1.71	-0.04	Malaysia	0.48	0.47	-0.01
Angola	1.20	1.13	-0.07	Brunei	0.09	0.09	
Libya	1.19	1.22	0.03	South Sudan	0.18	0.18	
Algeria	1.01	0.99	-0.02	Sudan	0.06	0.06	
Congo	0.31	0.31		Mexico	1.67	1.68	0.01
Eq. Guinea	0.12	0.12		Total non-OPEC	16.27	16.25	-0.02
Gabon	0.21	0.21	-0.01				
Venezuela	0.58	0.58					
Total OPEC	34.10	34.30	0.20	Total OPEC+	50.37	50.55	0.18

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



Crude supply from **Russia** dipped during May, lifting its compliance to 94%. Production was estimated at 9.52 mb/d, down 20 kb/d m-o-m, yet still 100 kb/d above its May target. Lower output from Rosneft's Bashneft subsidiary pulled down overall output. Total Russian supply, including condensates and NGLs, was 10.8 mb/d, 1.1 mb/d above May 2020. Crude production also eased in neighbouring countries. **Kazakh** output eased to 1.51 mb/d, 50 kb/d over its May OPEC+ quota. Kazakhstan has said it will offset overproduction this summer when scheduled maintenance will shut in some supply. **Azeri** supply held steady at 590 kb/d, remaining just below target after planned maintenance finished at BP's West Azeri platform that pumps oil from the Azeri Chirag-Guneshli fields.

Apart from Saudi Arabia, fellow Middle East producers raised output by a modest amount. Crude oil output in **Iraq**, including the Kurdistan Regional Government (KRG), inched up to 3.96 mb/d in May, 50 kb/d above its slightly higher May supply target. Total Iraqi exports of crude oil fell 90 kb/d to 3.2 mb/d, with some barrels moving into storage tanks. On the upstream front, a drilling effort has begun to boost output by an initial 30 kb/d from the Lukoil-operated West Qurna-2. One of Iraq's giant southern oil fields, West Qurna-2 is now capable of producing roughly 400 kb/d.

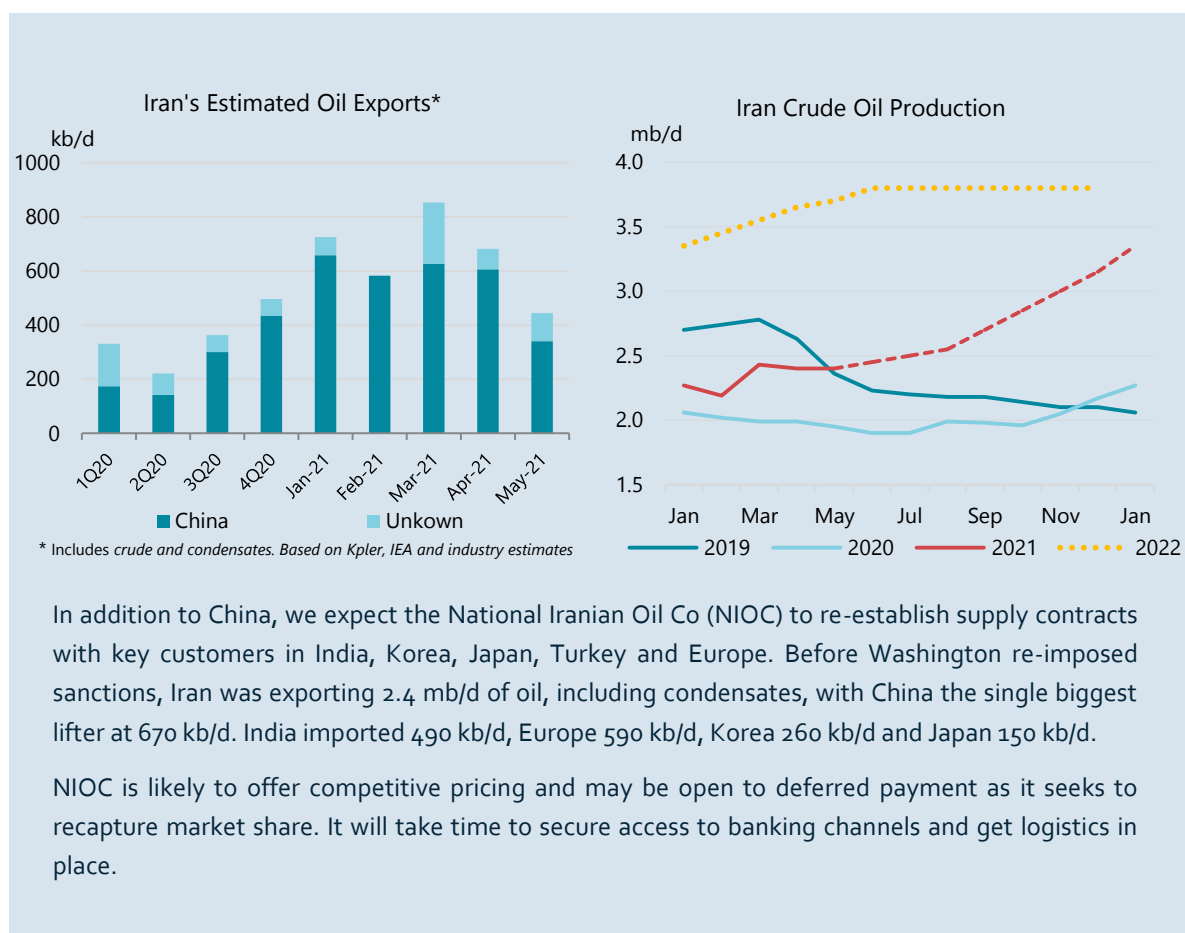
Production in the **UAE** rose 30 kb/d to 2.64 mb/d in May, just below its higher OPEC+ target. Exports of crude oil eased, but some production was shifted into storage. The Abu Dhabi National Oil Co (Adnoc) is meanwhile pushing ahead with its capacity expansion that aims for an official target of 5 mb/d by 2030. We estimate current capacity at 3.8 mb/d. It awarded a \$744 million contract to the UAE-based National Petroleum Construction Corp to develop an offshore block, which is expected to produce first oil in 2023. The block is made up of the Belbazem, Umm Al Salsal and Umm Al Dholou fields and is expected to produce 45 kb/d. Adnoc also plans to invest \$318 million to sustain output capacity at the 650 kb/d Bu Hasa field, the UAE's largest onshore oil field. **Kuwaiti** supply edged higher to 2.36 mb/d, up 160 kb/d on a year ago. Crude oil output in **Oman** rose marginally to 740 kb/d, while condensates eased to 215 kb/d.

Box 3. Iran: Oil supply wild card

Talks to revive the Joint Comprehensive Plan of Action (JCPOA) nuclear deal could pave the way for an agreement that leads to higher Iranian production and exports. If a deal is reached, it may take at least another month for US sanctions to be lifted – thus enabling production and exports to increase during the third quarter. At that point, we expect Iranian crude production to ramp up and rise to around 3.15 mb/d by the end of the year, up roughly 750 kb/d from current levels.

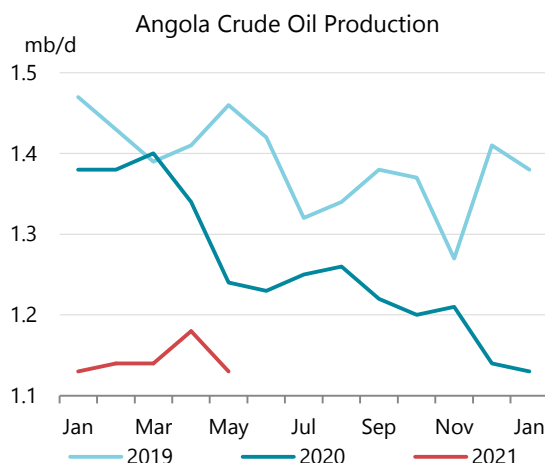
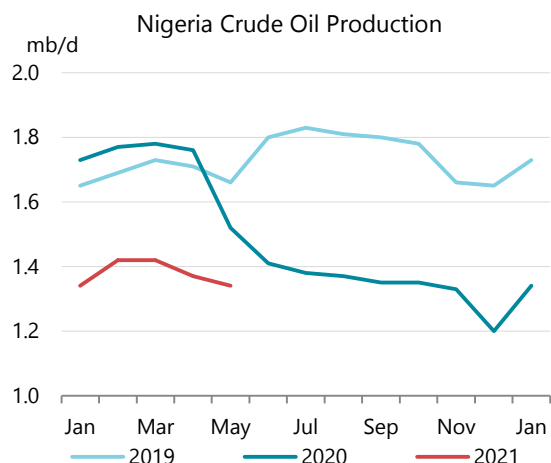
Iranian supply has been rising gradually since the end of 2020 (+340 kb/d since 4Q20), with production in March climbing to 2.43 mb/d based on the receipt of more complete data. Flows eased to 2.4 mb/d since then after heavy buying from China slowed. We believe Iran has made steady progress in preparing its oil network - enabling it to ramp up quickly once sanctions are eased. Sustainable crude oil production capacity of 3.8 mb/d could be reached by mid-2022. Iran also has about 75 million barrels of crude oil and condensate stored on tankers, and it will move to clear that overhang as quickly as possible.

After the former US administration withdrew from the JCPOA in 2018, oil sales slowed to a trickle. But shipments have increased in recent months on the back of hefty purchases from China. From an average 200 kb/d shipped in the first nine months of last year, Iran's estimated oil sales to China in 4Q20 rose to 440 kb/d and to roughly 620 kb/d in the first four months of 2021. For May, however, tanker tracking shows sharply lower shipments to China of around 340 kb/d due to slowing demand and substantial volumes going into onshore and floating storage. Iran's total oil exports this year are running at an average 660 kb/d.



In **Nigeria**, crude oil production dipped to 1.34 mb/d in May, down 180 kb/d on a year ago. Hoping to reverse its recent capacity losses, the Nigerian National Petroleum Co is taking steps to improve ties with international oil companies. To that end, it has signed a deal with its partners in the deepwater oil block OML 118, paving the way for an expansion of the Bonga oil and gas field. The OML license for the block's partners Shell, Eni, ExxonMobil and Total was renewed for a further 20 years and various commercial agreements were finalised. Development of the Bonga Southwest field, with estimated capacity of 150 kb/d, is at the core of the expansion project, which had been on ice for the past few years.

Output in **Angola** fell 50 kb/d to 1.13 mb/d, hovering at 16-year lows due to operational and technical issues. Production may fall further this month because of scheduled maintenance at the CLOV hub. Eni and BP have meanwhile signed a memorandum of understanding to merge their Angolan oil and gas operations. If finalised, the joint venture would produce more than 200 kb/d of oil equivalent and rank as one of Africa's largest energy companies. The 50-50 joint venture, which would be self-funded, comes as major oil companies are preparing to shift towards cleaner energy and renewables.



Supply in **Equatorial Guinea** inched down to 110 kb/d in May, while in **Gabon** output dipped to 180 kb/d. Flows in **Congo** held steady at 270 kb/d. At an estimated 160 kb/d, **South Sudan** produced 50 kb/d above its target in May. Production in **Algeria** edged up to 890 kb/d. The north African producer's Zarzaitine oil field is due to have its capacity increased from 28 kb/d to 50 kb/d. Sonatrach and partner Sinopec have agreed to extend work beyond the contract's original 2023 expiry. The Chinese company and Sonatrach plan to invest \$525 million in Zarzaitine, with Sinopec funding 75%.

For those countries spared from official cuts, production during May held steady in Iran and Libya, edged up in Venezuela and eased in Mexico.

Libyan production was stable at 1.14 mb/d during May, up 1.06 mb/d y-o-y. The country's recovery remains fragile as occasional shutdowns and disruptions are likely to continue.

Output edged up in **Venezuela**, struggling under US sanctions and a long-standing production decline. At 530 kb/d, May crude supply was 30 kb/d below a year ago. Output from the vast Orinoco Belt has edged up following maintenance and increased supply of light crude to dilute the region's extra heavy crude. Washington has meanwhile extended a license to Chevron and four US oil field service companies to enable them to keep operating until 1 December 2021.

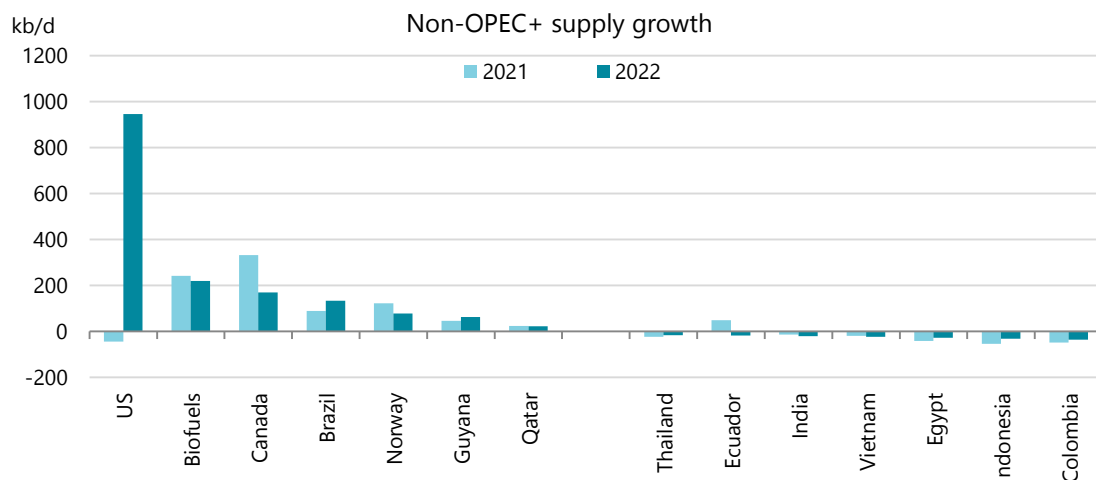
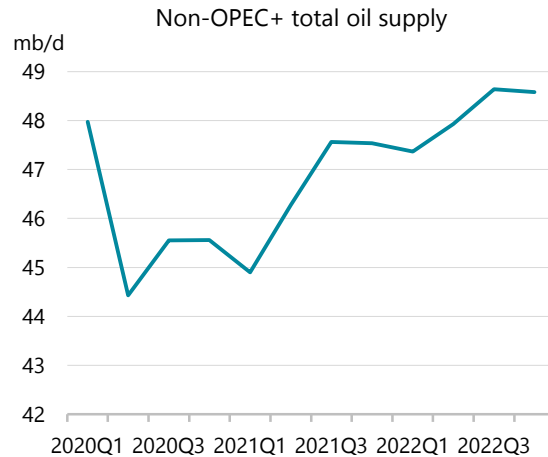
Mexican crude oil output eased to 1.67 mb/d during May. Monthly declines are expected to continue this year due to steep drops from mature acreage and underwhelming growth from the new priority fields. Total oil output slipped during May to around 1.95 mb/d. On average, 2021 output of 1.9 mb/d is about the same as 2020 levels. In 2022, fields such as Eni's Amoca (Area 1) and Pan-American Energy's Hokchi are expected to come online and, along with infill drilling at Pemex's shallow water Balam field, will help to raise supply by 30 kb/d y-o-y.

Onwards and upwards for non-OPEC+

Non-OPEC+ oil production is estimated to have risen to 46 mb/d in May, up 470 kb/d m-o-m, reaching its highest level since before the pandemic took hold in March 2020. Aside from a seasonal rise in biofuels output, gains came mostly from the US. Overall, 2Q21 non-OPEC+ supply has been revised down by 40 kb/d since last month's *Report* based on recently received data that was weaker than expected for some countries, including the UK and Brazil.

In 2Q21 operators, particularly in Canada and the North Sea, have been undertaking heavier-than-usual seasonal maintenance. Some of this was deferred from 2020 due to Covid-19 constraints on manpower. At the conclusion of workovers, non-OPEC+ supply is expected to show strong gains in 2H21, boosted by new projects in Brazil and Norway, and as US production creeps up. For 2021 as a whole, non-OPEC+ supply looks likely to rise 710 kb/d, a partial recovery from the 1.3 mb/d drop in 2020.

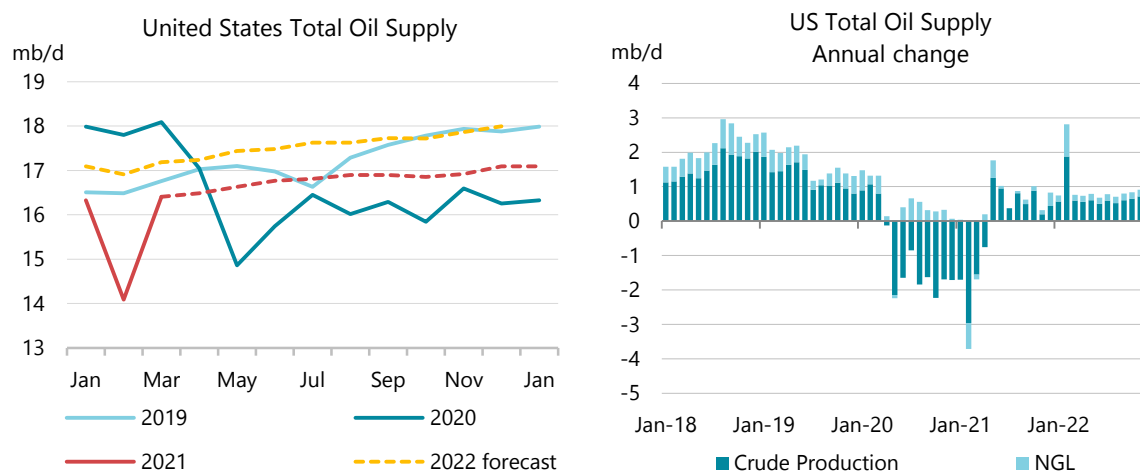
In 2022, non-OPEC+ output is set to increase by 1.6 mb/d and return to pre-pandemic levels by mid-year. The US is the largest contributor to growth, with supplies climbing 970 kb/d y-o-y as rising activity in the shale patch spurs a recovery in light tight oil (LTO) production from the Permian Basin. Canada, Brazil, Norway and Guyana add a combined 440 kb/d as projects ramp up and new fields come online (see *Non-OPEC+ conventional oil projects boost supply in 2021-22*). Meanwhile, weak investment takes its toll in many Asian producing countries where output will continue to slump. Colombia is expected to see the largest supply loss in 2022 (-40 kb/d) as production continues on a steeply declining trajectory.



US total supply was estimated to be 16.6 mb/d in May, returning above year-ago levels for the first time in one year but still well below pre-pandemic highs of more than 18 mb/d. Light tight oil (LTO) and output from the Gulf of Mexico grew modestly in May (+30 kb/d and +30 kb/d m-o-m, respectively), while NGL production rebounded as ethylene crackers fully recovered from the lingering impact of February's winter storms (+120 kb/d m-o-m).

US LTO production is expected to continue to creep upwards this year, with an exit rate of around 7.6 mb/d, 760 kb/d above December 2020. These gains come mainly from the Permian, where despite most operators keeping spending in check, falling upstream costs have allowed more drilling. Firms are also bringing drilled but uncompleted wells (DUCs) online at a faster rate, which is less capital intensive. Overall activity remains subdued as publicly-listed companies stick with spending discipline to deliver shareholder returns. However, recent higher

oil prices have already triggered private operators (who account for ~25% of US LTO supplies) to step up drilling. By the end of 2022, US LTO production is expected to rise slightly above pre-pandemic levels and reach 8.2 mb/d.

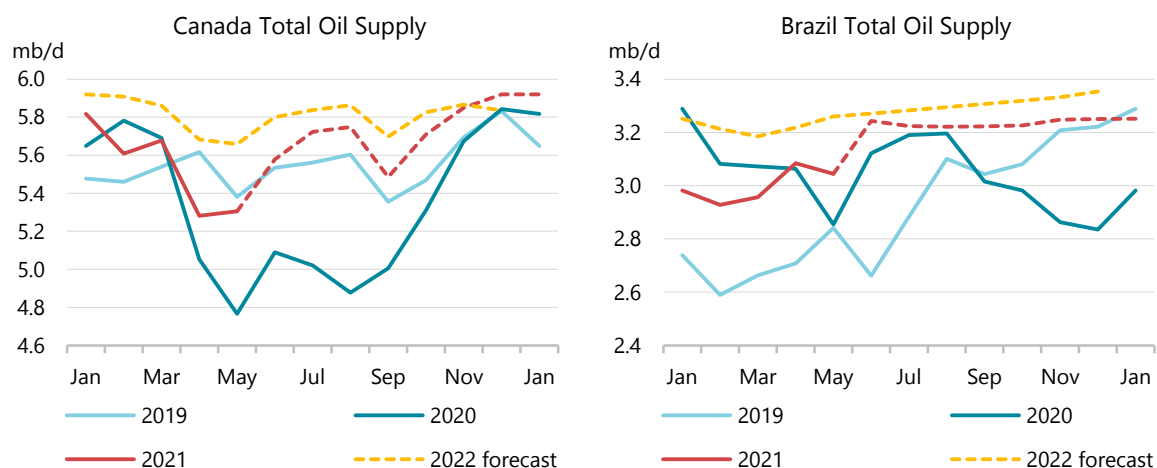


Following losses in 2020 (-590 kb/d) and 2021 (-40 kb/d), the US is set to rebound by 970 kb/d in 2022. Along with higher LTO, the Gulf of Mexico adds 120 kb/d as new projects come online or continue to ramp up. Overall, crude oil production increases by 700 kb/d y-o-y, while NGLs supply is set to rise by 240 kb/d.

On 1 June, US President Biden's administration suspended oil and gas leases that had been granted in the Arctic National Wildlife Reserve (ANWR) in Alaska. This is in line with Biden's campaign promise and efforts to cut carbon pollution. However, it is unlikely to materially impact US oil supply. Little interest was shown for oil leases in the ANWR when they first went on sale in January 2021, with weak oil prices and the lack of infrastructure deterring operators.

In May, as in April, heavy maintenance at oil sands upgraders weighed on **Canadian** output. Total supply was estimated at 5.3 mb/d, over 500 kb/d above May 2020, but 400 kb/d below 1Q21. CNRL's Horizon and Syncrude's Mildred Lake facilities started turnarounds in April and reportedly, the duration of these almost doubled (to 75 days) due to Covid-19 protocols. Meanwhile, Suncor has delayed maintenance initially scheduled for May at its Base Plant upgrader to reduce the risk to staff from Covid-19 outbreaks at oil worker camps. According to Suncor, the turnarounds will now begin in June at the earliest.

At the conclusion of maintenance, production will rise in 2H21 to 5.9 mb/d by year end, a record high. Average gains of 330 kb/d in 2021 will slow to 170 kb/d in 2022. New project sanctions are needed to maintain momentum, but several operators put plans on hold due to uncertainty and low prices in 2020. Production from the offshore Terra Nova field has been removed from the short-term forecast. The field has been offline since 2019 but was expected to return later this year. Operator Suncor is now reported to be trying to sell the FPSO and decommission the remaining facilities.



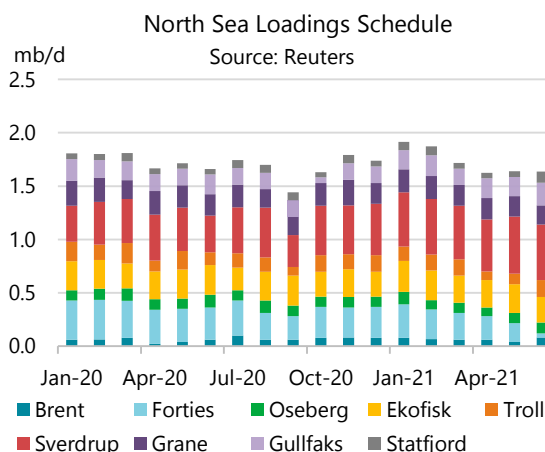
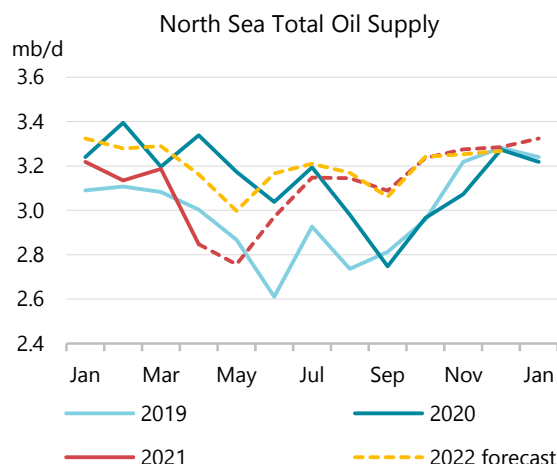
Daily production data from the Agência Nacional do Petróleo (ANP) suggests that the recovery in **Brazilian** output faltered in May, although production held above 3 mb/d for the second month in a row. Petrobras announced in April that its heavy offshore maintenance was largely concluded but there were reports of unplanned maintenance and field level data shows reduced flows from the 500 kb/d Buzios field in early May. In the absence of other disruptions, production should recover to over 3.2 mb/d in 2H21.

In 2021, rising supply from the Buzios and Iara fields in the Santos basin will more than offset slumping Campos basin output and the impact of 1Q21 maintenance. Total production will increase by 90 kb/d to average 3.1 mb/d. In 2022, growth will accelerate to 140 kb/d on new supplies from the Mero and Sepia fields and as the Peregrino field comes back online. Equinor have again delayed the return of Peregrino, which has been shut in since April 2020, to “towards the end of this year”.

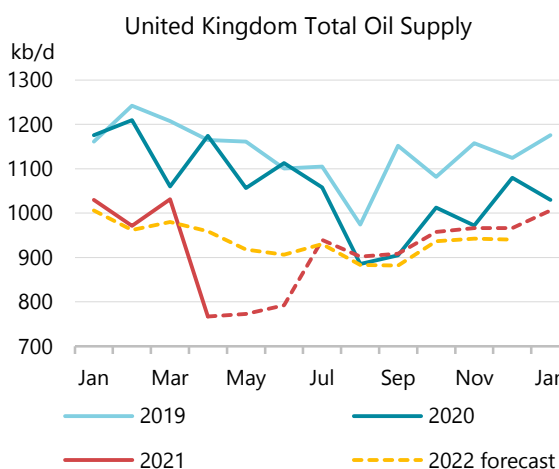
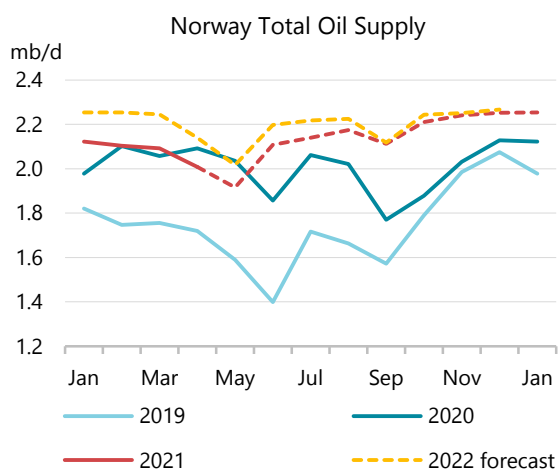
Argentina is making a healthy recovery after weak demand and low prices saw output fall 40 kb/d in 2020. Activity in the Vaca Muerta shale play rose to a fresh record high of 1 079 frack stages in May while worker strikes that had hampered operators ended without having a significant impact on supply. Led by rising LTO production, total output will rise 20 kb/d in 2021 and 10 kb/d in 2022.

Colombian supplies are estimated to have dipped to 710 kb/d in May (40 kb/d below the 1Q21 average) as civil unrest triggered by proposed tax reforms caused operators to shut in production. Protestors have blocked access to operations and the disruptions are ongoing as this *Report* is published. State-owned Ecopetrol has reported a 3.6% drop in production since 1Q21, and private operators Frontera Energy, Geopark, Gran Tierra and Parex have also been impacted. Total Colombian supply is expected to fall 50 kb/d in 2021, to 740 kb/d, and by a further 40 kb/d in 2022.

Maintenance in both the UK and Norway pushed North Sea output to a nine-month low of 2.8 mb/d in May. In June, production is expected to rebound in Norway, but UK flows will remain subdued while the Forties pipeline is shut in. Preliminary loading schedules for June show Forties exports dropping 130 kb/d m-o-m, while Gullfaks, Statfjord and Troll rise by a combined 150 kb/d. Shipments of Johan Sverdrup are scheduled at 520 kb/d in June.



In May, heavy maintenance pushed **Norwegian** production to 1.9 mb/d, down 120 kb/d m-o-m, to an eight-month low. In particular Troll experienced workovers, with loadings for April and May around half the usual level (150 kb/d). Norway is expected to show strong growth in 2H21, up 130 kb/d over 1H21, as Johan Sverdrup pumps at around 535 kb/d and other smaller projects, delayed due to the pandemic come online. Equinor's Martin Linge field, originally slated for first oil in 2014 should start up in the middle of this year and ramp up to 40 kb/d. Also due online this year and next are the Yme, Balder X, Fenja, Duva, Nova fields and the Njord redevelopment. These will see Norway's output rise 80 kb/d in 2022, following a 120 kb/d rise in 2021.



Preliminary data from the Department of Business, Energy and Industrial Strategy (BEIS) suggests that UK production plunged by 25% in April to 770 kb/d, well below our previous estimate. Although some maintenance was anticipated in April, notably of fields feeding the Flotta stream, analysis of loading schedules and tanker tracking data (which may not necessarily reflect the timing of production or volumes consumed domestically), did not indicate that production would see such a large decline. BEIS has advised that the fall in production was due to planned maintenance at FPS Kinneil, industrial activity at the Sullom Voe terminal and weaker output from the Schiehallion field.

It is estimated that flows remained subdued in May, with the UK's largest field Buzzard going offline on 24 May ahead of the full shutdown of the Forties Pipeline System (FPS). FPS operator INEOS confirmed that the maintenance began on 27 May and should be concluded by 16 June, with further works on the Graben Area Export Line completed by the end of the month.

The impact of maintenance, along with steep field declines due to weak investment, will see UK output drop 140 kb/d in 2021 to an eight-year low of 920 kb/d. No larger-than-usual workovers are planned for 2022 but production will rise only 20 kb/d next year. This assumes that BP can improve performance from its West of Shetlands acreage. BP recently formed an alliance with service companies and is targeting a 15% increase in production from Clair Ridge.

Chinese supply rose modestly in May to 4.1 mb/d (+20 kb/d m-o-m). Increased domestic spending by the national oil companies will see total output rise 120 kb/d in 2021 to 4.1 mb/d, and hold at this level in 2022. **Indonesian** production slumped 60 kb/d below year ago levels in May. This trend is expected to continue for the remainder of the year and into 2022 due to weak investment. In 2021, supply will average 680 kb/d (-50 kb/d y-o-y), with a further drop of 30 kb/d anticipated in 2022.

Box 4. Non-OPEC+ conventional oil projects boost supply in 2021-22

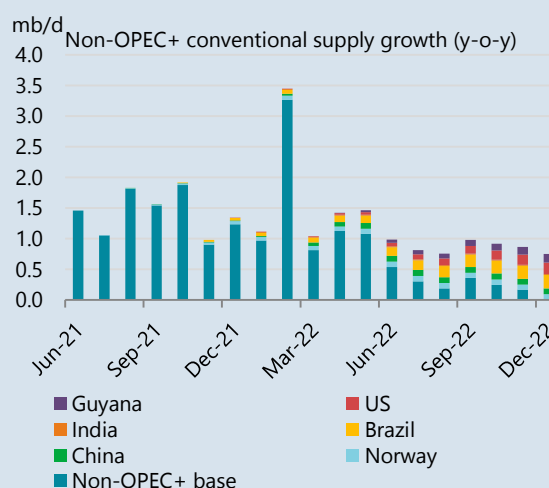
Underpinned by higher oil prices, US LTO is expected to once again dominate non-OPEC+ supply growth in 2022. Conventional production will also rise, but gains will be relatively modest in the near term. New conventional projects start-ups (see table), will contribute 100 kb/d by end-2021 and 830 kb/d by end-2022.

Production from two new pre-salt Santos basin fields, Sepia and Mero, make Brazil the biggest new source of conventional supplies in the short term, followed by the US Gulf of Mexico and then Guyana. Chinese firms are also raising domestic supplies to meet the government's energy security goals. Several new projects in Norway provide a sharp contrast to activity in the UK where only two significant start-ups are expected towards the end of next year, Shell's Penguins redevelopment and Neptune Energy's Seagull.

Several of the new projects are coming online later than planned due to Covid-19. In some cases, the fabrication of facilities and drilling of wells was disrupted by virus outbreaks. In Norway, the government delayed the start-up of some new fields in response to weak demand in 2020.

Almost all the new projects are concentrated in a handful of well-established oil producing countries. This reflects dwindling exploration budgets and reluctance by firms to explore risky and higher cost frontier plays. The exception is Guyana, which saw first oil in 2019, where ExxonMobil will bring Liza phase 2 online next year. This will raise the country's output to 340 kb/d. Additional phases are planned to bring supply to 750 kb/d by mid-decade.

The devastating financial impact of Covid-19 on E&P firms is reflected by the modest amount of new conventional oil expected to be brought to market in the short term. Some projects have been held up as operators attempt to lower costs by redesigning them, e.g. Woodside's Sangomar in Senegal. Others have seemingly been abandoned, e.g. Cenovus Energy's West White Rose Extension in Canada. As explored in the IEA's recently published *World Energy Investment 2021*



(WEI 2021) report, ongoing pressure from the pandemic and the energy transition means spending on oil and gas is expected to recover by only 10% this year, having plunged 30% in 2020. While lower investment in fossil fuels can be welcomed as consistent with efforts to reduce carbon emissions, as noted in the WEI 2021 “Today’s investment spending on fuels appears caught between two worlds: neither strong enough to satisfy current fossil fuel consumption trends nor diversified enough to meet tomorrow’s clean energy goals”.

Conventional oil projects due online in 2H21 and 2022

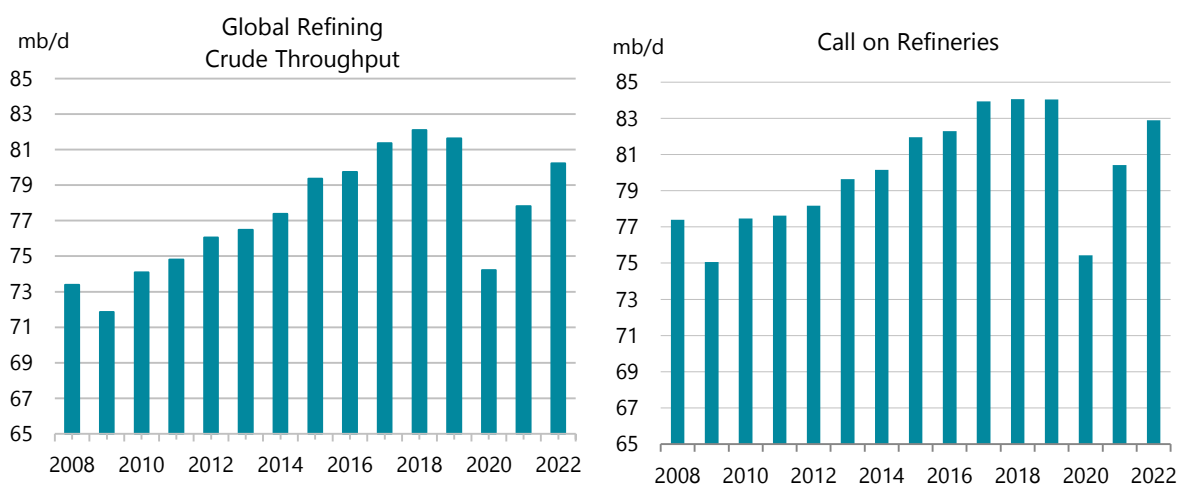
Country	Project	First oil	Plateau (kb/d)	Operator / Comment
Norway	Martin Linge	3Q21	40	Equinor. Originally due online in 2016 but issues with topsides and well integrity saw costs overrun by 150% to \$6.8 bn.
Norway	Duva	3Q21	9	Neptune Energy
Norway	Yme	3Q21	35	Repsol. One year delay as Covid-19 hampered rig conversion work.
Norway	Njord redev	3Q21	10	Equinor. One year delay due to Covid-19 restrictions and extended project schedule. 53% cost overrun to Nkr 24.7 bn.
Norway	Nova	1Q22	9	Neptune energy. March 2020 equipment failure on drilling risk could put schedule at risk.
Norway	Fenja	1Q22	24	Neptune Energy. Initially due online early-2021 but drilling delays due to Covid-19.
Brazil	Sepia	3Q21	180	Petrobras
Brazil	Mero-1	1Q22	180	Petrobras. Delayed from 2021 due to Covid-19 outbreak at Chinese fabrication yard.
Brazil	Peregrino Ph2	3Q22	35	Equinor. Initially due online in 2021 but delayed along with restart of phase 1.
US	Mad Dog Ph2	2Q22	120	BP
US	Vito	2Q22	100	Shell. Delayed from 2021.
US	King’s Quay	3Q22	80	Murphy Oil
Guyana	Liza Ph2	2Q22	220	ExxonMobil. Potential to increase capacity 10%-15%.
China	Lufeng redev	1Q22	40	CNOOC
China	Luda (additional phases)	1Q21	15	CNOOC
UK	Buzzard Ph2	4Q21	30	CNOOC. Delayed from 2020.
UK	Penguins redev	4Q22	45	Shell. Delayed from 2021 due to engineering challenges.
India	B-127 cluster	1Q22	15	ONGC
Mauritania	Tortue West	3Q22	10	BP. Associated condensate.

Refining

Overview

After a 7.4 mb/d year-on-year (y-o-y) fall in 2020, global refinery throughputs are forecast to increase by 3.6 mb/d this year and a further 2.4 mb/d in 2022. Growth in refining activity is expected to lag the increase in demand for refined products in 2021, allowing markets to continue to absorb surplus product stocks from 2020. By contrast, in 2022, the annual increase in refinery throughputs closely matches demand growth for refined products.

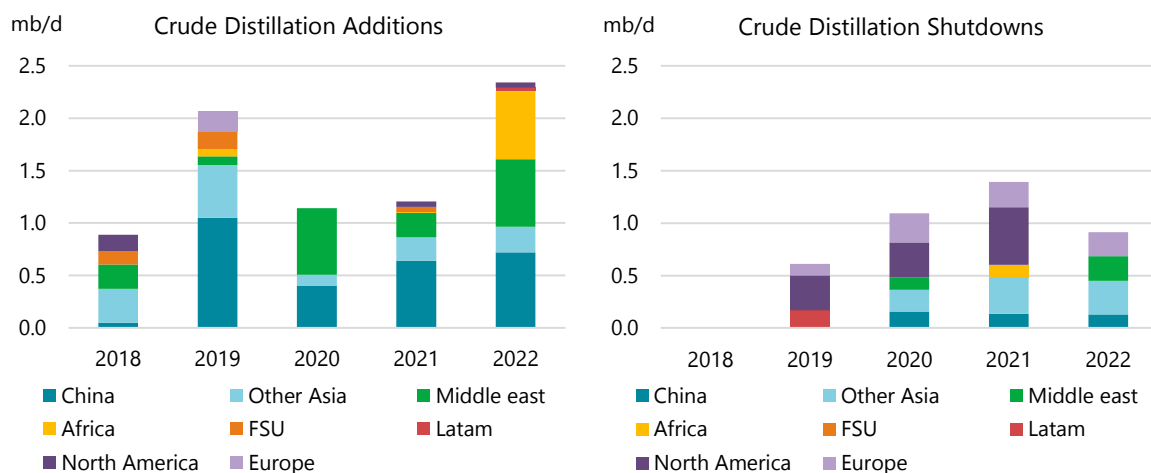
Even before the pandemic hit, the call on refineries had stagnated for two years. While total oil demand increased by 1.5 mb/d between 2017 and 2019, demand for refinery output increased by only an estimated 110 kb/d. At the same time, net capacity additions in 2017-20 amounted to 3.3 mb/d, with another 1.5 mb/d expected in 2021-22. Effectively, between 2017 and 2022, the global refining system will have added almost 5 mb/d of new capacity to serve a smaller market as demand for refined products, or the “call on refineries”, is forecast 1 mb/d lower in 2022 than in 2017.



In our *Oil 2021: Analysis and forecast to 2026*, published in March, we estimated 3.6 mb/d of announced capacity closures or refinery conversions, compared to 6 mb/d required to bring the utilisation rates back to 80% levels. Since that report was published, another 460 kb/d capacity has been slated to shut. In 2021-22, 3.8 mb/d of gross refinery crude distillation capacity additions will be partially offset by 2.3 mb/d of already announced permanent shutdowns and conversion to bio-refineries. China is leading in net additions with 1.1 mb/d new capacity coming online, followed by the Middle East (+ 640 kb/d) and Africa (+540 kb/d). In the rest of the world, capacity declines by 1 mb/d, concentrated in Europe, the US and Asia.

Global average utilisation rates only reach 78% of capacity in 2022, limiting the possibility of an increase in refinery margins from the depressed 2020-21 levels. Thus, there remains a high likelihood of further capacity closures. Refiners, that have braved the pandemic impact so far by cutting run rates and shutting down parts of their sites, will eventually have to decide on whether they can return to normal operations or not. The next 12-month period will be a make-

or-break time for dozens of refineries globally, but especially in Europe and in other economies where oil demand may have already peaked.

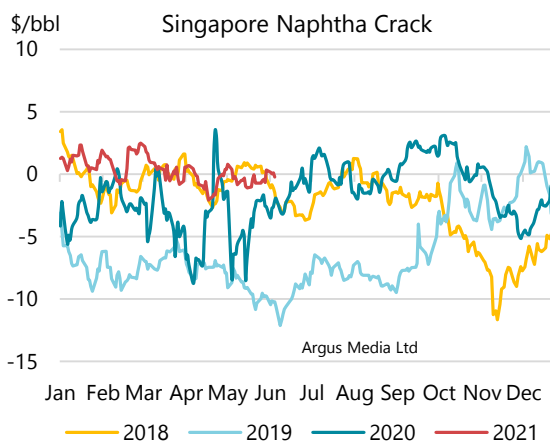
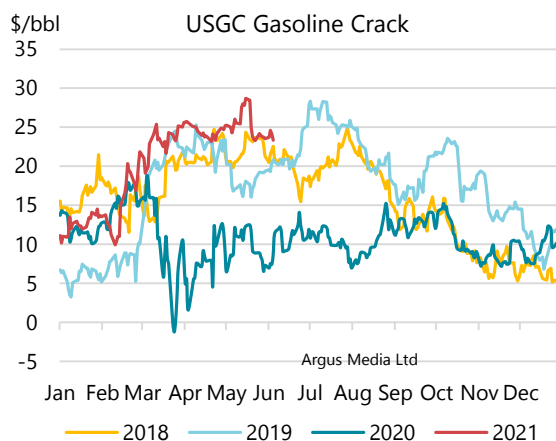


Global Refinery Crude Throughput ¹														
	(million barrels per day)													
	2019	1Q20	2Q20	3Q20	4Q20	2020	1Q21	2Q21	3Q21	4Q21	2021	1Q22	2021	2022
Americas	19.1	18.3	15.3	16.3	16.4	16.5	16.5	17.9	19.0	18.7	18.0	17.6	18.0	18.6
Europe	12.2	11.7	9.9	10.7	10.4	10.7	10.2	10.6	11.1	10.8	10.7	10.7	10.7	11.0
Asia Oceania	6.8	6.7	5.5	5.5	5.9	5.9	5.8	5.4	5.7	5.9	5.7	6.1	5.7	5.9
Total OECD	38.0	36.6	30.7	32.5	32.6	33.1	32.5	33.9	35.9	35.3	34.4	34.4	34.4	35.4
FSU	6.8	6.8	6.1	6.4	6.5	6.4	6.6	6.5	6.4	6.6	6.5	7.0	6.5	6.8
Non-OECD Europe	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.5
China	13.0	11.9	13.5	14.0	14.1	13.4	14.0	14.2	14.3	14.3	14.2	14.4	14.2	14.5
Other Asia	10.3	10.6	8.5	8.4	9.3	9.2	9.6	9.5	10.1	10.2	9.9	10.2	9.9	10.1
Latin America	3.2	3.1	2.6	3.1	3.2	3.0	3.2	3.1	3.2	3.3	3.2	3.4	3.2	3.4
Middle East	7.8	6.9	6.0	7.0	7.2	6.8	7.2	7.3	7.6	7.6	7.4	7.4	7.4	7.8
Africa	2.0	2.0	1.8	1.9	1.8	1.9	1.8	1.8	1.8	1.6	1.8	1.7	1.8	1.8
Total Non-OECD	43.6	41.8	38.9	41.2	42.5	41.1	42.7	42.7	43.9	44.1	43.4	44.4	43.4	44.8
Total	81.6	78.4	69.7	73.7	75.1	74.2	75.2	76.6	79.9	79.4	77.8	78.8	77.8	80.2
<i>Year-on-year change</i>	<i>-0.5</i>	<i>-3.2</i>	<i>-11.3</i>	<i>-8.9</i>	<i>-6.2</i>	<i>-7.4</i>	<i>-3.2</i>	<i>7.0</i>	<i>6.2</i>	<i>4.4</i>	<i>3.6</i>	<i>3.6</i>	<i>3.6</i>	<i>2.4</i>

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

Product cracks and refinery margins

The shutdown of the Colonial pipeline on 7 May did not significantly affect the benchmark US Gulf Coast gasoline cracks. Cracks rose on a monthly average basis, albeit less than in recent months, as refinery activity growth and higher crude prices capped gains. In Europe, despite the lifting of some mobility restrictions in several countries, cracks were slightly lower month-on-month (m-o-m) as backwardation in the crude price steepened sharply. Gasoline cracks also fell in Singapore with more Asian countries affected in the current Covid-19 wave than last year. Naphtha cracks started strengthening in Singapore but were slightly down m-o-m in Europe.

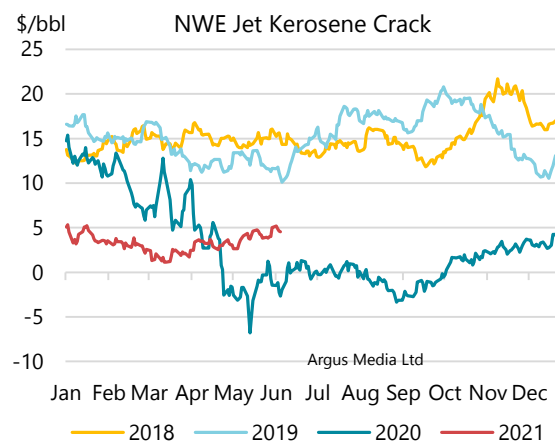
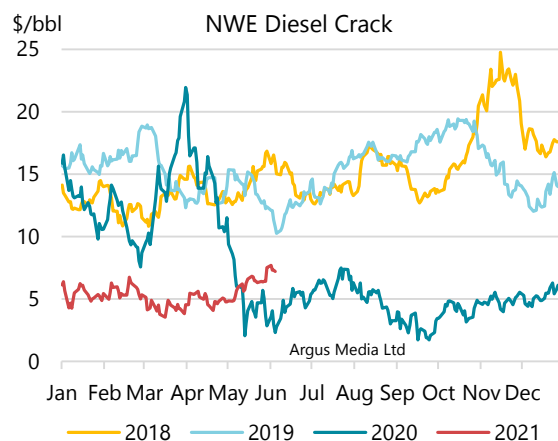


Spot Product Prices															
(monthly and weekly averages, \$/bbl)															
	Mar	Apr	May	May-Apr Chg	%	Week Ending						Mar	Apr	May	Chg
						07 May	14 May	21 May	28 May	04 Jun					
Rotterdam, Barges FOB						Differential to North Sea Dated									
Gasoline EBOB oxy	72.05	75.04	78.36	3.32	4.4	80.03	78.34	77.08	78.32	80.20	6.48	10.45	9.81	-0.63	
Naphtha	64.08	62.39	66.32	3.93	6.3	67.21	66.26	65.06	66.93	68.91	-1.49	-2.20	-2.22	-0.02	
Jet/Kerosene	67.43	67.80	72.45	4.65	6.9	72.29	72.74	72.00	72.73	74.87	1.86	3.21	3.90	0.70	
ULSD 10ppm	69.93	69.58	74.53	4.95	7.1	74.20	74.62	74.08	75.17	77.41	4.37	4.99	5.99	1.00	
Gasoil 0.1%	68.65	68.19	73.42	5.23	7.7	73.00	73.45	72.98	74.16	76.27	3.09	3.60	4.88	1.28	
VGO 2.0%	69.80	69.27	72.80	3.53	5.1	72.80	72.79	72.03	73.58	75.57	4.23	4.68	4.26	-0.42	
Fuel Oil 0.5%	73.90	72.29	74.67	2.38	3.3	75.42	75.31	73.32	74.78	77.93	8.34	7.70	6.13	-1.58	
LSFO 1%	67.09	64.69	65.89	1.20	1.9	67.05	66.84	64.28	65.61	68.19	1.52	0.10	-2.65	-2.75	
HSFO 3.5%	59.06	57.61	58.94	1.33	2.3	60.54	59.36	57.21	58.98	61.61	-6.50	-6.98	-9.60	-2.62	
Mediterranean, FOB Cargoes						Differential to Urals									
Premium Unl 10 ppm	73.62	74.64	77.42	2.79	3.7	79.16	77.56	76.15	77.18	79.01	9.33	11.49	10.12	-1.37	
Naphtha	62.59	60.82	64.72	3.90	6.4	65.96	64.82	63.15	65.19	67.23	-1.70	-2.33	-2.59	-0.26	
Jet Aviation fuel	66.24	66.44	71.03	4.59	6.9	71.23	71.49	70.27	71.18	73.38	1.96	3.29	3.73	0.44	
ULSD 10ppm	69.46	68.98	73.90	4.92	7.1	73.86	74.04	73.23	74.47	76.52	5.17	5.84	6.60	0.76	
Gasoil 0.1%	68.39	67.95	72.48	4.53	6.7	72.60	72.86	71.50	72.99	75.51	4.11	4.81	5.18	0.37	
LSFO 1%	68.04	65.86	66.78	0.92	1.4	67.97	67.72	65.13	66.54	69.09	3.75	2.72	-0.52	-3.24	
HSFO 3.5%	57.01	55.68	57.32	1.64	2.9	58.77	57.61	55.78	57.41	59.81	-7.27	-7.46	-9.98	-2.52	
US Gulf, FOB Pipeline						Differential to WTI Houston									
Super Unleaded	86.33	87.11	91.34	4.23	4.9	90.79	92.27	91.61	90.67	93.49	22.83	24.50	25.48	0.99	
Jet/Kerosene	69.60	69.66	73.41	3.74	5.4	73.08	74.01	72.60	73.93	76.17	6.11	7.05	7.55	0.50	
ULSD 10ppm	76.61	76.25	82.82	6.57	8.6	81.60	83.40	82.57	83.71	86.11	13.12	13.64	16.97	3.33	
Heating Oil	66.36	65.43	70.41	4.98	7.6	69.97	71.53	69.69	70.46	72.61	2.86	2.82	4.56	1.73	
No. 6 3%*	54.40	56.04	56.54	0.51	0.9	58.70	57.26	54.32	55.89	58.78	-9.09	-6.57	-9.31	-2.74	
Singapore, FOB Cargoes						Differential to Dubai									
Premium Unleaded	73.43	73.94	76.11	2.17	2.9	77.15	75.64	75.12	76.48	77.27	9.03	11.03	9.77	-1.26	
Naphtha	65.03	62.40	65.94	3.54	5.7	66.28	65.44	65.14	66.54	69.22	0.63	-0.51	-0.40	0.11	
Jet/Kerosene	66.82	66.74	71.71	4.97	7.4	71.66	71.89	71.37	71.76	73.96	2.42	3.83	5.37	1.54	
Gasoil 0.001%	69.66	68.84	73.88	5.04	7.3	72.98	73.60	74.01	74.75	76.76	5.26	5.93	7.54	1.61	
Fuel Oil 0.5%	75.76	74.43	75.38	0.94	1.3	76.81	75.84	73.78	74.76	79.19	11.36	11.52	9.03	-2.49	
HSFO 180 CST	60.67	59.02	59.71	0.69	1.2	61.80	60.25	57.82	58.67	62.79	-3.72	-3.90	-6.63	-2.74	
HSFO 380 CST 4%	59.92	58.00	58.63	0.63	1.1	60.69	59.17	56.78	57.61	61.64	-4.47	-4.91	-7.71	-2.80	

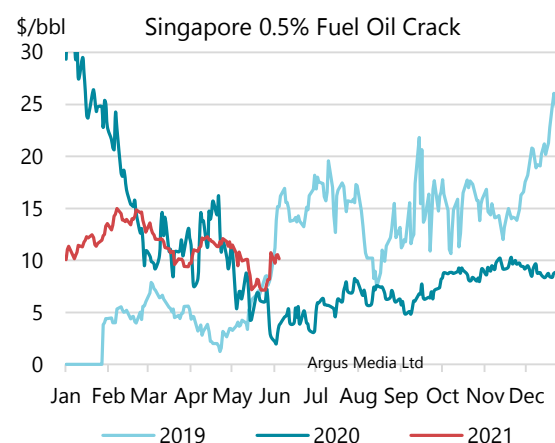
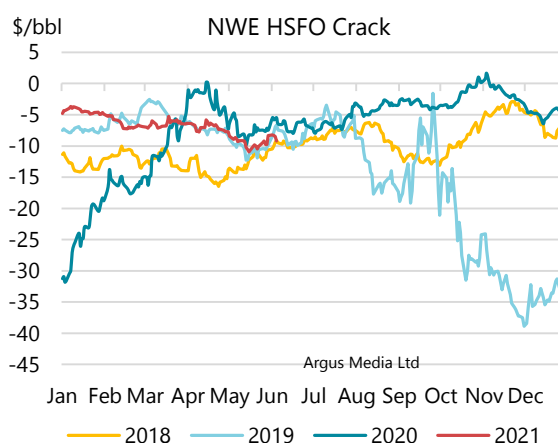
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*Waterborne

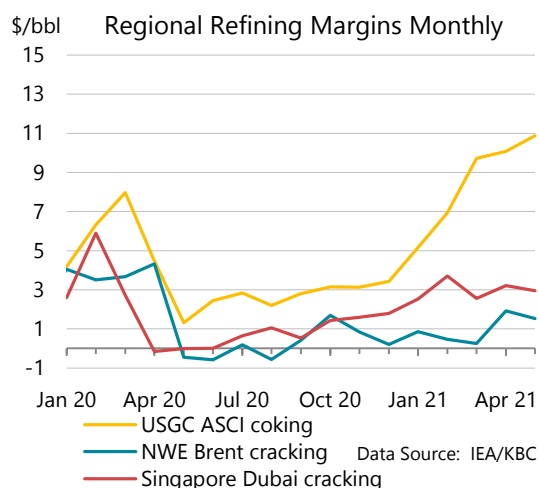
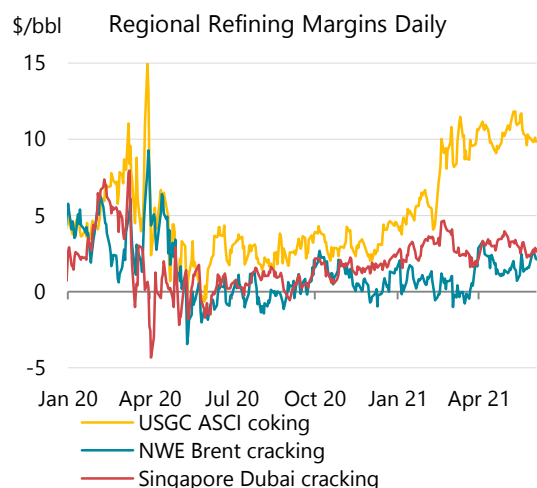
Middle distillates moved higher in May. In Europe, the gains were more muted in general, but diesel cracks finally managed to break through the \$6/bbl ceiling, with modest increases in jet cracks too. Singapore jet cracks increased sharply to average higher than in March 2020, when the pandemic had only just started. In the US Gulf Coast, diesel cracks saw the strongest monthly rise. Overall, however, middle distillates cracks remained far below gasoline crack levels in all regions. Sharply higher gasoline and diesel cracks on the US Gulf Coast versus other regions reflect the internalised cost of meeting US Renewable Volume Obligations (RVO) that skyrocketed in 2021.



The fuel oil complex was affected the most by higher crude prices, with cracks falling m-o-m in all regions. In Europe and Singapore cracks fell to their lowest levels since early 2020. Fuel oil may see some demand from Chinese independent refiners after the introduction of taxes on diluted bitumen, which could shift feedstock preference to imported fuel oil. Incremental increases in the supply of heavier sour crudes as OPEC+ ramps-up production may contribute to marginally higher residual fuel oil supply that would undermine the cracks. 0.5% sulphur marine bunker fuel oil cracks were also weaker m-o-m, but remained well above diesel cracks.



Higher middle distillates cracks did not fully offset lower cracks for light ends and fuel oil in Europe and Singapore, resulting in refinery margins easing somewhat in May, after a strong improvement in April. In the US, more stable gasoline cracks helped margins move higher. US Gulf Coast coking margins reached their highest levels in two years, helped by a combination of robust gasoline and diesel cracks.

IEA/KBC Global Indicator Refining Margins¹

(\$/bbl)

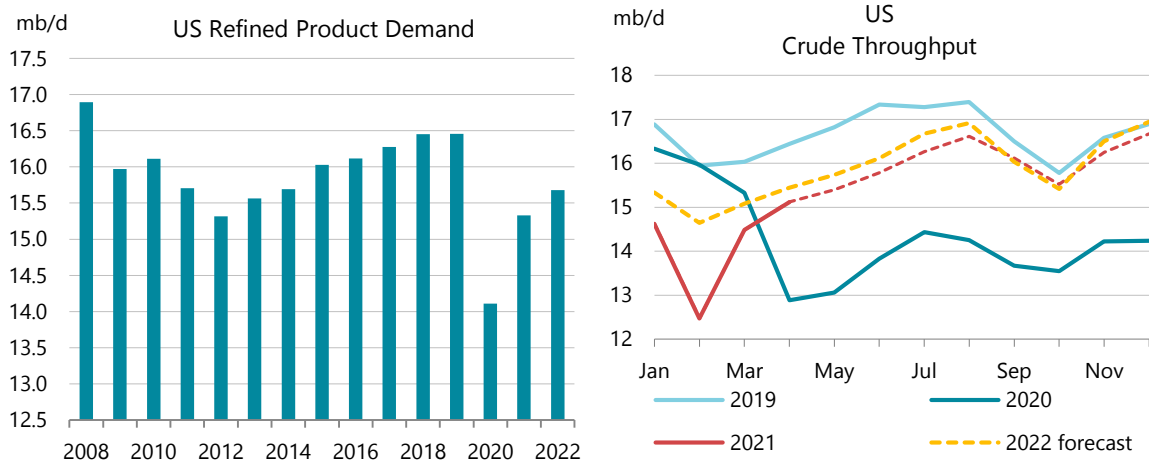
	Monthly Average				Change	Average for week ending:					
	Feb 21	Mar 21	Apr 21	May 21	May-Apr	07 May	14 May	21 May	28 May	04 Jun	
NW Europe											
Brent (Cracking)	0.46	0.26	1.93	1.53	↓	-0.40	1.38	1.41	1.69	1.59	2.44
Urals (Cracking)	1.45	1.78	3.50	2.35	↓	-1.15	2.51	2.01	2.52	2.39	3.01
Brent (Hydroskimming)	-0.03	-0.57	0.20	-0.75	↓	-0.95	-0.85	-0.65	-0.73	-0.80	0.18
Urals (Hydroskimming)	-0.98	-0.94	0.09	-1.64	↓	-1.73	-1.29	-1.88	-1.66	-1.66	-0.88
Mediterranean											
Es Sider (Cracking)	2.49	2.95	3.83	3.05	↓	-0.78	3.05	3.28	3.33	2.52	3.37
Urals (Cracking)	0.75	0.74	1.47	0.80	↓	-0.67	0.83	0.34	0.91	1.11	1.51
Es Sider (Hydroskimming)	2.15	2.62	3.08	1.65	↓	-1.43	1.85	2.06	1.74	0.99	1.95
Urals (Hydroskimming)	-2.25	-2.32	-1.88	-3.19	↓	-1.30	-2.83	-3.59	-3.29	-2.96	-2.45
US Gulf Coast											
Mars (Cracking)	3.33	5.30	6.29	5.60	↓	-0.69	6.39	6.30	5.34	4.54	4.71
50/50 HLS/LLS (Coking)	9.06	12.65	13.43	13.97	↑	0.53	13.98	14.57	14.21	13.10	13.01
50/50 Maya/Mars (Coking)	5.00	7.61	8.66	9.21	↑	0.56	8.99	9.69	9.56	8.57	8.68
ASCI (Coking)	6.94	9.72	10.07	10.88	↑	0.81	10.84	11.49	11.11	10.07	9.93
US Midwest											
30/70 WCS/Bakken (Cracking)	9.69	12.09	14.55	16.64	↑	2.09	16.35	17.13	16.43	16.67	18.25
Bakken (Cracking)	11.55	14.46	17.06	19.55	↑	2.49	18.84	20.15	19.59	19.63	21.32
WTI (Coking)	10.92	16.24	18.01	20.02	↑	2.01	19.29	20.93	19.96	19.90	21.42
30/70 WCS/Bakken (Coking)	12.00	15.26	17.45	20.53	↑	3.08	19.66	21.02	20.63	20.87	22.46
Singapore											
Dubai (Hydroskimming)	-1.83	-2.55	-2.38	-3.48	↓	-1.10	-2.52	-2.90	-3.90	-4.49	-3.50
Tapis (Hydroskimming)	2.43	0.54	1.27	0.77	↓	-0.51	0.59	0.15	1.21	1.02	2.55
Dubai (Hydrocracking)	3.71	2.56	3.21	2.95	↓	-0.26	3.25	3.24	2.93	2.38	2.74
Tapis (Hydrocracking)	1.14	-0.22	0.67	0.61	↓	-0.06	0.13	-0.19	1.27	1.06	1.95

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)

Regional refining developments

The shutdown of the Colonial pipeline in May forced several US Gulf Coast (PADD 3) refiners to cut rates due to reduced product offtake. PADD 3 weekly throughput in the first week of May was at 8.5 mb/d, the highest since mid-March 2020, but fell 300 kb/d in the wake of the cyber-attack, recovering by end-month, when US refiners ran at 15.9 mb/d, a level previously observed in February 2020. Overall, US runs in May increased by 2.3 mb/d y-o-y but remained 1.4 mb/d down from May 2019.



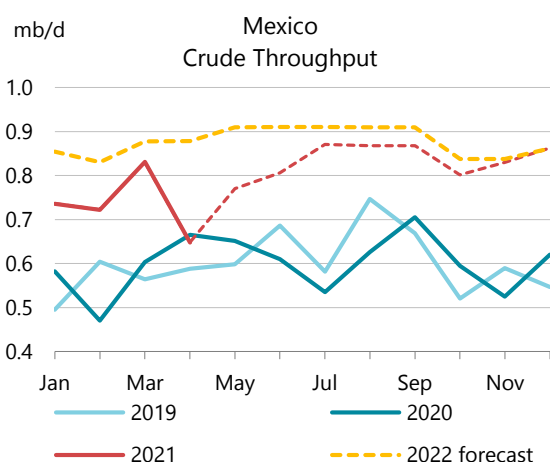
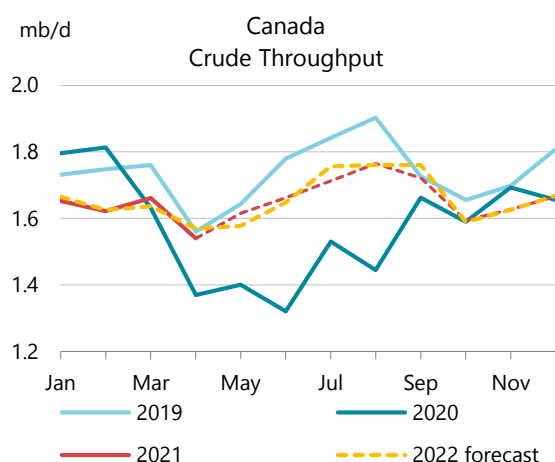
Since early 2020, some 890 kb/d of US refinery capacity has been slated for permanent closure or conversion into renewable fuel processing. This is one of the reasons why US refinery throughputs are not forecast to ever return to their record 2018 level of close to 17 mb/d. Demand for refined products, even though set to grow in 2021 and 2022, is neither expected to reach the historical peak of the mid-2000s, nor that of the pre-pandemic level.

In 2020, the decline in refinery throughput matched the fall in demand for refined products of 2.35 mb/d. Runs are forecast to increase by 1.2 mb/d y-o-y in 2021, closely following demand growth for refined products at 1.2 mb/d. In 2022, refinery intake is expected to recover at a slightly faster rate than refined product demand (+450 kb/d vs +350 kb/d). We have excluded the return to service of the 200 kb/d Limetree Bay refinery in the US Virgin Islands due to the recent shutdown of the plant ordered by the US Environmental Protection Agency on pollution concerns. The site is likely to remain offline, having operated for just over six months after the restart. This would allow refiners in the US mainland to run at slightly higher rates.

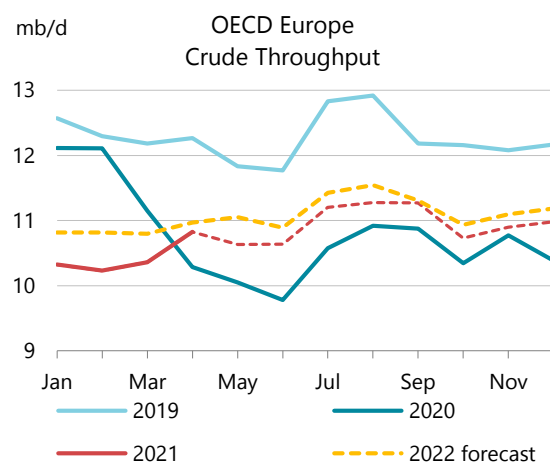
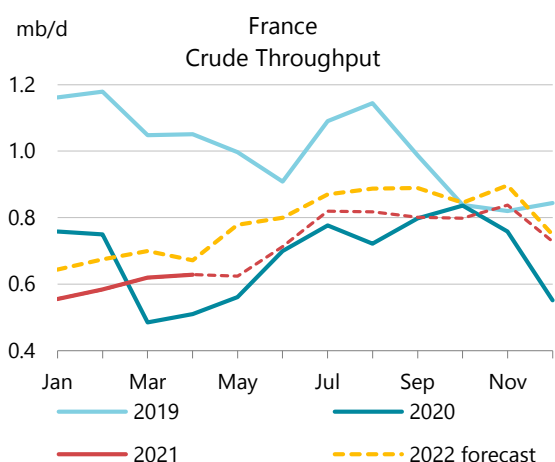
The most recent case of refinery closures in the US is the sale of Shell's 95 kb/d plant in Alabama to a renewable fuel producer who intends to convert the site to a bio-refinery. Shell also announced the sale of its 50% stake in the 340 kb/d Deer Park joint venture to Pemex, which leaves the company with just one operating refinery in the US. Globally, since early 2020, Shell has sold or idled a total of 1.3 mb/d refinery capacity, almost half of what it had on the books at end-2019. The company has said that it intends to reduce the number of refinery assets it operates, focusing on sites with current or potential petrochemical and clean energy integration.

Canadian refinery intake in February was finalised at 1.6 mb/d, 130 kb/d lower than preliminary estimates. The recovery in 2Q21 is now expected at a slower rate. **Mexican** runs fell 180 kb/d m-o-m in April due to a fire at the Minatitlan refinery, but are expected to recover by July. In

2021, Mexican refineries are forecast to increase processing by almost 30%, to 800 kb/d, adding another 80 kb/d in 2022, which will take them to 53% utilisation rates.



Preliminary April data for OECD Europe exceeded our expectations by a large margin, with runs up 520 kb/d m-o-m, and 590 kb/d y-o-y. In 2Q21 throughputs are estimated to increase 660 kb/d y-o-y, but the pace of recovery slows afterwards. Overall, 2021 refinery intake is expected broadly flat y-o-y, as the recovery from April through December only just offsets the 1.5 mb/d y-o-y decline in 1Q21.



Since early 2020, European refiners have slated about 750 kb/d of capacity for permanent closure or conversion to bio-refineries and temporarily idled almost as much capacity waiting for margins to improve. Half of the idled capacity is in **France**, where the larger two of TotalEnergies' three refineries stopped processing crude at end-2019 and in 2020. The utilisation rate for the company's refinery portfolio in France in 1Q21 was just 20%. Its largest French asset, the 240 kb/d Gonfreville refinery, is expected to restart this month, but the company brought forward maintenance planned originally in 2022 at the idled Donges plant, effectively excluding the possibility of a restart of the plant this year.

Refinery closures are also looming in Nordic countries. In **Finland**, Neste's Naantali plant has already ceased crude processing. In **Norway**, ExxonMobil announced the conversion of the 110 kb/d Slagen plant into an import terminal. In **Denmark**, the 70 kb/d Fredericia refinery,

formerly owned by Shell, may be eventually converted to a renewable and recycled feedstock processing site.

Refinery Crude Throughput and Utilisation in OECD Countries

(million barrels per day)

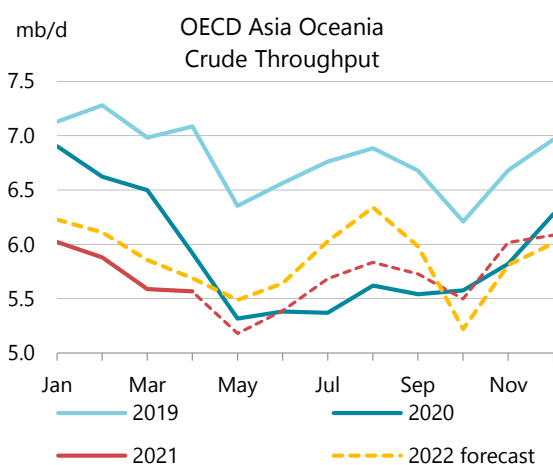
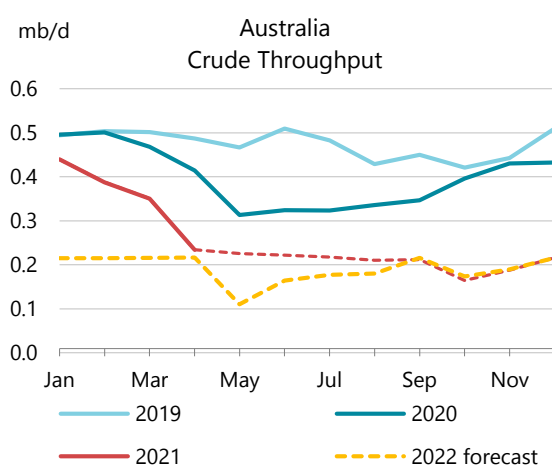
	Nov 20	Dec 20	Jan 21	Feb 21	Mar 21	Apr 21	Change from		Utilisation rate ¹	
							Mar 21	Apr 20	Apr 21	Apr 20
US ²	14.12	14.14	14.53	12.37	14.38	15.02	0.64	2.23	84%	68%
Canada	1.68	1.65	1.64	1.61	1.65	1.53	-0.12	0.17	76%	68%
Chile	0.17	0.20	0.17	0.23	0.20	0.17	-0.03	0.02	75%	66%
Mexico	0.52	0.61	0.73	0.71	0.82	0.64	-0.18	-0.02	39%	40%
OECD Americas³	16.49	16.59	17.06	14.92	17.05	17.36	0.31	2.41	80%	66%
France	0.75	0.54	0.55	0.57	0.61	0.62	0.01	0.12	54%	40%
Germany	1.68	1.58	1.60	1.60	1.54	1.75	0.21	0.19	86%	77%
Italy	1.10	1.07	1.04	0.96	1.18	1.22	0.05	0.22	76%	58%
Netherlands	1.07	1.02	0.95	1.15	1.12	1.12	-0.01	0.05	92%	83%
Spain	1.11	1.04	1.04	1.11	1.06	1.09	0.03	0.04	78%	75%
United Kingdom	0.87	0.90	0.84	0.69	0.70	0.90	0.20	0.08	75%	69%
Other OECD Europe	4.09	4.12	4.20	4.04	4.04	4.08	0.03	-0.10	80%	81%
OECD Europe	10.67	10.28	10.22	10.13	10.26	10.77	0.52	0.59	79%	71%
Japan	2.48	2.77	2.70	2.52	2.45	2.44	-0.01	-0.13	71%	72%
South Korea	2.56	2.72	2.55	2.64	2.53	2.59	0.07	-0.04	74%	75%
Other Asia Oceania	0.77	0.78	0.76	0.70	0.61	0.52	-0.08	-0.18	101%	81%
OECD Asia Oceania	5.81	6.27	6.01	5.87	5.58	5.56	-0.02	-0.35	74%	74%
OECD Total	32.97	33.14	33.29	30.92	32.89	33.69	0.80	2.64	79%	69%

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

² US\$0

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

In 2022, European throughputs are forecast to increase at a faster pace, up 290 kb/d y-o-y, but the cumulative refinery intake recovery for the two post-pandemic years will lag well behind the forecast refined product demand recovery (1 mb/d). Permanent capacity shutdowns and lower processing rates due to higher costs, including the increasing burden of carbon costs, are expected to cap further growth. In July, the European Commission is expected to decide on the Carbon Board Adjustment mechanism and its application to various industrial sectors, including refining.



April preliminary data for OECD Asia showed throughputs still declining y-o-y, the only region where this was observed. Modest annual growth is expected from 3Q21 onwards. Capacity

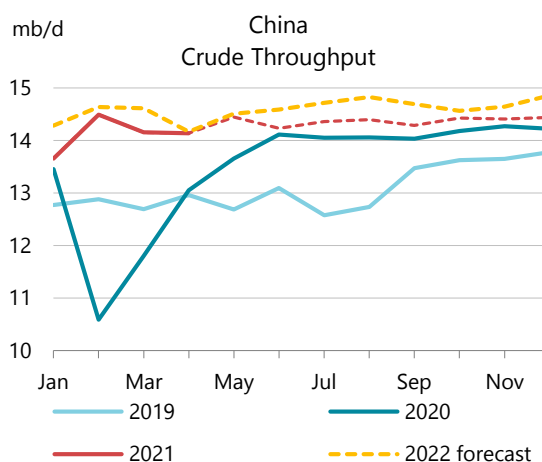
closures in OECD Asia over 2020-22 amount to 585 kb/d. We have removed Ampol's 109 kb/d Australian refinery from the shutdown list after the company agreed with the government's subsidy scheme and committed to continue processing until 2027. The new Chinese tax on imported feedstocks may adversely affect **Korean** run rates as China has been the largest importer of its refined products, namely, of light cycle oil that was used for diesel blending. After a 900 kb/d decline in 2020, regional runs are expected to fall by a further 200 kb/d in 2021, and recover by 160 kb/d in 2022.

Chinese throughput in April was essentially flat m-o-m, at 14.04 mb/d, despite record high maintenance scheduled for the month. Runs were up 1.1 mb/d y-o-y. According to the SCI refinery survey, refining activity increased by 2.4% in May, implying runs close to 14.35 mb/d. June and July throughput is forecast at lower levels as maintenance at several refineries, originally planned for April, was pushed back to summer months.

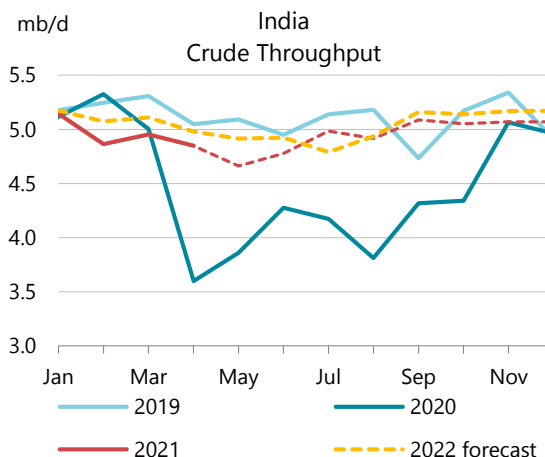
Since June 2020, when Chinese refinery intake first reached 14 mb/d, the levels have stayed in a narrow range, reflecting stable demand, but also a certain status quo in the domestic market between the large state-owned players and the independents. Over the last 12 months, capacity utilisation rates reached 80%, the highest in our records that began in the mid-2000s. This is likely to change soon as Chinese regulators announced several initiatives in May that could have consequences for independent refiners. The introduction from mid-June of a \$37/bbl consumption tax on imported blendstocks such as light cycle oil and mixed aromatics used for diesel and gasoline, respectively, effectively eliminates incentives for their use and may result in higher domestic throughput rates to fill in the gap. However, exports of these products, particularly of gasoline, exceed imported blendstocks by a large margin, which means that the redistribution of export flows to the domestic market would be sufficient to meet any shortages.

Imports of diluted bitumen, mostly a crude-grade feedstock masked as a secondary product to bypass the crude import quota system, are also now taxed at \$30/bbl. Imports under this category averaged 440 kb/d in the last 12 months to April. Venezuelan and Iranian crude and fuel oil barrels are thought to constitute most of this flow, through covert ship-to-ship transfers outside Malaysian and Indonesian port state control areas. It is very likely that processing of diluted bitumen has not been fully reflected in national crude intake statistics. If these volumes are eventually replaced by officially imported crude oil, reported throughput statistics may see a boost.

On the other hand, the National Development and Reform Commission started investigating possible transgressions in the crude oil import quota system by importers and independent refiners, specifically targeting quota trading and third-party processing deals. Some may yet see quota allocations reduced for the remainder of the year. The next batch of refined product export quotas may also be subject to a downward revision, which could result in lower runs due to potential oversupply in the domestic market.

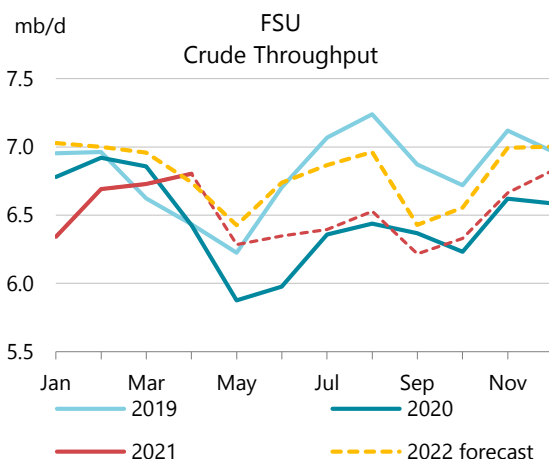
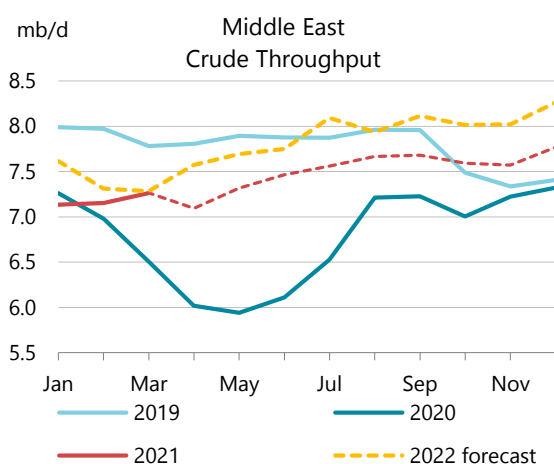


Indian refinery throughput fell 100 kb/d m-o-m in April, less than the demand decline of 300 kb/d as refiners could not scale back crude imports as fast as needed. May demand is estimated to have fallen by a further 610 kb/d m-o-m. Crude oil imports increased in May, according to data from *Kpler*, while net product exports surged by almost 50% to 1.1 mb/d. We estimated May runs at 4.7 mb/d, down 190 kb/d m-o-m. Demand and refining activity are expected to rebound from June. In 2020, Indian refinery throughput fell faster than domestic demand as export markets shrank. Demand and refinery intake are expected to largely recover to pre-pandemic levels next year.



Elsewhere in Asia, refiners suffered a slow recovery in March, with runs estimated 730 kb/d lower y-o-y. The region's combined refinery capacity is set to fall over 2020-22 with refinery closures in **Singapore** and the **Philippines** only partially offset by small increases elsewhere. However, with **Malaysia's** 300 kb/d Pengerang refinery restarting later this year after a prolonged shutdown, regional runs are expected to recover to 5.1 mb/d in 2022, still below the historical peak of 5.3 mb/d in 2018.

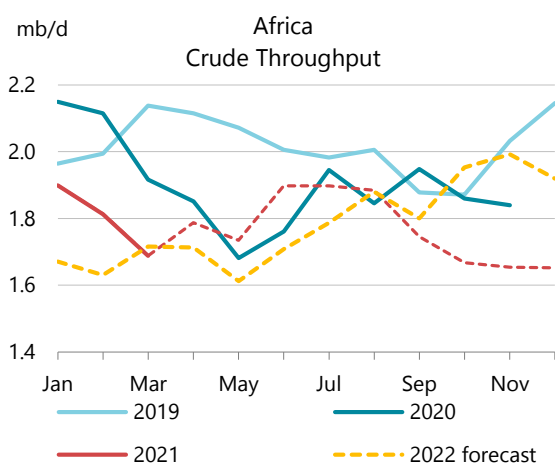
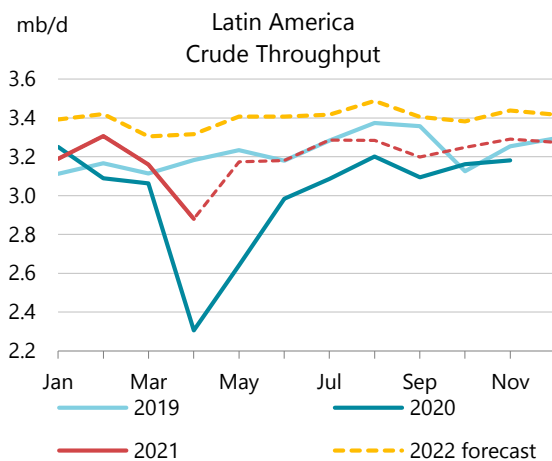
In the Middle East, the three reporting countries – **Saudi Arabia**, **Iraq** and **Bahrain** - showed a combined 210 kb/d m-o-m increase in March. In Saudi Arabia, runs were 465 kb/d higher than a year earlier. While this is indirect evidence of the 400 kb/d Jazan refinery beginning to run at least partially, overall utilisation rates in the country remained low at 70%. After a 220 kb/d increase in 2021, runs will likely stay flat in 2022, 260 kb/d below the historical peak 2.6 mb/d in 2018. In the Middle East in general, regional throughput is forecast to increase to 7.8 mb/d next year, marginally below the record level in 2018. Excluding Kuwait's mega-refinery projects, which will likely fully ramp-up after 2022, a total of 300 kb/d of capacity is expected to come online between 2020 and 2022.



Russian refinery activity fell 180 kb/d in May, but was up 530 kb/d y-o-y. We have revised down our 3Q21 forecast on a higher announced maintenance programme. In 2022, runs are forecast to recover to pre-Covid-19 levels driven by a strong rebound in demand. In **Belarus**, the

state-owned Novopolotsk refinery was reportedly shut in May due to US sanctions, which target Belarus state-owned oil and gas entities, affecting crude supply. Mozyr, the only other refinery in the country, was in partial maintenance. The shutdowns could lower the refinery intake to levels below oil product self-sufficiency for a country that regularly exports two thirds of its refined product output. In early June, the country's president Alexander Lukashenko said Belarus would not have crude oil supply issues as an agreement was reached with Russia's President Putin, without offering any detail.

Brazil's refinery intake in April fell 300 kb/d to just 1.5 mb/d, the lowest since April 2020, on two major maintenance outages and lower demand due to rising Covid-19 cases. In **Argentina**, April throughput was flat m-o-m. **Colombian** runs in 1Q21 were unchanged versus year earlier levels. The only capacity addition in the region by end-2022 is the 33 kb/d expansion at Petroperu's Talara refinery. In 2022, regional runs are expected to recover to pre-Covid levels at 3.4 mb/d, which is slightly more than half the refined product demand in the continent. Regional refinery activity peaked in 2005 at about 5 mb/d.

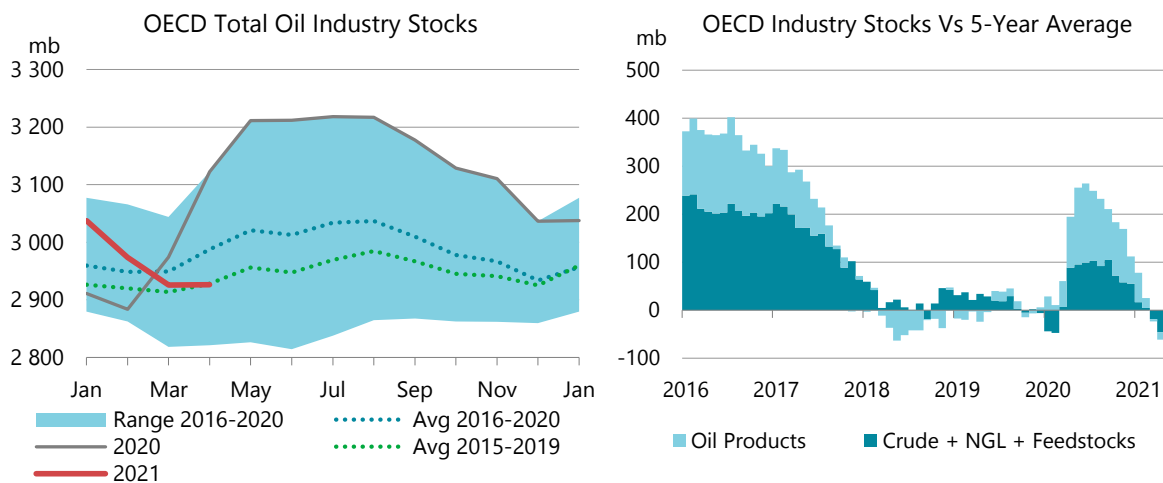


Egypt reported sharply lower refinery throughput in March. At 475 kb/d, runs were the lowest in two years, down 120 kb/d m-o-m. The 60 kb/d expansion at the Midor refinery is expected to be completed in 2022. **Nigeria's** 650 kb/d Lekki mega-refinery is not expected to start full commercial operations before 2023, and we assume the start of ramp-up in 2H22. Nigerian National Petroleum Corporation (NNPC) has expressed an interest to buy a 20% stake in the refinery. NNPC also announced a \$1.5 bn programme to rehabilitate the 150 kb/d Port Harcourt refinery. Its 450 kb/d refinery fleet has remained idled since 2019. In **South Africa**, Engen will permanently shut its 120 kb/d refinery in Cape Town. The 110 kb/d Cape Town refinery owned by Glencore's Astron Energy subsidiary has an uncertain future after a fatal fire caused the refinery to shut in July 2020. The operator announced that the site would remain closed for another year.

Stocks

Overview

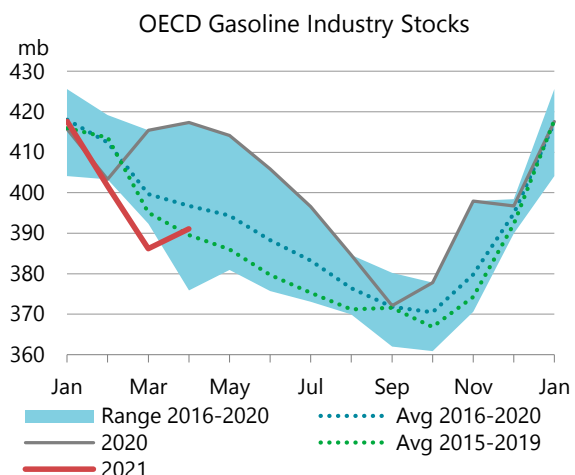
OECD total industry stocks held relatively steady in April, but it was the first time in more than a year to fall below the pre-Covid 2015-19 average, 1.6 mb, and were 61.3 mb lower than the 2016-20 average. Total oil inventories increased by a modest 0.5 mb and stood at 2 926 mb by end-April. Since reaching an all-time peak of 3 218 mb in July 2020, OECD industry stocks have drawn on average by 1.1 mb/d through April 2021, with 1Q21 averaging 1.2 mb/d. In terms of forward demand, end-April industry stocks covered 64.9 days, a decrease of 0.9 days month-on-month (m-o-m) and 0.6 days below the 2016-20 average.



OECD industry crude inventories fell counter-seasonally by 7.8 mb in April. At 1 142 mb, they were 100.6 mb below their peak reached in May last year, representing an average draw of 300 kb/d since then. In April, crude stocks in the OECD Americas and Europe decreased counter-seasonally by 13.8 mb and 0.5 mb, respectively, amid higher refinery runs (notably +640 kb/d m-o-m in the United States). OECD Asia Pacific saw industry crude stocks rise by 6.5 mb, largely in line with the seasonal pattern (+4.5 mb).

In April, OECD oil product inventories inched up by a modest 1.4 mb, to 1 461 mb, when they typically build by 11.8 mb for the month. Other oil stocks rose by 9.8 mb, in line with the seasonal increase. Gasoline stocks also built by 4.9 mb. Middle distillate inventories declined counter-seasonally by 12.1 mb while fuel oil stocks drew by 1.1 mb.

Preliminary data for May show OECD oil inventories rising in all regions. Product



stocks rose by 21.2 mb while crude oil, NGLs and feedstock inventories fell by 4 mb. In the US, product stocks built by 17.9 mb, led by other refined products (14 mb). US crude oil stocks declined by 8.1 mb, larger than the usual fall of 0.8 mb as refinery throughputs increased by 280 kb/d m-o-m. Japanese crude stocks rose 3.7 mb, in line with the normal seasonal pattern. Product stocks in Japan built by 5.2 mb, led by distillate inventories. European crude stocks increased by 2.6 mb, partly offset by a 1.8 mb decrease in products, with gasoline posting the largest decline (-1.3 mb).

Preliminary Industry Stock Change in April 2021 and First Quarter 2021												
	April 2021 (preliminary)								First Quarter 2021			
	(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	-13.8	-0.5	6.5	-7.8	-0.5	0.0	0.2	-0.3	0.2	-0.2	-0.2	-0.2
Gasoline	1.8	3.3	-0.2	4.9	0.1	0.1	0.0	0.2	-0.1	-0.1	0.0	-0.1
Middle Distillates	-7.8	-4.4	0.1	-12.1	-0.3	-0.1	0.0	-0.4	-0.1	0.0	0.0	-0.1
Residual Fuel Oil	0.5	-3.7	2.1	-1.1	0.0	-0.1	0.1	0.0	0.0	0.0	0.0	0.0
Other Products	7.9	1.5	0.4	9.8	0.3	0.1	0.0	0.3	-0.4	-0.1	0.0	-0.5
Total Products	2.4	-3.3	2.3	1.4	0.1	-0.1	0.1	0.0	-0.6	-0.1	0.0	-0.7
Other Oils ¹	-0.4	4.6	2.7	6.8	0.0	0.2	0.1	0.2	0.0	0.0	0.0	-0.1
Total Oil	-11.8	0.7	11.6	0.5	-0.4	0.0	0.4	0.0	-0.4	-0.2	-0.3	-1.0

¹ Other oils includes NGLs, feedstocks and other hydrocarbons.

OECD stock data for March were revised down by 25.1 mb to 2 926 mb. Product inventories in Europe were adjusted lower by 9.2 mb, with declines in middle distillates of 7.7 mb and gasoline of 2.6 mb. Crude stocks in the Asia Pacific were reduced by 7.6 mb. February figures were also revised lower following submission of more complete data (1.7 mb combined, to 2 974 mb).

Revisions versus May 2021 Oil Market Report								
	Americas		Europe		Asia Oceania		OECD	
	Feb-21	Mar-21	Feb-21	Mar-21	Feb-21	Mar-21	Feb-21	Mar-21
Crude Oil	-3.0	2.3	1.9	-3.2	0.2	-7.6	-1.0	-8.5
Gasoline	0.1	1.1	-0.8	-2.6	0.0	0.2	-0.7	-1.2
Middle Distillates	1.8	-2.2	-1.5	-7.7	0.0	-0.7	0.3	-10.6
Residual Fuel Oil	0.1	0.7	0.8	0.4	0.0	-0.1	1.0	1.0
Other Products	1.0	1.2	-0.3	0.8	0.0	-0.6	0.7	1.4
Total Products	3.0	0.8	-1.8	-9.2	0.0	-1.1	1.3	-9.5
Other Oils ¹	-2.1	-6.5	0.1	-0.9	0.0	0.3	-2.0	-7.2
Total Oil	-2.1	-3.4	0.2	-13.3	0.2	-8.4	-1.7	-25.1

¹ Other oils includes NGLs, feedstocks and other hydrocarbons.

Implied balance

The global supply and demand balance shows implied stock draws of 1.3 mb/d in April, based on preliminary data for the OECD countries and the latest available data for other components. Non-OECD crude stocks, excluding China, led the way with a 710 kb/d draw, according to satellite data from *Kayrros* and *Kpler*. Crude oil and products on water including floating storage declined by 540 kb/d and 470 kb/d, respectively, based on shipping data from *Refinitiv*. OECD oil inventories rose by a modest 0.5 mb (15 kb/d), with a 1.4 mb increase in product stocks offset by a draw of 0.9 mb in crude oil, NGLs and feedstocks inventories.

Revised data for March shows implied stock draws of 880 kb/d in 1Q21. OECD industry crude oil, NGLs and feedstock inventories fell by 410 kb/d in 1Q21. Product stocks for the same period

drew by a sharper 830 kb/d (-74.5 mb) as OECD Americas showed a large 48.4 mb decline in February on weather-related disruptions to US refinery activity.

In non-OECD economies, excluding China, crude oil inventories drew by 50 kb/d in 1Q21, sharply slower than the 550 kb/d fall observed in 4Q20, according to satellite data from *Kayrros* and *Kpler*. By contrast, the implied crude stock change for China in 1Q21, as calculated by the IEA, showed a large build of 1.05 mb/d amidst higher net crude imports in the same period (11.2 mb/d). Preliminary data suggest large crude oil inventory draws in April and May, as a shortage of crude import quotas and high stocks led companies to reduce purchases. Crude oil and products on water, including floating storage, fell by 790 kb/d in 1Q21, based on tanker-tracking data from *Refinitiv*. The decline in oil on water volumes mainly reflects destocking in the Asia Pacific as port congestion eased in China.

In 2Q21, the total stock change and miscellaneous to balance item calculated by assessed supply and demand from the IEA oil market balance shows a slower stock draw of 310 kb/d.

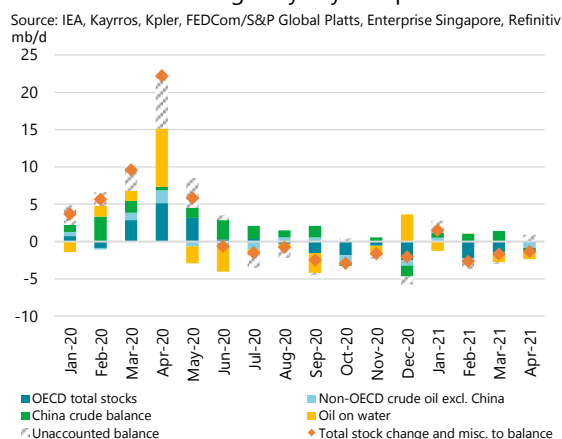
Implied total oil balance (mb/d)									
	1H20	2H20	2020	Jan-21	Feb-21	Mar-21	1Q21	Apr-21	May-21*
OECD industry crude oil, NGLs and feedstocks	0.91	-0.45	0.23	-1.00	0.02	-0.20	-0.41	-0.03	-0.13
OECD industry product stocks	0.86	-0.51	0.17	1.02	-2.29	-1.36	-0.83	0.05	0.69
OECD government stocks	0.14	-0.11	0.02	0.05	0.05	0.05	0.05	-0.16	-0.20
Non-OECD crude oil excluding China	0.31	-0.26	0.02	0.43	-0.42	-0.18	-0.05	-0.71	0.41
Independent product stocks (Fujairah and Singapore)	0.11	-0.04	0.03	-0.04	-0.01	-0.09	-0.05	0.13	-0.03
Crude oil on water including floating storage	0.47	-0.38	0.04	-0.19	-0.89	-1.20	-0.75	-0.54	
Products on water including floating storage	0.09	0.15	0.12	-1.06	0.91	0.13	-0.04	-0.47	
Total known stock change excluding China (as above)	2.89	-1.60	0.63	-0.78	-2.63	-2.86	-2.07	-1.72	
IEA estimate - Chinese crude balance	1.70	0.45	1.07	0.69	1.04	1.42	1.05	-0.50	
Total known and estimated stock change	4.59	-1.14	1.71	-0.10	-1.59	-1.44	-1.02	-2.22	
Total stock change and misc. to balance**	7.73	-1.90	2.89	1.51	-2.64	-1.68	-0.88	-1.31	0.53
Unaccounted balance	3.14	-0.75	1.18	1.61	-1.06	-0.24	0.14	0.91	

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

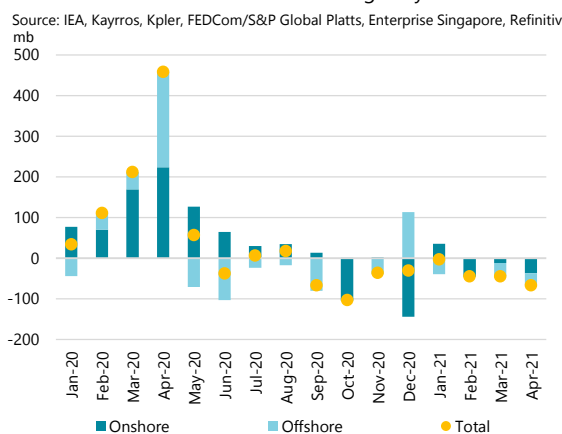
** Assessed supply minus assessed demand from the IEA oil market balance.

Source: IEA, EIA, PAJ, Euroilstock, Kayrros, Kpler, FEDCom/S&P Global Platts, Enterprise Singapore, Refinitiv

Stock changes by key components



M-o-m total known stock changes by location

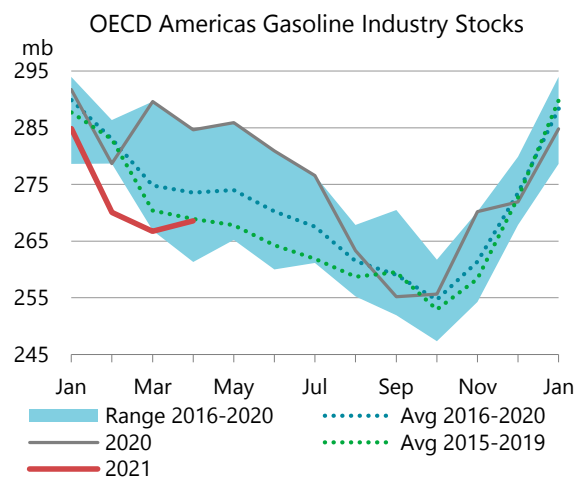
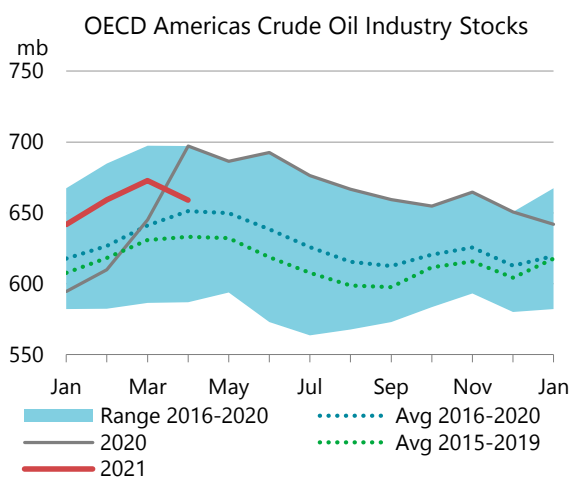


Recent OECD industry stock changes

OECD Americas

In April, industry stocks in the OECD Americas region fell counter-seasonally by 11.8 mb to 1 559 mb. The end-month inventory level was 12.7 mb below the latest five-year average for the first time this year but remained 22.4 mb above the 2015-19 average.

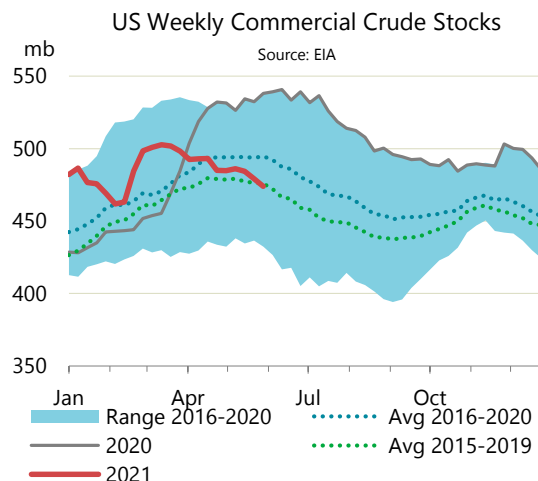
Crude oil stocks led the draw at 13.8 mb m-o-m, whereas they typically build by 10 mb, due to increased refinery runs in the US (+640 kb/d m-o-m in April) and higher crude oil exports from the US (+330 kb/d m-o-m to 3 mb/d on average in April). Crude oil inventories stood at 659 mb, 8 mb above the five-year average.



Oil product stocks rose by 2.4 mb in April, much less than the typical 9.6 mb increase due to a counter-seasonal fall seen in middle distillate inventories (-7.8 mb versus the usual increase of 1.3 mb for the month). Motor gasoline and fuel oil stocks rose counter-seasonally by 1.8 mb and 0.5 mb, respectively. 'Other oils' built by 7.9 mb, in line with the seasonal trend.

Weekly data from the US EIA show that crude oil stocks fell by a larger than normal 8.1 mb in May as refinery throughputs increased by 280 kb/d m-o-m. PADD 3 led the decline with a 7.7 mb draw. Total product stocks built 17.9 mb versus a more typical 24.1 mb increase. Other refined product stocks (mainly propane inventories) rose by 14 mb. Gasoline and middle distillate inventories built by 1.2 mb and 1.7 mb, respectively. Residual fuel oil stocks also rose, by 1 mb.

Crude oil stored at Strategic Petroleum Reserve (SPR) sites fell by 6.2 mb to 627.3 mb, utilising 87.9% of its designed storage capacity of 713.5 mb. The change was in-line with the planned drawdown discussed in last month's *Report*.

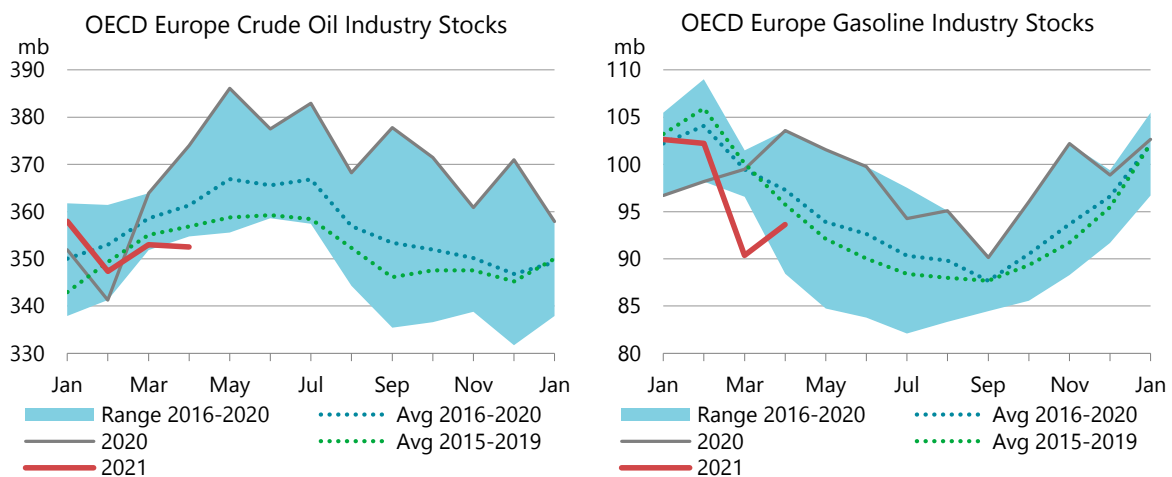


OECD Europe

Industry stocks in OECD Europe rose by a modest 0.7 mb to 1 009 mb in April, which was 7.3 mb below the five-year average. The increase was less than usual for the month as product stocks declined counter-seasonally on stronger demand.

Crude oil inventories also drew counter-seasonally by 0.5 mb in April amid higher refinery throughputs in the region (+470 kb/d m-o-m). They stood at 352 mb and were 8.9 mb below the five-year average. Crude stocks decreased counter-seasonally by 1.2 mb in Italy and 0.3 mb in the United Kingdom, while those in the Netherlands and Germany built 3 mb and 2.9 mb, respectively.

Total oil product stocks drew by 3.3 mb in April, when they typically build by 1 mb. Middle distillate inventories led the decrease by a counter-seasonal 4.4 mb fall. Fuel oil stocks also declined by 3.7 mb, more than double the normal draw of 1.8 mb. By contrast, motor gasoline and other oil inventories built counter-seasonally, by 3.3 mb and 1.5 mb, respectively.



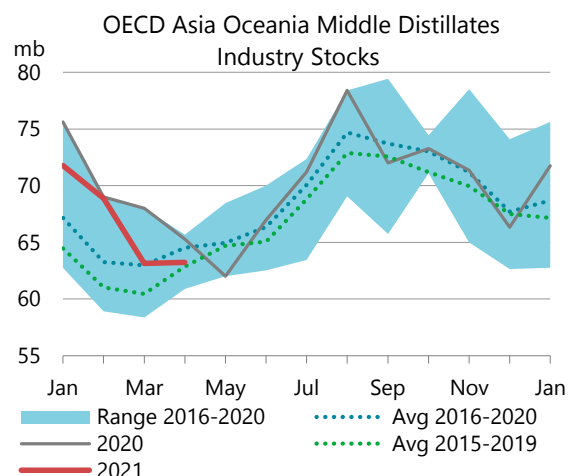
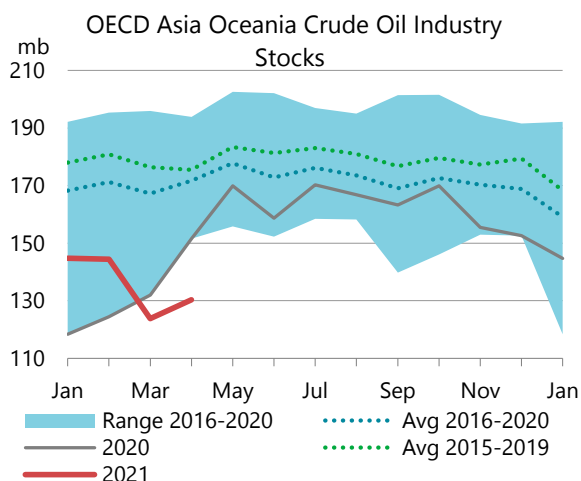
Preliminary May data from *Euroilstock* showed overall inventories building by 0.7 mb. Crude oil stocks rose by 2.6 mb, notably in Italy and the UK (+2.6 mb each). The Netherlands (-2.2 mb), France and Germany (-1.5 mb each) posted a decline in their crude oil inventories. Total oil product stocks fell by 1.8 mb. Gasoline and fuel oil stocks led the decrease by 1.3 mb and 1.1 mb, respectively. Middle distillate inventories also drew by a modest 0.1 mb. By contrast, naphtha stocks rose by 0.6 mb.

OECD Asia Oceania

Total industry stocks in the OECD Asia Oceania region rose by 11.6 mb to 358 mb in April. Crude stocks built by 6.5 mb, largely in line with the usual increase of 4.5 mb. Japanese crude inventories rose by 6.7 mb versus a typical build of 4.1 mb. Crude stocks in Korea fell by a modest 0.1 mb.

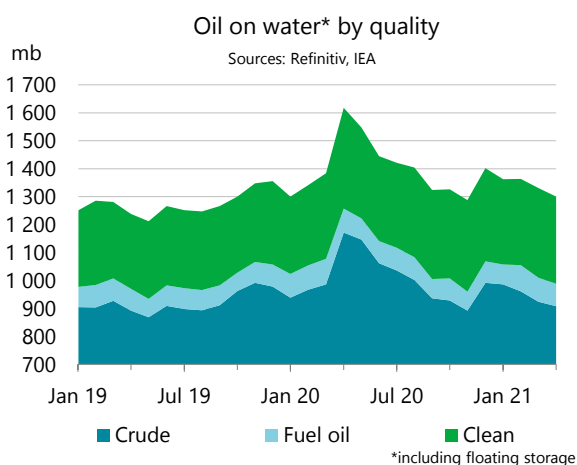
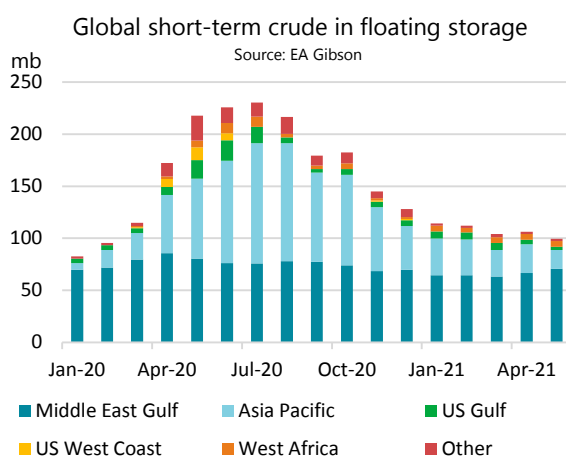
Among the three OECD regions, the Asia Pacific has the lowest relative stock level. End-April crude inventories in the region stood at 130 mb, 41.5 mb below the five-year average. In terms of forward demand, they covered 18.5 days (4.8 days below the five-year average).

Oil product stocks rose by 2.3 mb in April. Fuel oil stocks increased by 2.1 mb, when they typically build by a modest 0.1 mb. Fuel oil inventories in Korea built counter-seasonally by 1.3 mb. Those in Japan increased by 0.8 mb, double the usual increase for the month. Other oil and middle distillate inventories in the region also rose, by 0.4 mb and 0.1 mb, respectively. Gasoline stocks fell counter-seasonally by 0.2 mb.



Preliminary May data from the *Petroleum Association of Japan* show crude oil inventories increasing by 3.7 mb m-o-m, in line with the seasonal pattern (+3.3 mb). Total product stocks built by 5.2 mb, led by a 2.4 mb increase in middle distillates. Gasoline and residual fuel oil stocks rose by 2.2 mb and 0.7 mb, respectively. By contrast, other product inventories fell counter-seasonally, by 0.1 mb.

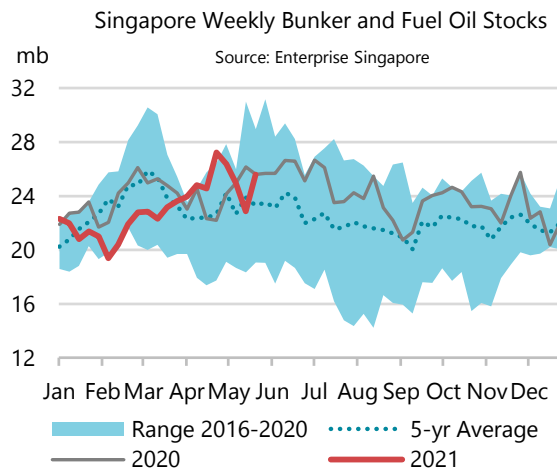
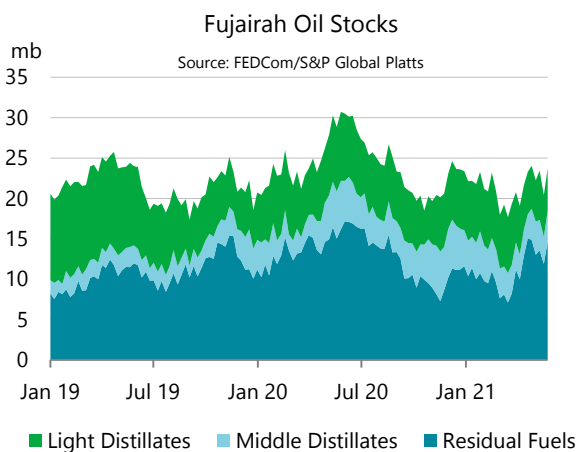
Other stock developments



Crude oil held in short-term floating storage declined by 6.8 mb to 99.4 mb in May, according to data from *EA Gibson*. The total crude oil in floating storage volume fell below 100 mb for the first time since February 2020. The Asia Pacific region led the decrease at 9.8 mb as port congestion in China eased. By contrast, floating storage volumes in the Middle East Gulf increased by 4.2 mb. At end-May, 42 VLCCs and 8 Suezmaxes were used for floating storage globally. In Iran, 29 VLCCs (up three from the previous month) and three Suezmaxes (unchanged from end-April) remained in use.

In April, volumes of oil on water (including floating storage) fell by 30 mb, according to data from *Refinitiv*. Crude oil on the water led the decrease of 16.1 mb m-o-m due to a combination of lower exports from OPEC+ countries and easing port congestion in China. Seaborne crude exports from Iran and Kuwait fell by 8.7 mb and 5.4 mb, respectively, while the US and the UAE increased by 8.4 mb and 5.6 mb, according to tanker tracking data from *Kpler*. Fuel oil and clean product volumes on the water also fell by 5 mb and 9 mb, respectively.

In Fujairah, independent product stocks were unchanged overall in May at 23.7 mb but were at their highest level since August last year, according to data from *FEDCom* and *S&P Global Platts*. Middle distillate stocks increased by 0.4 mb and stood at 3.8 mb. Light distillate and residual fuel oil stocks drew by 0.1 mb and 0.3 mb, respectively.



Independent product stocks in Singapore, the world's largest bunkering hub, fell by 0.8 mb in May, according to data from *Enterprise Singapore*. Middle distillate inventories led the way with a 1.4 mb draw. Residual fuel oil stocks also fell by 0.5 mb. By contrast, light distillate inventories rose by 1.1 mb.

The Chinese implied crude balance fell by 15.1 mb in April, according to data derived from reported crude production, refinery runs and net crude imports. Net crude oil imports decreased by 1.9 mb/d m-o-m to 9.8 mb/d in April as Chinese crude imports fell to the lowest level since December last year. Refinery runs were largely unchanged at 14.04 mb/d.

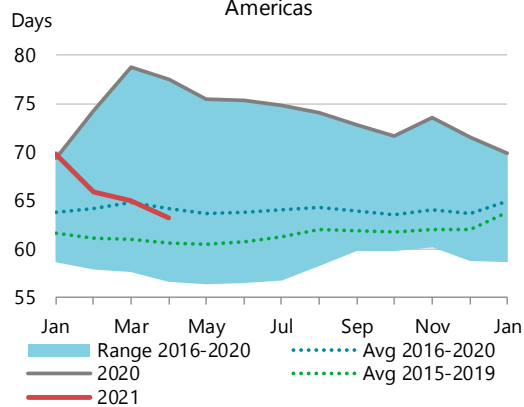
Total oil stocks in 20 non-OECD economies reported to the *JODI-Oil* database rose 1.1 mb m-o-m in March, led by builds in crude and NGL inventories (combined 3.5 mb). Crude stocks increased in Nigeria by 1.7 mb, Chinese Taipei by 1.6 mb and India by 1.5 mb. By contrast, crude oil inventories decreased in Saudi Arabia and Angola by 1.2 mb each. Oil product stocks fell by 0.3 mb in total, led by India at 5.6 mb, Brazil at 1.4 mb and Cyprus at 0.6 mb. Chinese Taipei and Saudi Arabia increased their product stocks by 3.4 mb and 1.6 mb, respectively.

Regional OECD End-of-Month Industry Stocks

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

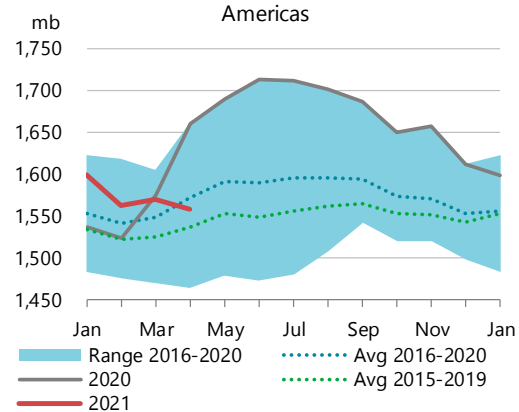
Days¹

Americas

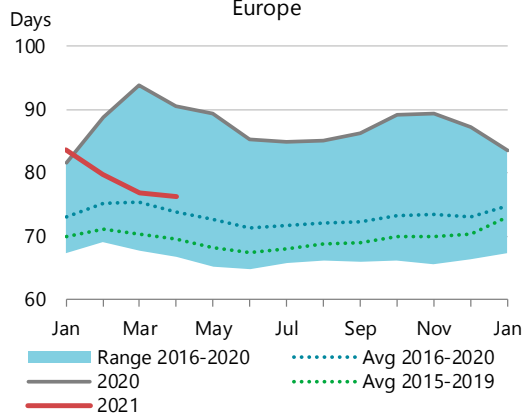


Million Barrels

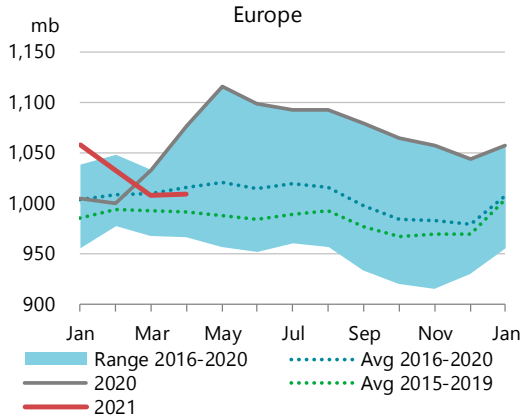
Americas



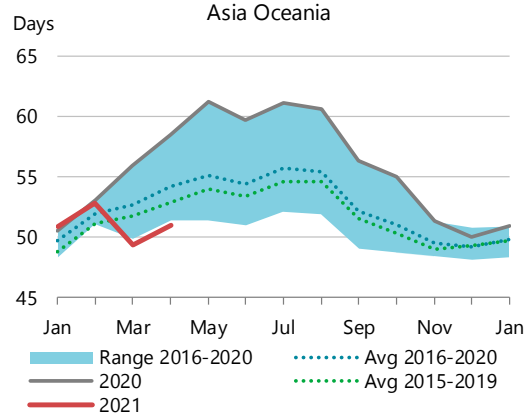
Europe



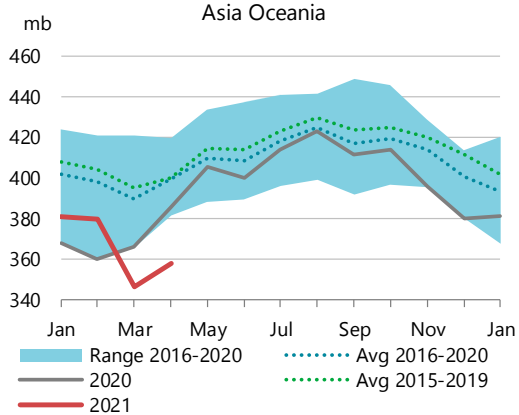
Europe



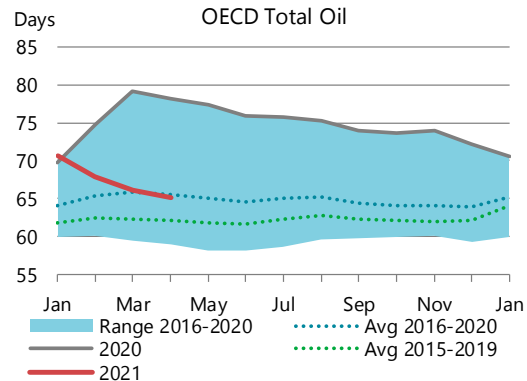
Asia Oceania



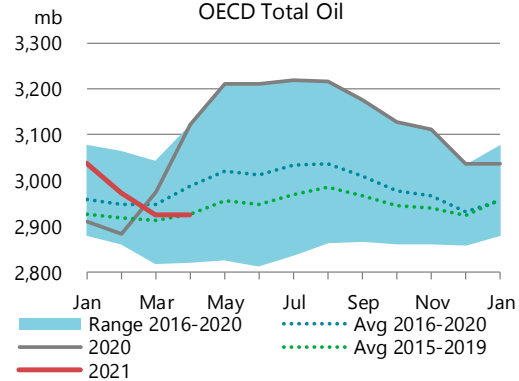
Asia Oceania



OECD Total Oil



OECD Total Oil

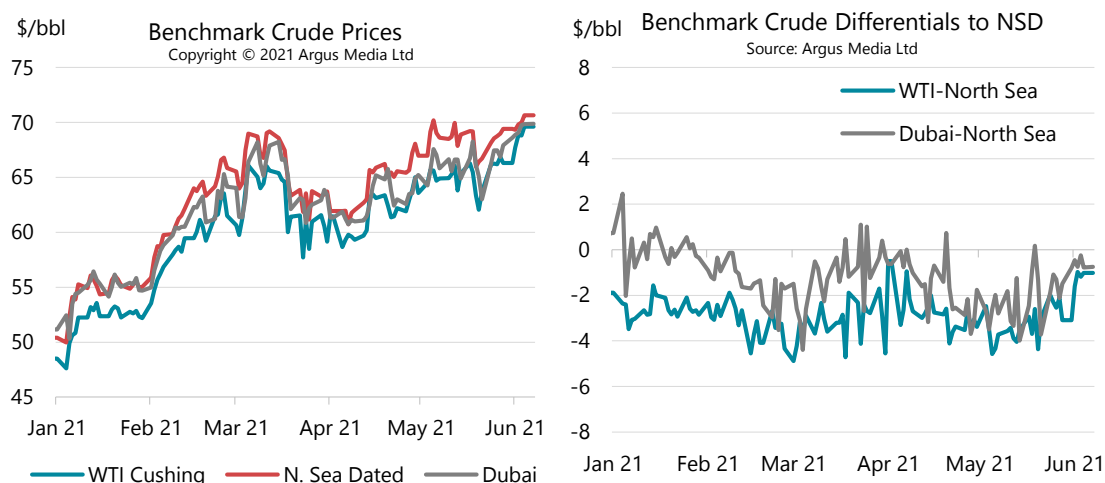


¹ Days of forward demand are based on average OECD demand over the next three months.

Prices

Overview

Stronger oil fundamentals and financial markets have been the twin engines driving the steady rise in crude prices over the past two months. From the financial market side, oil and other commodity prices present a prime means of investing in the global economic recovery and of anticipating higher inflation trends (the reflation trade). As well, forward oil market fundamentals appear robust. The demand recovery remains more-or-less on track and the global economic outlook has been revised higher. But, against this relatively certain demand outlook, the supply outlook suffers from the uncertainty surrounding Iran's return to the oil market and a lack of information about the OPEC+ strategy beyond July 2021.



The demand certainty and supply uncertainty come as world crude stocks continue the steady draw that has taken them to tighter levels (outside China), notably below the 2016-20 5-year average for OECD industry crude stocks and for OECD industry total oil stocks. This leaves less latitude for further stock draws. Moreover, this steady draw has occurred with refineries operating below their 2019 levels. Rising refinery throughputs to match the demand recovery in the months ahead will also require additional crude supplies as companies build-in working stocks along the supply chain (including oil in transit).

The fall in crude oil inventories has contributed to heightening the crude price backwardation in recent weeks. The current backwardation level creates significant costs for holding on to stocks, pushing stockholders to drawdown their storage surplus. Hence, most of the crude stock surplus versus "normal" levels should have disappeared.

OPEC+ has the spare capacity to meet market requirements, especially if Iranian production returns fully to the market. However, the backwardation and the rise in forward prices over the past month suggests, in part, that the market expects OPEC+ not to adjust production until Iran's fate has been decided. This could create a potentially tighter crude market in the coming weeks if negotiations to re-instate the Joint Comprehensive Plan of Action (JCPOA) get bogged down while oil demand continues to recover.

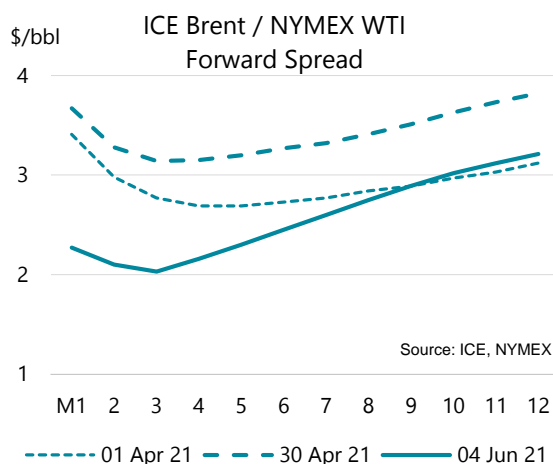
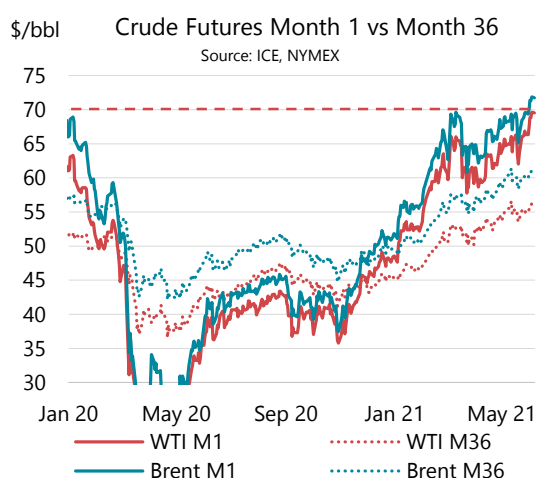
Futures markets have led prices higher for now as physical barrels have priced at discounts to futures since late-May. The discounts reflect the need for physical crude barrels to remain competitive in a depressed refinery margin environment where product prices have lagged the escalation in crude prices.

Higher oil prices contribute to weaker trade balances that can have a detrimental impact on financially fragile emerging markets, particularly those that have increased national debt levels over the past year. As well, while most inflation indices exclude volatile food and energy prices, higher oil prices can eventually feed through to inflation via second-round effects on wages.

Futures markets

After hitting a trough in early April, crude futures prices made relatively steady gains through early June. By mid-May, front month ICE Brent contracts were regularly bumping up against the \$70/bbl technical resistance, last broken for a brief period in May 2019. The marker finally breached that threshold in early June, possibly creating in-turn a strong support level for prices going forward.

Prompt ICE Brent prices rose almost \$10/bbl from their trough of 5 April 2021 at \$62.15/bbl to \$71.89/bbl on 4 June, as the prompt market rolled from trading the July contract in May to the August contract in June. August is the first month for which there is no specific OPEC+ target. ICE Brent prices have increased overall by \$20/bbl since 1 January 2021 and have almost doubled since their 30 October 2021 low point of \$37.46/bbl.

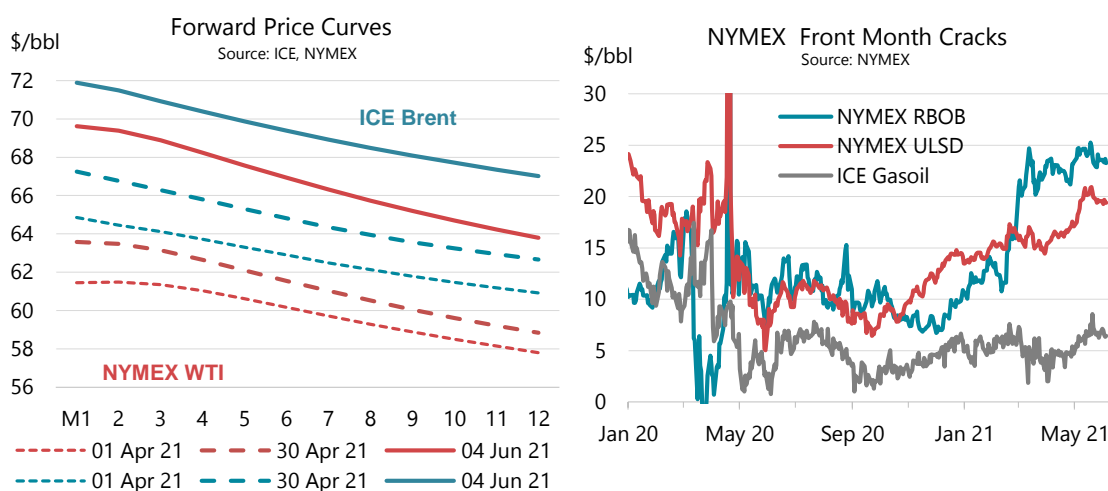


NYMEX WTI prices rose almost \$11/bbl from \$58.65/bbl on 5 April to \$69.62/bbl on 4 June. On a monthly average basis, ICE Brent prices increased by \$2.98/bbl in May to \$68.31/bbl while NYMEX WTI prices rose \$3.47/bbl to \$65.16/bbl. Prices now stand some \$36/bbl above their levels of a year ago. The prompt ICE Brent premium to NYMEX WTI narrowed by \$0.49/bbl m-o-m in May to \$3.15/bbl, and reached just \$2.08/bbl in the first week of June. Prices three-years forward (thirty-sixth month contract) now stand at over \$60/bbl for ICE Brent and over \$55/bbl for NYMEX WTI, levels not seen since the June-July 2019 period.

NYMEX WTI crude futures rose more over the past month than ICE Brent, narrowing the price spread, particularly on the prompt contracts. Anticipation of a tighter US crude market over the coming months (as refinery throughputs rise faster than US crude production) has driven most of the narrowing. If the US crude market tightens further, crude exports could fall.

Futures prices suffered a brief drop over May 18-20 when most commodities and financial markets sold-off but recovered rapidly in the following days. The sell-off drove a collapse in prices of commodities as well as Bitcoin (and other crypto currencies). It appeared to be driven in particular by China's announcement of strengthened price controls on major commodities in its 14th five-year plan (2021 to 2025) and the warning by three Chinese banking regulators not to conduct transactions in crypto currencies. Margin calls fed the sell-off as traders liquidated positions to generate cash to cover the margin calls.

Backwardation steepened on both crude futures contracts over the month, reflecting anticipation of tighter markets in the near term. Backwardation on the NYMEX WTI contract rose much faster than that on the ICE Brent contract, reflecting the tightening crude stock levels in the US. The price spread across the first three contracts rose from \$0.10/bbl on 1 April to \$0.44/bbl on 30 April and to \$0.73/bbl on 4 June for NYMEX WTI. At the same time, ICE Brent rose from \$0.74/bbl on 1 April to \$0.97/bbl on 30 April and remained at that level through early June. The three-year time spread (first to thirty-sixth month contract) has risen almost \$2/bbl from \$8.78/bbl on 30 April to \$10.76/bbl on 4 June for ICE Brent while NYMEX WTI has increased by almost \$3.50/bbl, from \$9.88/bbl to \$13.36/bbl.

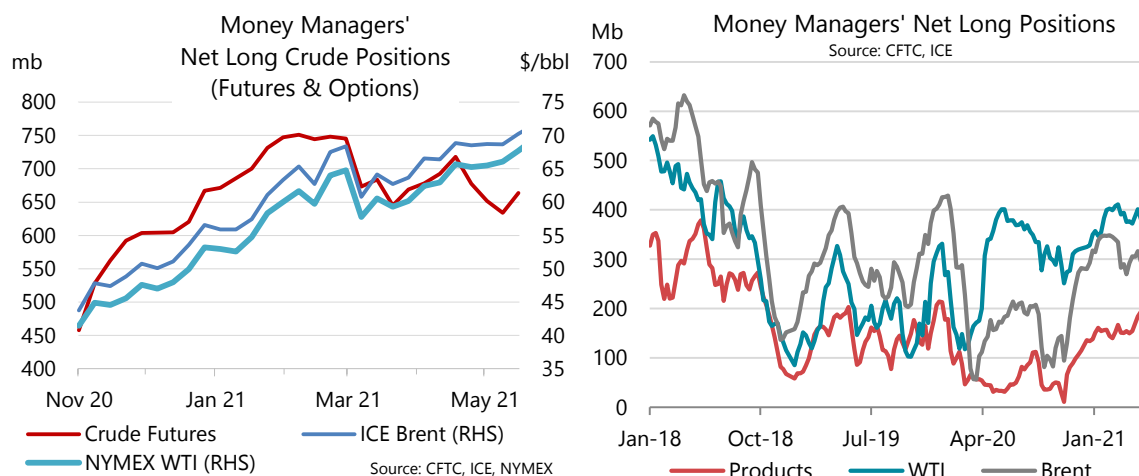


Product price futures saw strikingly different trends over the month. The NYMEX RBOB gasoline crack rose only \$1.48/bbl over the month to \$24.12/bbl, having already benefitted from substantial gains earlier in the year as US road traffic recovered. On the other hand, NYMEX ULSD cracks increased by \$3.27/bbl to \$19.72/bbl over the month while ICE gasoil cracks rose \$2.04/bbl to just \$6.24/bbl. The increases in NYMEX RBOB and ULSD cracks since January largely reflect the rapidly rising cost of meeting US Renewable Fuel Standard (RFS) quotas versus the international market. NYMEX ULSD cracks may have also partly been supported by an uptick in airline hedging activity ahead of the summer US travel season that will benefit (both domestically and internationally) from the nations successful vaccine campaign. On the other hand, ICE gasoil cracks rose only modestly as they remained pressured – at least in part – by the continued weak recovery in international air travel and ample supply as refiners lift runs to meet demand for naphtha, gasoline and bunkers.

Money Manager positions in crude futures and options declined slightly overall during the past four weeks. Net long positions remained relatively stable on WTI, likely reflecting expectations of a tightening balance (versus local production) as US refiners ramp-up throughputs over the course of the summer with the recovery in oil product demand. Net long positions on ICE Brent contracts fell 16%, accounting for virtually all the deterioration in the overall net length in

Money Manager positions on crude. The decline in net long positions on ICE Brent reflects a decrease in outright long positions (-6% m-o-m) and a rise in outright short positions (+29% m-o-m). The overall long-short ratio has fallen from a peak of around 6.3 in early May to around 5.0 at the start of June, essentially due to the reduction in net length for Money Managers on ICE Brent contracts. The shift in long and short positions reflects both profit taking as prices approached \$70/bbl and anticipation of lower prices if OPEC+ ramps-up output.

Money Manager net long positions on products continued their steady overall increase from early-April to early-May and into early-June. Net length on products now stands almost 23% higher than in early April. The increase in overall net length on product futures and options reflects a sharp rise on ICE gasoil and NYMEX ULSD contracts over the month (+25% m-o-m combined). The rise in positions reflects anticipation of a more dynamic recovery in the second half of 2021 that will tighten middle distillate markets as air travel accelerates (boosting jet kerosene demand) and as diesel use accelerates in road transport and agriculture. On the other hand, net long position on NYMEX RBOB gasoline futures and options stagnated or declined slightly over the month. As indicated last month, substantial gains in car use have already occurred with the post-Covid recovery in the US.



Prompt Month Oil Futures Prices (monthly and weekly averages, \$/bbl)												
	May-20	Mar-21	Apr-21	May-21	May-21		Week Commencing:					
					m-o-m Chg	y-o-y Chg	26 Apr	03 May	10 May	17 May	24 May	31 May
NYMEX												
Light Sweet Crude Oil (WTI)	28.53	62.36	61.69	65.16	3.47	36.63	63.46	65.08	65.09	64.15	66.30	68.75
RBOB	40.10	84.31	84.33	89.28	4.95	49.18	86.02	89.41	89.51	88.51	89.69	92.17
ULSD	38.23	77.95	78.14	84.88	6.74	46.65	80.68	83.61	85.39	84.64	85.88	88.20
ULSD (\$/mmbtu)	6.74	13.75	13.78	14.97	1.19	8.23	14.23	14.75	15.06	14.93	15.15	15.56
Henry Hub Natural Gas (\$/mmbtu)	1.81	2.62	2.68	2.96	0.28	1.15	2.89	2.95	2.96	2.98	2.95	3.08
ICE												
Brent	32.41	65.70	65.33	68.31	2.98	35.90	67.03	68.35	68.39	67.28	69.01	70.82
Gasoil	35.51	70.15	69.53	74.55	5.02	39.04	71.54	73.97	74.39	74.25	75.26	77.19
Prompt Month Differentials												
NYMEX WTI - ICE Brent	-3.88	-3.34	-3.64	-3.15	0.49	0.73	-3.57	-3.27	-3.30	-3.13	-2.71	-2.08
NYMEX ULSD - WTI	9.70	15.59	16.45	19.72	3.27	10.02	17.22	18.53	20.30	20.49	19.58	19.46
NYMEX RBOB - WTI	11.57	21.95	22.64	24.12	1.48	12.55	22.56	24.33	24.42	24.36	23.39	23.42
NYMEX 3-2-1 Crack (RBOB)	10.95	19.83	20.58	22.65	2.08	11.71	20.78	22.40	23.05	23.07	22.12	22.10
NYMEX ULSD - Natural Gas (\$/m)	4.93	11.13	11.10	12.01	0.91	7.08	11.34	11.79	12.10	11.95	12.20	12.48
ICE Gasoil - ICE Brent	3.10	4.45	4.20	6.24	2.04	3.14	4.51	5.62	6.00	6.97	6.25	6.37

Source: ICE, NYMEX.

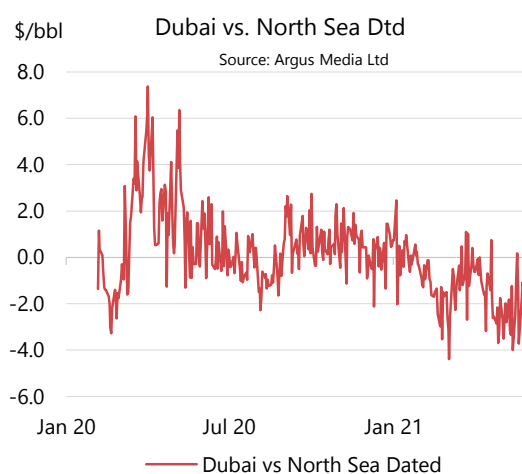
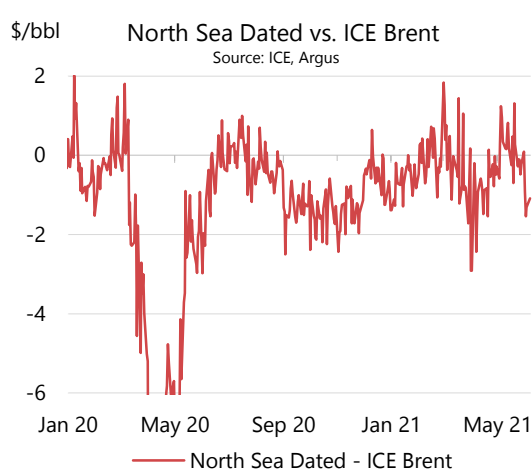
Spot crude oil prices

North Sea Dated prices flipped from a \$0.74/bbl discount versus ICE Brent in April to a premium of \$0.23/bbl in May. The premium rose to over \$0.40/bbl in the first half of May, but by end-May had returned to discounts that reached \$0.99/bbl in the first week of June. As a result, North Sea Dated rose \$3.95/bbl in May to \$68.54/bbl and reached \$69.84/bbl in the first week of June.

Strong North Sea Dated¹ premiums to ICE Brent in the first half of May reflect low late-May and early-June loading levels due to maintenance shutdowns on pipelines feeding the Forties system (available cargoes cut from 17.5 normally to 15 in May and 6 in June) after heavy North Sea maintenance by end-June.

Atlantic Basin crudes remain under pressure from weak local refinery demand but also from reduced buying by Asian refiners due to the wide Forward North Sea Dated to Dubai spread in recent months. The combination of a Brent-Dubai premium and heightened ICE Brent backwardation has pressured physical barrel differentials versus North Sea Dated for many Atlantic Basin grades, particularly those in West Africa.

East of Suez, refineries coming out of spring maintenance and the gradual recovery in Indian product demand have sustained a rise in regional crude buying for July-loading barrels that traded in May. A combination of planned increases in Middle East OPEC+ production and a draw on regional crude stocks in May (notably those in China) has partially offset the regional rebound in buying, easing the call on costly Atlantic Basin barrels.

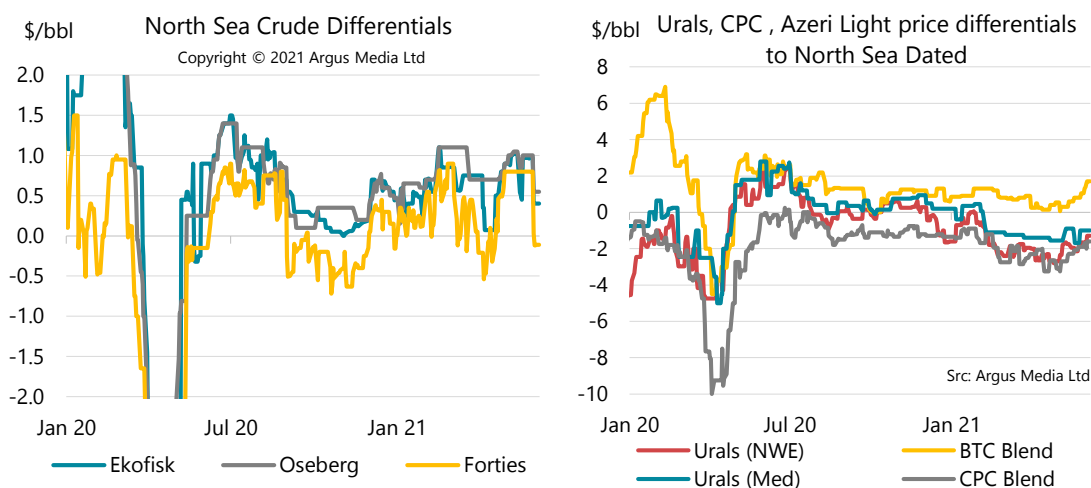


North Sea crude price differentials remained well supported in May thanks to the heavy maintenance program on the Forties Pipeline System and related facilities that reduced the number of available cargoes. However, by end-month the anticipated late June return to full production began to feed back through pricing and differentials to North Sea Dated which dropped sharply. The North Sea market also came under pressure from exports of light sweet US crude to European refiners.

¹ The fall in cargoes coincides with the pricing period for North Sea Date that covers spot cargoes available over a one-month horizon beginning 10 days after the date of assessment.

Forties price differentials to North Sea Dated rose \$0.74/bbl to \$0.80/bbl in May due to lost supply, but by the first week of June they had fallen back to \$0.10/bbl. Ekofisk differentials were up by \$0.49/bbl in May to \$0.90/bbl but fell back to \$0.51/bbl in the first week of June while Oseberg differentials increased \$0.27/bbl to \$0.99/bbl in May before easing to \$0.64/bbl in early June. The strength of gasoline cracks versus middle distillates benefitted Ekofisk versus Oseberg.

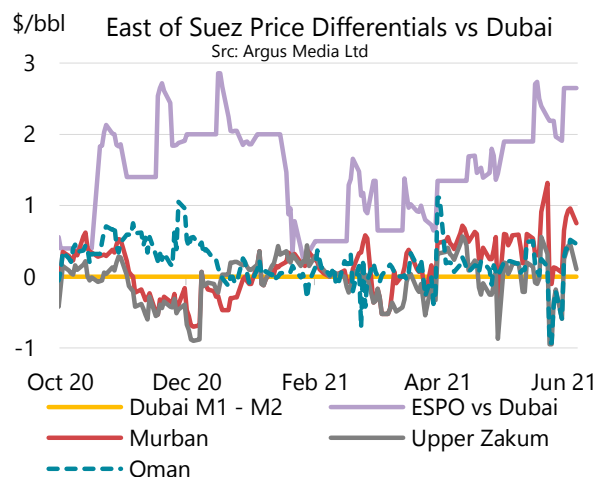
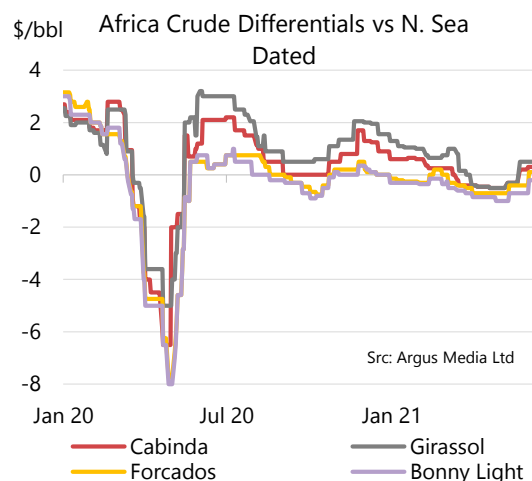
Good sour crude margins combined with the wrap-up of Atlantic Basin spring refinery maintenance supported demand for Urals in May and June despite a larger export program announced for June. Urals discounts to North Sea Dated narrowed steadily over the month from their late-April low, with those in Northwest Europe tapering by \$0.06/bbl to -\$1.93/bbl in May while in the Mediterranean they contracted by \$0.20/bbl to -\$1.24/bbl. By the first week of June, discounts had reached -\$1.58/bbl and -\$1.00/bbl, respectively. Sour CPC Blend tracked Mediterranean Urals prices higher while sweet BTC Blend rose on tighter Mediterranean sweet crude supply due to maintenance on BP's West Azeri platform.



West African crude price differentials to North Sea Dated remained under pressure throughout most of May, as they did in April. However, the sharp widening of the North Sea Dated discount to ICE Brent futures in early June and the narrowing of the North Sea Dated premium to Dubai boosted Asian refiner interest in West African grades.

The progressive recovery in Indian oil product demand and in refining activity has lifted demand for light sweet Nigerian barrels. Forcados discounts narrowed by \$0.21/bbl to -\$0.49/bbl in May and reached -\$0.20/bbl in early June. Bonny Light discounts narrowed by \$0.09/bbl to -\$0.79/bbl in May and reached \$0.50/bbl in early June.

A smaller July program for heavy sweet Angolan barrels has accelerated buying by those refiners actively seeking the grades. Girassol discounts narrowed by \$0.34/bbl to -\$0.13/bbl on average in May but flipped to a premium of \$0.50/bbl in early June. Cabinda discounts narrowed by \$0.26/bbl to -\$0.21/bbl in May, and flipped to a premium of \$0.26/bbl in the first week of June.



Dubai M1 crude prices (July) rose \$3.43/bbl m-o-m to \$66.34/bbl in May and reached \$69.24/bbl in the first week of June. Prices increased on a continued strong call on Middle East barrels and despite indications that OPEC+ would stick to their planned production increases in July. The Dubai discount to North Sea Dated widened by \$0.52/bbl to -\$2.20/bbl on average in May but narrowed sharply in the second half of the month to reach -\$0.60/bbl in the first week of June.

After three straight months of weak loadings, shipments from the Middle East to China rose by almost 400 kb/d in May, highlighting a post-maintenance rebound in Chinese refinery demand. Chinese demand for Middle East barrels likely benefitted from new duties imposed to halt feedstock imports such as diluted bitumen that some independent Chinese refiners reportedly use to circumvent sanctions, import quotas, or duties on Venezuelan or Iranian crudes.

Murban premiums to Dubai remained flat around \$0.45/bbl in May but rose to \$0.69/bbl in early June. Differentials for heavier, more sour grades deteriorated, with Upper Zakum falling \$0.14/bbl and flipping to a discount of -\$0.02/bbl and Qatari Al-Shaheen declining by \$0.08/bbl to \$0.22/bbl in May. The deterioration in heavier sour grades reflects weaker high sulphur fuel oil prices.

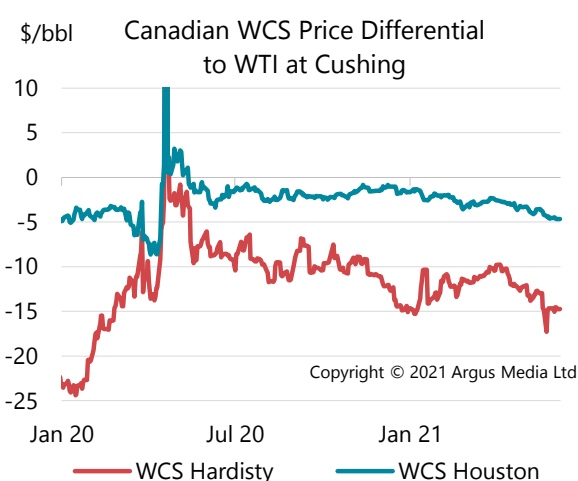
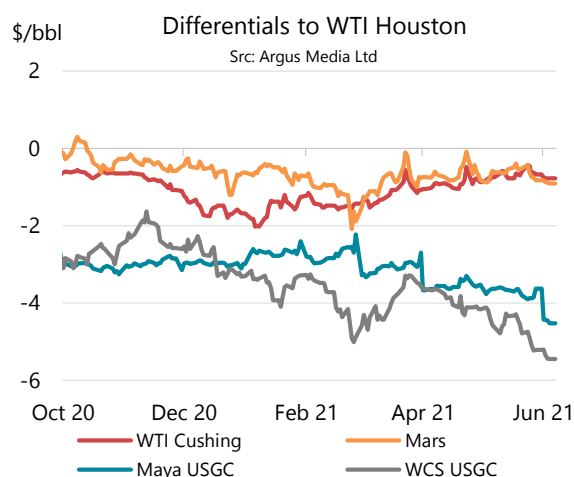
The strong crude price backwardation continued to benefit short-haul Asian crude grades bought by Chinese refiners, and notably Russian ESPO. The ESPO blend premium rose \$0.52/bbl to \$1.48/bbl in May and continued rising to reach \$1.66/bbl in the first week of June. Chinese independent refiners also bought ESPO as a short-term solution following the unexpected impact of new duties on imports of “diluted bitumen” feedstock.

Tight US midcontinent crude stocks lifted WTI prices at Cushing into a steeper backwardation, penalising related crude price differentials despite a rise in US crude throughputs over the past month. WTI Midland premiums to Cushing narrowed by \$0.14/bbl to \$0.22/bbl in May, while WTI Houston premiums to Cushing tightened by \$0.23/bbl to \$0.67/bbl. The discount for Western Canadian Select (WCS) at Hardisty widened by \$2.27/bbl to -\$13.63/bbl in May as the steeper WTI backwardation, weaker high sulphur fuel oil cracks, and rising heavy crude inventories at Hardisty in Western Canada combined to undermine its value vs WTI.

US crude prices versus WTI at Houston generally improved for the low sulphur grades and stagnated for the medium heavy high sulphur grades, but the heavy sour grades saw a net deterioration. Strong US light crude exports over the month and the uptick in US PADD 3 refinery throughputs contributed to sustain light sweet crude prices, while weak high sulphur fuel oil cracks undercut heavy sour barrels like Mexican Maya or WCS sold into the region.

Heavier crudes also suffered from the delivery of over 19 mb of heavy sour SPR barrels from storage taking place in April, May and June (in accordance with notices of sale in February and April this year (see commentary in last month's *Report*).

Medium heavy sour Mars discounts versus WTI at Houston were stable in April and May at around -\$0.63/bbl on the prompt month. Heavy sour crude discounts widened in May, with Maya widened by \$0.16/bbl to -\$3.71/bbl and WCS by \$0.67/bbl to -\$4.60/bbl.



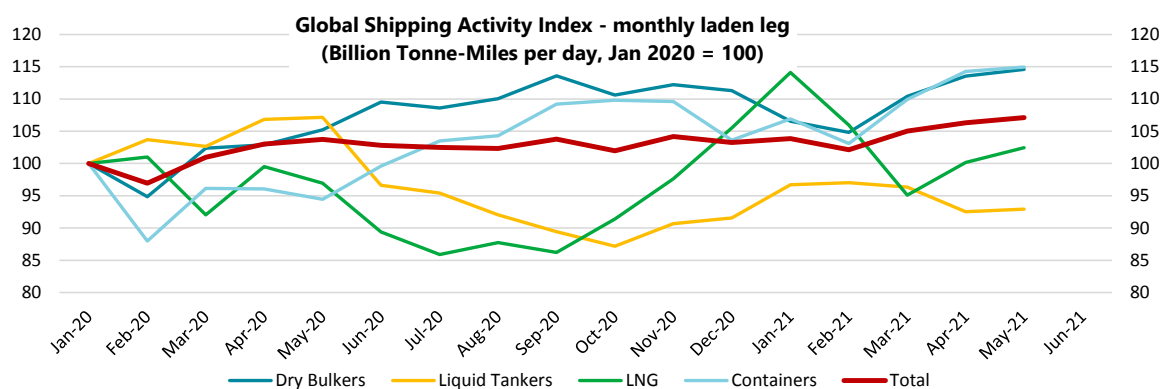
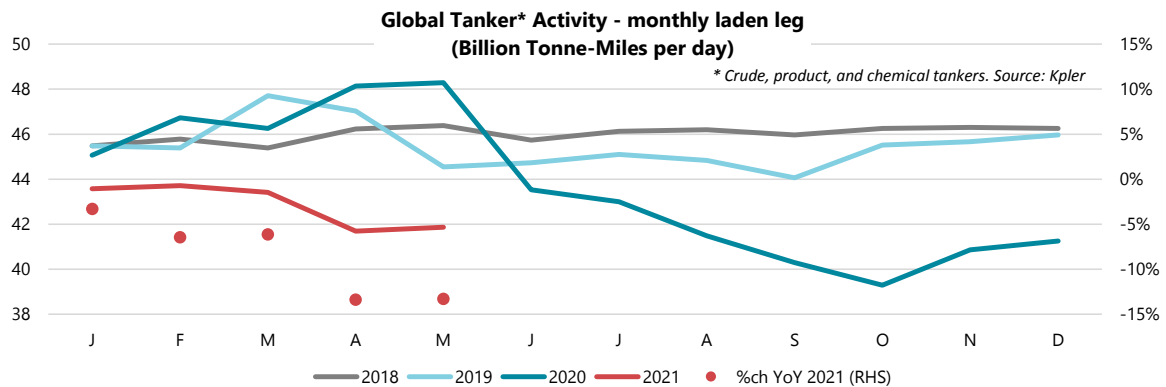
Spot Crude Oil Prices and Differentials (monthly and weekly averages, \$/bbl)												
	May-20	Mar-21	Apr-21	May-21	May-21 m-o-m Chg	May-21 y-o-y Chg	Week Commencing:					
							26 Apr	03 May	10 May	17 May	24 May	31 May
Crudes												
North Sea Dated	29.00	65.56	64.59	69.26	4.67	40.26	66.67	69.26	68.79	67.50	68.78	69.84
North Sea Mth 1	31.47	66.18	65.80	69.41	3.61	37.93	67.44	69.41	68.75	67.78	68.99	71.20
WTI (Cushing) Mth 1	28.57	62.35	61.71	65.08	3.38	36.51	63.46	65.08	65.09	64.17	66.37	68.26
WTI (Houston) Mth 1	30.94	63.50	62.61	65.86	3.25	34.91	64.30	65.86	65.75	64.85	66.95	69.01
Urals (NWE)	29.93	63.51	62.06	67.05	4.99	37.12	63.94	67.05	67.08	65.51	66.92	68.26
Urals (Mediterranean)	30.84	64.29	63.15	67.71	4.56	36.87	65.12	67.71	67.87	66.36	67.36	68.84
Dubai (1st month)	30.98	64.40	62.92	66.08	3.16	35.09	63.94	66.08	65.94	65.85	67.13	69.24
Tapis (Dated)	26.40	67.16	65.74	69.85	4.11	43.46	67.67	69.85	70.02	68.43	69.43	70.54
Differential to North Sea Dated												
WTI (Houston)	1.95	-2.07	-1.98	-3.40	-1.42	-5.35	-2.37	-3.40	-3.03	-2.64	-1.83	-0.83
Urals (NWE)	0.93	-2.06	-2.53	-2.21	0.32	-3.14	-2.73	-2.21	-1.71	-1.99	-1.86	-1.58
Urals (Mediterranean)	1.84	-1.28	-1.45	-1.55	-0.10	-3.39	-1.55	-1.55	-0.92	-1.14	-1.42	-1.00
Dubai	1.99	-1.16	-1.68	-3.18	-1.50	-5.17	-2.73	-3.18	-2.84	-1.65	-1.64	-0.60
Tapis (Dated)	-2.60	1.60	1.15	0.60	-0.56	3.20	1.00	0.60	1.23	0.93	0.65	0.71
Prompt Month Differential												
North Sea Dated vs. ICE Brent	-3.41	-0.14	-0.74	0.95	1.69	4.36	-0.36	0.91	0.40	0.22	-0.23	-0.99
Forward Cash Brent Mth1-Mth2	-0.70	0.20	0.48	0.47	-0.01	1.17	0.57	0.47	0.21	0.14	0.04	0.49
Forward WTI Cushing Mth1-Mth2	-0.67	0.03	-0.01	0.05	0.06	0.72	0.12	0.05	-0.01	0.04	0.21	0.21
Forward Dubai Mth1-Mth2	-1.88	0.56	0.50	0.49	-0.01	2.37	0.13	0.49	0.46	0.71	0.78	0.84

Source: Argus Media Ltd, ICE

Freight

Global shipping activity continues to show impressive gains in 2021. However, the average increase for the whole sector of around 3.2% y-o-y in April/May hides big differences in the level of activity by segment. In April and May, dry bulk freight (47% of all tonne-miles of shipping traffic) rose almost 10% y-o-y, while container freight (17% of all tonne-miles) increased by around 11% y-o-y. The rise in activity has sustained freight costs for these segments, particularly for containers. Freight rates for container ships have more than tripled since June

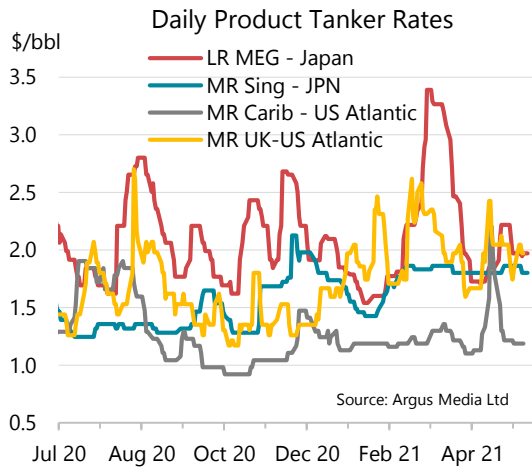
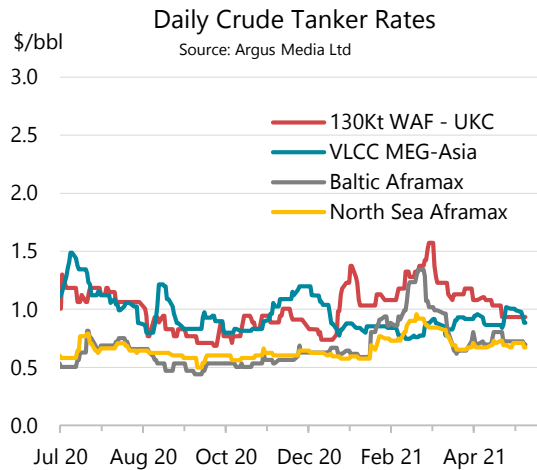
2020 based on the Freight Baltic Index (FBX). LNG shipping activity (4% of tonne-miles) also remained robust in May, up 6% y-o-y and 22% versus 2019. On the other hand, activity remains depressed for liquids tankers (31% of tonne-miles), off by around 13% y-o-y in April and May (due to substantial use of floating storage in April and May 2020) and down roughly 8% versus 2019 levels.



Tanker freight costs remained weak overall during the month of May. Ample tonnage availability in most segments and little expansion of activity outside the Middle East left shippers unable to charter their ships at higher rates.

The increase in Middle East OPEC+ exports boosted rates on VLCCs starting mid-month, but the other dirty tanker segments saw chartering rates deteriorate over the month. Chartering requirements were limited in part by field and pipeline maintenance or outages in several regions, affecting crude and condensate production outside the Middle East Gulf.

The week-long Colonial Pipeline outage in the first half of May drove a spike of Atlantic Basin chartering to deliver gasoline and diesel to the US East Coast. In the week of 7 May, rates for MRs from the Caribbean to the Atlantic Coast rose almost 50% before rapidly tapering off the following week. UK to US East Coast MR rates also shot-up by over 20% on the week, but held the level longer due to the extended voyage length that locked in ship availability.



Freight Costs

(monthly and weekly averages, \$/bbl)

	1-May-21						Week Commencing					
	May-20	Mar-21	Apr-21	May-21	m-o-m chg	y-o-y chg	26-Apr	03-May	10-May	17-May	24-May	31-May
Crude Tankers												
VLCC MEG-Asia	1.92	0.81	0.89	0.92	0.02	-1.0	0.92	0.86	0.88	1.00	0.96	0.88
130Kt WAF - UKC	1.92	1.32	1.15	1.00	-0.15	-0.9	1.09	1.06	0.98	0.93	0.93	2.42
Baltic Aframax	1.12	1.09	0.74	0.74	0.00	-0.4	0.70	0.74	0.78	0.72	0.72	0.70
North Sea Aframax	0.91	0.84	0.70	0.70	-0.01	-0.2	0.67	0.69	0.71	0.69	0.70	0.45
Product Tankers												
LR MEG - Japan	7.64	2.39	2.46	1.95	-0.52	-5.7	1.72	1.80	2.06	2.17	1.97	1.50
MR Sing - JPN	3.57	1.81	1.82	1.82	0.00	-1.8	1.80	1.80	1.81	1.86	1.85	1.38
MR Carib - US Atlantic	1.86	1.20	1.22	1.44	0.23	-0.4	1.18	1.76	1.57	1.23	1.19	0.83
MR UK-US Atlantic	2.59	2.11	1.86	2.01	0.14	-0.6	1.76	2.15	2.06	1.94	1.93	1.35

Source: Argus Media Ltd

Tables

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

	2018	2019	1Q20	2Q20	3Q20	4Q20	2020	1Q21	2Q21	3Q21	4Q21	2021	1Q22	2Q22	3Q22	4Q22	2022
OECD DEMAND																	
Americas	25.7	25.7	24.3	20.0	22.7	23.2	22.6	22.8	24.4	25.2	25.3	24.4	24.6	25.2	25.7	25.3	25.2
Europe	14.3	14.3	13.3	11.0	12.9	12.5	12.4	11.9	13.1	13.5	13.4	13.0	13.1	13.5	13.8	13.3	13.4
Asia Oceania	8.0	7.8	7.8	6.5	6.7	7.3	7.1	7.6	7.0	7.2	7.7	7.4	7.8	7.1	7.2	7.7	7.5
Total OECD	48.0	47.7	45.4	37.6	42.3	43.0	42.1	42.3	44.4	45.9	46.3	44.8	45.5	45.8	46.8	46.2	46.1
NON-OECD DEMAND																	
FSU	4.7	4.8	4.6	4.0	4.8	4.8	4.6	4.6	4.6	4.9	5.0	4.8	4.8	4.6	5.0	5.1	4.9
Europe	0.8	0.8	0.7	0.6	0.8	0.8	0.7	0.7	0.7	0.8	0.8	0.7	0.7	0.7	0.8	0.8	0.7
China	13.0	13.7	11.9	14.2	14.7	14.9	13.9	14.7	15.1	15.1	15.3	15.0	15.3	15.6	15.4	15.7	15.5
Other Asia	14.0	14.0	13.5	11.2	12.3	13.4	12.6	13.5	12.8	13.0	13.9	13.3	14.2	14.1	13.7	14.4	14.1
Americas	6.2	6.2	5.8	4.9	5.8	5.9	5.6	5.8	5.7	6.0	6.0	5.9	5.9	5.9	6.2	6.2	6.1
Middle East	8.3	8.3	7.8	7.0	8.2	7.8	7.7	7.6	7.6	8.4	7.9	7.9	7.9	7.9	8.4	8.1	8.1
Africa	4.2	4.2	4.1	3.3	3.8	4.0	3.8	4.0	3.9	3.9	4.0	3.9	4.1	3.9	4.0	4.1	4.0
Total Non-OECD	51.2	52.0	48.5	45.3	50.4	51.6	49.0	51.0	50.4	52.0	53.0	51.6	52.8	52.8	53.6	54.4	53.4
Total Demand¹	99.2	99.7	93.9	82.9	92.6	94.6	91.0	93.3	94.9	98.0	99.3	96.4	98.3	98.6	100.3	100.6	99.5
OECD SUPPLY																	
Americas	23.0	24.6	25.7	22.8	23.1	23.7	23.8	23.3	24.0	24.5	24.7	24.1	24.9	25.1	25.4	25.7	25.3
Europe	3.5	3.3	3.7	3.6	3.4	3.5	3.5	3.6	3.2	3.5	3.6	3.5	3.7	3.5	3.5	3.6	3.6
Asia Oceania	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5
Total OECD⁴	26.9	28.5	29.9	26.9	27.1	27.8	27.9	27.4	27.7	28.5	28.9	28.1	29.1	29.1	29.5	29.8	29.4
NON-OECD SUPPLY																	
FSU	14.6	14.6	14.8	13.2	12.8	13.2	13.5	13.4	13.7	13.7	13.7	13.6	13.7	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	3.8	3.9	4.0	4.0	4.0	3.9	4.0	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
Other Asia	3.4	3.3	3.2	3.0	3.0	3.0	3.0	3.0	2.9	3.0	2.9	3.0	2.9	2.9	2.9	2.8	2.9
Americas	5.1	5.3	5.6	5.1	5.4	5.2	5.3	5.3	5.4	5.6	5.6	5.5	5.5	5.6	5.6	5.7	5.6
Middle East	3.2	3.2	3.2	3.1	3.1	3.1	3.1	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
Africa	1.5	1.5	1.4	1.4	1.4	1.3	1.4	1.3	1.3	1.2	1.2	1.3	1.2	1.2	1.2	1.2	1.2
Total Non-OECD⁴	31.7	32.0	32.3	30.0	29.7	29.9	30.5	30.3	30.7	30.9	30.9	30.7	30.8	30.8	30.8	30.9	30.8
Processing gains ³	2.4	2.4	2.3	2.0	2.1	2.1	2.1	2.1	2.2	2.3	2.3	2.3	2.4	2.4	2.4	2.4	2.4
Global Biofuels	2.7	2.8	2.2	2.5	3.1	2.6	2.6	2.1	3.0	3.3	2.9	2.8	2.5	3.2	3.5	3.0	3.0
Total Non-OPEC Supply	63.6	65.6	66.7	61.3	61.9	62.4	63.1	62.0	63.7	65.0	65.0	63.9	64.8	65.4	66.2	66.1	65.7
OPEC²																	
Crude	31.4	29.6	28.2	25.6	24.1	24.9	25.7	25.2									
NGLs	5.5	5.4	5.4	5.1	5.1	5.1	5.2	5.2	5.3	5.3	5.3	5.3	5.5	5.5	5.5	5.5	5.5
Total OPEC	36.8	35.0	33.6	30.7	29.2	30.0	30.9	30.5									
Total Supply	100.5	100.6	100.2	92.0	91.1	92.4	93.9	92.4									
STOCK CHANGES AND MISCELLANEOUS																	
Reported OECD																	
Industry	0.1	0.0	0.9	2.6	-0.4	-1.5	0.4	-1.2									
Government	-0.1	0.0	0.0	0.3	-0.1	-0.1	0.0	0.0									
Total	0.0	0.0	1.0	2.9	-0.5	-1.6	0.4	-1.2									
Floating storage/Oil in transit	0.0	0.1	0.4	0.7	-1.3	0.8	0.2	-0.8									
Miscellaneous to balance ⁵	1.3	0.8	5.0	5.6	0.2	-1.4	2.3	1.1									
Total Stock Ch. & Misc	1.3	1.0	6.3	9.1	-1.6	-2.2	2.9	-0.9									
Memo items:																	
Call on OPEC crude + Stock ch. ⁶	30.1	28.7	21.9	16.5	25.7	27.1	22.8	26.1	25.9	27.6	29.0	27.2	27.9	27.6	28.6	28.9	28.3

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

	2018	2019	1Q20	2Q20	3Q20	4Q20	2020	1Q21	2Q21	3Q21	4Q21	2021	1Q22	2Q22	3Q22	4Q22	2022
OECD DEMAND																	
Americas	-	-	-	-	-	-	-	0.3	0.3	0.2	-	0.2					
Europe	-	-	-	-	-	-	-	-0.1	-0.1	-0.1	-0.2	-0.1					
Asia Oceania	-	-	-	-	-	-	-	-	-	-	-	-					
Total OECD	-	-	-	-	-	-	-	0.2	0.2	0.1	-0.3	0.1					
NON-OECD DEMAND																	
FSU	-	-	-	-	-	-	-	-	-	-0.1	0.1	-					
Europe	-	-	-	-	-	-	-	-	-	-	-	-					
China	-	-	-	-	-	-	-	-	0.1	-	0.1	-					
Other Asia	-	-	0.1	-	-0.1	-0.1	-	-0.1	0.1	-0.2	-0.1	-0.1					
Americas	-	-	-	-	-	-	-	-	-	-0.1	-0.1	-					
Middle East	-	-	0.1	0.1	0.1	0.1	0.1	0.1	-	-	-	-					
Africa	-0.1	-0.1	-	-	-	-	-	-	-0.1	-0.1	-0.1	-0.1					
Total Non-OECD	-0.1	-0.1	0.1	-	-	-0.1	-	-0.1	0.1	-0.4	-	-0.1					
Total Demand	-0.1	-0.1	0.1	-	-	-0.1	-	0.2	0.2	-0.3	-0.3	-					
OECD SUPPLY																	
Americas	-	-	-	-	-	-	-	0.1	0.1	0.1	0.1	0.1					
Europe	-	-	-	-	-	-	-	-	-0.2	-	-	-0.1					
Asia Oceania	-	-	-	-	-	-	-	-	-	-	-	-					
Total OECD	-	-	-	-	-	-	-	0.1	-	0.1	0.1	0.1					
NON-OECD SUPPLY																	
FSU	-	-	-	-	-	-	-	-	-	-	-	-					
Europe	-	-	-	-	-	-	-	-	-	-	-	-					
China	-	-	-	-	-	-	-	-	-	-	0.1	-					
Other Asia	-	-	-	-	-	-	-	-	-	-	-	-					
Americas ²	-	-	-	-	-	-	-	-	-0.1	-	-	-					
Middle East	-	-	-	-	-	-	-	-	-	-	-	-					
Africa	-	-	-	-	-	-	-	-	-	-	-	-					
Total Non-OECD	-	-	-	-	-	-	-	-	-	-	-	-					
Processing gains	-	-	-	-	-	-	-	-	-	-	-	-					
Global Biofuels	-	-	-	-	-	-	-	-	-	-	-	-					
Total Non-OPEC Supply	-	-	-	-	-	-	-	-	-	0.1	0.1	0.1					
OPEC																	
Crude ²	-	0.1	-	-	-	-	-	0.1	-	-	-	-					
NGLs	-	-	-	-	-	-	-	-	0.1	0.1	0.1	0.1					
Total OPEC	-	0.1	-	-	-	-	-	0.1	-	-	-	-					
Total Supply	-	0.2	-	-	-	-	-	0.1	-	-	-	-					
STOCK CHANGES AND MISCELLANEOUS																	
REPORTED OECD																	
Industry	-	-	-	-	-	-	-	-0.3	-	-	-	-					
Government	-	-	-	-	-	-	-	-	-	-	-	-					
Total	-	-	-	-	-	-	-	-0.3	-	-	-	-					
Floating storage/Oil in transit	-	-	-	-	-	-	-	0.3	-	-	-	-					
Miscellaneous to balance	0.1	0.2	-0.1	-0.1	-	0.1	-	-0.1	-	-	-	-					
Total Stock Ch. & Misc	0.1	0.2	-0.1	-0.1	-	0.1	-	-0.1	-	-	-	-					
Memo items:																	
Call on OPEC crude + Stock ch.	-0.1	-0.1	0.1	-	-	-	-	0.1	0.2	-0.5	-0.5	-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

	2019	1Q20	2Q20	3Q20	4Q20	2020	1Q21	2Q21	3Q21	4Q21	2021	1Q22	2Q22	3Q22	4Q22	2022
Demand (mb/d)																
Americas	25.65	24.35	20.01	22.72	23.16	22.56	22.79	24.41	25.19	25.27	24.43	24.55	25.20	25.72	25.29	25.19
Europe	14.25	13.33	11.01	12.87	12.51	12.43	11.88	13.06	13.53	13.41	12.98	13.06	13.45	13.79	13.28	13.40
Asia Oceania	7.79	7.75	6.54	6.70	7.29	7.07	7.61	6.98	7.21	7.66	7.36	7.85	7.12	7.25	7.66	7.47
Total OECD	47.69	45.44	37.56	42.28	42.96	42.06	42.28	44.45	45.93	46.35	44.77	45.46	45.77	46.76	46.23	46.06
Asia	27.65	25.34	25.41	27.01	28.29	26.52	28.21	27.90	28.12	29.24	28.37	29.49	29.73	29.19	30.08	29.62
Middle East	8.32	7.85	7.05	8.20	7.85	7.74	7.60	7.62	8.37	7.93	7.88	7.87	7.88	8.39	8.12	8.07
Americas	6.23	5.78	4.93	5.79	5.94	5.61	5.83	5.74	6.01	6.04	5.91	5.86	5.92	6.24	6.23	6.06
FSU	4.78	4.62	4.04	4.78	4.83	4.57	4.64	4.59	4.91	4.99	4.78	4.78	4.62	5.03	5.10	4.88
Africa	4.22	4.15	3.31	3.81	3.98	3.81	4.04	3.85	3.86	4.00	3.94	4.10	3.94	3.96	4.08	4.02
Europe	0.77	0.73	0.61	0.76	0.77	0.72	0.72	0.71	0.77	0.76	0.74	0.71	0.71	0.77	0.77	0.74
Total Non-OECD	51.98	48.47	45.35	50.35	51.65	48.96	51.04	50.42	52.03	52.97	51.62	52.82	52.80	53.59	54.36	53.40
World	99.67	93.90	82.91	92.64	94.61	91.03	93.31	94.87	97.96	99.31	96.39	98.28	98.57	100.35	100.59	99.46
of which: US50	20.54	19.33	16.08	18.36	18.71	18.12	18.34	19.72	20.25	20.25	19.65	19.66	20.22	20.56	20.26	20.18
Europe 5*	8.15	7.61	5.92	7.09	7.02	6.91	6.65	7.36	7.64	7.65	7.33	7.50	7.60	7.73	7.52	7.59
China	13.68	11.86	14.22	14.70	14.91	13.93	14.66	15.06	15.07	15.31	15.03	15.27	15.60	15.45	15.68	15.50
Japan	3.65	3.69	2.89	3.03	3.50	3.27	3.69	3.14	3.29	3.64	3.44	3.76	3.19	3.29	3.63	3.47
India	4.99	4.93	3.90	4.28	5.02	4.53	5.09	4.48	4.59	5.07	4.81	5.19	5.16	4.79	5.21	5.09
Russia	3.58	3.53	3.09	3.60	3.61	3.46	3.53	3.49	3.71	3.75	3.62	3.66	3.53	3.82	3.83	3.71
Brazil	3.08	2.95	2.64	2.99	3.13	2.93	2.97	2.93	3.03	3.07	3.00	2.94	3.01	3.14	3.15	3.06
Saudi Arabia	3.08	2.90	2.73	3.26	2.98	2.97	2.74	2.94	3.34	2.99	3.00	2.85	2.91	3.18	3.04	3.00
Canada	2.37	2.33	1.88	2.16	2.05	2.10	2.01	2.11	2.41	2.44	2.24	2.24	2.24	2.50	2.44	2.35
Korea	2.55	2.51	2.42	2.34	2.38	2.41	2.52	2.45	2.52	2.55	2.51	2.62	2.49	2.50	2.52	2.53
Mexico	2.05	1.97	1.48	1.59	1.68	1.68	1.71	1.91	1.87	1.88	1.84	1.95	2.05	1.99	1.90	1.97
Iran	1.97	1.95	1.75	1.88	1.86	1.86	1.92	1.81	1.87	1.89	1.87	1.98	1.91	1.92	1.89	1.93
Total	69.69	65.55	58.98	65.28	66.83	64.17	65.84	67.41	69.57	70.49	68.34	69.61	69.93	70.87	71.06	70.37
% of World	69.9%	69.8%	71.1%	70.5%	70.6%	70.5%	70.6%	71.1%	71.0%	71.0%	70.9%	70.8%	70.9%	70.6%	70.6%	70.8%
Annual Change (% per annum)																
Americas	-0.3	-3.7	-21.4	-12.7	-10.3	-12.1	-6.4	22.0	10.9	9.1	8.3	7.8	3.2	2.1	0.1	3.1
Europe	-0.5	-4.9	-22.5	-12.3	-11.2	-12.8	-10.9	18.6	5.1	7.2	4.4	9.9	3.0	1.9	-1.0	3.2
Asia Oceania	-2.0	-5.7	-11.7	-11.4	-8.6	-9.2	-1.8	6.6	7.6	5.0	4.1	3.2	2.1	0.5	0.0	1.4
Total OECD	-0.6	-4.4	-20.2	-12.4	-10.3	-11.8	-7.0	18.3	8.6	7.9	6.4	7.5	3.0	1.8	-0.2	2.9
Asia	2.3	-7.3	-8.4	-1.3	0.4	-4.1	11.3	9.8	4.1	3.4	7.0	4.6	6.6	3.8	2.8	4.4
Middle East	0.4	-3.0	-13.6	-6.1	-5.6	-7.0	-3.2	8.1	2.0	1.0	1.8	3.6	3.4	0.3	2.4	2.4
Americas	-0.1	-5.9	-20.8	-7.9	-5.0	-9.9	0.9	16.6	3.8	1.7	5.3	0.6	3.1	3.8	3.1	2.7
FSU	2.0	1.4	-14.0	-3.6	-1.6	-4.4	0.3	13.8	2.7	3.3	4.7	2.9	0.6	2.5	2.1	2.0
Africa	0.3	-3.3	-22.2	-7.4	-5.9	-9.7	-2.6	16.3	1.4	0.7	3.4	1.5	2.3	2.6	1.9	2.1
Europe	2.0	-1.5	-20.7	-3.4	-1.8	-6.9	-1.1	15.8	0.5	-0.8	3.0	-1.3	-0.6	0.7	0.7	-0.1
Total Non-OECD	1.5	-5.2	-12.5	-3.7	-1.9	-5.8	5.3	11.2	3.3	2.6	5.4	3.5	4.7	3.0	2.6	3.4
World	0.5	-4.9	-16.2	-7.8	-5.9	-8.7	-0.6	14.4	5.7	5.0	5.9	5.3	3.9	2.4	1.3	3.2
Annual Change (mb/d)																
Americas	-0.07	-0.95	-5.46	-3.30	-2.66	-3.09	-1.56	4.41	2.48	2.11	1.86	1.77	0.78	0.52	0.02	0.77
Europe	-0.07	-0.69	-3.19	-1.81	-1.58	-1.82	-1.46	2.05	0.66	0.91	0.55	1.18	0.39	0.26	-0.14	0.42
Asia Oceania	-0.16	-0.47	-0.86	-0.86	-0.69	-0.72	-0.14	0.43	0.51	0.37	0.29	0.24	0.14	0.04	0.00	0.11
Total OECD	-0.30	-2.11	-9.51	-5.97	-4.93	-5.63	-3.16	6.89	3.65	3.38	2.70	3.19	1.32	0.82	-0.12	1.29
Asia	0.62	-1.99	-2.33	-0.37	0.13	-1.14	2.87	2.49	1.10	0.96	1.85	1.29	1.83	1.08	0.83	1.25
Middle East	0.04	-0.24	-1.11	-0.53	-0.46	-0.59	-0.25	0.57	0.16	0.08	0.14	0.27	0.26	0.03	0.19	0.19
Americas	-0.01	-0.36	-1.29	-0.50	-0.31	-0.62	0.05	0.82	0.22	0.10	0.30	0.03	0.18	0.23	0.19	0.16
FSU	0.09	0.07	-0.66	-0.18	-0.08	-0.21	0.02	0.56	0.13	0.16	0.22	0.14	0.03	0.12	0.10	0.10
Africa	0.01	-0.14	-0.94	-0.30	-0.25	-0.41	-0.11	0.54	0.05	0.03	0.13	0.06	0.09	0.10	0.08	0.08
Europe	0.02	-0.01	-0.16	-0.03	-0.01	-0.05	-0.01	0.10	0.00	-0.01	0.02	-0.01	0.00	0.01	0.01	0.00
Total Non-OECD	0.77	-2.68	-6.49	-1.91	-0.99	-3.01	2.57	5.08	1.67	1.32	2.65	1.78	2.38	1.56	1.40	1.78
World	0.47	-4.79	-16.00	-7.88	-5.92	-8.64	-0.59	11.96	5.32	4.70	5.36	4.97	3.69	2.38	1.28	3.07
Revisions to Oil Demand from Last Month's Report (mb/d)																
Americas	0.00	0.00	0.00	0.00	0.00	0.00	0.28	0.29	0.16	-0.02	0.18					
Europe	0.00	0.00	0.00	0.00	-0.01	0.00	-0.06	-0.08	-0.06	-0.21	-0.10					
Asia Oceania	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.02	0.03	-0.02	0.00					
Total OECD	-	-0.00	0.00	-0.00	-0.01	-0.00	0.22	0.19	0.14	-0.25	0.07					
Asia	-0.01	0.05	-0.03	-0.06	-0.09	-0.03	-0.07	0.13	-0.20	0.04	-0.02					
Middle East	0.00	0.09	0.08	0.08	0.08	0.08	0.12	0.01	0.00	0.02	0.04					
Americas	0.00	0.01	0.01	0.01	0.00	0.01	-0.03	0.01	-0.06	-0.05	-0.03					
FSU	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	0.02	-0.05	0.09	0.01					
Africa	-0.06	-0.05	-0.03	-0.04	-0.04	-0.04	-0.05	-0.10	-0.10	-0.12	-0.09					
Europe	0.00	0.00	0.00	0.00	0.00	0.00	-0.02	-0.01	-0.02	-0.03	-0.02					
Total Non-OECD	-0.06	0.10	0.03	-0.02	-0.05	0.02	-0.05	0.05	-0.43	-0.05	-0.12					
World	-0.06	0.10	0.04	-0.02	-0.06	0.01	0.17	0.24	-0.29	-0.30	-0.05					
Revisions to Oil Demand Growth from Last Month's Report (mb/d)																
World	0.08	0.16	0.10	0.04	0.01	0.08	0.07	0.20	-0.27	-0.24	-0.06					

* France, Germany, Italy, Spain and UK

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

	2019	2020	2Q20	3Q20	4Q20	1Q21	Jan 21	Feb 21	Mar 21 ²	Latest month vs.	
										Feb 21	Mar 20
Americas											
LPG and ethane	3.84	3.84	3.50	3.50	4.23	4.07	4.57	3.72	3.89	0.17	-0.15
Naphtha	0.24	0.24	0.21	0.23	0.24	0.22	0.23	0.18	0.23	0.06	-0.03
Motor gasoline	11.09	9.52	8.38	10.02	9.53	9.40	8.94	9.14	10.09	0.94	0.75
Jet and kerosene	2.08	1.26	0.78	1.13	1.26	1.31	1.32	1.27	1.33	0.06	-0.32
Gasoil/diesel oil	5.41	4.94	4.56	4.82	5.09	5.12	4.98	5.06	5.32	0.26	0.07
Residual fuel oil	0.56	0.44	0.38	0.53	0.45	0.56	0.50	0.54	0.64	0.10	0.24
Other products	2.43	2.32	2.20	2.48	2.35	2.11	2.16	1.87	2.28	0.41	-0.03
Total	25.65	22.56	20.01	22.72	23.16	22.79	22.70	21.78	23.79	2.01	0.54
Europe											
LPG and ethane	1.17	1.10	0.97	1.12	1.08	1.13	1.14	1.13	1.14	0.01	-0.05
Naphtha	1.01	1.07	1.05	1.02	1.15	1.21	1.29	1.24	1.11	-0.13	0.10
Motor gasoline	2.04	1.78	1.46	2.08	1.75	1.60	1.47	1.57	1.75	0.17	0.13
Jet and kerosene	1.55	0.74	0.40	0.67	0.66	0.62	0.62	0.65	0.59	-0.05	-0.39
Gasoil/diesel oil	6.45	5.90	5.36	6.03	6.01	5.62	5.07	5.75	6.05	0.30	-0.07
Residual fuel oil	0.83	0.68	0.65	0.69	0.68	0.69	0.68	0.67	0.71	0.03	0.00
Other products	1.20	1.16	1.12	1.27	1.18	1.01	0.94	0.99	1.09	0.11	0.00
Total	14.25	12.43	11.01	12.87	12.51	11.88	11.21	12.00	12.44	0.44	-0.28
Asia Oceania											
LPG and ethane	0.76	0.73	0.69	0.67	0.73	0.81	0.84	0.83	0.76	-0.07	-0.03
Naphtha	1.96	1.80	1.75	1.80	1.72	1.95	1.86	1.99	2.00	0.01	0.25
Motor gasoline	1.53	1.40	1.25	1.48	1.47	1.38	1.29	1.43	1.42	-0.01	0.07
Jet and kerosene	0.91	0.61	0.40	0.37	0.69	0.82	0.95	0.85	0.65	-0.21	-0.10
Gasoil/diesel oil	1.92	1.83	1.78	1.77	1.93	1.86	1.75	1.97	1.89	-0.07	0.02
Residual fuel oil	0.42	0.42	0.41	0.39	0.44	0.50	0.52	0.51	0.47	-0.04	0.03
Other products	0.29	0.28	0.26	0.23	0.31	0.29	0.29	0.30	0.29	-0.01	-0.04
Total	7.79	7.07	6.54	6.70	7.29	7.61	7.49	7.88	7.48	-0.40	0.20
OECD											
LPG and ethane	5.77	5.67	5.17	5.29	6.04	6.01	6.54	5.67	5.79	0.12	-0.23
Naphtha	3.21	3.10	3.01	3.05	3.12	3.38	3.38	3.41	3.35	-0.07	0.32
Motor gasoline	14.66	12.71	11.09	13.58	12.75	12.38	11.70	12.15	13.26	1.10	0.95
Jet and kerosene	4.55	2.62	1.58	2.16	2.62	2.74	2.89	2.77	2.57	-0.20	-0.81
Gasoil/diesel oil	13.77	12.66	11.70	12.61	13.03	12.61	11.80	12.78	13.27	0.49	0.03
Residual fuel oil	1.81	1.54	1.43	1.60	1.57	1.75	1.70	1.72	1.82	0.10	0.27
Other products	3.93	3.76	3.58	3.99	3.84	3.41	3.39	3.16	3.66	0.50	-0.06
Total	47.69	42.06	37.56	42.28	42.96	42.28	41.41	41.66	43.71	2.05	0.46

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)

	2019	2020	2Q20	3Q20	4Q20	1Q21	Jan 21	Feb 21	Mar 21 ²	Latest month vs.	
										Feb 21	Mar 20
United States³											
LPG and ethane	2.94	2.99	2.71	2.69	3.34	3.14	3.64	2.70	3.04	0.34	-0.09
Naphtha	0.21	0.18	0.16	0.19	0.19	0.16	0.18	0.13	0.17	0.04	-0.03
Motor gasoline	9.31	8.03	7.11	8.50	8.02	8.00	7.67	7.74	8.58	0.83	0.80
Jet and kerosene	1.75	1.09	0.69	0.97	1.10	1.14	1.14	1.12	1.16	0.04	-0.23
Gasoil/diesel oil	4.10	3.78	3.51	3.70	3.92	3.97	3.94	3.95	4.03	0.09	0.12
Residual fuel oil	0.28	0.22	0.15	0.32	0.23	0.26	0.24	0.26	0.29	0.03	0.18
Other products	1.96	1.83	1.75	1.99	1.90	1.66	1.71	1.43	1.81	0.37	0.04
Total	20.54	18.12	16.08	18.36	18.71	18.34	18.51	17.33	19.07	1.74	0.79
Japan											
LPG and ethane	0.35	0.33	0.31	0.27	0.34	0.42	0.43	0.43	0.40	-0.03	0.02
Naphtha	0.73	0.67	0.62	0.66	0.70	0.73	0.72	0.73	0.74	0.01	0.12
Motor gasoline	0.85	0.78	0.69	0.85	0.82	0.75	0.70	0.78	0.77	-0.01	0.01
Jet and kerosene	0.48	0.37	0.22	0.19	0.44	0.56	0.67	0.60	0.41	-0.19	-0.06
Diesel	0.44	0.41	0.39	0.40	0.43	0.42	0.38	0.45	0.43	-0.01	0.00
Other gasoil	0.33	0.31	0.29	0.28	0.33	0.35	0.35	0.38	0.34	-0.04	0.01
Residual fuel oil	0.23	0.21	0.20	0.19	0.23	0.27	0.29	0.26	0.26	0.01	0.04
Other products	0.24	0.20	0.18	0.18	0.19	0.19	0.21	0.18	0.19	0.02	-0.02
Total	3.65	3.27	2.89	3.03	3.50	3.69	3.74	3.79	3.54	-0.25	0.12
Germany											
LPG and ethane	0.12	0.11	0.11	0.11	0.10	0.11	0.10	0.11	0.12	0.01	0.00
Naphtha	0.27	0.29	0.28	0.27	0.32	0.34	0.35	0.38	0.30	-0.08	0.02
Motor gasoline	0.50	0.45	0.41	0.49	0.44	0.40	0.36	0.39	0.45	0.06	0.02
Jet and kerosene	0.22	0.10	0.06	0.09	0.08	0.09	0.08	0.09	0.10	0.00	-0.03
Diesel	0.77	0.71	0.65	0.75	0.71	0.60	0.53	0.58	0.69	0.11	-0.02
Other gasoil	0.35	0.37	0.44	0.26	0.33	0.23	0.19	0.26	0.25	-0.01	-0.28
Residual fuel oil	0.05	0.05	0.04	0.05	0.05	0.04	0.04	0.04	0.05	0.00	0.00
Other products	0.09	0.08	0.08	0.09	0.08	0.06	0.07	0.07	0.05	-0.02	-0.02
Total	2.36	2.15	2.07	2.12	2.11	1.88	1.71	1.92	2.00	0.08	-0.32
Italy											
LPG and ethane	0.10	0.09	0.07	0.09	0.10	0.10	0.10	0.12	0.09	-0.03	0.00
Naphtha	0.10	0.10	0.09	0.11	0.12	0.11	0.13	0.09	0.11	0.02	0.02
Motor gasoline	0.18	0.16	0.13	0.20	0.16	0.15	0.13	0.17	0.16	-0.01	0.05
Jet and kerosene	0.11	0.05	0.03	0.06	0.05	0.03	0.02	0.04	0.04	-0.01	0.00
Diesel	0.44	0.36	0.27	0.41	0.39	0.38	0.33	0.41	0.39	-0.02	0.15
Other gasoil	0.07	0.07	0.07	0.07	0.08	0.06	0.04	0.06	0.07	0.01	-0.01
Residual fuel oil	0.06	0.06	0.05	0.06	0.05	0.05	0.05	0.05	0.05	0.01	0.00
Other products	0.14	0.13	0.12	0.15	0.14	0.13	0.12	0.12	0.14	0.02	0.04
Total	1.20	1.02	0.82	1.14	1.10	1.01	0.93	1.06	1.06	-0.00	0.26
France											
LPG and ethane	0.13	0.13	0.10	0.13	0.13	0.14	0.13	0.14	0.14	0.00	-0.01
Naphtha	0.11	0.13	0.14	0.11	0.14	0.15	0.16	0.16	0.14	-0.01	0.04
Motor gasoline	0.20	0.17	0.13	0.22	0.17	0.18	0.16	0.17	0.19	0.02	0.05
Jet and kerosene	0.17	0.09	0.04	0.08	0.08	0.08	0.09	0.09	0.06	-0.03	-0.05
Diesel	0.68	0.66	0.54	0.75	0.68	0.67	0.61	0.68	0.74	0.06	0.15
Other gasoil	0.23	0.14	0.16	0.07	0.13	0.17	0.19	0.18	0.15	-0.03	-0.07
Residual fuel oil	0.05	0.03	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.00	0.00
Other products	0.12	0.09	0.08	0.11	0.09	0.07	0.05	0.07	0.08	0.01	0.01
Total	1.69	1.43	1.22	1.52	1.45	1.49	1.42	1.52	1.53	0.01	0.12
United Kingdom											
LPG and ethane	0.14	0.14	0.13	0.12	0.13	0.14	0.14	0.14	0.13	0.00	-0.01
Naphtha	0.03	0.02	0.03	0.02	0.01	0.01	0.01	0.01	0.01	0.00	-0.02
Motor gasoline	0.29	0.22	0.14	0.24	0.23	0.20	0.21	0.17	0.21	0.05	-0.05
Jet and kerosene	0.33	0.18	0.11	0.13	0.17	0.17	0.17	0.18	0.16	-0.02	-0.14
Diesel	0.51	0.42	0.31	0.44	0.45	0.41	0.37	0.42	0.45	0.03	-0.02
Other gasoil	0.14	0.11	0.11	0.13	0.11	0.12	0.10	0.12	0.13	0.00	0.01
Residual fuel oil	0.02	0.02	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.00
Other products	0.12	0.10	0.08	0.10	0.10	0.09	0.10	0.09	0.10	0.01	0.00
Total	1.57	1.21	0.93	1.20	1.22	1.15	1.11	1.15	1.20	0.06	-0.22
Canada											
LPG and ethane	0.44	0.40	0.41	0.39	0.40	0.47	0.45	0.56	0.40	-0.16	-0.04
Naphtha	0.01	0.02	0.02	0.01	0.02	0.02	0.03	0.02	0.02	0.01	0.00
Motor gasoline	0.83	0.72	0.62	0.78	0.71	0.64	0.57	0.67	0.68	0.01	-0.01
Jet and kerosene	0.18	0.08	0.04	0.07	0.07	0.06	0.08	0.05	0.06	0.01	-0.06
Diesel	0.26	0.27	0.27	0.26	0.26	0.27	0.26	0.29	0.26	-0.03	0.00
Other gasoil	0.34	0.30	0.24	0.31	0.31	0.29	0.27	0.26	0.32	0.06	-0.01
Residual fuel oil	0.04	0.03	0.03	0.02	0.02	0.03	0.03	0.01	0.03	0.02	0.00
Other products	0.26	0.29	0.25	0.31	0.25	0.23	0.23	0.22	0.25	0.03	-0.05
Total	2.37	2.10	1.88	2.16	2.05	2.01	1.91	2.08	2.03	-0.05	-0.16

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)

	2020	2021	2022	1Q21	2Q21	3Q21	4Q21	1Q22	Mar 21	Apr 21	May 21
OPEC											
Crude Oil											
Saudi Arabia	9.21			8.47					8.14	8.14	8.48
Iran	2.00			2.30					2.43	2.40	2.40
Iraq	4.05			3.88					3.93	3.95	3.96
UAE	2.86			2.61					2.61	2.61	2.64
Kuwait	2.41			2.34					2.33	2.32	2.36
Angola	1.27			1.14					1.14	1.18	1.13
Nigeria	1.49			1.39					1.42	1.37	1.34
Libya	0.35			1.15					1.20	1.14	1.14
Algeria	0.90			0.87					0.87	0.87	0.89
Congo	0.30			0.28					0.28	0.27	0.27
Gabon	0.20			0.17					0.18	0.19	0.18
Equatorial Guinea	0.11			0.11					0.11	0.12	0.11
Venezuela	0.53			0.53					0.55	0.50	0.53
Total Crude Oil	25.69			25.24					25.19	25.06	25.43
of which Neutral Zone ¹	0.11			0.23					0.23	0.22	0.26
Total NGLs²	5.18	5.30	5.54	5.21	5.31	5.34	5.34	5.54	5.20	5.26	5.34
Total OPEC³	30.86			30.45					30.39	30.32	30.77
NON-OPEC⁴											
OECD											
Americas											
United States	16.57	16.53	17.50	15.66	16.63	16.87	16.95	17.07	16.40	16.48	16.63
Mexico	1.93	1.93	1.96	1.93	1.94	1.92	1.92	1.93	1.95	1.95	1.95
Canada	5.31	5.64	5.81	5.70	5.39	5.65	5.83	5.90	5.68	5.28	5.30
Chile	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.01
Europe											
UK	1.06	0.92	0.94	1.01	0.78	0.92	0.96	0.98	1.03	0.77	0.77
Norway	2.00	2.12	2.20	2.11	2.01	2.14	2.23	2.25	2.09	2.01	1.92
Others	0.48	0.44	0.42	0.45	0.43	0.44	0.44	0.43	0.45	0.41	0.44
Asia Oceania											
Australia	0.54	0.55	0.55	0.52	0.56	0.57	0.56	0.56	0.56	0.55	0.55
Others	0.46	0.48	0.48	0.45	0.48	0.49	0.49	0.49	0.49	0.48	0.48
Others	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.08	0.07
Total OECD	27.90	28.14	29.39	27.38	27.74	28.52	28.91	29.12	28.17	27.46	27.58
NON-OECD											
Former USSR											
Russia	13.50	13.63	13.73	13.42	13.68	13.71	13.73	13.73	13.52	13.70	13.69
Azerbaijan	10.61	10.74	10.82	10.53	10.79	10.81	10.82	10.82	10.60	10.82	10.80
Kazakhstan	0.70	0.72	0.74	0.70	0.70	0.73	0.73	0.74	0.70	0.70	0.69
Others	1.84	1.83	1.81	1.84	1.83	1.82	1.82	1.81	1.86	1.83	1.86
Others	0.36	0.35	0.37	0.35	0.35	0.35	0.36	0.36	0.35	0.35	0.35
Asia											
China	7.00	7.05	6.97	7.03	7.04	7.07	7.04	7.01	7.04	7.00	7.04
China	3.97	4.08	4.08	4.06	4.09	4.10	4.09	4.09	4.09	4.08	4.09
Malaysia	0.60	0.64	0.66	0.61	0.62	0.67	0.66	0.66	0.59	0.57	0.62
India	0.75	0.74	0.72	0.74	0.74	0.74	0.73	0.73	0.75	0.75	0.74
Indonesia	0.73	0.68	0.65	0.71	0.68	0.68	0.67	0.66	0.70	0.69	0.68
Others	0.95	0.90	0.85	0.92	0.91	0.89	0.89	0.87	0.91	0.92	0.91
Europe											
Europe	0.11	0.11	0.10	0.11	0.11	0.11	0.10	0.10	0.11	0.11	0.11
Americas											
Americas	5.33	5.47	5.61	5.30	5.43	5.56	5.57	5.52	5.30	5.36	5.35
Brazil	3.05	3.14	3.27	2.96	3.12	3.22	3.24	3.22	2.96	3.08	3.04
Argentina	0.61	0.63	0.64	0.62	0.63	0.63	0.63	0.64	0.63	0.63	0.63
Colombia	0.79	0.74	0.70	0.75	0.72	0.74	0.73	0.72	0.75	0.72	0.71
Ecuador	0.49	0.53	0.52	0.53	0.54	0.54	0.54	0.53	0.54	0.54	0.54
Others	0.40	0.43	0.47	0.44	0.42	0.43	0.42	0.42	0.43	0.38	0.43
Middle East											
Middle East	3.13	3.18	3.22	3.15	3.17	3.20	3.20	3.22	3.16	3.16	3.16
Oman	0.96	0.98	0.99	0.96	0.97	0.99	0.99	0.99	0.96	0.96	0.96
Qatar	1.88	1.90	1.93	1.89	1.90	1.91	1.91	1.93	1.90	1.90	1.90
Others	0.29	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
Africa											
Africa	1.38	1.28	1.22	1.32	1.31	1.23	1.24	1.24	1.36	1.35	1.33
Egypt	0.60	0.56	0.53	0.57	0.56	0.56	0.55	0.54	0.57	0.56	0.56
Others	0.78	0.72	0.69	0.75	0.75	0.68	0.69	0.70	0.79	0.78	0.76
Total Non-OECD	30.46	30.71	30.84	30.33	30.74	30.88	30.88	30.83	30.49	30.67	30.68
Processing gains ⁵	2.11	2.25	2.38	2.13	2.22	2.34	2.32	2.38	2.15	2.17	2.22
Global Biofuels	2.58	2.82	3.05	2.14	2.97	3.27	2.89	2.52	2.27	2.69	3.03
TOTAL NON-OPEC	63.06	63.93	65.65	61.98	63.67	65.01	65.00	64.84	63.07	63.00	63.51
TOTAL SUPPLY	93.92			92.43					93.46	93.31	94.28

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)

	2020	2021	2022	1Q21	2Q21	3Q21	4Q21	1Q22	Mar 21	Apr 21	May 21
United States											
Alaska	448	434	443	456	437	391	451	461	453	443	442
California	407	372	358	377	374	370	367	363	376	375	374
Texas	4869	4747	5077	4408	4849	4859	4865	4930	4745	4835	4843
Federal Gulf of Mexico ²	1656	1873	1990	1807	1895	1913	1875	1950	1870	1857	1888
Other US Lower 48	3934	3774	4049	3656	3751	3836	3849	3992	3740	3743	3727
NGLs ³	5161	5229	5469	4860	5216	5389	5443	5270	5116	5129	5251
Other Hydrocarbons	100	103	110	91	104	109	106	102	102	101	101
Total	16575	16531	17495	15656	16626	16867	16955	17068	16402	16484	16626
Canada											
Alberta Light/Medium/Heavy	423	425	415	419	431	427	424	419	430	440	424
Alberta Bitumen	1718	2020	2237	1892	1882	2133	2167	2154	1940	1965	1719
Saskatchewan	435	437	422	444	439	435	431	428	438	442	439
Other Crude	492	465	436	469	463	465	464	437	477	455	468
NGLs	956	1004	1024	1015	1029	959	1011	1030	1022	1021	983
Other Upgraders	173	174	172	197	153	166	179	192	184	129	171
Synthetic Crudes	1116	1119	1108	1268	989	1069	1151	1236	1187	831	1101
Total	5312	5644	5813	5705	5387	5654	5827	5896	5678	5282	5305
Mexico											
Crude	1721	1745	1785	1750	1755	1735	1739	1750	1777	1771	1750
NGLs	206	181	172	175	185	183	180	177	173	175	200
Total	1932	1930	1962	1929	1945	1923	1924	1932	1954	1950	1954
UK											
Brent Fields	35	30	27	36	29	27	29	31	35	20	34
Forties Fields	297	213	219	259	121	224	249	242	261	155	134
Ninian Fields	31	26	24	28	24	26	26	25	29	29	23
Flotta Fields	51	52	57	61	29	60	59	59	61	11	16
Other Fields	561	530	550	548	515	518	539	565	562	509	496
NGLs	82	66	60	80	59	61	61	61	83	44	69
Total	1058	917	937	1012	777	917	963	983	1031	767	773
Norway⁵											
Ekofisk-Ula Area	132	133	123	138	135	124	135	132	141	139	140
Oseberg-Troll Area	234	243	254	228	234	249	263	261	234	236	217
Statfjord-Gullfaks Area	230	286	297	265	284	287	306	309	263	279	284
Haltenbanken Area	274	297	300	296	301	291	299	302	309	301	299
Sleipner-Frigg Area	744	825	879	800	808	831	862	874	769	808	810
Other Fields	99	57	94	76	-32	84	99	108	72	-25	-119
NGLs	288	282	255	304	280	276	271	265	305	270	286
Total	2001	2123	2202	2106	2009	2142	2234	2250	2092	2008	1916
Other OECD Europe											
Denmark	71	62	56	63	64	62	60	59	63	66	62
Italy	101	104	106	104	96	109	108	107	117	69	109
Turkey	62	64	63	64	64	64	64	63	64	64	64
Other	90	104	97	101	107	104	102	100	103	107	107
NGLs	7	7	6	7	7	7	7	6	7	7	7
Non-Conventional Oils	151	99	93	111	95	96	96	93	96	93	95
Total	481	440	421	449	432	441	436	428	450	407	443
Australia											
Gippsland Basin	8	7	7	7	7	7	7	7	7	7	7
Cooper-Eromanga Basin	35	31	28	32	31	30	30	29	31	31	31
Carnarvon Basin	106	124	118	120	123	127	125	122	119	122	123
Other Crude	202	209	214	183	213	219	219	217	216	207	211
NGLs	113	110	110	106	111	112	112	111	112	109	110
Total	464	480	478	447	485	495	492	486	486	476	482
Other OECD Asia Oceania											
New Zealand	21	18	17	19	19	18	18	17	17	19	19
Japan	4	4	4	4	4	4	4	4	4	4	4
NGLs	11	11	10	11	11	11	11	11	12	11	11
Non-Conventional Oils	34	37	38	34	39	39	38	38	37	43	36
Total	71	71	70	69	73	72	71	71	70	77	70
OECD											
Crude Oil	19492	19712	20747	19111	19455	20031	20234	20519	19726	19486	19145
NGLs	6832	6896	7113	6564	6904	7006	7102	6937	6830	6774	6924
Non-Conventional Oils ⁴	1578	1536	1525	1705	1385	1483	1575	1666	1612	1200	1508
Total	27903	28143	29386	27380	27744	28519	28910	29122	28167	27460	27578

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					PRIOR YEARS' STOCKS ²			STOCK CHANGES			
	in Million Barrels					in Million Barrels			in mb/d			
	Dec2020	Jan2021	Feb2021	Mar2021	Apr2021*	Apr2018	Apr2019	Apr2020	2Q2020	3Q2020	4Q2020	1Q2021
OECD INDUSTRY-CONTROLLED STOCKS¹												
OECD Americas												
Crude	650.6	641.8	659.2	672.8	659.0	586.9	630.5	697.1	0.52	-0.36	-0.09	0.25
Motor Gasoline	272.0	284.8	270.1	266.8	268.6	271.8	261.3	284.7	-0.10	-0.28	0.18	-0.06
Middle Distillate	224.2	231.0	210.5	210.6	202.8	195.8	199.9	215.3	0.54	-0.07	-0.11	-0.15
Residual Fuel Oil	38.1	40.3	39.3	39.4	39.9	38.7	34.5	42.8	0.07	-0.09	-0.01	0.02
Total Products ³	769.6	768.0	719.6	715.8	718.1	698.8	709.1	771.0	0.90	-0.04	-0.50	-0.60
Total⁴	1612.9	1599.1	1562.6	1571.1	1559.3	1465.2	1528.8	1661.0	1.51	-0.29	-0.80	-0.46
OECD Europe												
Crude	371.0	358.0	347.3	353.0	352.5	362.0	357.9	374.0	0.15	0.00	-0.07	-0.20
Motor Gasoline	98.9	102.7	102.2	90.4	93.6	93.4	88.4	103.6	0.00	-0.10	0.09	-0.09
Middle Distillate	317.4	336.6	329.4	313.4	309.0	256.3	270.6	313.5	0.52	-0.05	-0.19	-0.04
Residual Fuel Oil	67.4	68.0	65.9	66.6	62.9	58.6	59.0	71.0	0.04	-0.06	-0.01	-0.01
Total Products ³	596.1	620.9	605.3	577.8	574.5	521.2	529.6	609.8	0.50	-0.20	-0.18	-0.20
Total⁴	1043.7	1057.3	1031.9	1008.2	1008.9	966.5	970.6	1076.0	0.72	-0.21	-0.39	-0.39
OECD Asia Oceania												
Crude	152.7	144.7	144.4	123.7	130.3	163.1	156.7	151.6	0.29	0.05	-0.12	-0.32
Motor Gasoline	25.9	30.2	29.3	29.1	28.9	25.5	26.1	29.1	-0.01	0.02	-0.01	0.04
Middle Distillate	66.3	71.8	68.9	63.2	63.2	65.1	65.7	65.3	-0.01	0.05	-0.06	-0.03
Residual Fuel Oil	15.6	16.0	17.3	17.1	19.1	18.2	20.1	18.4	-0.01	0.00	-0.02	0.02
Total Products ³	168.5	177.1	176.9	166.2	168.5	166.2	163.6	169.7	0.05	0.07	-0.16	-0.02
Total⁴	380.1	381.1	379.5	346.3	357.9	389.5	381.6	385.4	0.37	0.12	-0.34	-0.37
Total OECD												
Crude	1174.2	1144.5	1150.9	1149.6	1141.8	1111.9	1145.2	1222.7	0.96	-0.31	-0.28	-0.27
Motor Gasoline	396.7	417.6	401.6	386.2	391.1	390.7	375.8	417.4	-0.10	-0.37	0.27	-0.12
Middle Distillate	607.9	639.4	608.8	587.2	575.0	517.2	536.2	594.1	1.04	-0.06	-0.36	-0.23
Residual Fuel Oil	121.0	124.3	122.5	123.1	122.0	115.4	113.5	132.1	0.09	-0.15	-0.04	0.02
Total Products ³	1534.2	1565.9	1501.8	1459.7	1461.1	1386.2	1402.3	1550.5	1.45	-0.16	-0.85	-0.83
Total⁴	3036.7	3037.6	2974.1	2925.6	2926.1	2821.1	2881.0	3122.4	2.61	-0.37	-1.53	-1.23
OECD GOVERNMENT-CONTROLLED STOCKS⁵												
OECD Americas												
Crude	638.1	638.1	637.8	637.8	633.2	664.0	648.6	637.8	0.23	-0.15	-0.04	0.00
Products	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	0.00	0.00	0.00	0.00
OECD Europe												
Crude	205.2	205.1	207.4	207.3	208.2	211.6	209.4	209.2	0.02	-0.01	-0.02	0.02
Products	280.2	282.4	281.9	283.2	282.4	274.9	277.9	276.7	0.01	0.04	0.00	0.03
OECD Asia Oceania												
Crude	374.6	374.6	374.6	374.6	374.6	383.4	378.6	377.3	0.00	0.00	-0.03	0.00
Products	39.1	38.8	38.8	38.8	38.8	38.7	38.8	38.9	0.00	0.00	0.00	0.00
Total OECD												
Crude	1217.9	1217.7	1219.7	1219.6	1216.0	1259.0	1236.6	1224.3	0.25	-0.16	-0.10	0.02
Products	321.3	323.3	322.7	324.0	323.2	315.6	318.6	317.6	0.01	0.05	-0.01	0.03
Total⁴	1541.3	1542.9	1544.3	1545.8	1541.1	1578.3	1557.5	1543.3	0.27	-0.11	-0.11	0.05

* estimated

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

2 Closing stock levels.

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

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

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

Table 4a
INDUSTRY STOCKS¹ ON LAND IN SELECTED COUNTRIES

(million barrels)

	November			December			January			February			March		
	2019	2020	%	2019	2020	%	2020	2021	%	2020	2021	%	2020	2021	%
United States²															
Crude	445.9	500.4	12.2	432.8	485.3	12.1	442.8	475.9	7.5	454.2	493.2	8.6	482.5	501.9	4.0
Motor Gasoline	233.7	241.2	3.2	254.1	243.2	-4.3	264.2	255.1	-3.4	251.7	241.1	-4.2	260.8	237.6	-8.9
Middle Distillate	169.6	196.6	15.9	183.4	201.7	10.0	189.4	207.8	9.7	177.3	185.3	4.5	168.3	186.4	10.8
Residual Fuel Oil	32.7	31.2	-4.6	30.5	30.2	-1.0	30.7	32.0	4.2	31.2	31.2	0.0	34.4	30.9	-10.2
Other Products	221.3	244.4	10.4	210.5	218.5	3.8	200.1	194.0	-3.0	191.3	180.8	-5.5	195.9	180.3	-8.0
Total Products	657.3	713.4	8.5	678.5	693.6	2.2	684.4	688.9	0.7	651.5	638.4	-2.0	659.4	635.2	-3.7
Other ³	180.1	175.6	-2.5	170.6	165.4	-3.0	171.4	165.2	-3.6	173.6	163.3	-5.9	178.9	164.6	-8.0
Total	1283.3	1389.4	8.3	1281.9	1344.3	4.9	1298.6	1330.0	2.4	1279.3	1294.9	1.2	1320.8	1301.7	-1.4
Japan															
Crude	86.9	79.6	-8.4	92.1	79.8	-13.4	75.6	77.0	1.9	79.6	77.0	-3.3	84.4	64.5	-23.6
Motor Gasoline	10.4	12.5	20.2	10.8	12.5	15.7	11.9	13.5	13.4	11.2	13.0	16.1	11.7	12.4	6.0
Middle Distillate	37.1	38.6	4.0	33.1	34.6	4.5	34.0	33.5	-1.5	28.5	30.1	5.6	27.5	27.4	-0.4
Residual Fuel Oil	8.5	7.0	-17.6	7.2	6.6	-8.3	7.8	6.9	-11.5	7.3	7.1	-2.7	6.4	6.5	1.6
Other Products	36.3	35.5	-2.2	35.8	32.3	-9.8	37.5	31.0	-17.3	32.8	32.9	0.3	33.4	31.6	-5.4
Total Products	92.3	93.6	1.4	86.9	86.0	-1.0	91.2	84.9	-6.9	79.8	83.1	4.1	79.0	77.9	-1.4
Other ³	54.4	52.4	-3.7	53.1	49.9	-6.0	54.5	50.1	-8.1	51.8	49.1	-5.2	51.8	47.3	-8.7
Total	233.6	225.6	-3.4	232.1	215.7	-7.1	221.3	212.0	-4.2	211.2	209.2	-0.9	215.2	189.7	-11.8
Germany															
Crude	47.4	50.1	5.7	47.3	51.9	9.7	44.2	52.7	19.2	47.8	49.5	3.6	51.9	52.7	1.5
Motor Gasoline	11.3	11.7	3.5	11.4	10.9	-4.4	11.5	12.7	10.4	11.5	11.7	1.7	11.1	9.0	-18.9
Middle Distillate	22.7	24.3	7.0	24.8	23.3	-6.0	28.3	27.5	-2.8	26.5	25.7	-3.0	23.1	22.7	-1.7
Residual Fuel Oil	8.0	7.2	-10.0	7.0	6.6	-5.7	7.3	7.1	-2.7	6.8	7.6	11.8	7.0	7.5	7.1
Other Products	9.7	9.1	-6.2	10.2	9.3	-8.8	9.4	9.3	-1.1	9.9	9.4	-5.1	9.7	9.5	-2.1
Total Products	51.7	52.3	1.2	53.4	50.1	-6.2	56.5	56.6	0.2	54.7	54.4	-0.5	50.9	48.7	-4.3
Other ³	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	99.1	102.4	3.3	100.7	102.0	1.3	100.7	109.3	8.5	102.5	103.9	1.4	102.8	101.4	-1.4
Italy															
Crude	35.9	36.7	2.2	39.4	40.1	1.8	42.0	37.4	-11.0	37.9	34.3	-9.5	44.8	39.9	-10.9
Motor Gasoline	12.5	12.8	2.4	12.9	11.9	-7.8	12.3	11.6	-5.7	12.8	10.6	-17.2	13.9	9.8	-29.5
Middle Distillate	29.0	29.3	1.0	28.1	26.9	-4.3	29.2	29.0	-0.7	29.6	28.1	-5.1	32.9	28.6	-13.1
Residual Fuel Oil	8.9	7.6	-14.6	8.9	7.9	-11.2	9.0	8.4	-6.7	9.4	7.7	-18.1	9.3	8.1	-12.9
Other Products	14.1	19.9	41.1	13.9	19.3	38.8	14.8	17.7	19.6	16.0	16.8	5.0	17.2	16.1	-6.4
Total Products	64.5	69.6	7.9	63.8	66.0	3.4	65.3	66.7	2.1	67.8	63.2	-6.8	73.3	62.6	-14.6
Other ³	14.5	17.0	17.2	14.9	16.6	11.4	15.6	15.3	-1.9	16.2	15.0	-7.4	16.8	15.8	-6.0
Total	114.9	123.3	7.3	118.1	122.7	3.9	122.9	119.4	-2.8	121.9	112.5	-7.7	134.9	118.3	-12.3
France															
Crude	17.3	13.3	-23.1	11.9	12.4	4.2	10.2	13.4	31.4	9.9	12.3	24.2	11.7	12.8	9.4
Motor Gasoline	3.8	6.1	60.5	3.8	4.8	26.3	4.9	4.9	0.0	5.3	5.4	1.9	4.9	3.9	-20.4
Middle Distillate	19.3	24.1	24.9	21.5	21.5	0.0	20.6	23.4	13.6	20.6	25.2	22.3	22.5	22.3	-0.9
Residual Fuel Oil	1.5	1.7	13.3	1.5	2.3	53.3	1.7	2.1	23.5	1.1	1.8	63.6	1.2	2.0	66.7
Other Products	3.9	4.3	10.3	4.3	3.4	-20.9	4.2	3.5	-16.7	4.5	3.5	-22.2	4.8	3.5	-27.1
Total Products	28.5	36.2	27.0	31.1	32.0	2.9	31.4	33.9	8.0	31.5	35.9	14.0	33.4	31.7	-5.1
Other ³	7.8	7.6	-2.6	7.7	6.5	-15.6	7.9	7.0	-11.4	9.0	7.9	-12.2	8.2	7.9	-3.7
Total	53.6	57.1	6.5	50.7	50.9	0.4	49.5	54.3	9.7	50.4	56.1	11.3	53.3	52.4	-1.7
United Kingdom															
Crude	27.6	26.1	-5.4	28.7	27.9	-2.8	28.6	27.5	-3.8	27.8	24.2	-12.9	29.3	26.5	-9.6
Motor Gasoline	9.2	10.7	16.3	9.1	11.3	24.2	10.9	12.1	11.0	10.9	10.3	-5.5	10.5	9.3	-11.4
Middle Distillate	28.3	30.6	8.1	27.3	30.7	12.5	28.9	31.6	9.3	27.4	29.4	7.3	27.2	26.0	-4.4
Residual Fuel Oil	1.3	1.1	-15.4	1.3	1.2	-7.7	1.3	1.5	15.4	2.1	1.2	-42.9	1.7	1.4	-17.6
Other Products	6.7	6.5	-3.0	7.0	6.9	-1.4	6.6	6.8	3.0	7.0	6.3	-10.0	7.2	5.9	-18.1
Total Products	45.5	48.9	7.5	44.7	50.1	12.1	47.7	52.0	9.0	47.4	47.2	-0.4	46.6	42.6	-8.6
Other ³	8.7	8.7	0.0	7.9	7.4	-6.3	8.2	7.3	-11.0	7.6	7.1	-6.6	7.6	7.8	2.6
Total	81.8	83.7	2.3	81.3	85.4	5.0	84.5	86.8	2.7	82.8	78.5	-5.2	83.5	76.9	-7.9
Canada⁴															
Crude	125.5	131.3	4.6	125.3	133.0	6.1	129.5	132.8	2.5	133.2	133.3	0.1	140.3	138.8	-1.1
Motor Gasoline	14.8	16.2	9.5	15.3	15.9	3.9	16.2	16.7	3.1	15.1	16.4	8.6	17.2	16.2	-5.8
Middle Distillate	11.5	11.9	3.5	12.0	13.0	8.3	11.4	14.1	23.7	11.9	15.2	27.7	12.9	15.0	16.3
Residual Fuel Oil	1.9	2.6	36.8	2.4	2.3	-4.2	2.6	2.6	0.0	2.4	2.8	16.7	2.8	3.3	17.9
Other Products	9.4	8.6	-8.5	9.0	8.0	-11.1	9.7	9.0	-7.2	10.3	10.3	0.0	10.2	10.4	2.0
Total Products	37.6	39.3	4.5	38.7	39.2	1.3	39.9	42.4	6.3	39.7	44.7	12.6	43.1	44.9	4.2
Other ³	19.6	29.4	50.0	17.4	26.9	54.6	15.1	23.8	57.6	14.7	20.2	37.4	14.3	17.8	24.5
Total	182.7	200.0	9.5	181.4	199.1	9.8	184.5	199.0	7.9	187.6	198.2	5.7	197.7	201.5	1.9

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

² US figures exclude US territories.

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

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

Table 5
TOTAL STOCKS ON LAND IN OECD COUNTRIES¹
(millions of barrels² and days³)

	End March 2020		End June 2020		End September 2020		End December 2020		End March 2021 ³	
	Stock	Days Fwd ²	Stock	Days Fwd	Stock	Days Fwd	Stock	Days Fwd	Stock	Days Fwd
	Level	Demand	Level	Demand	Level	Demand	Level	Demand	Level	Demand
OECD Americas										
Canada	197.6	105	202.3	94	195.7	96	199.1	99	201.4	-
Chile	11.9	43	12.4	42	11.9	31	11.0	29	9.7	-
Mexico	23.1	18	23.6	17	35.1	24	36.3	25	36.1	-
United States ⁴	1957.7	122	2110.9	115	2066.2	110	1984.4	108	1941.5	-
Total⁴	2212.4	112	2371.3	105	2331.0	102	2252.9	100	2210.9	91
OECD Asia Oceania										
Australia	42.7	46	41.3	43	40.9	39	40.2	39	43.5	-
Israel	-	-	-	-	-	-	-	-	-	-
Japan	534.9	185	553.8	183	559.5	160	532.4	144	506.5	-
Korea	196.5	81	213.4	91	219.4	92	213.3	85	201.5	-
New Zealand	8.0	69	7.8	52	8.4	51	8.0	51	8.3	-
Total	782.1	120	816.3	122	828.2	114	793.8	104	759.7	109
OECD Europe⁵										
Austria	24.2	111	22.7	89	24.4	108	23.6	113	23.7	-
Belgium	47.9	86	50.1	90	52.8	90	51.7	79	51.2	-
Czech Republic	24.0	148	23.2	105	22.7	116	23.8	135	23.1	-
Denmark	29.2	220	34.1	240	32.1	241	32.3	257	31.7	-
Estonia	2.6	99	4.4	138	3.6	123	3.7	131	2.9	-
Finland	38.7	194	39.7	185	43.3	212	38.5	209	39.1	-
France	162.5	134	165.5	109	167.7	115	158.4	107	162.1	-
Germany	278.8	135	281.3	133	276.6	131	278.2	148	278.2	-
Greece	35.7	147	38.3	147	34.9	147	35.0	150	34.4	-
Hungary	26.2	160	26.2	151	26.9	149	26.8	167	25.8	-
Ireland	10.3	95	12.3	94	12.2	85	11.9	93	11.7	-
Italy	145.2	177	142.3	124	139.9	127	135.8	134	131.3	-
Latvia	2.7	84	3.4	90	3.5	111	3.2	109	3.0	-
Lithuania	7.3	116	7.7	106	7.6	120	7.9	146	7.8	-
Luxembourg	0.7	16	0.7	14	0.6	12	0.6	13	0.6	-
Netherlands	147.1	176	174.4	201	165.5	188	156.6	189	158.1	-
Norway	28.5	160	27.3	158	31.8	170	30.1	140	28.2	-
Poland	83.2	137	82.3	115	82.2	122	81.6	135	83.0	-
Portugal	25.4	151	22.0	103	22.3	109	22.4	124	20.7	-
Slovak Republic	12.5	163	12.1	141	12.6	155	12.7	168	12.4	-
Slovenia	5.2	112	5.4	105	5.4	123	5.3	118	5.3	-
Spain	127.4	145	128.0	115	126.7	112	123.1	110	121.7	-
Sweden	45.2	195	71.9	301	66.5	301	63.0	243	49.8	-
Switzerland	33.4	182	34.4	190	34.5	189	34.0	199	33.7	-
Turkey	89.4	112	86.0	79	89.9	98	85.4	107	84.4	-
United Kingdom	83.5	90	89.9	75	83.5	69	85.5	74	76.9	-
Total	1516.9	138	1585.6	123	1569.6	126	1531.3	129	1500.8	115
Total OECD	4511.5	121	4773.2	113	4728.9	111	4578.0	109	4471.4	101
DAYS OF IEA Net Imports⁶ -	216	-	258	-	254	-	245	-	241	-

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

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

³ End March 2021 forward demand figures are IEA Secretariat forecasts.

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

⁵ Data not available for Iceland.

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

TOTAL OECD STOCKS

CLOSING STOCKS	Total	Government ¹	Industry	Total	Government ¹	Industry
		controlled			controlled	
		Millions of Barrels			Days of Fwd. Demand ²	
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	4511	1537	2974	121	41	80
2Q2020	4773	1561	3212	113	37	76
3Q2020	4729	1551	3177	111	36	74
4Q2020	4578	1541	3037	109	37	72
1Q2021	4471	1546	2926	101	35	66

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 1Q2021 (when latest forecasts are used).

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

	2018	2019	2020	2Q20	3Q20	4Q20	1Q21	Jan 21	Feb 21	Mar 21	Year Earlier	
											Mar 20	change
Saudi Light & Extra Light												
Americas	0.66	0.20	0.26	0.41	0.03	0.11	0.18	0.18	0.08	0.27	0.55	-0.28
Europe	0.69	0.68	0.59	0.79	0.50	0.53	0.43	0.50	0.41	0.38	0.60	-0.22
Asia Oceania	1.45	1.42	1.39	1.36	1.34	1.44	1.41	1.42	1.60	1.22	1.48	-0.26
Saudi Medium												
Americas	0.30	0.12	0.14	0.39	0.06	0.03	0.06	0.17	-	-	0.03	-
Europe	0.01	0.02	0.02	0.03	0.01	0.01	0.01	0.02	-	-	0.06	-
Asia Oceania	0.41	0.23	0.25	0.26	0.25	0.26	0.22	0.22	0.19	0.25	0.20	0.05
Canada Heavy												
Americas	2.41	2.27	2.39	2.14	2.23	2.55	2.58	2.62	2.51	2.61	2.57	0.03
Europe	0.04	0.04	0.03	0.02	0.03	0.03	0.04	0.04	0.06	0.02	0.02	0.00
Asia Oceania	0.00	0.00	0.00	-	0.01	-	0.01	-	0.02	0.02	-	-
Iraqi Basrah Light ²												
Americas	0.50	0.31	0.11	0.05	0.07	0.05	0.06	-	-	0.17	0.29	-0.12
Europe	0.76	0.85	0.58	0.60	0.54	0.54	0.56	0.49	0.58	0.61	0.72	-0.11
Asia Oceania	0.43	0.37	0.22	0.20	0.23	0.20	0.15	0.19	0.17	0.09	0.22	-0.13
Kuwait Blend												
Americas	0.02	-	-	-	-	-	-	-	-	-	-	-
Europe	0.13	0.11	0.04	0.09	0.01	-	-	-	-	-	0.13	-
Asia Oceania	0.66	0.61	0.55	0.67	0.43	0.47	0.47	0.43	0.51	0.47	0.58	-0.11
Iranian Light												
Americas	-	-	-	-	-	-	-	-	-	-	-	-
Europe	0.16	0.00	-	-	-	-	-	-	-	-	-	-
Asia Oceania	0.01	0.00	-	-	-	-	-	-	-	-	-	-
Iranian Heavy ³												
Americas	-	-	-	-	-	-	-	-	-	-	-	-
Europe	0.35	0.04	-	-	-	-	-	-	-	-	-	-
Asia Oceania	0.28	0.14	-	-	-	-	-	-	-	-	-	-
BFOE												
Americas	0.00	0.00	-	-	-	-	-	-	-	-	-	-
Europe	0.35	0.37	0.43	0.32	0.48	0.43	0.39	0.42	0.40	0.35	0.43	-0.08
Asia Oceania	0.09	0.01	0.03	0.02	0.06	0.03	0.08	0.17	0.07	-	-	-
Kazakhstan												
Americas	-	-	-	-	-	-	-	-	-	-	-	-
Europe	0.75	0.76	0.75	0.69	0.77	0.74	0.75	0.70	0.67	0.88	0.63	0.25
Asia Oceania	0.19	0.18	0.07	0.07	0.08	0.03	0.07	0.10	0.08	0.04	0.08	-0.04
Venezuelan 22 API and heavier												
Americas	0.44	0.05	-	-	-	-	-	-	-	-	-	-
Europe	0.03	0.09	0.04	0.04	0.08	0.01	-	-	-	-	0.02	-
Asia Oceania	-	-	-	-	-	-	-	-	-	-	-	-
Mexican Maya												
Americas	0.63	0.51	0.48	0.53	0.47	0.37	0.36	0.40	0.33	0.35	0.50	-0.15
Europe	0.21	0.19	0.16	0.15	0.16	0.18	0.15	0.16	0.18	0.11	0.16	-0.05
Asia Oceania	0.08	0.13	0.12	0.10	0.10	0.16	0.15	0.15	0.18	0.13	0.11	0.01
Russian Urals												
Americas	0.01	0.01	-	-	-	-	-	-	-	-	-	-
Europe	1.40	1.37	1.18	1.10	1.13	1.07	1.05	1.25	0.98	0.91	1.49	-0.58
Asia Oceania	0.00	-	-	-	-	-	0.01	-	0.03	-	-	-
Cabinda and Other Angola												
North America	0.06	0.01	0.01	0.03	-	-	-	-	-	-	-	-
Europe	0.14	0.15	0.12	0.11	0.09	0.10	0.02	0.03	-	0.03	0.13	-0.10
Pacific	0.01	0.00	-	-	-	-	-	-	-	-	-	-
Nigerian Light ⁴												
Americas	0.01	0.03	-	-	-	-	-	-	-	-	-	-
Europe	0.53	0.51	0.49	0.39	0.57	0.52	0.41	0.31	0.38	0.52	0.46	0.06
Asia Oceania	0.02	0.02	0.02	0.01	0.01	0.02	0.00	0.01	-	-	-	-
Libya Light and Medium												
Americas	-	0.00	-	-	-	-	-	-	-	-	-	-
Europe	0.62	0.67	0.19	0.03	0.04	0.49	0.75	0.81	0.73	0.69	0.01	0.68
Asia Oceania	0.02	0.03	0.01	-	-	-	0.01	-	0.02	0.02	0.02	0.00

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)

	2018	2019	2020	2Q19	3Q19	4Q19	1Q20	Jan 21	Feb 21	Mar 21	Year Earlier	
											Mar 20	% change
Crude Oil												
Americas	3759	2698	1880	2961	2654	2292	2097	1586	1771	1743	2051	-15%
Europe	9814	9872	8350	9575	10309	9589	9314	7855	7459	7881	9234	-15%
Asia Oceania	6697	6542	5603	6379	6365	6520	6372	5562	5690	4792	6455	-26%
Total OECD	20269	19111	15834	18914	19329	18401	17784	15004	14919	14416	17740	-19%
LPG												
Americas	22	26	28	21	21	28	31	15	26	252	26	859%
Europe	457	434	422	409	408	438	530	405	345	427	562	-24%
Asia Oceania	553	582	559	551	608	586	647	646	747	542	604	-10%
Total OECD	1032	1042	1009	981	1037	1052	1207	1067	1119	1221	1192	2%
Naphtha												
Americas	8	5	7	4	5	5	7	3	6	20	15	37%
Europe	391	347	409	334	310	396	420	626	454	483	517	-7%
Asia Oceania	1021	993	1005	958	1031	1061	1109	937	1204	1130	1012	12%
Total OECD	1420	1345	1422	1296	1347	1462	1536	1566	1664	1633	1544	6%
Gasoline³												
Americas	773	817	567	1045	957	669	507	448	472	1249	669	87%
Europe	110	112	109	148	92	90	112	65	214	35	68	-48%
Asia Oceania	113	114	126	116	117	110	103	128	178	156	99	57%
Total OECD	996	1043	802	1309	1165	869	722	641	864	1441	837	72%
Jet & Kerosene												
Americas	140	175	158	185	206	170	164	137	104	104	149	-30%
Europe	509	520	337	571	558	496	429	314	278	251	443	-43%
Asia Oceania	89	76	63	60	69	94	119	113	127	57	87	-35%
Total OECD	738	771	558	816	832	760	711	564	509	412	679	-39%
Gasoil/Diesel												
Americas	124	118	135	81	72	117	77	247	199	549	56	873%
Europe	1339	1300	1192	1285	1276	1253	1262	1105	1165	1033	1163	-11%
Asia Oceania	253	262	328	259	270	286	281	329	308	367	226	62%
Total OECD	1716	1680	1656	1625	1618	1656	1621	1681	1673	1949	1446	35%
Heavy Fuel Oil												
Americas	161	116	144	104	85	127	156	172	106	75	195	-61%
Europe	197	223	295	229	240	206	283	380	327	394	327	20%
Asia Oceania	162	101	88	106	116	80	108	132	111	85	83	2%
Total OECD	520	440	526	439	441	413	546	684	544	554	605	-8%
Other Products												
Americas	679	713	592	730	792	809	704	562	456	496	651	-24%
Europe	1011	865	573	902	830	723	665	511	408	618	576	7%
Asia Oceania	263	268	241	279	260	273	288	223	249	266	278	-4%
Total OECD	1952	1846	1406	1911	1882	1804	1657	1296	1113	1381	1505	-8%
Total Products												
Americas	1908	1971	1630	2171	2138	1924	1645	1585	1370	2745	1762	56%
Europe	4013	3800	3338	3878	3714	3602	3702	3407	3191	3241	3656	-11%
Asia Oceania	2454	2397	2410	2328	2470	2490	2654	2508	2924	2604	2390	9%
Total OECD	8374	8168	7378	8377	8323	8016	8000	7501	7485	8590	7808	10%
Total Oil												
Americas	5666	4669	3510	5131	4793	4216	3742	3171	3140	4488	3813	18%
Europe	13827	13672	11688	13452	14023	13191	13016	11262	10650	11122	12890	-14%
Asia Oceania	9151	8939	8014	8707	8836	9010	9027	8071	8614	7396	8845	-16%
Total OECD	28644	27279	23212	27291	27652	26417	25784	22504	22404	23006	25548	-10%

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)

	2018	2019	2020	2Q19	3Q19	4Q19	1Q20	Jan 21	Feb 21	Mar 21	Year Earlier	
											Mar 20	% change
Crude Oil												
Americas	3606	2553	1820	2707	2519	2203	2047	1535	1701	1617	2006	-19%
Europe	9088	8913	7116	8773	9383	8397	8028	6671	6345	6769	7806	-13%
Asia Oceania	6249	5914	5076	5808	5695	5795	5690	4955	5022	4182	5762	-27%
Total OECD	18943	17380	14012	17289	17598	16394	15765	13162	13069	12569	15574	-19%
LPG												
Americas	15	23	22	21	21	25	25	15	18	252	26	887%
Europe	350	303	252	304	274	282	303	252	237	242	290	-17%
Asia Oceania	158	74	57	95	65	54	46	84	26	61	26	133%
Total OECD	523	400	331	420	360	362	373	351	281	555	342	62%
Naphtha												
Americas	4	2	1	1	3	2	1	0	4	17	2	873%
Europe	360	320	390	321	284	348	398	505	382	381	494	-23%
Asia Oceania	924	898	835	868	975	941	924	866	892	854	842	1%
Total OECD	1288	1220	1226	1191	1261	1291	1323	1371	1278	1252	1337	-6%
Gasoline³												
Americas	271	308	194	367	386	234	168	132	111	662	250	165%
Europe	105	108	104	142	89	87	108	63	210	31	63	-50%
Asia Oceania	90	88	109	60	97	101	86	104	171	155	97	60%
Total OECD	466	504	406	569	572	421	362	298	492	849	410	107%
Jet & Kerosene												
Americas	56	39	54	24	55	34	58	38	12	62	47	32%
Europe	445	464	297	521	473	446	365	251	242	249	385	-35%
Asia Oceania	89	76	63	60	69	94	119	113	127	57	87	-35%
Total OECD	590	579	414	605	596	573	541	403	381	368	519	-29%
Gasoil/Diesel												
Americas	100	86	103	40	58	82	61	187	157	462	55	740%
Europe	1160	1126	1062	1091	1026	1168	1143	1026	1089	973	1016	-4%
Asia Oceania	253	261	324	259	264	286	281	329	308	367	226	62%
Total OECD	1513	1473	1489	1390	1349	1537	1485	1542	1554	1802	1298	39%
Heavy Fuel Oil												
Americas	147	102	111	97	81	107	124	149	97	75	163	-54%
Europe	185	202	279	201	210	191	268	352	310	355	309	15%
Asia Oceania	162	100	88	106	114	80	108	132	111	85	83	2%
Total OECD	493	404	477	405	405	378	500	633	517	515	555	-7%
Other Products												
Americas	522	542	514	560	615	646	611	535	437	431	567	-24%
Europe	702	629	352	656	615	510	365	346	295	430	329	31%
Asia Oceania	182	184	164	187	175	198	199	165	195	170	212	-20%
Total OECD	1406	1355	1030	1403	1404	1354	1175	1046	927	1032	1108	-7%
Total Products												
Americas	1115	1103	999	1110	1219	1129	1047	1057	835	1961	1109	77%
Europe	3307	3152	2735	3237	2971	3031	2951	2795	2764	2662	2887	-8%
Asia Oceania	1857	1681	1640	1635	1758	1755	1762	1792	1832	1749	1574	11%
Total OECD	6279	5936	5374	5982	5948	5915	5760	5644	5431	6372	5570	14%
Total Oil												
Americas	4721	3656	2819	3818	3738	3332	3095	2592	2536	3578	3116	15%
Europe	12395	12064	9851	12010	12354	11428	10979	9466	9109	9432	10692	-12%
Asia Oceania	8106	7595	6716	7444	7453	7550	7452	6748	6854	5930	7336	-19%
Total OECD	25223	23316	19386	23271	23545	22310	21526	18806	18500	18940	21144	-10%

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)

	2018	2019	2020	2Q19	3Q19	4Q19	1Q20	Jan 21	Feb 21	Mar 21	Year Earlier	
											Mar 20	% change
Crude Oil												
Americas	153	145	60	253	135	89	50	51	70	125	45	179%
Europe	726	959	1234	802	926	1192	1286	1184	1114	1112	1428	-22%
Asia Oceania	448	628	527	570	670	725	682	607	667	610	693	-12%
Total OECD	1326	1731	1821	1625	1731	2007	2018	1842	1851	1847	2166	-15%
LPG												
Americas	7	3	6	0	0	3	6	0	8	0	1	-98%
Europe	107	131	171	105	134	156	227	154	108	185	271	-32%
Asia Oceania	395	508	501	455	543	532	601	562	721	482	578	-17%
Total OECD	508	642	678	560	678	690	834	716	837	666	850	-22%
Naphtha												
Americas	4	3	6	3	3	3	6	3	2	4	13	-73%
Europe	31	27	20	12	26	48	23	121	73	102	23	338%
Asia Oceania	97	96	170	90	57	120	185	71	311	276	170	63%
Total OECD	132	125	196	105	86	171	213	195	386	382	206	85%
Gasoline³												
Americas	502	509	373	678	571	436	339	316	361	587	419	40%
Europe	5	4	5	6	2	3	4	2	4	4	5	-27%
Asia Oceania	23	26	18	56	20	9	17	24	7	1	2	-55%
Total OECD	530	539	396	740	593	448	360	343	372	592	427	39%
Jet & Kerosene												
Americas	84	136	104	161	151	137	106	98	93	42	102	-59%
Europe	64	56	40	50	85	50	64	63	36	1	58	-98%
Asia Oceania	0	0	0	0	0	0	0	0	0	0	0	na
Total OECD	148	192	144	211	236	186	170	162	128	43	160	-73%
Gasoil/Diesel												
Americas	25	32	32	42	14	35	16	60	42	87	1	6053%
Europe	178	174	131	193	250	85	119	79	77	60	146	-59%
Asia Oceania	0	1	4	0	5	0	0	0	0	0	0	na
Total OECD	203	207	167	235	269	120	135	139	119	147	148	0%
Heavy Fuel Oil												
Americas	15	14	33	6	4	20	31	23	9	0	32	-99%
Europe	12	21	16	28	30	15	15	29	17	39	18	115%
Asia Oceania	0	1	0	0	2	0	0	0	0	0	0	na
Total OECD	27	36	49	35	36	35	46	51	26	39	50	-22%
Other Products												
Americas	157	171	78	170	177	163	93	27	19	65	84	-23%
Europe	308	236	221	246	216	213	299	165	113	188	246	-24%
Asia Oceania	81	83	77	92	85	75	89	58	53	96	66	47%
Total OECD	546	490	376	508	477	451	481	250	185	349	397	-12%
Total Products												
Americas	793	867	631	1060	920	795	597	528	534	784	653	20%
Europe	706	649	604	641	743	571	751	613	427	579	769	-25%
Asia Oceania	597	716	770	693	712	735	892	716	1092	855	816	5%
Total OECD	2095	2232	2005	2394	2375	2101	2240	1856	2054	2219	2238	-1%
Total Oil												
Americas	945	1012	691	1314	1055	884	647	579	604	910	698	30%
Europe	1432	1608	1837	1442	1669	1763	2037	1797	1541	1691	2197	-23%
Asia Oceania	1044	1343	1297	1264	1382	1461	1574	1323	1759	1465	1509	-3%
Total OECD	3421	3963	3826	4020	4107	4108	4259	3698	3905	4066	4404	-8%

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)

	2018	2019	2020	2Q20	3Q20	4Q20	1Q21	Jan 21	Feb 21	Mar 21	Year Earlier Mar 20	change
OECD Americas												
Venezuela	506	81	-	-	-	-	-	-	-	-	-	-
Other Central & South America	795	867	745	625	782	750	648	673	737	542	784	-242
North Sea	150	143	60	83	28	78	83	51	70	125	45	80
Other OECD Europe	1	2	1	4	-	-	-	-	-	-	-	-
Non-OECD Europe	-	-	-	-	-	-	-	-	-	-	-	-
Former Soviet Union	145	189	91	42	80	96	128	116	56	206	192	15
Saudi Arabia	983	601	572	1015	441	293	333	230	366	406	574	-167
Kuwait	78	45	21	-	29	16	7	-	23	-	23	-
Iran	-	-	-	-	-	-	12	-	-	33	-	-
Iraq	519	331	177	176	143	107	115	89	121	135	290	-154
Oman	-	-	-	-	-	-	-	-	-	-	-	-
United Arab Emirates	5	3	5	9	2	10	-	-	-	-	-	-
Other Middle East	-	-	-	-	-	-	-	-	-	-	-	-
West Africa ²	317	267	145	146	128	188	207	284	121	208	82	126
Other Africa	196	137	45	24	34	67	149	111	278	71	11	60
Asia	61	32	17	12	4	11	17	32	-	16	52	-36
Other	3	0	3	-	-	10	-	-	-	-	-	-
Total	3759	2698	1880	2134	1671	1625	1698	1586	1771	1743	2051	-309
of which Non-OECD	3606	2553	1820	2048	1643	1547	1615	1535	1701	1617	2006	-389
OECD Europe												
Canada	81	60	95	67	80	117	108	122	96	104	117	-13
Mexico + USA	645	900	1139	1038	1196	1150	1029	1062	1017	1008	1311	-303
Venezuela	57	106	44	40	91	13	-	-	-	-	28	-
Other Central & South America	132	118	208	151	248	205	143	49	150	231	300	-69
Non-OECD Europe	12	14	25	13	21	34	23	22	23	24	42	-17
Former Soviet Union	4149	4240	3506	3218	3409	3270	3291	3372	3185	3305	3886	-581
Saudi Arabia	818	792	756	1071	637	602	517	562	525	466	723	-257
Kuwait	137	97	48	64	7	30	-	-	-	-	127	-
Iran	536	74	6	-	4	2	-	-	-	-	8	-
Iraq	962	1124	814	847	822	759	765	658	805	835	1018	-182
Oman	-	-	-	-	-	-	-	-	-	-	-	-
United Arab Emirates	2	2	-	-	-	-	-	-	-	-	-	-
Other Middle East	-	3	8	16	13	1	6	-	6	12	-	-
West Africa ²	1115	1140	1075	876	1128	976	781	792	602	931	1265	-334
Other Africa	1161	1180	596	476	450	858	1064	1207	1051	934	380	554
Asia	-	-	0	-	1	-	-	-	-	-	-	-
Other	9	13	11	17	12	5	-	-	-	-	30	-
Total	9816	9863	8331	7895	8120	8022	7727	7846	7459	7851	9234	-1383
of which Non-OECD	9088	8913	7116	6787	6869	6786	6604	6671	6345	6769	7806	-1036
OECD Asia Oceania												
Canada	3	5	1	-	6	-	17	-	18	33	-	-
Mexico + USA	344	613	477	457	336	444	493	368	574	545	693	-148
Venezuela	-	-	-	-	-	-	-	-	-	-	-	-
Other Central & South America	35	48	91	96	75	114	107	86	137	102	162	-60
North Sea	100	10	49	42	79	64	116	238	75	32	-	-
Other OECD Europe	-	-	-	-	-	-	-	-	-	-	-	-
Non-OECD Europe	-	-	-	-	-	-	-	-	-	-	-	-
Former Soviet Union	435	435	300	218	286	295	328	365	263	351	415	-64
Saudi Arabia	2040	1878	1867	1790	1858	1976	1868	1897	2066	1660	1908	-248
Kuwait	672	666	584	704	459	508	482	457	528	466	616	-150
Iran	274	137	-	-	-	-	-	-	-	-	-	-
Iraq	435	364	224	201	226	205	151	188	175	93	222	-128
Oman	56	59	22	-	35	19	15	43	-	-	-	-
United Arab Emirates	1098	1256	1096	1018	975	960	908	979	906	841	1552	-711
Other Middle East	450	449	387	345	374	374	396	407	394	388	404	-16
West Africa ²	95	56	65	46	70	49	46	14	61	65	88	-23
Other Africa	105	90	42	26	40	23	59	55	49	72	63	9
Non-OECD Asia	319	220	161	109	128	207	193	176	210	195	204	-8
Other	235	255	234	245	290	268	155	289	235	-52	128	-180
Total	6697	6542	5602	5298	5237	5505	5336	5562	5690	4792	6455	-1663
of which Non-OECD	6249	5914	5076	4799	4816	5003	4710	4955	5022	4182	5762	-1580
Total OECD Trade	20271	19103	15813	15327	15027	15152	14761	14994	14919	14386	17740	-3354
of which Non-OECD	18943	17380	14012	13634	13328	13336	12928	13162	13069	12569	15574	-3005

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)

	2018	2019	2020	2Q20	3Q20	4Q20	1Q21	Jan 21	Feb 21	Mar 21	Year Earlier	
											Mar 20	change
OECD Americas												
Venezuela	23	4	-	-	-	-	-	-	-	-	-	-
Other Central & South America	64	83	40	65	44	24	10	16	5	10	47	-37
ARA (Belgium Germany Netherlands)	167	189	146	126	199	138	127	85	84	209	178	31
Other Europe	323	293	207	131	255	241	275	225	253	344	219	125
FSU	80	100	67	49	71	89	100	74	58	163	86	77
Saudi Arabia	11	7	6	6	16	-	4	-	7	6	-	-
Algeria	1	-	4	2	5	-	4	-	-	10	10	0
Other Middle East & Africa	19	14	13	8	15	20	23	25	9	34	9	25
Singapore	8	5	1	2	3	-	4	-	-	10	-	-
OECD Asia Oceania	13	28	21	30	15	19	21	6	24	34	27	7
Non-OECD Asia (excl. Singapore)	84	116	72	88	84	53	44	36	32	62	96	-34
Other	0	0	-	-	-	-	137	0	-	397	-	-
Total²	794	838	578	508	707	585	748	467	472	1279	671	608
of which Non-OECD	271	308	194	213	226	167	308	132	111	662	250	412
OECD Europe												
OECD Americas	4	3	3	4	3	4	2	2	2	3	4	-1
Venezuela	0	0	0	1	-	-	1	4	-	-	-	-
Other Central & South America	5	3	4	1	2	5	8	4	-	19	10	9
Non-OECD Europe	11	18	16	15	18	12	9	5	12	10	20	-10
FSU	70	62	44	51	26	41	24	25	32	16	42	-26
Saudi Arabia	2	0	8	7	5	21	-	-	-	-	-	-
Algeria	0	0	1	3	-	-	-	-	-	-	-	-
Other Middle East & Africa	4	8	3	5	3	3	8	15	1	6	1	5
Singapore	2	3	2	1	2	1	-	-	-	-	2	-
OECD Asia Oceania	1	1	1	1	1	1	1	-	2	1	1	-1
Non-OECD Asia (excl. Singapore)	2	0	0	0	-	2	3	4	3	2	-	-
Other	20	21	37	46	45	27	57	21	170	-10	2	-13
Total²	122	121	120	134	106	116	113	80	223	47	83	-36
of which Non-OECD	105	108	104	118	87	103	98	63	210	31	63	-31
OECD Asia Oceania												
OECD Americas	4	6	4	8	0	0	2	0	7	0	0	0
Venezuela	-	-	-	-	-	-	-	-	-	-	-	-
Other Central & South America	-	-	-	-	-	-	-	-	-	-	-	-
ARA (Belgium Germany Netherlands)	13	14	4	1	6	-	9	24	-	1	1	0
Other Europe	7	5	10	22	17	-	-	-	-	-	2	-
FSU	1	0	2	7	-	-	-	-	-	-	2	-
Saudi Arabia	0	1	-	-	-	-	-	-	-	-	-	-
Algeria	-	-	-	-	-	-	-	-	-	-	-	-
Other Middle East & Africa	1	-	1	-	3	-	-	-	-	-	-	-
Singapore	49	46	51	40	72	44	84	46	111	97	56	41
Non-OECD Asia (excl. Singapore)	19	21	37	21	55	52	39	39	39	39	22	17
Other	20	21	19	20	19	19	20	19	21	19	19	0
Total²	114	114	128	118	173	116	153	128	178	156	101	55
of which Non-OECD	90	88	109	81	152	116	142	104	171	155	97	58
Total OECD Trade²	1029	1073	826	760	987	816	1014	675	873	1482	855	627
of which Non-OECD	466	504	406	412	465	386	548	298	492	849	410	439

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)

	2018	2019	2020	2Q20	3Q20	4Q20	1Q21	Jan 21	Feb 21	Mar 21	Year Earlier	
											Mar 20	change
OECD Americas												
Venezuela	4	1	-	-	-	-	-	-	-	-	-	-
Other Central and South America	30	38	34	34	40	39	40	31	50	40	24	16
ARA (Belgium Germany Netherlands)	6	5	11	-	2	36	51	58	12	81	-	-
Other Europe	3	2	5	11	2	4	3	3	-	6	1	5
FSU	16	6	12	22	-	26	35	22	21	61	-	-
Saudi Arabia	17	3	8	-	10	17	23	28	3	36	3	32
Algeria	-	-	-	-	-	-	-	-	-	-	-	-
Other Middle East and Africa	8	2	9	-	4	29	48	78	39	26	-	-
Singapore	1	0	-	-	-	-	-	-	-	-	-	-
OECD Asia Oceania	15	24	16	11	18	26	10	-	31	-	-	-
Non-OECD Asia (excl. Singapore)	23	30	34	31	13	64	48	23	40	82	28	54
Other	-	7	6	6	3	15	78	5	5	217	-	-
Total²	124	118	135	115	91	256	336	247	199	549	56	493
of which Non-OECD	100	86	103	92	69	190	272	187	157	462	55	407
OECD Europe												
OECD Americas	154	138	99	84	156	64	34	47	33	21	117	-96
Venezuela	-	-	-	-	-	-	-	-	-	-	-	-
Other Central and South America	4	0	3	1	7	2	-	-	-	-	5	-
Non-OECD Europe	39	41	30	27	34	33	28	36	22	27	7	19
FSU	714	685	661	647	555	633	721	693	755	719	840	-121
Saudi Arabia	225	205	193	214	183	260	131	156	146	91	-	-
Algeria	-	0	2	7	-	-	-	-	-	-	-	-
Other Middle East and Africa	76	83	71	64	68	73	65	61	93	44	84	-40
Singapore	14	27	17	29	10	13	10	12	12	5	10	-5
OECD Asia Oceania	25	36	32	32	36	32	38	32	43	39	29	10
Non-OECD Asia (excl. Singapore)	151	152	101	95	72	89	72	77	54	84	128	-44
Other	12	10	15	61	11	10	23	11	25	33	-28	61
Total²	1413	1378	1224	1261	1131	1210	1122	1126	1183	1062	1193	-131
of which Non-OECD	1160	1126	1062	1110	914	1082	1027	1026	1089	973	1016	-44
OECD Asia Oceania												
OECD Americas	-	1	4	6	7	3	-	-	-	-	-	-
Venezuela	-	-	-	-	-	-	-	-	-	-	-	-
Other Central and South America	-	-	0	-	-	0	-	-	-	-	-	-
ARA (Belgium Germany Netherlands)	-	-	0	0	-	-	-	-	-	-	-	-
Other Europe	-	-	-	-	-	-	-	-	-	-	-	-
FSU	4	4	2	3	1	1	1	0	2	1	1	0
Saudi Arabia	3	-	-	-	-	-	-	-	-	-	-	-
Algeria	-	-	-	-	-	-	-	-	-	-	-	-
Other Middle East and Africa	8	7	13	22	23	8	13	38	-	-	-	-
Singapore	141	111	91	96	103	85	82	71	85	89	63	27
Non-OECD Asia (excl. Singapore)	91	133	208	209	214	215	229	215	216	256	158	98
Other	5	5	10	10	16	8	11	5	6	21	5	16
Total²	253	262	328	346	365	320	336	329	308	367	226	141
of which Non-OECD	253	261	324	340	358	316	336	329	308	367	226	141
Total OECD Trade²	1790	1758	1687	1722	1588	1785	1794	1702	1691	1978	1476	503
of which Non-OECD	1513	1473	1489	1543	1341	1588	1635	1542	1554	1802	1298	504

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)

	2018	2019	2020	2Q20	3Q20	4Q20	1Q21	Jan 21	Feb 21	Mar 21	Year Earlier	
											Mar 20	change
OECD Americas												
Venezuela	6	0	-	-	-	-	-	-	-	-	-	-
Other Central and South America	2	7	5	5	7	5	3	4	2	3	3	-1
ARA (Belgium Germany Netherlands)	0	-	-	-	-	-	4	11	-	-	-	-
Other Europe	0	0	4	0	8	4	6	17	-	-	1	-
FSU	0	-	0	-	1	-	-	-	-	-	-	-
Saudi Arabia	1	2	6	7	1	14	-	-	-	-	2	-
Algeria	-	-	1	1	3	-	9	2	10	15	-	-
Other Middle East and Africa	2	10	11	4	13	18	6	17	-	1	10	-9
Singapore	6	3	4	1	3	-	-	-	-	-	18	-
OECD Asia Oceania	84	136	100	87	115	95	67	71	93	42	101	-59
Non-OECD Asia (excl. Singapore)	27	14	22	31	24	10	13	17	-	22	14	8
Other	11	3	4	11	-	-	7	-	-	22	-	-
Total²	140	175	158	146	175	145	115	137	104	104	149	-45
of which Non-OECD	56	39	54	60	53	47	38	38	12	62	47	15
OECD Europe												
OECD Americas	32	20	13	14	5	1	1	1	1	1	31	-30
Venezuela	1	-	-	-	-	-	-	-	-	-	-	-
Other Central and South America	2	1	0	-	-	-	-	-	-	-	1	-
Non-OECD Europe	6	2	0	-	1	-	-	-	-	-	-	-
FSU	40	45	22	17	14	26	34	27	37	37	29	8
Saudi Arabia	98	105	40	47	25	30	36	25	63	21	80	-59
Algeria	9	11	9	13	6	6	6	10	-	8	-	-
Other Middle East and Africa	197	199	155	127	166	153	137	151	102	154	171	-17
Singapore	25	29	10	6	6	8	3	8	-	-	28	-
OECD Asia Oceania	32	36	27	23	37	16	32	62	34	0	27	-27
Non-OECD Asia (excl. Singapore)	69	73	50	40	38	54	17	12	20	20	81	-61
Other	1	2	10	38	4	2	12	17	19	1	-5	6
Total²	512	523	337	325	302	296	278	314	278	242	443	-201
of which Non-OECD	445	464	297	287	259	278	248	251	242	249	385	-135
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	-	-	-	-	-	3	8	-	-	-	-
Singapore	28	21	14	5	17	10	5	2	9	4	21	-17
Non-OECD Asia (excl. Singapore)	26	29	28	15	16	28	55	60	72	35	42	-7
Other	33	26	21	16	9	19	36	44	46	18	24	-6
Total²	89	76	63	35	41	58	98	113	127	57	87	-30
of which Non-OECD	89	76	63	35	41	58	98	113	127	57	87	-30
Total OECD Trade²	741	774	558	506	518	499	492	564	509	403	679	-277
of which Non-OECD	590	579	414	382	353	382	384	403	381	368	519	-151

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)

	2018	2019	2020	2Q20	3Q20	4Q20	1Q21	Jan 21	Feb 21	Mar 21	Year Earlier	
											Mar 20	change
OECD Americas												
Venezuela	42	7	-	-	-	-	-	-	-	-	-	-
Other Central and South America	72	50	52	67	34	38	29	18	46	24	144	-120
ARA (Belgium Germany Netherlands)	7	6	12	16	9	15	3	8	-	-	0	-
Other Europe	7	8	21	30	13	17	8	15	9	0	32	-31
FSU	23	30	44	33	43	51	62	92	49	44	18	26
Saudi Arabia	-	2	2	-	7	-	-	-	-	-	-	-
Algeria	-	8	2	0	0	-	8	20	-	4	2	2
Other Middle East and Africa	7	5	10	3	30	7	6	17	-	1	-	-
Singapore	-	1	1	3	-	-	-	-	-	-	-	-
OECD Asia Oceania	-	-	-	-	-	-	-	-	-	-	-	-
Non-OECD Asia (excl. Singapore)	0	0	-	-	-	-	-	-	-	-	-	-
Other	2	-	0	-	-	1	2	2	2	2	-	-
Total²	161	117	145	153	136	131	118	172	106	75	196	-120
of which Non-OECD	147	102	111	107	113	98	107	149	97	75	163	-88
OECD Europe												
OECD Americas	4	7	12	10	17	12	28	29	17	38	15	23
Venezuela	-	-	-	-	-	-	-	-	-	-	-	-
Other Central and South America	3	5	6	-	14	5	5	1	14	-	0	-
Non-OECD Europe	17	21	13	11	16	21	12	14	12	10	1	8
FSU	154	154	149	145	141	156	272	243	215	351	191	160
Saudi Arabia	1	-	2	7	-	-	-	-	-	-	-	-
Algeria	1	0	2	7	-	-	3	8	-	-	0	-
Other Middle East and Africa	15	19	13	13	9	14	14	7	10	26	16	10
Singapore	-	1	3	4	1	4	2	7	-	-	3	-
OECD Asia Oceania	8	14	4	5	3	3	0	-	-	1	3	-2
Non-OECD Asia (excl. Singapore)	0	3	-	-	-	-	-	-	-	-	-	-
Other	5	8	93	66	113	99	48	91	51	2	98	-96
Total²	208	232	295	268	313	315	384	398	319	428	328	100
of which Non-OECD	185	202	279	253	298	295	340	352	310	355	309	45
OECD Asia Oceania												
OECD Americas	0	1	-	-	-	-	-	-	-	-	-	-
Venezuela	-	-	-	-	-	-	-	-	-	-	-	-
Other Central and South America	-	-	0	-	-	0	-	-	-	-	-	-
ARA (Belgium Germany Netherlands)	-	-	-	-	-	-	-	-	-	-	-	-
Other Europe	-	-	-	-	-	-	-	-	-	-	-	-
FSU	16	6	5	9	2	-	1	4	-	-	13	-
Saudi Arabia	-	1	1	-	3	-	-	-	-	-	-	-
Algeria	-	-	-	-	-	-	-	-	-	-	-	-
Other Middle East and Africa	23	27	38	14	61	35	32	51	23	19	51	-33
Singapore	37	25	18	10	23	14	27	28	8	44	7	37
Non-OECD Asia (excl. Singapore)	85	40	26	13	29	31	49	48	79	22	12	10
Other	0	1	-	-	-	-	-	-	-	-	-	-
Total²	162	101	88	46	118	80	109	132	111	85	83	2
of which Non-OECD	162	100	88	46	118	80	109	132	111	85	83	2
Total OECD Trade²	531	450	528	467	567	525	611	702	536	588	607	-18
of which Non-OECD	493	404	477	406	529	473	556	633	517	515	555	-41

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)

	2018	2019	2020	2Q20	3Q20	4Q20	1Q21	Dec 20	Jan 21	Feb 21	Mar 21	Apr 21	May 21
CRUDE OIL PRICES													
IEA CIF Average Import¹													
IEA Americas	60.02	56.93	37.31	24.30	39.34	40.17	53.66	43.80	48.26	53.78	59.14		
IEA Europe	70.52	64.25	42.88	28.35	43.29	43.99	60.09	48.89	54.39	61.15	65.00		
IEA Asia Oceania	72.46	66.38	46.28	30.10	42.99	44.27	57.82	46.34	52.49	57.65	63.86		
IEA Total	67.77	62.75	42.18	27.60	42.12	43.00	57.62	46.82	52.09	58.08	62.98		
FOB Spot													
North Sea Dated	71.27	64.12	41.76	29.57	42.82	44.03	61.07	49.72	54.73	62.23	65.56	64.59	68.54
Brent (Asia) Mth 1	72.23	64.86	44.86	36.46	44.20	45.86	61.55	50.72	55.29	62.51	66.20	65.58	68.50
WTI (Cushing) Mth 1	65.20	57.03	39.25	27.95	40.90	42.63	58.13	47.05	52.10	59.06	62.35	61.71	65.18
Urals (Mediterranean)	70.17	64.31	41.93	30.29	43.39	44.49	60.41	50.07	54.89	61.47	64.29	63.15	67.30
Dubai (1st month)	69.65	63.49	42.36	31.17	42.80	44.62	60.20	49.78	54.76	60.85	64.40	62.92	66.34
Tapis (Dated)	73.44	69.16	43.28	28.66	43.69	44.21	62.30	50.88	55.98	63.06	67.16	65.74	69.45
PRODUCT PRICES													
Rotterdam, Barges FOB													
Premium Unl 10 ppm	78.78	71.35	44.65	30.56	46.58	46.99	65.71	50.77	58.22	65.90	72.05	75.04	78.36
Naphtha	64.48	56.27	39.64	26.52	41.90	43.64	60.82	48.16	55.84	62.06	64.08	62.39	66.32
Jet/Kerosene	86.39	79.24	44.79	29.76	41.92	46.75	64.04	53.72	58.79	65.40	67.43	67.80	72.45
ULSD 10ppm	86.22	79.45	49.32	37.55	47.49	48.86	66.15	55.20	60.06	67.89	69.93	69.58	74.53
Gasoil 0.1 %	84.28	77.73	48.10	36.43	45.99	48.05	65.02	54.37	59.16	66.71	68.65	68.19	73.42
LSFO 1%	63.22	62.21	42.78	30.10	41.34	46.27	62.77	50.76	56.30	64.26	67.09	64.69	65.89
HSFO 3.5%	61.13	50.31	34.43	24.05	38.33	41.40	55.34	44.99	50.34	56.05	59.06	57.61	58.94
Mediterranean, FOB Cargoes													
Premium Unl 10 ppm	79.41	71.31	45.59	31.91	47.45	47.42	66.81	51.33	58.92	66.86	73.62	74.64	77.42
Naphtha	66.08	54.43	37.81	23.72	40.74	42.80	59.29	47.08	54.51	60.28	62.59	60.82	64.72
Jet Aviation Fuel	85.37	77.76	43.28	27.43	40.88	46.01	62.77	52.75	57.67	63.87	66.24	66.44	71.03
ULSD 10ppm	86.03	79.05	48.76	36.15	47.45	49.02	65.71	55.33	59.93	67.18	69.46	68.98	73.90
Gasoil 0.1 %	84.74	77.70	47.60	34.06	46.32	48.48	64.76	54.94	59.31	66.02	68.39	67.95	72.48
LSFO 1%	64.31	63.90	44.06	31.39	42.26	47.07	63.60	51.18	56.92	65.16	68.04	65.86	66.78
HSFO 3.5%	62.06	52.17	34.36	24.32	37.23	39.72	53.60	43.19	48.92	54.37	57.01	55.68	57.32
US Gulf, FOB Pipeline													
Super Unleaded	85.71	79.24	50.64	39.80	52.55	52.94	76.13	57.76	65.73	74.84	85.80	86.58	90.81
Unleaded	80.10	72.28	46.02	34.95	49.24	49.93	72.92	54.50	63.02	72.03	81.83	82.38	85.60
Jet/Kerosene	85.12	78.81	46.20	32.58	45.02	49.16	65.77	55.52	59.42	67.50	69.60	69.66	73.41
ULSD 10 ppm	85.94	79.09	50.17	38.27	48.59	52.24	71.63	58.92	64.07	73.16	76.61	76.25	82.82
No. 6 3% ²	60.20	52.57	34.63	24.69	37.70	40.20	51.93	43.67	48.00	52.87	54.40	56.04	56.54
Singapore, FOB Cargoes													
Premium Unleaded	80.21	72.55	46.65	33.23	47.32	48.72	67.39	53.43	60.03	67.83	73.43	73.94	76.11
Naphtha	67.50	57.15	40.77	28.05	43.29	43.51	61.09	47.80	55.83	61.85	65.03	62.40	65.94
Jet/Kerosene	85.05	77.26	44.83	30.73	42.13	47.08	63.47	53.87	58.02	65.15	66.82	66.74	71.71
Gasoil 0.05%	84.33	77.23	48.43	36.58	47.00	48.38	64.93	54.50	58.87	66.70	68.75	67.73	72.11
HSFO 180 CST	67.04	58.62	39.32	29.24	40.35	44.09	56.74	47.43	51.40	57.61	60.67	59.02	59.71
HSFO 380 CST 4%	66.01	57.57	38.25	27.95	39.59	43.26	56.09	46.83	51.17	56.64	59.92	58.00	58.63

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

IEA Americas includes United States and Canada.

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

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

² Waterborne

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Table 14
MONTHLY AVERAGE END-USER PRICES FOR PETROLEUM PRODUCTS

May 2021

NATIONAL CURRENCY *							US DOLLARS						
Total	% change from		Ex-Tax	% change from			Total	% change from		Ex-Tax	% change from		
Price	Apr-21	May-20	Price	Apr-21	May-20		Price	Apr-21	May-20	Price	Apr-21	May-20	
GASOLINE ¹ (per litre)													
France	1.523	0.5	22.5	0.578	1.0	67.5	1.851	2.1	36.5	0.702	2.7	86.7	
Germany	1.536	1.0	28.6	0.636	2.1	82.2	1.866	2.6	43.3	0.773	3.7	103.0	
Italy	1.588	0.9	16.4	0.574	2.1	47.2	1.930	2.5	29.7	0.697	3.8	64.0	
Spain	1.347	2.0	24.8	0.640	3.6	52.7	1.637	3.7	39.1	0.778	5.2	70.2	
United Kingdom	1.272	1.4	19.8	0.480	3.0	56.9	1.792	3.2	37.2	0.676	4.8	79.7	
Japan	151.9	1.0	20.8	81.5	1.7	41.2	1.393	1.0	18.8	0.747	1.8	38.8	
Canada	1.332	2.5	42.3	0.863	3.6	66.3	1.099	5.6	64.1	0.712	6.8	91.7	
United States	0.789	4.5	59.7	0.661	5.4	80.1	0.789	4.5	59.7	0.661	5.4	80.1	
AUTOMOTIVE DIESEL FOR NON COMMERCIAL USE (per litre)													
France	1.388	1.1	19.1	0.548	2.4	51.4	1.687	2.7	32.7	0.666	4.1	68.7	
Germany	1.327	1.4	26.7	0.645	2.4	57.3	1.613	3.0	41.2	0.784	4.0	75.3	
Italy	1.447	0.8	15.3	0.569	1.6	38.1	1.758	2.4	28.5	0.691	3.2	53.9	
Spain	1.204	1.9	22.1	0.616	3.2	41.3	1.463	3.6	36.1	0.749	4.8	57.4	
United Kingdom	1.309	1.0	15.4	0.512	2.4	39.9	1.844	2.8	32.2	0.721	4.2	60.2	
Japan	132.0	1.1	23.4	88.0	1.5	34.8	1.210	1.1	21.3	0.807	1.5	32.5	
Canada	1.264	2.3	40.6	0.846	3.2	58.4	1.043	5.4	62.1	0.698	6.4	82.6	
United States	0.850	2.8	34.5	0.701	3.4	44.8	0.850	2.8	34.5	0.701	3.4	44.8	
DOMESTIC HEATING OIL (per litre)													
France	0.857	1.6	17.6	0.558	2.0	23.7	1.041	3.2	31.1	0.678	3.6	37.9	
Germany	0.706	2.8	47.5	0.532	3.2	56.1	0.857	4.5	64.4	0.646	4.8	73.9	
Italy	1.246	0.7	16.6	0.618	1.1	30.8	1.514	2.3	29.9	0.751	2.8	45.7	
Spain	0.687	2.5	48.1	0.471	3.0	64.4	0.834	4.1	65.0	0.572	4.6	83.1	
United Kingdom	0.561	4.6	44.1	0.423	5.9	63.0	0.790	6.5	65.1	0.596	7.8	86.8	
Japan ²	92.8	1.1	21.8	81.5	1.1	22.7	0.851	1.1	19.7	0.748	1.1	20.6	
Canada	1.171	2.3	44.0	1.017	2.4	44.4	0.966	5.5	66.0	0.839	5.5	66.5	
United States	-	-	-	-	-	-	-	-	-	-	-	-	
LOW SULPHUR FUEL OIL FOR INDUSTRY ³ (per kg)													
France	0.564	- 0.0	50.5	0.424	-0.0	80.5	0.685	1.6	67.7	0.515	1.6	101.1	
Germany	-	-	-	-	-	-	-	-	-	-	-	-	
Italy	0.500	- 0.3	59.5	0.469	-0.4	66.1	0.608	1.2	77.7	0.570	1.2	85.1	
Spain	0.425	0.4	66.8	0.408	0.4	71.6	0.517	2.0	85.9	0.496	2.0	91.2	
United Kingdom	-	-	-	-	-	-	-	-	-	-	-	-	
Japan	-	-	-	-	-	-	-	-	-	-	-	-	
Canada	-	-	-	-	-	-	-	-	-	-	-	-	
United States	-	-	-	-	-	-	-	-	-	-	-	-	

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

² Kerosene for Japan.

³ VAT excluded from prices for low sulphur fuel oil when refunded to industry.

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

Table 15
IEA/KBC Global Indicator Refining Margins¹
 (\$/bbl)

	Monthly Average				Change	Average for week ending:					
	Feb 21	Mar 21	Apr 21	May 21	May-Apr	07 May	14 May	21 May	28 May	04 Jun	
NW Europe											
Brent (Cracking)	0.46	0.26	1.93	1.53	↓	-0.40	1.38	1.41	1.69	1.59	2.44
Urals (Cracking)	1.45	1.78	3.50	2.35	↓	-1.15	2.51	2.01	2.52	2.39	3.01
Brent (Hydroskimming)	-0.03	-0.57	0.20	-0.75	↓	-0.95	-0.85	-0.65	-0.73	-0.80	0.18
Urals (Hydroskimming)	-0.98	-0.94	0.09	-1.64	↓	-1.73	-1.29	-1.88	-1.66	-1.66	-0.88
Mediterranean											
Es Sider (Cracking)	2.49	2.95	3.83	3.05	↓	-0.78	3.05	3.28	3.33	2.52	3.37
Urals (Cracking)	0.75	0.74	1.47	0.80	↓	-0.67	0.83	0.34	0.91	1.11	1.51
Es Sider (Hydroskimming)	2.15	2.62	3.08	1.65	↓	-1.43	1.85	2.06	1.74	0.99	1.95
Urals (Hydroskimming)	-2.25	-2.32	-1.88	-3.19	↓	-1.30	-2.83	-3.59	-3.29	-2.96	-2.45
US Gulf Coast											
Mars (Cracking)	3.33	5.30	6.29	5.60	↓	-0.69	6.39	6.30	5.34	4.54	4.71
50/50 HLS/LLS (Coking)	9.06	12.65	13.43	13.97	↑	0.53	13.98	14.57	14.21	13.10	13.01
50/50 Maya/Mars (Coking)	5.00	7.61	8.66	9.21	↑	0.56	8.99	9.69	9.56	8.57	8.68
ASCI (Coking)	6.94	9.72	10.07	10.88	↑	0.81	10.84	11.49	11.11	10.07	9.93
US Midwest											
30/70 WCS/Bakken (Cracking)	9.69	12.09	14.55	16.64	↑	2.09	16.35	17.13	16.43	16.67	18.25
Bakken (Cracking)	11.55	14.46	17.06	19.55	↑	2.49	18.84	20.15	19.59	19.63	21.32
WTI (Coking)	10.92	16.24	18.01	20.02	↑	2.01	19.29	20.93	19.96	19.90	21.42
30/70 WCS/Bakken (Coking)	12.00	15.26	17.45	20.53	↑	3.08	19.66	21.02	20.63	20.87	22.46
Singapore											
Dubai (Hydroskimming)	-1.83	-2.55	-2.38	-3.48	↓	-1.10	-2.52	-2.90	-3.90	-4.49	-3.50
Tapis (Hydroskimming)	2.43	0.54	1.27	0.77	↓	-0.51	0.59	0.15	1.21	1.02	2.55
Dubai (Hydrocracking)	3.71	2.56	3.21	2.95	↓	-0.26	3.25	3.24	2.93	2.38	2.74
Tapis (Hydrocracking)	1.14	-0.22	0.67	0.61	↓	-0.06	0.13	-0.19	1.27	1.06	1.95

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

Source: IEA, KBC Advanced Technologies (KBC)

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

	Jan-21	Feb-21	Mar-21	Mar-20	Mar 21 vs Previous Month	Mar 21 vs Previous Year	Mar 21 vs 5 Year Average	5 Year Average
OECD Americas								
Naphtha	1.3	1.1	1.1	1.4	0.0	-0.2	-0.4	1.5
Motor gasoline	46.1	46.2	45.9	44.0	-0.3	1.9	0.6	45.3
Jet/kerosene	7.3	6.6	6.6	7.8	0.0	-1.2	-2.4	9.0
Gasoil/diesel oil	28.9	28.1	29.2	30.4	1.1	-1.2	0.6	28.6
Residual fuel oil	3.0	3.5	3.5	2.4	0.0	1.1	0.1	3.3
Petroleum coke	4.2	4.2	4.2	4.6	0.0	-0.4	-0.4	4.6
Other products	11.7	12.2	13.0	13.1	0.8	-0.1	0.9	12.0
OECD Europe								
Naphtha	9.7	10.1	9.6	8.6	-0.6	1.0	0.9	8.7
Motor gasoline	21.1	19.4	19.7	19.2	0.2	0.5	-0.4	20.1
Jet/kerosene	5.3	5.3	5.1	7.5	-0.2	-2.4	-3.1	8.2
Gasoil/diesel oil	41.2	41.0	41.3	40.9	0.2	0.4	1.3	39.9
Residual fuel oil	8.2	9.1	8.6	8.8	-0.5	-0.2	-1.4	10.0
Petroleum coke	1.6	1.6	1.5	1.6	-0.1	0.0	0.1	1.4
Other products	15.2	16.1	17.0	15.5	0.9	1.5	2.7	14.3
OECD Asia Oceania								
Naphtha	15.6	16.4	16.0	15.5	-0.3	0.5	0.9	15.2
Motor gasoline	21.7	22.2	22.5	21.4	0.3	1.2	0.8	21.7
Jet/kerosene	14.2	13.5	11.6	14.6	-1.9	-2.9	-3.8	15.4
Gasoil/diesel oil	30.2	30.2	30.9	29.7	0.7	1.2	2.0	28.9
Residual fuel oil	7.5	7.5	8.1	8.4	0.6	-0.3	0.4	7.7
Petroleum coke	0.4	0.4	0.3	0.3	-0.1	0.0	-0.1	0.4
Other products	12.9	12.6	12.6	12.2	0.0	0.4	0.4	12.2
OECD Total								
Naphtha	6.5	7.0	6.4	6.3	-0.6	0.1	0.1	6.3
Motor gasoline	33.9	32.8	33.5	31.9	0.6	1.6	0.6	32.9
Jet/kerosene	7.9	7.5	7.0	9.0	-0.5	-2.0	-2.9	9.9
Gasoil/diesel oil	32.9	32.7	33.3	33.6	0.6	-0.3	1.0	32.3
Residual fuel oil	5.4	6.1	5.9	5.5	-0.2	0.4	-0.3	6.3
Petroleum coke	2.7	2.6	2.6	2.8	0.0	-0.2	-0.1	2.8
Other products	13.0	13.5	14.2	13.7	0.7	0.5	1.4	12.8

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)

	2019	2020	2021	3Q20	4Q20	1Q21	Mar 21	Apr 21	May 21
ETHANOL									
OECD Americas¹	1060	936	1007	953	1002	932	976	982	1039
United States	1029	906	976	923	972	901	946	951	1007
Other	31	30	31	30	30	30			
OECD Europe²	97	90	101	103	85	94	101	103	103
France	20	16	17	22	15	19	21	16	16
Germany	12	11	12	14	10	18	19	10	10
Spain	9	8	9	8	8	5	5	11	11
United Kingdom	4	4	11	5	5	9	11	11	11
Other	51	50	52	54	48	43			
OECD Asia Oceania³	5	4	5	4	5	4	4	5	5
Australia	4	3	3	3	3	4	4	3	3
Other	1	1	1	1	1	0			
Total OECD Ethanol	1163	1030	1113	1061	1092	1029	1081	1090	1147
Total Non-OECD Ethanol	813	743	799	1147	664	320	340	670	958
Brazil	621	560	579	959	467	99	119	449	738
China	67	69	76	74	83	76			
Argentina	19	15	18	15	15	18			
Other	106	99	126	99	99	126	220	220	220
TOTAL ETHANOL	1976	1774	1912	2208	1756	1349	1421	1760	2105
BIODIESEL									
OECD Americas¹	119	125	171	132	128	108	133	174	174
United States	113	118	163	125	122	107	131	164	164
Other	7	6	7	6	6	2			
OECD Europe²	281	261	290	288	274	248	273	304	304
France	42	41	43	47	41	49	55	41	41
Germany	66	60	66	68	56	49	51	72	72
Italy	18	28	31	29	28	26			
Spain	38	34	39	38	36	28	29	42	42
Other	116	99	112	106	114	96	111	117	117
OECD Asia Oceania³	15	20	23	24	17	12	14	27	27
Australia	2	3	4	3	3	1	1	5	5
Other	13	17	19	21	14	11			
Total OECD Biodiesel	415	405	484	443	419	369	420	504	504
Total Non-OECD Biodiesel	388	405	425	406	406	424	424	425	425
Brazil	102	111	117	124	113	116	128	130	116
Argentina*	42	27	36	27	27	36			
Other	245	267	272	254	265	272			
TOTAL BIODIESEL	803	810	909	849	825	793	844	929	929
GLOBAL BIOFUELS	2779	2584	2820	3057	2581	2142	2265	2689	3034

* monthly data not available.

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