



Organization of the Petroleum Exporting Countries



OPEC Monthly Oil Market Report

14 December 2020

Feature article:
Review of 2020; outlook for 2021

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Oil Market Highlights

Crude Oil Price Movements

The OPEC Reference Basket (ORB) rose by \$2.53, or 6.3%, month-on-month (m-o-m), to stand at \$42.61/b in November. Year-to-date (y-t-d), the ORB has averaged \$40.75/b, down by \$23.07 compared to the same period last year. Spot crude prices bounced back in November, following a rally in crude futures contracts after positive news on COVID-19 vaccines raised optimism about a recovery in oil demand. Crude oil futures prices on both sides of the Atlantic settled higher in November, with front-month ICE Brent increasing \$2.46, m-o-m, to average \$43.98/b, and NYMEX WTI \$1.79 higher to settle at \$41.35/b, m-o-m. Consequently, the Brent-WTI spread widened slightly by 66¢, m-o-m, to average \$2.63/b. The contango structure of crude oil futures prices flattened considerably in November, and prompt time-spreads of DME Oman flipped into backwardation in the second half of the month. In November, hedge funds and other money managers turned more positive on the outlook for oil prices, amid prospects for improving global oil demand fundamentals in the coming months.

World Economy

Global economic growth is revised up slightly for 2020, after a better-than-expected performance in 3Q20, now showing a contraction of 4.2% y-o-y, compared to the previous month's forecast of -4.3%. While the 2021 forecast remains at 4.4%, recent positive news about faster-than-anticipated vaccination programmes in major economies provides potential upside for next year's growth forecast. US economic growth remains unchanged at -3.6% for 2020 and at 3.4% for 2021. The Euro-zone forecast is revised down to -7.3%, while the 2021 growth forecast remains at 3.7%. Japan's economic forecast is revised up to -5.2% for 2020 but remains at growth of 2.8% for 2021. China's economic growth remains at 2.0% for 2020 and at 6.9% in 2021. The forecast for India remains at -9.2% for 2020 and 6.8% for 2021. Brazil's 2020 forecast is revised up to -5.8%, but remains at 2.4% for 2021. Russia's economic growth forecast in 2020 is revised up to -4.5%, while the growth forecast for 2021 remains unchanged at 2.9%.

World Oil Demand

World oil demand for 2020 is expected to decline by 9.77 mb/d, marginally lower than in last month's assessment. Weaker-than-expected data in the OECD in 3Q20, mainly due to lower transportation fuel demand in the US and OECD Europe, led to a downward revision of around 0.18 mb/d for the OECD group. However, this is mostly offset by an upward revision to the non-OECD, by 0.16 mb/d. Better-than-expected oil demand in China, amid a steady recovery across various economic sectors, and improving oil demand from India support this upward revision. Total oil demand is estimated to reach 89.99 mb/d in 2020. For 2021, world oil demand growth is revised lower by 0.35 mb/d, to growth of 5.90 mb/d. This is due to the uncertainty surrounding the impact of COVID-19 and the labour market on the OECD transportation fuel outlook for 1H21. Petrochemical feedstock and industrial fuels are forecast to gain momentum on the back of improving economic activities, with total oil demand projected to reach 95.89 mb/d in 2021.

World Oil Supply

Non-OPEC liquids production in 2020 is revised down by 0.08 mb/d, m-o-m, contracting by 2.50 mb/d, to average 62.67 mb/d. This is mainly due to downward revisions in Brazil, the US, the UK and Norway, following lower-than-expected output in 4Q20, although partially offset by upward revisions to production in Russia and Canada. For the year, oil supply shows declines mainly in Russia, the US and Canada, while production in Norway, Brazil, China and Guyana is estimated to have grown. Non-OPEC supply for 2021 is adjusted down by 0.1 mb/d and is now forecast to grow by 0.85 mb/d to average 63.52 mb/d, mainly due to downward revisions in Russia's output. The US liquids supply forecast remains unchanged at 0.3 mb/d, while uncertainties persist. The main drivers for supply growth are expected to be the US, Canada, Brazil and Norway. OPEC NGLs in 2020 are estimated to decline by 0.1 mb/d y-o-y, and forecast to grow by 0.1 mb/d y-o-y in 2021, to average 5.2 mb/d. OPEC crude oil production in November increased by 0.71 mb/d, m-o-m, to average 25.11 mb/d, according to secondary sources.

Product Markets and Refining Operations

Refining margins globally showed mixed movement. The USGC, the only positive performing region, benefitted from strength at the middle and bottom of the barrel, due to sharp declines in diesel floating storage, reduced jet/kerosene refinery output, and an uptick in transportation activity during the Thanksgiving holidays. In Europe and in Asia, margins weakened with solid losses witnessed at the top of the barrel, affected by lower regional naphtha and gasoline consumption amid closed arbitrage and higher feedstock prices.

Tanker Market

Dirty tanker rates remained weak in November, with historically low levels so far in 2H20, amid ample tonnage lists. However, signs indicating that November could be the bottom of the market have provided some hope for ship owners as they look to the coming year. Clean tanker rates picked up from multi-year lows, supported by improving West of Suez activities.

Crude and Refined Products Trade

Preliminary data shows that US crude imports remained near a three-decade low for the second consecutive month, averaging 5.3 mb/d in November. US crude exports picked up from an almost two-year low in October, to average just under 3 mb/d in November, supported by a return of Chinese purchases, with the release of 2021 import quotas. US product exports fell below 5 mb/d for the first time in five months, as diesel outflows declined, amid lower demand from Mexico. Japan's crude imports recovered from a decline the month before to average 2.3 mb/d in October, on the back of demand for heating. China's crude imports averaged 10.0 mb/d in October, falling below 11 mb/d for the first time in six months. The decline came as independent refineries awaited new quotas and amid a pause due to the Golden Week holiday, which also reduced product imports. In contrast, China's product exports jumped 40% to average almost 1.5 mb/d as refiners pushed out gasoline and diesel amid high inventory levels. India's crude imports declined further, although at a slower pace, to average 3.4 mb/d in October. India's product imports plunged by almost half to average 0.6 mb/d in October, as inflows were almost solely limited to LPG.

Commercial Stock Movements

Preliminary October data shows total OECD commercial oil stocks down by 46.3 mb, m-o-m. At 3,145 mb, they were 252.5 mb higher than the same time one year ago and 200.3 mb above the latest five-year average. Within the components, crude and product stocks declined by 21.5 mb and 24.8 mb, m-o-m, respectively. In terms of days of forward cover, OECD commercial stocks fell by 1.0 days, m-o-m, in October to stand at 72.2 days. This is 11.1 days above the October 2019 level and 10.1 days above the latest five-year average.

Balance of Supply and Demand

Demand for OPEC crude in 2020 is revised up by 0.1 mb/d from the previous month to stand at 22.2 mb/d, around 7.1 mb/d lower than in 2019. Demand for OPEC crude in 2021 is revised down by 0.2 mb/d from the previous month to stand at 27.2 mb/d, around 5.0 mb/d higher than in 2020.

Feature Article

Review of 2020, outlook for 2021

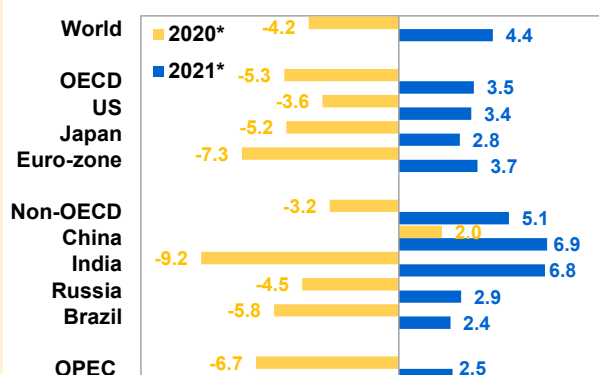
While 2020 began on relatively solid footing, the COVID-19 pandemic upended all expectations, especially for 1H2020. Indeed, global growth recovered considerably in 3Q20, with the rebound mainly supported by exceptional fiscal and monetary stimulus, as well as the easing of lockdown measures by the end of 2Q20. Additionally, savings mainly in OECD economies during the lockdown built a solid base for reviving consumption, as well as lifting global trade and investment. More recently, rising infections and growing uncertainties have left the global economic recovery more fragile, with global GDP now forecast to show a decline of 4.2% in 2020.

Next year, global GDP is forecast to grow by 4.4%. This rebound will be mainly driven by emerging and developing economies, especially in Asia. The actual growth trajectory will very much depend on uncertainties related to COVID-19 developments, policies of the incoming US administration and Brexit negotiations, as well as ongoing trade negotiations. Recent news about the possibility of vaccination programs in most major economies provides upside to the current forecast, which assumes that a vaccination will gradually be globally available by 2H21. Earlier availability would allow a faster-than-anticipated move towards normalisation.

The COVID-19 pandemic and accompanying lockdown measures have had an unprecedented impact on world oil demand, with the latest data pointing to a historic contraction of 9.8 mb/d in 2020. Oil demand in the OECD is estimated to fall by 5.5 mb/d in 2020, while non-OECD oil demand is anticipated to drop by 4.3 mb/d, despite a notable recovery in China in 3Q20, and more lately in India. For 2021, global oil demand is estimated to rebound by 5.9 mb/d, with OECD increasing by 2.6 mb/d, led by OECD Americans contributing 1.6 mb/d. In the non-OECD, oil demand growth is projected to be around 3.3 mb/d, with growth focused in China and India. The solid economic recovery coupled with the low baseline of 2020 will support oil demand growth next year. Transportation and industrial sectors are projected to lead oil demand growth in 2021. However, uncertainties remain high, mainly surrounding the development of the COVID-19 pandemic and rollout of vaccines, as well as the structural impact of COVID-19 on consumer behaviours, predominantly in transportation sector. On the supply side, non-OPEC growth in 2020 has been lower than initial expectations as the COVID-19 outbreak led to a drastic fall in demand and prices. In an effort to address the unprecedented turmoil in the market, OPEC members and non-OPEC participating in the DoC removed some 9.5 mb/d of excess supply from the market, with an estimated 2.6 mb/d contributed by non-OPEC partners in the DoC. The US and Canada contributed a further reduction of 3.6 mb/d through shut-in wells. As a result, non-OPEC supply is now expected to show a decline of 2.5 mb/d this year. In 2021, non-OPEC supply is projected to see a mild recovery of 0.8 mb/d, y-o-y, on the back of a gradual increase in drilling and completion activities in North America, as well as an rise of 0.7 mb/d from non-OPEC producers in the DoC. US tight crude output is expected to remain flat, although total liquids will grow by 0.3 mb/d. Canada, Norway, and Brazil are also expected to see growth in 2021, amid considerable uncertainties on the overall forecast, as the industry responds to conditions related to the pandemic.

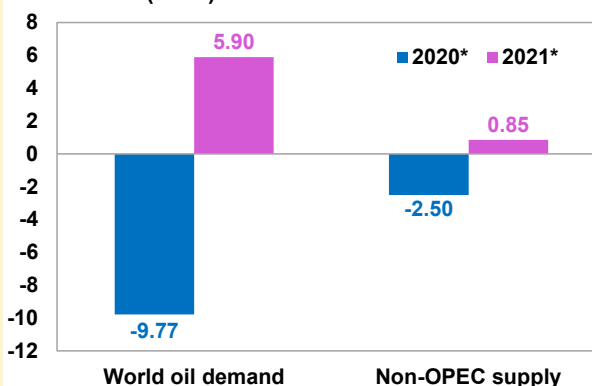
Following the drastic impact of the COVID-19 pandemic on the global economy and world oil demand in 2020, OPEC and the Non-OPEC countries participating in the DoC acted swiftly and decisively earlier in the year to adjust oil production to avoid a severe oil market imbalance. The recent OPEC and Non-OPEC Ministerial Meeting on 3 December reconfirmed the existing commitment under the DoC decision from 12 April 2020, then amended in June and September 2020, to gradually return 2 mb/d, given consideration to market conditions. Beginning in January 2021, DoC participating countries decided to voluntarily adjust production by 0.5 mb/d from 7.7 mb/d to 7.2 mb/d. Furthermore, DoC participating counties agreed to hold monthly OPEC and Non-OPEC ministerial meetings starting January 2021 to assess market conditions and decide on further production adjustments for the following month, with further monthly adjustments being no more than 0.5 mb/d.

Graph 1: Real GDP growth for selected countries in 2020-2021 (%)



Note: * 2020-2021 = Forecast. Source: OPEC.

Graph 2: World oil demand and non-OPEC supply growth in 2020-2021 (mb/d)



Source: *2020-2021 = Forecast. Source: OPEC.

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Crude Oil Price Movements

Spot crude prices bounced back in November following crude futures contracts rally after positive news on COVID-19 vaccines raised optimism about oil demand recovery in the coming months. Crude oil market fundamentals improved thanks to robust crude demand in Asia Pacific. Nonetheless, weak refining margins, increases in the crude oil supply and high stocks levels, including in the US, have constrained prices.

The OPEC Reference Basket (ORB) rebounded in November after two consecutive months of decline, increasing by \$2.53, or 6.3%, on a monthly average, to stand at \$42.61/b. However, compared to the previous year, the y-t-d ORB was down \$23.07, or 36.2%, from \$63.82/b in 2019 to an average of \$40.75/b so far this year.

Crude oil futures prices rallied in November to reach their highest levels since March, buoyed by news about promising new COVID-19 vaccines that brightened the global oil demand outlook. The outlook for oil market fundamentals also improved as investors were expecting a delay in the planned easing of crude oil production adjustments from OPEC and participating non-OPEC producers in the Declaration of Cooperation (DoC). The ICE Brent front month rose by \$2.46, or 5.9%, in November to average \$43.98/b, and NYMEX WTI increased by \$1.79, or 4.5%, to average \$41.35/b. However, y-t-d, ICE Brent was \$21.51 lower, or 33.6%, at \$42.56/b, while NYMEX WTI was \$18.18 lower, or 32.0%, at \$38.61/b, compared to the same period a year earlier. DME Oman crude oil futures prices rose in November by \$2.90 m-o-m, or 7.1%, to settle at \$44.03/b. Y-t-d, DME Oman was lower by \$21.48, or 33.6%, at \$42.35/b.

Hedge funds and other money managers turned more positive on the outlook of oil prices over November amid prospects of improving global oil demand fundamentals in coming months. Money managers accelerated purchases, particularly in ICE Brent, as oil prices rose.

The contango structure of oil futures prices flattened considerably in November. The prompt time spreads of ICE Brent flipped into backwardation for several sessions in the second part of November, while the front of the DME Oman crude forward curve moved deeper into backwardation over the month.

The sweet/sour crude differential was narrow in all markets in November, as the value of sour crude remained supported by the restrained supply of sour crude, due to planned and unplanned output reductions, in addition to narrow light/heavy distillate margins.

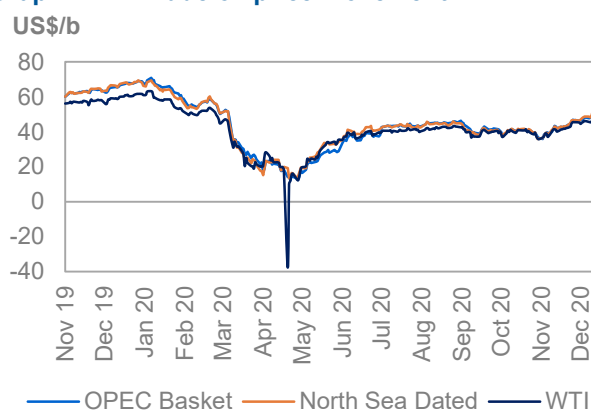
Crude spot prices

Spot crude oil prices bounced back in November following crude futures contracts rally as news on COVID-19 vaccine developments raised optimism for an oil demand recovery in the coming months. Expectations that the DoC participating countries would delay the planned easing of production adjustments from January 2021 further contributed the improved outlook. Spot prices also rose on improving crude oil market fundamentals spurred by robust crude oil demand in the Asia Pacific, specifically China and India. Nonetheless, weak refining margins and increasing crude oil supply have limited prices. Furthermore, the rise of US crude oil stocks in November compared to late October levels, including in Cushing, Oklahoma, put downward pressure on crude prices.

All physical crude oil benchmarks rose m-o-m in November, with North Sea Dated and Dubai first month increasing respectively by \$2.53 and \$2.63, or 6.3% and 6.5%, to settle at \$42.54/b and \$43.33/b. The WTI first month rose by \$1.99, or 5.0%, to settle at \$41.52/b.

Despite a rapid recovery in Libyan crude oil supply, the value of light and medium crude differentials strengthened in the Atlantic on firm crude demand from China and India, which mopped up available cargoes in the West African, Mediterranean and the US Gulf Coast markets. West African crude differentials strengthened further due to the temporary absence of some Brass River volume due to pipeline explosions. The

Graph 1 - 1: Crude oil price movement



Sources: Argus, OPEC and Platts.

Crude Oil Price Movements

value of Azeri Light and Bonny Light crude differentials rose in November by 81¢ and 61¢ respectively on monthly basis, to settle at a premium of \$1.06/b and 61¢/b, respectively. However, in the North Sea, crude differentials weakened slightly on subdued demand in Europe, low European refinery runs and weak refining margins in North-West Europe, with some crude cracking falling to multi-month lows. High crude floating storage in the North Sea also added downward pressure on the value of Brent-related crudes in the region. In the USGC, crude differentials rose slightly on a monthly average on sustained US crude oil exports in November and gradual recovery in US refinery runs and utilization rates. The value of Dubai-related crudes in the Middle East rose in November on the back of strong buying from the Asia Pacific with most grades trading at premiums to their related benchmarks. In the Middle East spot market, the value of crude differentials of Oman and Upper Zakum rose by 82¢ and 17¢, respectively, to a premium of 62¢/b and 22¢/b, while Basrah Light crude traded at high premiums of more than \$1/b to its OSP.

Table 1 - 1: OPEC Reference Basket and selected crudes, US\$/b

	Oct 20	Nov 20	Change		Year-to-date	
			Nov/Oct	%	2019	2020
OPEC Reference Basket	40.08	42.61	2.53	6.3	63.82	40.75
Arab Light	40.32	42.98	2.66	6.6	64.74	41.23
Basrah Light	40.60	43.12	2.52	6.2	63.44	40.77
Bonny Light	39.64	41.91	2.27	5.7	65.41	40.78
Djeno	32.56	35.09	2.53	7.8	61.43	35.16
Es Sider	37.71	40.24	2.53	6.7	63.48	39.32
Girassol	40.72	44.11	3.39	8.3	65.80	41.82
Iran Heavy	40.24	42.88	2.64	6.6	61.68	39.98
Kuwait Export	40.38	42.99	2.61	6.5	64.07	40.76
Merey	26.23	27.07	0.84	3.2	54.40	27.70
Murban	41.06	43.09	2.03	4.9	64.55	42.38
Rabi Light	39.01	42.12	3.11	8.0	63.10	39.38
Sahara Blend	39.76	42.59	2.83	7.1	64.17	41.38
Zafiro	39.99	43.41	3.42	8.6	65.39	40.71
Other Crudes						
North Sea Dated	40.01	42.54	2.53	6.3	63.95	40.92
Dubai	40.70	43.33	2.63	6.5	63.36	41.62
Isthmus	38.15	40.26	2.11	5.5	63.25	35.67
LLS	40.81	42.87	2.06	5.0	62.60	40.63
Mars	39.96	41.96	2.00	5.0	60.82	39.43
Minas	39.30	41.42	2.12	5.4	60.03	40.45
Urals	40.26	43.35	3.09	7.7	64.14	41.06
WTI	39.53	41.52	1.99	5.0	56.77	38.72
Differentials						
North Sea Dated/WTI	0.48	1.02	0.54	-	7.17	2.20
North Sea Dated/LLS	-0.80	-0.33	0.47	-	1.34	0.29
North Sea Dated/Dubai	-0.69	-0.79	-0.10	-	0.59	-0.70

Sources: Argus, Direct Communication, OPEC and Platts.

OPEC Reference Basket (ORB)

The **ORB** rebounded in November after two consecutive months of decline, increasing by \$2.53, or 6.3%, on a monthly average, to stand at \$42.61/b. The rise in the ORB value was in line with other spot benchmarks, while the m-o-m official selling prices of medium and heavy sour crude components to Asia were almost unchanged. The official selling prices of light sweet crude components were mixed. Compared to the previous year, the y-t-d ORB was down \$23.07, or 36.2%, from \$63.82/b in 2019, to an average of \$40.75/b so far this year. West and North African Basket components – Bonny Light, Djeno, Es Sider, Girassol, Rabi Light, Sahara Blend and Zafiro – rose \$2.87, or 7.5% m-o-m, on average, in November to \$41.35/b. The multiple regions' destination grades – Arab Light, Basrah Light, Iran Heavy and Kuwait Export – increased by \$2.61, or 6.5% m-o-m, on average, to settle at \$42.99/b. Murban crude rose by \$2.03, or 4.9% m-o-m, on average, to settle at \$43.09/b, while the Merey component rose by 84¢, or 3.2% m-o-m, on average, to settle at 27.07/b.

The oil futures market

Crude oil futures prices rallied in November to reach their highest levels since March. Both ICE Brent and NYMEX WTI first month climbed 5.9% and 4.5%, respectively, on a monthly average, recording their biggest monthly rise since July. Futures prices were buoyed by COVID-19 vaccine developments, which brightened the outlook for global oil demand and offset concerns about the rise of infections in several regions. The outlook for global oil market fundamentals also improved as investors anticipated a potential delay in the planned easing of the DoC crude oil production adjustments, healthier oil demand data in some countries, and higher-than-expected economic indexes in the US and in some Asian countries. In China, National Bureau of Statistics data showed that crude oil refinery throughputs increased 2.6% in October compared to the previous year, and domestic oil demand was expected to strengthen during holiday travel. Traders turned more positive after China released higher crude import quotas for Chinese independent refiners for next year, which could increase demand for January loadings. Furthermore, data from Japan showed a sharp recovery in the economy in 3Q20 amid strengthening exports and domestic consumption. In the US, a survey by the Institute for Supply Management reported higher-than-expected manufacturing activity in October. Strong equity markets and a weakening US dollar also supported futures prices.

Nonetheless, the rise of crude futures prices was capped by concerns about the impact on short-term oil demand recovery of the rise of global COVID-19 infections and the recent lockdowns in Europe, while the full recovery to pre-COVID-19 conditions could take more time than anticipated. By late November, oil prices steadied amid quiet trading in observance of the US Thanksgiving holiday and as investors awaited the outcome of the 180th Meeting of OPEC Conference and 12th OPEC and Non-OPEC Ministerial Meeting.

Table 1 - 2: Crude oil futures, US\$/b

	Oct 20	Nov 20	Change		Year-to-date	
			Nov/Oct	%	2019	2020
Future crude						
NYMEX WTI	39.55	41.35	1.79	4.5	56.79	38.61
ICE Brent	41.52	43.98	2.46	5.9	64.08	42.56
DME Oman	41.13	44.03	2.90	7.1	63.83	42.35
Spread						
ICE Brent-NYMEX WTI	1.97	2.63	0.66	33.7	7.28	3.95

Note: Totals may not add up due to independent rounding.

Sources: CME, DME, ICE and OPEC.

The **ICE Brent** front month rose by \$2.46, or 5.9%, in November to average \$43.98/b, and **NYMEX WTI** increased by \$1.79, or 4.5%, to average \$41.35/b. However, y-t-d, ICE Brent was \$21.51 lower, or 33.6%, at \$42.56/b, while NYMEX WTI was \$18.18 lower, or 32.0%, at \$38.61/b, compared to the same period a year earlier. **DME Oman** crude oil futures prices rose in November by \$2.90 m-o-m, or 7.1%, to settle at \$44.03/b. Y-t-d, DME Oman was lower by \$21.48, or 33.6%, at \$42.35/b.

On 11 December, ICE Brent stood at \$50.25/b and NYMEX WTI at \$46.78/b.

The **ICE Brent/NYMEX WTI spread** widened slightly in November on average m-o-m, though it remained narrow, below \$3/b, as the international futures benchmark Brent performed better than NYMEX WTI at Cushing, Oklahoma. In addition to optimism about oil demand recovery, ICE Brent's value strengthened on an easing supply overhang in the Atlantic Basin, due to healthy demand from Asia, and despite the rapid increase of Libyan crude oil supply. In the meantime, the rise of WTI was slowed by the continued build of crude oil stocks at US PADD2 and at Cushing, Oklahoma – the delivery point for NYMEX crude oil futures – which reached its highest level since May in the week to 13 November, according to US Energy Information Administration (EIA) data. The ICE Brent/NYMEX WTI spread widened by 66¢ m-o-m to average \$2.63/b in November, compared to \$1.97/b in October. The widening Brent-WTI spread also contributed to supporting US crude oil exports, which averaged about 2.8 mb/d during the three first weeks of November, according to the EIA's weekly data. The value of North Sea Dated also rose compared to WTI Houston's first month in November, and the value of North Sea Dated was 22¢/b higher than WTI Houston on a monthly average, compared to a discount of 17¢/b in October.

Hedge funds and other money managers turned more positive on the oil price outlook amid prospects for improving global oil demand fundamentals, driven by COVID-19 vaccine developments and expectations for a potential delay of the planned easing of the DoC oil production adjustments. Money managers accelerated purchases, particularly of ICE Brent as oil prices rose in November to their highest since last March. By the end

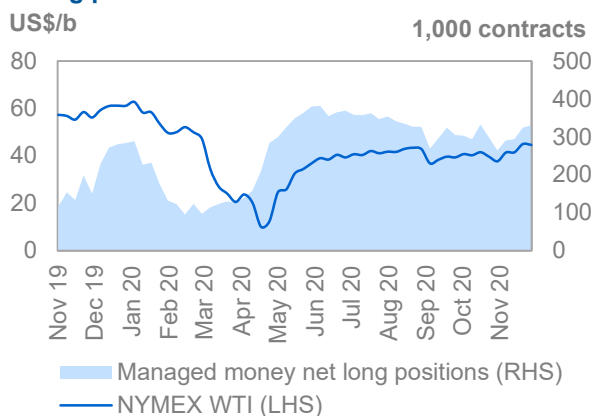
Crude Oil Price Movements

of the week of 24 November, money managers held net long positions equivalent to about 542 mb in the two main crude oil futures and options contracts, the highest level since August 2020. Hedge funds have raised their net long positions by about 100 mb since late October 2020.

Money managers raised their positive positions in ICE Brent in November to reach their highest since early March. Combined futures and options net long positions in ICE Brent increased by 73,059 contracts, or 50.5%, to reach 217,590 lots in the week of 24 November, according to the ICE Exchange. In the week ending 24 November, gross short positions fell by 20,812 lots, or 19.3%, to 86,916 contracts. Gross long positions rose by 52,247 lots, or 20.7%, to 304,506 contracts during the same period.

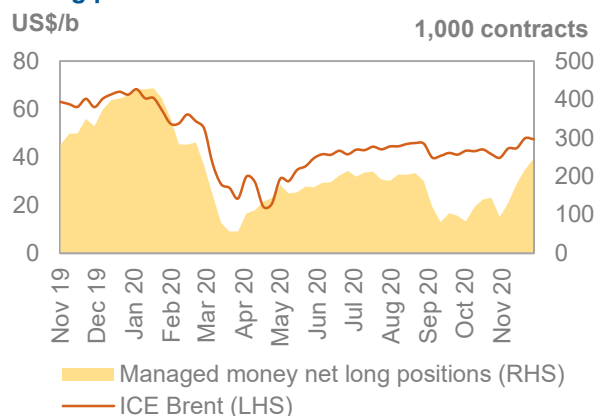
However, hedge funds and money managers raised slightly their bullish positions related to NYMEX WTI over November. Compared to late October, speculators increased their related NYMEX WTI net long positions by 8.9%, or 26,466 contracts, to stand at 324,127 lots in the week of 24 November. This is due to a decline in short positions by 22,593 lots, or 25.3%, to 66,623 contracts, and a rise of 3,873 contracts, or 1.0%, in long positions, to 390,750 contracts, according to the US Commodity Futures Trading Commission (CFTC).

Graph 1 - 2: NYMEX WTI vs. Managed Money net long positions



Sources: CFTC, CME and OPEC.

Graph 1 - 3: ICE Brent vs. Managed Money net long positions



Sources: ICE and OPEC.

The **long-to-short ratio** of speculative positions in the ICE Brent contract rose to 4:1 in the week to 24 November, compared to 2:1 in late October. Similarly, the NYMEX WTI long-to-short ratio rose to 6:1 in week to 24 November, compared to 4:1 in late October, reflecting the prospects of improving oil market fundamentals.

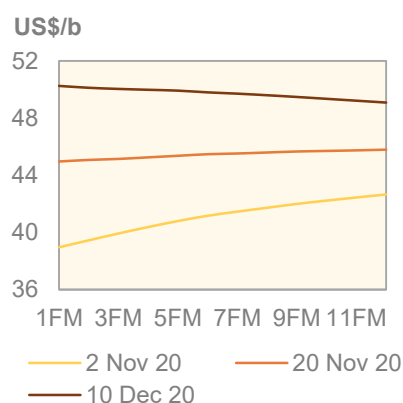
Total futures and options open interest volumes on the two exchanges rose over November, increasing by 2.6%, or 138,218 contracts, to stand at 5.5 million contracts in the week ending 24 November.

The futures market structure

The contango **structure of oil futures prices** flattened considerably in November. The prompt time spreads of ICE Brent flipped into backwardation for several sessions in the second part of the month, and the rest of the curve remained in a shallow contango, while the front of the DME Oman crude forward curve moved deeper into backwardation over the month. Prompt month's futures prices rose sharply in November compared to forward months on growing optimism about the COVID-19 vaccines that could accelerate the global oil demand recovery, in addition to strong crude demand from Asia. The markets remained optimistic about a possible delay in the planned easing of crude production adjustments by the DoC participating countries.

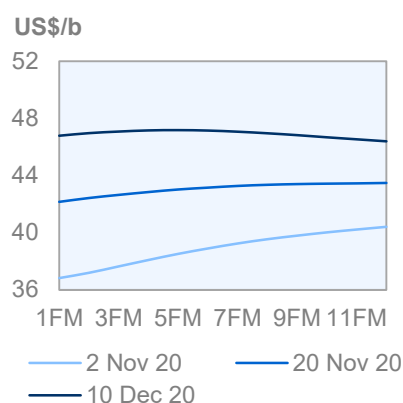
The **ICE Brent contango structure** eased significantly in November, amid robust prompt demand from China and India that contributed to reducing the unsold volumes in the Atlantic Basin and the Mediterranean, which weighed on prices in previous months. Nonetheless, a sustainable recovery of Libya's crude oil supply and subdued demand from European refiners amid renewed lockdowns and mobility restrictions weighed on prompt prices and kept the ICE Brent time-spread in a shallow contango for most of the month. The ICE Brent M1-M3 spread narrowed further in November by 37¢, on average, from a contango 79¢/b in October, to a contango of 42¢/b in November.

Graph 1 - 4: ICE Brent forward curves



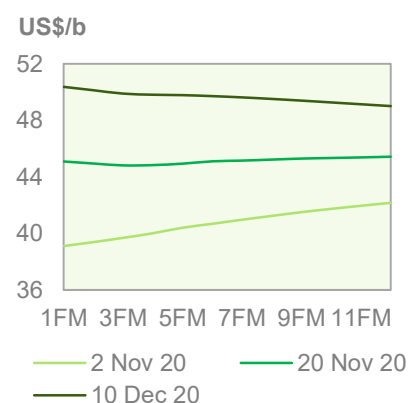
Sources: ICE and OPEC.

Graph 1 - 5: NYMEX WTI forward curves



Sources: CME and OPEC.

Graph 1 - 6: DME Oman forward curves



Sources: DME and OPEC.

In the US, the **NYMEX WTI contango structure** flattened slightly in November and the time spreads narrowed marginally on monthly average as the decline in US crude oil stocks stalled and remained at high levels. In the week to 13 November, Cushing, Oklahoma, crude oil stocks rose to 61.6 mb, their highest level since May. The rise of COVID-19 infections in the US raised concerns about oil demand recovery in the short term and weighed on the WTI crude price. The NYMEX WTI M1-M3 contango narrowed slightly in November by 9¢/b m-o-m, to 54¢/b, compared to a contango of 63¢/b in October.

The **DME Oman contango structure** flipped into backwardation in November as prompt prices were supported by strong demand from Asia-Pacific refiners, specifically China, and limited supply of sour crude. The East Suez crude market was also supported by a high conformity level under the DoC production adjustments, which reached 101 per cent in October 2020. On a monthly average, the DME Oman M1-M3 spread flipped into a backwardation of 7¢/b on average in November, from a contango of 47¢/b in October, or an increase of 54¢.

Regarding the **M1/M3 structure**, the North Sea Brent M1/M3 spread narrowed in November by 44¢ on a monthly average to stand at contango of 47¢/b. In the US, the WTI M1/M3 contango narrowed slightly in November by 8¢ to 54¢/b compared to a contango of 62¢/b in October. However, the Dubai M1/M3 monthly average spread flipped into a backwardation of 12¢/b on average in November, from a contango of 61¢/b in October, or an increase of 73¢.

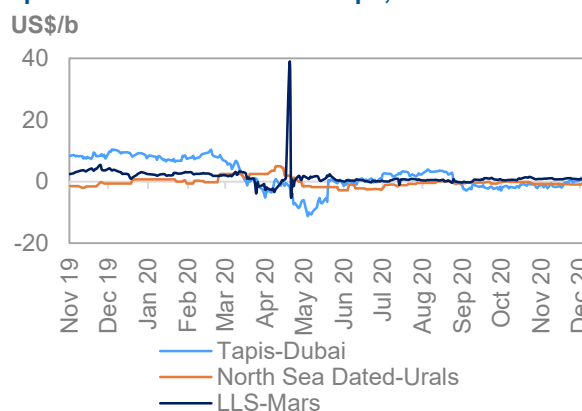
Crude spreads

The **sweet/sour crude differential** stayed narrow in all markets in November, as the value of sour crude remained supported by the restrained supply of sour crude, both planned and unplanned, and to narrow light/heavy distillate margins. The value of sour crude continued to settle at a premium price against sweet crude in Europe and in Asia, while in the USGC, the sweet/sour crude differential remained narrow and widened marginally.

In **Europe**, the premium of medium sour crude Urals against the light sweet benchmark North Sea Dated widened further in November on firm demand for the Urals grade in Northwest Europe and the Mediterranean, and expectation of lower available volumes for December loadings, which prompted some traders to secure their volumes.

The Urals values in the Mediterranean and in Northwest Europe climbed in November to their highest levels since July. At the same time, crude differentials of light sweet crudes in the North Sea were mixed amid weak demand from European refiners and lower flows to Asia. The Brent-Urals spread widened by 56¢ in November on a monthly average, from a discount of 25¢/b in October to a discount of 81¢/b in November.

Graph 1 - 7: Differential in Europe, Asia and USGC



Sources: Argus, OPEC and Platts.

Crude Oil Price Movements

In **Asia**, the Tapis-Dubai spread narrowed by 61¢ in November on average, but it remained at a discount as the value of Tapis light sweet crude was below the value of Dubai. The value of light sweet crude in the Asia-Pacific increased slightly in November on higher demand from regional refiners. However, the rise of light sweet crude value in the Asia-Pacific was limited amid the narrowing Brent-Dubai spread that improves the arbitrage opportunity of similar light sweet crude in the Atlantic Basin to Asia. The Tapis-Dubai spread narrowed by 61¢ m-o-m in November to a discount of 92¢/b, compared to a discount of \$1.53/b in October. The front-month Brent-Dubai Exchange of Futures for Swaps (EFS) remained low, although it rose again in November. On a monthly average, the Brent-Dubai EFS rose 21¢ m-o-m to 40¢/b in November compared to 18¢/b in October.

In the **USGC**, the LLS-Mars differential was narrow in November, below \$1/b, as the Mars sour crude value remained supported by a tight sour crude market and sustained demand from the Asia. Nonetheless, the LLS-Mars spread widened slightly by 6¢ on a monthly average to stand at 91¢/b in November on the back of recovering sour crude supply in the Gulf of Mexico. The deep-water Cameron Highway Oil Pipeline System that transports sour crude production from Louisiana to Texas City and Port Arthur is expected to back online by the end of this year.

Commodity Markets

Energy commodity prices, including crude oil and coal, rose in November. Natural gas prices were mixed, rising in the US amid strong LNG exports, but declining in Europe on the impact of lockdown measures. Base metals continued their ascending trend, supported by the expansion in global manufacturing and optimism in financial markets. In the precious metals group, gold prices declined for the third consecutive month on reduced safe haven demand.

Trends in selected commodity markets

The **energy price index** advanced by around 6.4% m-o-m in November, led by rising crude oil and coal prices, while natural gas prices were mixed. The index was down by 32.9% in the January-to-November period, compared to the same period of 2019.

The **non-energy index** rose m-o-m by 4.4%, with the base metals and agriculture indexes rising by 6.0% and 4.1%, respectively. The non-energy index was up by 1.7% in the first 11 months of 2020 compared to the same period last year.

Table 2 - 1: Commodity prices

Commodity	Unit	Monthly averages			% Change Nov 20/Oct 20	Year-to-date	
		Sep 20	Oct 20	Nov 20		2019	2020
Energy*	Index	51.0	51.3	54.6	6.4	75.9	50.9
Coal, Australia	US\$/mt	54.6	58.4	62.8	7.6	79.0	58.6
Crude oil, average	US\$/b	40.6	39.9	42.3	6.0	61.2	40.6
Natural gas, US	US\$/mbtu	1.9	2.2	2.6	18.5	2.6	2.0
Natural gas, Europe	US\$/mbtu	4.0	4.9	4.8	-1.1	4.8	3.0
Non-energy*	Index	87.4	88.8	92.8	4.4	81.5	82.9
Base metal*	Index	85.2	86.3	91.4	6.0	81.7	78.6
Precious metals*	Index	148.1	145.2	143.0	-1.5	104.9	132.6

Note: * World Bank commodity price indices (2010 = 100).

Sources: World Bank and OPEC.

In November, the **Henry Hub natural gas index** rose on average by 18% m-o-m to \$2.6/mmbtu. Prices were supported by strong demand for LNG exports, around 10 bcf/d at the end of November from as low as 2.8 bcf at the end of August, according to IHS Markit estimates, as price differentials between US and Europe, and especially Asia, widened. While US production improved during the month, it is still lower than a year ago by around 5% y-o-y, according to IHS Markit. Gains were limited by warmer-than-average temperatures, which constrained withdrawals from inventories, while forecasts for the rest of the winter also point to above-average temperatures for the Lower 48 states. According to the Energy Information Administration (EIA), utilities withdrew 1 bcf from working gas underground storage during the week ending 27 November. This withdrawal left total working gas in underground storage at 3,939 bcf, which was 7.9% above the latest five-year average, versus 5.4% above the five-year average at the end of October.

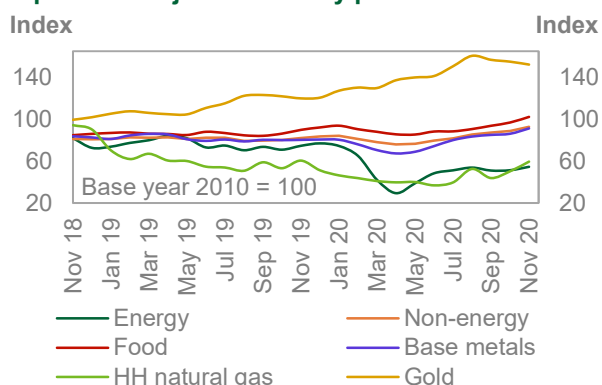
Natural gas prices in Europe weakened slightly in November with the average **Title Transfer Facility price** down by 1.1% m-o-m to \$4.8/mmbtu amid concerns about the impact of lockdowns on demand. Cold weather and strong LNG prices of close to \$7/mmbtu in Asia, which favour LNG exports to the region, limited price decline. Inventories at the end of November were around 88% full, compared to around 94.5% the previous month, according to Gas Infrastructure Europe, but below the 94% seen at the end of November 2019. As mentioned the previous MOMR, inventories in Europe and the US are at comfortable levels ahead of winter.

Australian thermal coal prices rose for the third consecutive month, increasing by 7.6% m-o-m to average \$62.8/mt. Prices have risen by around 25% since August, initially supported by the expectation of colder-than-average winter temperatures in North East Asia and by shut-ins by some Australian mine operators – including Glencore – to help stabilize the market in September and October. Prices were also supported by severe weather that restricted export capacity from one of the main terminals, outweighing the impact of Chinese thermal coal import restrictions. According to preliminary customs data, in November thermal coal imports dropped by 15% m-o-m and by around 44% y-t-d. In the January-to-November period, imports were down by 10.8%. Coal output in October rose by 1.4% y-o-y in China, but was still flat in the January-to-October period, according to data from China's National Bureau of Statistics. Electricity demand increased in October by 4.6%

Commodity Markets

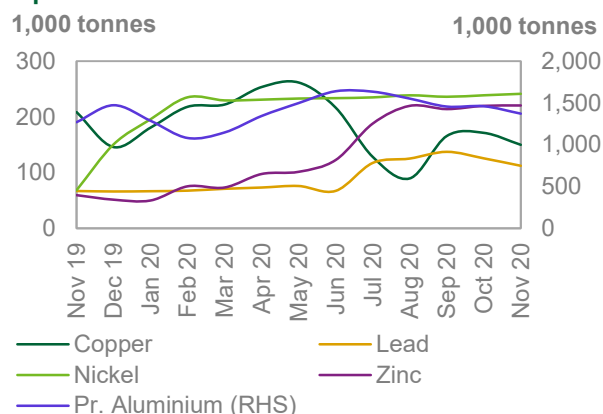
y-o-y, but the majority of the increase was covered by renewable sources, while thermal power generation fell by 1.5% y-o-y in October.

Graph 2 - 1: Major commodity price indices



Sources: World Bank, S&P Goldman Sachs, Haver Analytics and OPEC.

Graph 2 - 2: Inventories at the LME



Sources: LME, Thomson Reuters and OPEC.

The **base metal price index** rose by 6.0% m-o-m in November, supported by the strong performance of global manufacturing, while improving investor sentiment and a weaker US dollar also contributed.

Average monthly copper prices rose in November by 5.3% m-o-m to \$7,068/mt, supported by stock draws and positive investor sentiment. According to International Copper Study Group (ICGS) estimates, the refined copper balance (adjusted for unreported Chinese inventories) in the January-to-August 2020 period showed a deficit of 296,000 tonnes, up from 278,000 tonnes in the January-July estimation. In November, inventories at London Metal Exchange (LME)-designated warehouses fell to 149,800 from 171,300 tonnes in October, lending support to the view of a tight market.

Iron ore prices rose in November by 3.8% m-o-m to around \$124.4/mt, supported by strong demand for steel in China. While Chinese imports slowed by 8% m-o-m, they were up by 8.3% y-o-y in November. Chinese steel output was up by 12.7% y-o-y in October, and by 5.5% in the January-to-November period, according to World Steel Association. As noted in the previous reports, steel output this year has experienced negative growth, with few exceptions outside of China. Another factor supporting prices has been the difficulties that Brazilian major producer Vale has encountered in meeting production targets.

In the **precious metals** group, gold was down by 1.8% m-o-m in November to average \$1,966.3/ troy ounce, following some decline in safe haven demand, while real interest rates remained stable. Silver prices declined by 0.6%, while platinum prices rose by 4.0%.

Investment flows into commodities

Money managers' net length decreased crude oil, natural gas and gold, both in absolute terms and as a share of the open interest (OI). In the case of copper, just a slight decline in net length was observed both in absolute and relative terms.

Table 2 - 2: CFTC data on non-commercial positions, 1,000 contracts

Selected commodity	Open interest		Net length			
	Oct 20	Nov 20	Oct 20	% OI	Nov 20	% OI
Crude oil	2,553	2,511	307	12	293	12
Natural gas	1,239	1,232	136	11	89	7
Gold	909	846	129	14	115	14
Copper	243	235	83	34	80	34
Total	5,386	5,253	1,869	101	1,837	96

Note: Data on this table is based on monthly average.

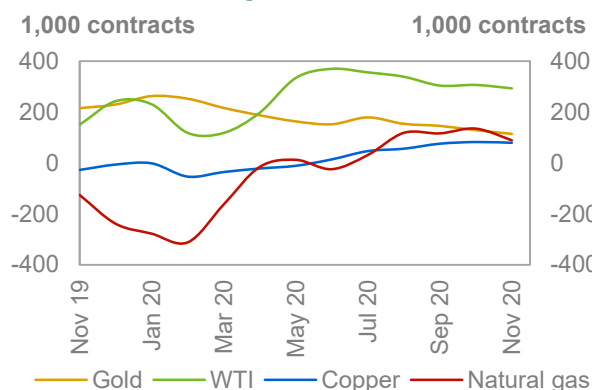
Sources: CFTC and OPEC.

Henry Hub's natural gas OI fell by 0.5% m-o-m in November. Money managers' net long position decreased by 34% to 89,364 contracts in November from 135,506 contracts in October, as weather forecasts point to a warmer-than-average winter in the US.

Copper's OI decreased by 2.9% in November. Money managers' net long positions declined slightly by 3.7% m-o-m to 79,515 contracts from 82,544 contracts the previous month, as speculators took a pause after five monthly increases. As a share of the open interest, the decrease in net length was minimal.

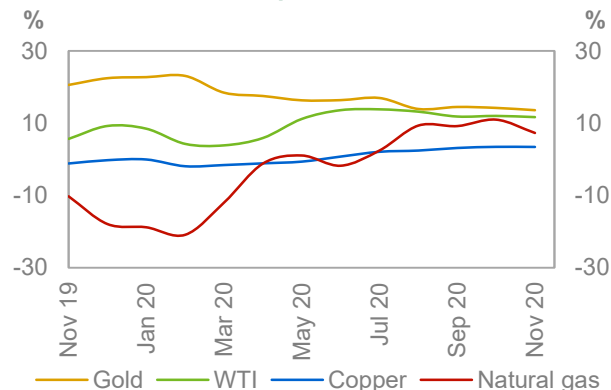
Gold OI decreased by 7.0% in November. Money managers decreased their net length by 11.1% to 115,012 contracts from 129,438 contracts the previous month with real interest rates firming for the third consecutive month, while safe haven demand fell after a string of vaccine development announcements.

Graph 2 - 3: Money managers' activity in key commodities, net length



Note: Data on this graph is based on monthly average. Sources: CFTC and OPEC.

Graph 2 - 4: Money managers' activity in key commodities, as % of open interest



Note: Data on this graph is based on monthly average. Sources: CFTC and OPEC.

World Economy

After the momentous decline of the global economy in 1H20, 3Q20 growth turned out slightly better than expected. This momentum was supported by extraordinary fiscal and monetary stimulus measures across the globe, in addition to the spending of forced 1H20 savings by private households, mainly in locked down OECD economies. This has led to an upward revision in the 2020 global GDP forecast, now expected to decline by 4.2%, compared with 4.3% the previous month. However, 4Q20 growth is again forecast to slow as lockdown measures have been re-implemented, especially in the advanced economies, and there is some expectation that it will be necessary to extend some of these measures well into 1H21. Although since the global emergence of COVID-19 at the beginning of the year, the economic growth risk has obviously been tilted towards the downside, the expectation of a globally distributable vaccine and hence the possibility of a clear prospect to contain COVID-19 in the near term has considerably lifted sentiment. While this upside potential has already been widely reflected in asset markets, numerous challenges remain. Hence, the 2021 global economic growth forecast remains at 4.4%, but positive developments will be closely monitored in the coming weeks and further reviewed next month. Additional upside potential may come from further US fiscal stimulus, an acceleration of India's recovery and stronger-than-anticipated growth in China amid once again rising global trade and improving domestic activity. While this remains to be seen, an upside in the two largest Asian economies may lead to positive spillover effects for their Asian and western trading partners.

In greater numerical detail, the OECD growth forecast for 2020 was revised up to stand at -5.3%, compared with -5.4% the previous month. This is followed by 3.5% in 2021, unchanged from the previous month. The OECD's 2020 revision is mainly due to higher-than-expected 3Q20 growth in selective economies, particularly Japan. In the emerging economies, India's 2020 GDP growth remains at -9.2%. For the time being, the growth forecast for 2021 is unchanged at 6.8%. China's GDP growth forecast is unchanged as well, at 2.0% for 2020 and 6.9% for 2021. Brazil's 2020 GDP growth forecast was revised up to -5.8%, compared with -6.0% the previous month. The Brazilian economy is forecast to grow by 2.4% in 2021, unchanged from the previous month. Russia's 2020 GDP was revised up to stand at -4.5%, after previously reaching -4.9%. The 2021 recovery is forecast to remain unchanged at 2.9%, with the country benefiting from the ongoing Declaration of Cooperation (DoC) process.

Importantly, the forecast assumes that COVID-19 infections will continue to rise towards the end of the year, with ongoing lockdowns taking place in large parts of the Euro-zone and increasing challenges in the US as well. A pick-up in underlying global growth is accounted for, especially in 2H20, when the majority of 2021 COVID-19 containment effects will materialise. While growth risks will certainly be associated with the vaccine, further downside risks to the current growth outlook may also come from ongoing challenges due to Brexit, rising geopolitical challenges in selective regions, unexpected repercussions from quickly rising global debt, and mounting social unrest in some countries as a consequence of COVID-19 and growing inequality.

Table 3 - 1: Economic growth rate and revision, 2020–2021*, %

	World	OECD	US	Euro-zone	UK	Japan	China	India	Brazil	Russia
2020	-4.2	-5.3	-3.6	-7.3	-9.6	-5.2	2.0	-9.2	-5.8	-4.5
Change from previous month	0.1	0.1	0.0	-0.1	0.0	0.5	0.0	0.0	0.2	0.4
2021	4.4	3.5	3.4	3.7	3.8	2.8	6.9	6.8	2.4	2.9
Change from previous month	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Note: * 2020–2021 = Forecast. The GDP numbers have been adjusted to reflect 2017 ppp.

Source: OPEC.

Global

Update on latest developments

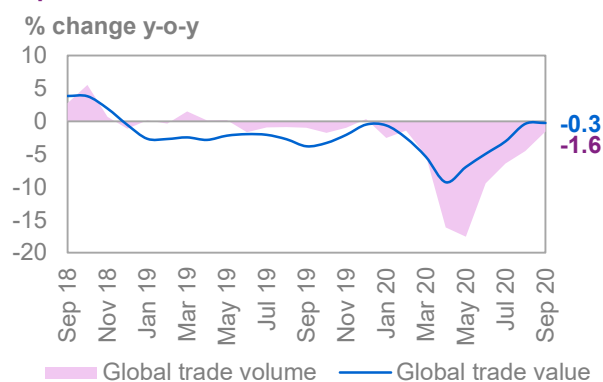
Most major economies have released 3Q20 GDP growth levels, which were slightly better than expected. Growth was certainly lifted by extraordinary fiscal and monetary stimulus measures across the globe. In addition, forced private household savings in 1H20 mainly in OECD economies supported pent-up demand. This was reflected in quickly recovering consumption, leading to improving global trade and also to some extent

rising investment. This dynamic was also reflected in the rebound in global consumer confidence levels from April's trough. However, the latest rise of COVID-19 infections has again led to renewed lockdown measures and voluntary social distancing. Thus, economic activity already softened in 4Q20, as can be seen in the most recent available indicators from October. And while monetary stimulus continues, additional announcements and the implementation of fiscal measures have been limited so far in 2H20.

Manufacturing continued to improve, leading the recovery. While the sector is a very important driver for recovery, it constitutes the minority share, especially in advanced economies. Contrary to the solid pick-up in manufacturing, relative sluggishness in the labour-intensive services sector – accounting for more than two-thirds of major advanced countries' economies – has continued. Consequently, labour markets across the world remain negatively impacted by the pandemic. Nonetheless, given extraordinary stimulus measures across the world, the fallout from COVID-19 has been contained and a recovery has become visible. At the same time, support for the global economy comes at the price of a sharp rise in debt levels in most economies. This has led to very high total debt-to-GDP ratios in advanced economies, as well as in emerging and developing economies, a subject that will need close monitoring in the near term.

Global trade levels continued recovering, according to data available up to September. World trade volume levels declined by 1.6% y-o-y in September, compared with -4.5% y-o-y in August and -6.5% y-o-y in July, based on the CPB World Trade Index, provided by the Netherlands Bureau of Economic Policy Analysis. Trade improved in value terms as well, falling by only 0.3% y-o-y in September, compared with -0.4% y-o-y in August, and -3.0% y-o-y in July.

Graph 3 - 1: Global trade



Sources: Netherlands Bureau for Economic Policy Analysis, Haver Analytics and OPEC.

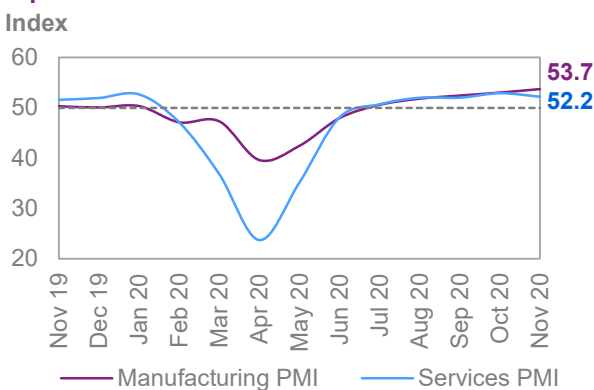
Near-term expectations

The forecast remains very much influenced by underlying COVID-19 developments. The current working assumption is that COVID-19 infections will continue to rise towards the end of the year, with ongoing lockdowns taking place in large parts of the Euro-zone and increasing challenges in the US as well. The pick-up in underlying global growth is accounted for especially in 2H21, when the majority of positive 2021 COVID-19 containment effects will materialise. After a quarterly decline of 0.8% and 1.0% in 1Q21 and 2Q21, respectively, growth is forecast to pick up again, reaching quarterly levels of 1.4% and 1.6% in 3Q21 and 4Q21. Also, further advancements in COVID-19 treatment will support consumer confidence and therefore global growth. In the meantime, the latest resurrection of COVID-19 infections and the associated consequences of lockdowns and/or voluntary social distancing measures are leading to a slowdown in 4Q20, with the expectation of a spillover into 1H21. While the availability of a vaccine is certainly providing the base for a recovery, related developments remain to be seen.

In sectoral terms, anticipation of a continued major impact of COVID-19 on contact-intensive sectors is unchanged. This includes primarily travel and tourism, along with leisure and hospitality, which are all not expected to achieve pre-COVID-19 levels of activity from 2019 before 2023 or even later. Compensating for some of this shortfall, sectors such as health, IT and communications are forecast to accelerate. However, as the contact-intensive services sectors are disproportionately affected, there will be an ongoing asymmetry in global economic growth and global oil demand developments.

Global purchasing managers' indices (PMIs) in November supported the view of an ongoing recovery, particularly in the manufacturing sector. The global manufacturing PMI rose to 53.7 in November, compared with 53 in October and 52.4 in September. The global services sector PMI remained at almost the same level for four consecutive months, standing at 52.2 in November, compared with 52.9 in October and 52 in September.

Graph 3 - 2: Global PMI



Sources: JP Morgan, IHS Markit, Haver Analytics and OPEC.

With some further improvement in OECD economies and better activity in both Brazil and Russia, the 2020 **GDP growth** forecast was revised up to stand at -4.2%, compared with -4.3% the previous month. The revision was mainly caused by a stronger-than-expected recovery in 3Q20, while the forecast of some softening in 4Q20 remains unchanged. The gradual pickup is forecast to carry over into 2021. It is assumed that the pandemic will pose further economic challenges in 1H21 amid a partial

Table 3 - 2: World economic growth rate and revision, 2020–2021*, %

	World
2020	-4.2
Change from previous month	0.1
2021	4.4
Change from previous month	0.0

Note: * 2020–2021 = Forecast.

Source: OPEC.

continuation of lockdown measures in combination with voluntary social distancing. However, 2H21 is forecast to pick up amid support in the form of a globally available vaccine. In addition, the recovery next year foresees no further challenges that will impact economic growth.

In geographical terms, it is forecast that Asia will clearly outperform western hemisphere economies. While growth risks will certainly be associated with the vaccine, further downside risks to the current growth outlook may also come from ongoing challenges due to Brexit, rising geopolitical challenges in select regions, unexpected repercussions from quickly rising global debt, and mounting social unrest in some countries as a consequence of COVID-19 and rising inequality.

The 2021 GDP growth level assumption of 4.4% remains unchanged, with growth in contact-intensive services areas picking up, but still showing the legacy of COVID-19. Additional upside potential may come from further US fiscal stimulus, an acceleration of India's recovery and a stronger-than-anticipated growth dynamic in China amid once-again rising global trade and improving domestic activity. While this remains to be seen, growth in the two largest Asian economies may have positive spillover effects on Asian and western trading partners. In addition, stimulus measures in the Euro-zone could lift growth further and an earlier available vaccine could already start to support growth in 1H21, all providing additional upside potential to the current global economic growth forecast.

OECD

OECD Americas

US

Update on the latest developments

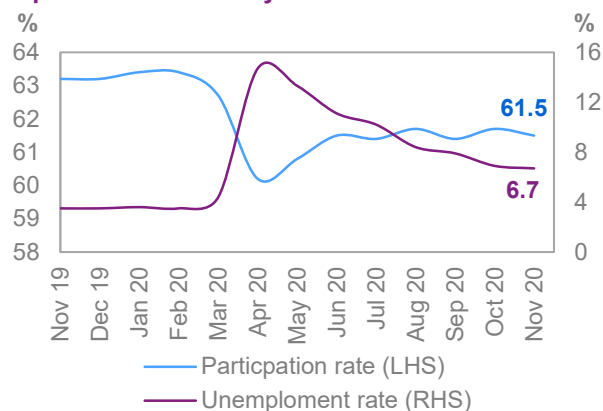
After experiencing very strong recovery in 3Q20 GDP growth, momentum at the beginning of 4Q20 slowed. This was expected, as the recovery in 3Q20 was exceptionally strong. The ending of major stimulus measures, especially social welfare measures, seems to have had a considerable impact on the most recent slowdown. In its second release of 3Q20 GDP growth, the Bureau of Economic Analysis showed GDP growth of 33.1% q-o-q seasonally adjusted annualised rate (SAAR), unchanged from the previous estimate. This confirms an exceptional recovery compared with a similarly impressive decline of 31.4% q-o-q SAAR in 2Q20. However, consumer confidence retracted in November, standing as measured by the Conference Board at

96.1, compared with 101.4 in October. Despite improvements in the labour market, consumer confidence has picked up only gradually from April's trough, when it stood at 85.7. Improving clarity on the incoming administration and the likelihood of further fiscal stimulus measures may have at least stabilised the 4Q20 slowdown. Positively, the important wealth factors of equity and housing markets continued to perform very well. This was strongly supported by intensive monetary stimulus. Asset markets are furthermore anticipating the successful impact of a widely available vaccine in the very near term. Meanwhile, the recent rise in COVID-19 cases in the US has led to voluntary social distancing and selective lockdown measures, which has dampened the recovery in 4Q20.

US industrial sector activity improved slightly in October, after a slowdown was seen in September. It rose by 1.1% m-o-m in October, compared with -0.4% m-o-m in September. This translates to a yearly decline of -5.3% y-o-y in October and -6.7% y-o-y in September. Exports improved too, declining by 13.5% y-o-y in October, compared with -14.9% y-o-y in September.

The labour market showed ongoing signs of a recovery. In November, the **unemployment rate** improved to stand at 6.7%, after seeing 6.9% in October and 7.9% in August. This is a continuous improvement since peak unemployment was seen in April, when the rate stood at 14.7%.

Graph 3 - 3: US monthly labour market



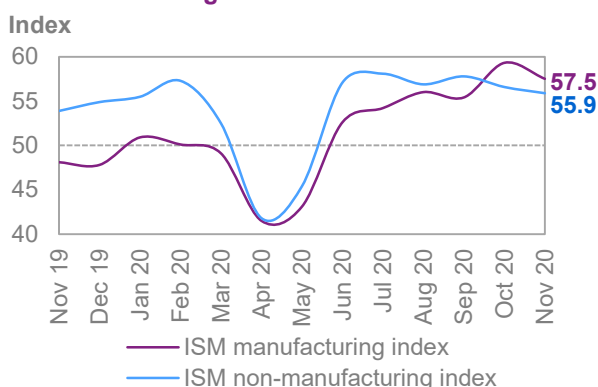
Sources: Bureau of Labor Statistics and Haver Analytics.

Near-term expectations

US growth is forecast to slow in 4Q20, after experiencing strong growth in 3Q20. This comes amid the ending of large social welfare programmes that supported, among other measures, 3Q20 consumption. After a strong 3Q20 increase of 33.1% q-o-q SAAR in GDP, growth is forecast to reach only 2.2% q-o-q SAAR in 4Q20. Positively, there is good likelihood that further stimulus measures of more than \$900 billion will be approved in Congress, which – depending in the structure and the magnitude of the support – could provide an upside to the current growth forecast. While the US economy is forecast to perform relatively well in 2021, the availability of an effective vaccine, in combination with well-targeted stimulus measures, could further lift the current 2021 growth forecast. However, the 4Q20 slowdown is forecast to carry over into 1H21. Another concern going forward may be rising debt levels, which will require close monitoring, but are not expected to post an imminent challenge in the near term. Despite the positive news of an available vaccine, the forecast does not anticipate broad-based penetration in the US before 2H20. From a quarterly perspective, this will also be the period when most of next year's pick-up will materialise. While annualised quarterly growth in 1H21 will stand at 2.6%, it will move to almost 3.6% in 2H21. However, as long as the number of COVID-19 infections are rising and only a gradual distribution of vaccines can be assumed, 1H21 economic developments, though picking up, will remain dominated by the pandemic, as partial and localized lockdowns, along with social distancing, may be pursued. Importantly, the US Federal Reserve (Fed) is expected to continue its flexible approach with regard to monetary policy to counterbalance COVID-19's effects.

The economy's recovery is reflected in **November PMI** levels as provided by the Institute for Supply Management (ISM). While still indicating a solid expansion, PMI indices retracted slightly. The manufacturing PMI stood at 57.5 in November, compared with 59.3 in October. The services sector index retracted slightly to 55.9 in November, compared with 56.6 in October.

Graph 3 - 4: US-ISM manufacturing and non-manufacturing indices



Sources: Institute for Supply Management and Haver Analytics.

GDP growth for the US remains unchanged in 2020 at -3.6%. However, it is expected that the momentum from 3Q20 will slow in 4Q20. Assuming that COVID-19 will be contained, a further rise in consumption and investment could lead to a solid recovery in the coming year. This may certainly be supported by additional fiscal stimulus measures and a widely available vaccine. For the time being, 2021 US GDP growth is forecast at 3.4%, unchanged from the previous month. Moreover, COVID-19-related uncertainties and political challenges remain.

Table 3 - 3: US economic growth rate and revision, 2020–2021*, %

	US
2020	-3.6
Change from previous month	0.0
2021	3.4
Change from previous month	0.0

Note: * 2020–2021 = Forecast.

Source: OPEC.

OECD Europe

Euro-zone

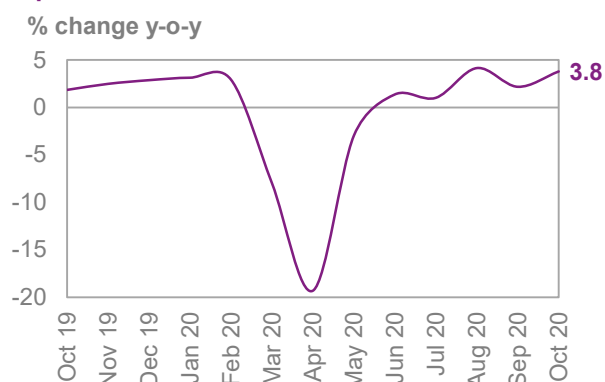
Update on the latest developments

At the time of this writing, it is still unclear whether the EU budget and further fiscal stimulus measures will be agreed upon, but there seems to be a good chance that a compromise will be found. This would allow the EU to disburse its recovery fund in the coming year at the magnitude of 750 billion euros, a substantial amount that would be especially supportive for the most challenged economies in the Euro-zone. In the midst of this very important decision, the Euro-zone has recovered strongly in 3Q20. GDP growth in 3Q20 was reported at 12.6% q-o-q on a seasonally adjusted (SA) basis, while the annualized rate stood at more than 60% or almost twice the growth level of the US. However, since the beginning of 4Q20, voluntary social distancing and relatively severe lockdown measures have caused a deceleration, which can be seen in the latest available economic indicators. Business and consumer confidence indicators have all pointed to a slowdown in 4Q20. As a response to this slowdown, the European Central Bank (ECB) has increased its accommodative monetary policy measures. The ECB announced that it will increase the size of its pandemic emergency purchase programme (PEPP) by 500 billion euros, from 1.35 trillion to 1.85 trillion euros. It also said it will push back the end of this mechanism from June 2021 to at least March 2022. Furthermore, it will reinvest any proceeds until at least the end of 2023.

The large monetary support and especially the fiscally driven social welfare measures have supported the **labour market** in the Euro-zone and have thus far kept the unemployment rate at a relatively modest level. The latest available October numbers from Eurostat even point to an improvement as the unemployment rate declined to 8.4%, compared with 8.5% in October.

Retail sales increased again in November, rising by 3.8% y-o-y, after 2.2% y-o-y in October. Industrial production (IP) retracted in September, declining by 6.6% y-o-y, after a decline of 6.3% y-o-y was seen in August.

Graph 3 - 5: Euro-zone retail sales



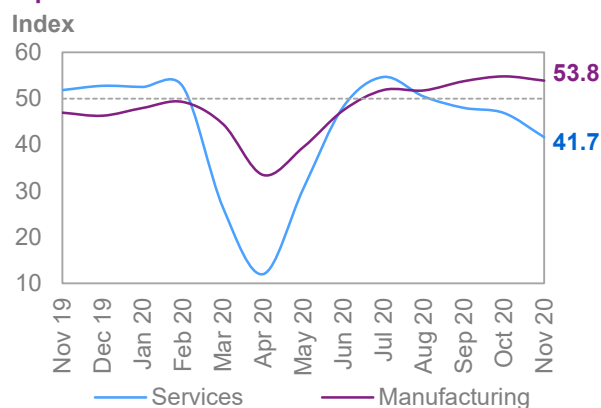
Sources: Statistical Office of the European Communities and Haver Analytics.

Near-term expectations

Given the ongoing considerable issues of the pandemic in the Euro-zone and the consequent outcome of voluntary social distancing and lockdown measures in most Euro-zone economies, 4Q20 GDP is forecast to decline as consumption and investments are expected to be, for the most part, negatively impacted. After the strong growth of more than 60% annualized quarterly growth in 3Q20, 4Q20 GDP is forecast to decline by almost 10%. The ECB's additional monetary stimulus, in combination with the likely distribution of the 750 billion euro rescue fund, will help support the gradual recovery in 2021. This assumes that a vaccination will be gradually distributed and that infection rates in 1H21 do not exceed the average level of 2H20 and that only localized actions are undertaken to contain the virus. The recovery in travel, tourism, leisure and hospitality, sectors that are very important for many Euro-zone economies, is forecast to be muted. Global trade is forecast to recover further in 2021, but it will likely remain subdued.

The November **PMI** for the Euro-zone economy reflects the ongoing 4Q20 contraction. The manufacturing PMI fell to 53.8, compared with 54.8 in October and 53.7 in September. The PMI for services, the largest sector in the Euro-zone, fell considerably, to a level of 41.7, compared to 46.9 in October and 48 in September.

Graph 3 - 6: Euro-zone PMIs



Sources: IHS Markit and Haver Analytics.

Taking into account the ongoing challenges in the Euro-zone and a slight downward revision of 3Q20 GDP growth by Eurostat, the **GDP growth forecast for 2020** was revised down to -7.3%, compared with -7.2% in the previous month. While a vaccination may become available soon, partial lockdown measures and voluntary social distancing are forecast to continue in 1H21.

Table 3 - 4: Euro-zone economic growth rate and revision, 2020–2021*, %

	Euro-zone
2020	-7.3
Change from previous month	-0.1
2021	3.7
Change from previous month	0.0

Note: * 2020–2021 = Forecast.

Source: OPEC.

2H21 should gain traction with an anticipated improvement in the COVID-19 situation amid the expected wide availability of a vaccine. While a successful containment of COVID-19 may provide upside to economic growth, the **2021 GDP growth** forecast remains unchanged at 3.7%. Moreover, Brexit will need close monitoring as it may impact growth in the Euro-zone in 2021, and negotiations have not been finalized yet.

OECD Asia Pacific

Japan

Update on latest developments

After a considerable decline in 1H20 and having entered the pandemic already in a recession, the monetary and fiscal stimulus measures by the Japanese government have led to a strong recovery in 3Q20. After a decline of 2.3% q-o-q SAAR in 1Q20 and a contraction of 28.8% q-o-q SAAR in 2Q20, growth has recovered to 21.4% q-o-q SAAR in 3Q20. Most indicators point to a continuation of the recovery and a better-than-expected development in 2H20. With rising consumer confidence lifting domestic demand further and an improvement in global trade, the economy has seen good momentum in the past months. In addition, COVID-19 infections have been relatively well contained, which has also helped to normalize economic activity again. However, some underlying weakness remains. While of less importance, the unemployment rate stood at 3.1% in October, still a low level, but the highest this year.

Industrial production improved on a monthly basis, rising by 3.3% m-o-m in October, compared to 3.1% m-o-m in September. This is the fifth consecutive monthly increase. On a yearly comparison, this translates into a decline of 3.3% y-o-y, compared with a decline of 10.2% y-o-y in September and -11.1% in August.

Exports improved as well on a monthly basis, rising by 2.6% m-o-m, in October, after a rise of 3.5% m-o-m in September. On a yearly basis, this is a decline of 2.3% y-o-y in October and a decline of 8.5% y-o-y in September, all on a seasonally adjusted basis. Based on the usually applied non-seasonally adjusted view, exports declined even less in October, falling by only 0.2% y-o-y.

Retail sales recovered after falling sharply, by 8.8% y-o-y, in September, a decline that was influenced by last year's very strong September sales ahead of the sales tax increase in October. In October, they rose by 6.4% y-o-y. In line with the economy's underlying uptick, consumer sentiment, as reported by the Cabinet Office, rose to 33.7 in November, rising from 33.5 in October.

Near-term expectations

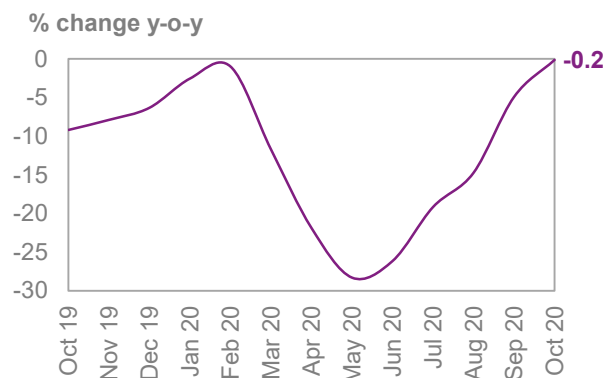
While growth rebounded sharply in 3Q20, growing by 28.8% q-o-q SAAR, growth expectations for Japan's economy are forecast to slow down in 4Q20 to lower growth of 5% q-o-q SAAR. However, this is still far higher than expectations for the US and the Euro-zone, with the Euro-zone's economy even forecast to decline. The main reason may not only be the extraordinary stimulus measures, but also the relatively improved containment of COVID-19 and the improving trade dynamics, especially with Asian trading partners. The recovery is forecast to soften further in 2021 with relatively equally distributed quarterly growth of 0.7% q-o-q SAAR. The relatively low number of COVID-19 infections is forecast to benefit the economy as well in 2021. The availability of a vaccine may also lift growth further, with Japan's economy benefitting from domestic and global containment of COVID-19, as well as a recovery in global trade.

November **PMIs** point to the ongoing gradual improvement of the recovery in Japan in both the services and manufacturing sectors. The manufacturing PMI rose to 49 in November, compared with 48.7 in October and 47.7 in September. However, the index remains below the growth-indicating level of 50. The PMI for the services sector, which constitutes around two-thirds of the Japanese economy, rose to 47.8 in November, almost unchanged from 47.7 in October, indicating a contraction in this important sector.

The underlying assumption for the **GDP growth** forecast considers that after the downturn in 1H20 and the rebound in 3Q20, growth will soften towards 4Q20. Taking into consideration the better-than-expected 3Q20 growth number, the 2020 GDP growth forecast was revised up to -5.2%.

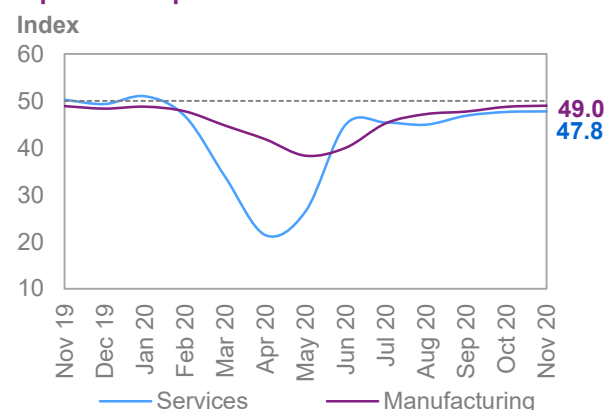
Assuming that COVID-19 remains largely contained in Japan and that there will be a global improvement towards and especially after 2H21, a rebound and gradual positive momentum should lead to a pickup in 2021. While GDP growth is expected to remain supported by stimulus measures, leading to a recovery in private household consumption and investments, GDP growth in 2021 is unchanged from last month to stand at 2.8%. Upside may come from an acceleration in global trade amid a recovery in global consumption, potentially supported by a successful vaccination program in major economies.

Graph 3 - 7: Japan's exports



Sources: Ministry of Finance, Japan Tariff Association and Haver Analytics.

Graph 3 - 8: Japan's PMIs



Sources: IHS Markit, Nikkei and Haver Analytics.

Table 3 - 5: Japan's economic growth rate and revision, 2020–2021*, %

	Japan
2020	-5.2
Change from previous month	0.5
2021	2.8
Change from previous month	0.0

Note: * 2020–2021 = Forecast.

Source: OPEC.

Non-OECD

China

Update on the latest developments

China's economy continued its broad-based recovery as private consumption and fixed asset investments continued to pick up. Meanwhile, growth in industrial value added remained unchanged on a month to month base, however it is back to the pre-pandemic level. China's retail trade growth increased by 4.3% y-o-y in October 2020, the sharpest increase since December 2019. Consumption continued to recover from the pandemic downturn. The automobiles sales rose 12 % y-o-y in October compare to 11.2% y-o-y in September; however, sales of oil and oil products continued to contract but at a slightly slower rate, declining by -11% y-o-y compared to -11.8%. Over the period January to October, retail trade contracted by 5.9% y-o-y.

On the policy front, as the economy rebounds, the People's Bank of China (PBoC) has been studying the likelihood of tightening monetary stimulus towards 2021 as a trade-off for concerns over financial system stability and to contain elevated debt risks. Meanwhile, the value of loans increased by only 12.8% y-o-y in November, recording the lowest growth since March 2020.

China's **industrial production** climbed 6.9% y-o-y in October 2020, same as in the previous month, as activity continued to recover from the COVID-19 shock. In 2H20, the industrial sector has seen an impressive turnaround, supported by robust exports.

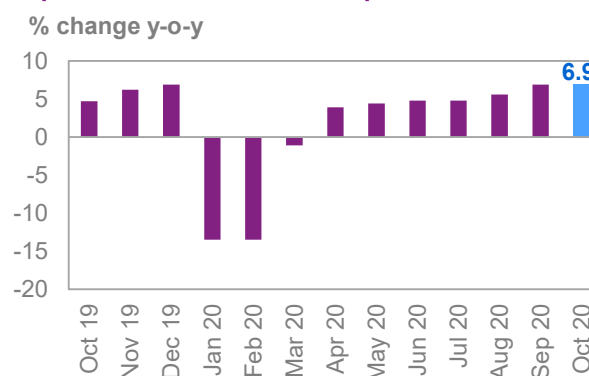
Externally, China's **trade surplus** expanded to \$75.42 billion in November 2020 from \$37.18 billion in November 2019, registering the largest trade surplus since 1981. External demand rose to all-time high, jumping by 21.1% y-o-y to \$268.07 billion in November 2020, supported by rising global demand. The improvement in exports were supported by virus-related purchases such as textiles and electronics. Imports increased as well, by 4.5% y-o-y, to \$192.65 billion in November 2020, following a 4.7% increase in October 2020 driven by rising domestic demand and higher commodity prices.

The trade surplus with the US widened to \$37.42 billion in November from \$31.37 billion in October. Over the past eleven months of 2020, China's trade surplus was \$459.92 billion, as exports rose by 2.5% and imports fell by 1.6%, indicating that external demand has become more broad-based.

Consequently, China's **foreign exchange reserves** increased by more than \$50 billion in November, recording the sharpest increase since August 2016, driven by record-high exports and a weaker dollar as the yuan has already appreciated by more than 6% against the dollar in 2020.

In November 2020, China unexpectedly recorded the first deflation rate since October of 2009. The **consumer price index (CPI)** declined by 0.5% y-o-y following a 5.0% increase in October 2020 mainly due to a collapse in pork prices, which led to an approximate 2% contraction in food prices for the first time in nearly three years. However it is important to note that the increase in pork supply and a high statistical base over the same period in 2019 contributed to the current deflation. On a monthly basis, consumer prices fell by 0.6%, the sharpest decline since May 2020. Nevertheless, considering the core CPI (excluding fuel and food), inflationary pressures might be steadier than what the CPI index suggests as the core CPI increased by 0.5% in November 2020.

Graph 3 - 9: China's industrial production



Sources: China National Bureau of Statistics and Haver Analytics.

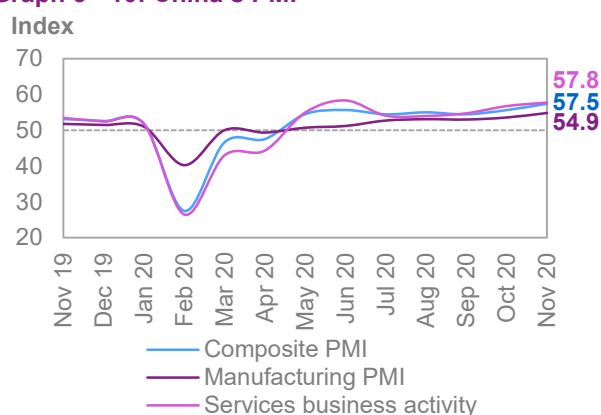
Near-term expectations

Looking ahead, China's economy is on a steady path to recovery that would be sustained into 2021 with a high level of business confidence, which has remained strongly positive amid signs that COVID-19 remained largely under control in the country. Moreover, the boosted external demand would be an additional recovery driver considering the increased need for virus-related commodities and services. This robust positive singles reflected in the **PMI** indices which all rose significantly in the month of November. The Caixin China General Manufacturing PMI increased to 54.9 in November 2020 from 53.6 in October, registering the seventh straight month of expansion in manufacturing output and the highest since November 2010. The services PMI increased to 57.8 in November 2020, from 56.8 in October, keeping the momentum of high growth in services activities and increased external demand.

However, certain external and local drivers, such as the development of a COVID-19 vaccination and infection rates around the globe, in addition to the uneven domestic recovery, might pose challenges for China's recovery. In addition, uncertainty related to US-China trade relations under the new US administration must be considered.

China's **GDP growth for 2020 and 2021** remain unchanged from last month's projections at 2.0% and 6.9%, respectively. Yet, despite prevailing uncertainty, positive development and distribution of a COVID-19 vaccination could provide further upside potential towards the 2021 growth.

Graph 3 - 10: China's PMI



Sources: Caixin, IHS Markit and Haver Analytics.

Table 3 - 6: China's economic growth rate and revision, 2020–2021*, %

	China
2020	2.0
Change from previous month	0.0
2021	6.9
Change from previous month	0.0

Note: * 2020–2021 = Forecast.

Source: OPEC.

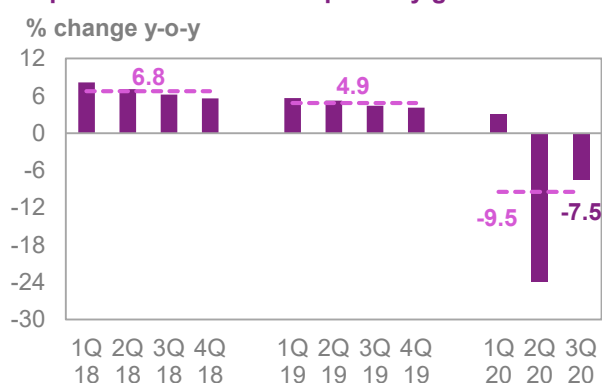
Other Asia

India

Update on the latest developments

Following the sharpest decline in 2020 of almost 24% y-o-y in 2Q20, **India's real GDP growth** contracted by only 7.5% y-o-y in 3Q20. This indicates a notable V-shaped recovery from the 2Q20 contraction, which was the weakest among the Asia-Pacific region. Higher private demand was recorded during the festival season, in addition to a notable recovery in manufacturing and utilities output, which benefitted from a resumption in economic activity starting in June. Remarkably, the recovery in 3Q20 was primarily driven by private consumption, while public consumption was scaled back.

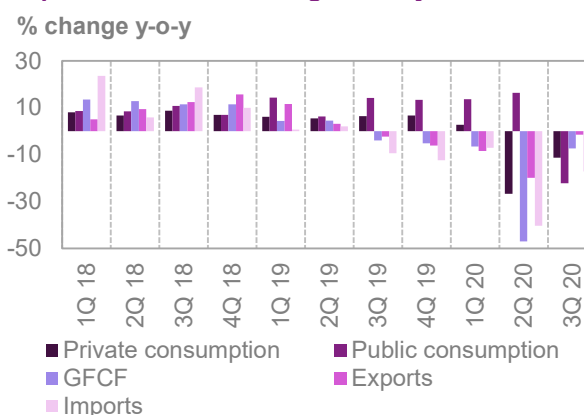
Graph 3 - 11: India's GDP quarterly growth



Sources: National Informatics Centre (NIC) and Haver Analytics.

Regarding the GDP contribution from **demand**, private consumption contracted by 11.3% y-o-y in 3Q20 following a fall of 26.7% y-o-y in 2Q20. Fixed capital formation contracted by 7.3% y-o-y in 3Q20 following a double-digit contraction of 47% y-o-y in 2Q20, driven by a higher rate of capacity utilisation in addition to inventory restocking. Over the same period, investment shrank by 7.3% y-o-y, compared with a sharp contraction of 47.1% y-o-y in 2Q20 – showing a remarkable recovery in the sector. Exports contracted by 1.5% y-o-y in 3Q20 following a plunge of 19.8% y-o-y in 2Q20, while imports fell by 17.2% in 3Q20, compared with a contraction of 40.4% in 2Q20.

Graph 3 - 12: India's GDP growth by demand side



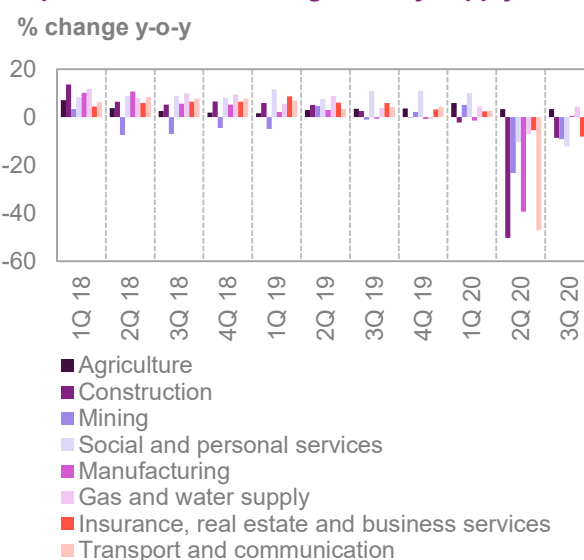
Sources: Central Statistics Office and Haver Analytics.

In contrast to other demand-side GDP contributors, government final consumption expenditure recorded a double-digit contraction of 22% y-o-y in 3Q20 following expansion of 16.4% y-o-y in 2Q20, making government spending the worst performer as it lost momentum from 2Q20. However, as about 90% of India's economic activities are led by private spending and private investment, improvements in those sectors definitely reflect a positive turnaround for India's economy.

On the **supply side**, while agriculture was the only sector to record growth of 3.4% y-o-y in 2Q20, manufacturing output recorded a sharp expansion of 0.6% y-o-y in 3Q20, following a collapse of 39.3% y-o-y over the April to June period. Similarly, the utilities sector grew by 4.4% in 3Q20 following a contraction of 7% in 2Q20. Only finance, real estate and professional activities shrank faster in 3Q20, by 8.1% y-o-y compared with a contraction of 5.3% y-o-y in 2Q20, while other supply-side contributors contracted, but at a slower pace, thus still posting a significant recovery. This includes mining (-9.1% vs -23.3%); construction (-8.6% vs -50.3%); and trade, hotels (-15.6% vs -47%).

More signs of improvement were recorded in November in the labour market. The unemployment rate in both urban and rural areas marginally declined to 7.1% and 6.3%, respectively, compared with 7.2% and 7.0% in October, according to data from the Centre for Monitoring Indian Economy (CMIE). Overall, the country's jobless rate dropped to 6.5% in November from about 7.0% in October.

Graph 3 - 13: India's GDP growth by supply side



Sources: Central Statistics Office and Haver Analytics.

India's **industrial production** improved as well and moved into positive territory, expanding for the first time in seven months by 0.2% y-o-y in September, following a downward-revised contraction of 7.4% in August.

On external demand, India's **trade deficit** shrank to \$9.96 billion in November, down from \$12.1 billion in November 2019. Preliminary estimates showed exports dropped by 9.1% to \$23.43 billion from \$24.82 billion in October of this year and imports declined by 13.3% to \$33.39 billion from \$33.60 billion in October of 2020.

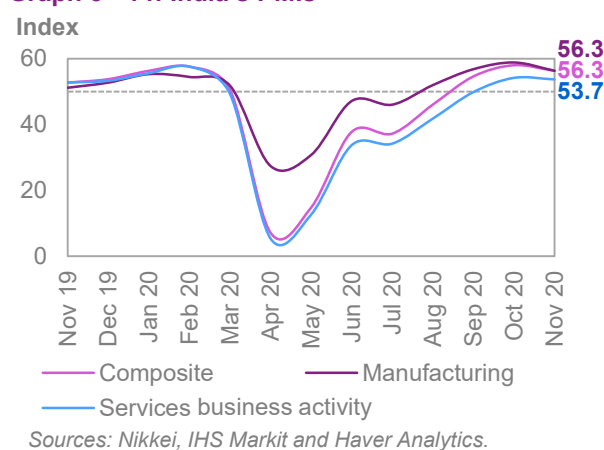
The **CPI** registered its highest rate since May 2014 in October 2020 as it increased to 7.6% following a downward revision of 7.27% in September. This rate was above the central bank's 2-6% target for the 7th straight month. Increased price levels were mainly driven by food inflation ahead of the festival season; it rose to 11.1% in October from 10.7% in September, the highest rate since January.

Near-term expectations

Considering the less severe GDP contraction in 3Q20 and improvements in most macroeconomic indicators, as well as a slowing COVID-19 infection rate, India's economy is likely to rebound at a faster pace and the recovery should continue to expand in 2021.

However, there are issues of concern. First, released economic data might exclude informal/unorganised economic activity, which definitely faced a sharp decline due to the lockdown that has not yet been measured. Second, the remarkable increase in manufacturing restocking in 2QFY might challenge future industrial output growth. This is reflected in November PMI indices, which marginally declined in both the manufacturing and services sectors. The IHS Markit India Manufacturing **PMI** fell to 56.3 in November from 58.9 in October, while the services PMI decreased to 53.7 in November from 54.1 the previous month. Despite the decline, the latest reading was consistent with a sharp rate of expansion, driven by the ongoing easing of COVID-19 restrictions.

Graph 3 - 14: India's PMIs



Overall, in the last part of 2020, there have been more signs of consistent upticks in economic activities such as auto sales and PMIs. GST collection continued to post a positive trend, though this was moderate due to cautious demand and a high jobless rate. In addition, fiscal stimulus injected in October and November may be implemented faster and more effectively than that in May, leading to more signs of a rebound in the economy. Yet, uncertainty is still high considering developments in the vaccination process at the global level, as well as overall improvements in local economic and health conditions. Subsequently, the **GDP growth forecast for 2020 and 2021** remains unchanged from last month at -9.2% and 6.8%, respectively.

Table 3 - 7: India's economic growth rate and revision, 2020–2021*, %

	India
2020	-9.2
Change from previous month	0.0
2021	6.8
Change from previous month	0.0

Note: * 2020–2021 = Forecast.

Source: OPEC.

Latin America

Brazil

Update on latest developments

The **Brazil's real GDP** contracted by 3.9% y-o-y in 3Q20, after a downwardly revised 10.9% contraction in 2Q20, recording the third-straight quarter of decline due to the COVID-19 pandemic. On a quarterly basis, the real GDP expanded in 3Q20 by 7.7%, compared with a contraction of 9.6% in 2Q20. Comparing the first three quarters of 2020 to the same period last year, the Brazilian economy lost about 5% of GDP compared with 2019.

Private consumption recovered considerably, contracting by 6% y-o-y following a contraction of 12.2% y-o-y in 2Q20. Likewise, public spending dropped by 5.3% in 3Q20 due to a slower pace compared with 8.5% in 2Q20. Investment activities recovered somewhat, dropping by only 7.8% in 3Q20 following a 13.9% decline in 2Q20. Exports contracted by 1.1% y-o-y in 3Q20 following a 0.7% expansion in 2Q20. Similarly, imports again saw a double-digit decline of 25% y-o-y in 3Q20 compared with a decline of 14.6% in 2Q20 government spending

October and November key indicators suggest a slight slowdown in major economic sector performance amid fears of an ongoing second wave locally and globally. However, Brazil's economy has been rebounding since 2H20, supported by billions of dollars in fiscal stimulus targeted to support private consumption.

Industrial production in Brazil kept expanding in October, though at a slower pace compared with the previous month. Industrial output increased by only 0.30% y-o-y that month, lower than the upwardly revised 3.7% gain recorded in September.

Retail trade in Brazil continued to build momentum, increasing by 8.30% y-o-y in October, the biggest increase in retail sales since February of 2014. Nevertheless, consumer confidence in Brazil declined in 3Q20 to 42.8 points down from 47.3 in 4Q19, the lowest reading since 2Q18 amid households deteriorating assessment of their financial situation and future personal income. Consumers were also more concerned about inflation, which jumped to 4.31% y-o-y in November, the sharpest increase since December 2019, amid a 15.94% y-o-y increase in food and beverages prices, the highest since October 2003.

Labour market pressures also surged, as unemployment increased to 14.6% in 3Q20 from 13.3% in 2Q20 – the steepest jobless rate on record amid the COVID-19 crisis impact on the labour market. Unemployed worker figures surged by 10.2% to an all-time high of 14.09 million and that of employed workers fell by 1.1% to 82.46 million.

Brazil's **trade** surplus expanded to \$3.73 billion in November of this year from \$3.56 billion in November 2019. Exports fell by 1.2% y-o-y to \$17.53 billion, while imports dropped to \$13.79 billion.

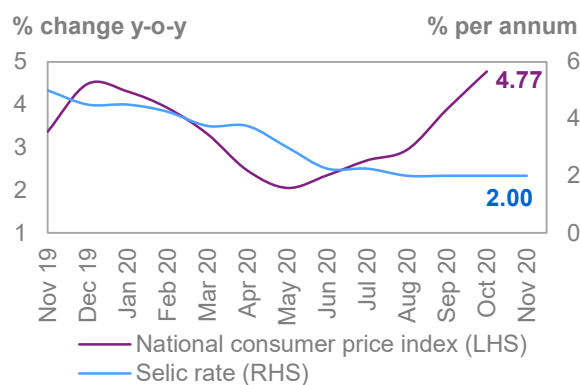
Near-term expectations

Major macroeconomic indicators saw a marginal decline over the last month as the pandemic continued to weigh on the economy. Brazil's economy is still on a recovery path, supported by fiscal and monetary support offered during 2020.

Even though November's **PMI** reading points to a decline in the manufacturing and services PMI from 66.7 and 52.3 in October to 64 and 50.9 in November, respectively, the readings still point to strong growth in both manufacturing and services activities. Disruptions to sectors are mainly driven by increased inventories levels and concerns over the second wave of the virus. Nevertheless, recent vaccination developments, as well as better-than-expected 2Q20 and 3Q20 performance suggest a further recovery in the economy.

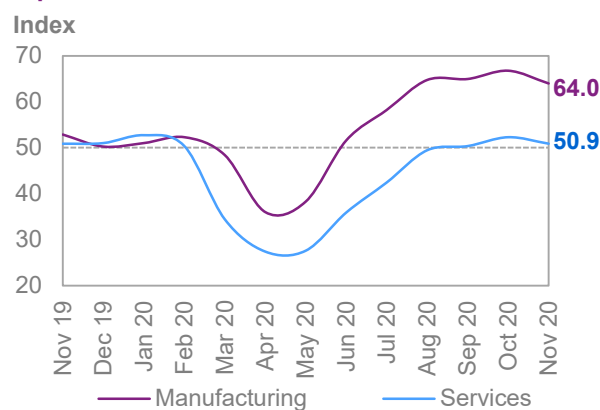
Overall, considering 3Q20 **GDP growth** performance, Brazil's GDP growth for the year has been revised up by 0.2 pp to a contraction of -5.8% from a contraction of 6.0% the previous month, while the 2021 GDP forecast maintained growth of 2.4%.

Graph 3 - 15: Brazil's inflation vs. interest rate



Sources: Banco Central do Brasil, Instituto Brasileiro de Geografia e Estatística and Haver Analytics.

Graph 3 - 16: Brazil's PMIs



Sources: IHS Markit and Haver Analytics.

Table 3 - 8: Brazil's economic growth rate and revision, 2020–2021*, %

	Brazil
2020	-5.8
Change from previous month	0.2
2021	2.4
Change from previous month	0.0

Note: * 2020–2021 = Forecast.

Source: OPEC.

Africa

South Africa

Update on the latest developments

South Africa's real GDP contracted by 6.0% y-o-y in 3Q20, following a slump of 17.5% in 2Q20. This suggests a rebound on a quarterly basis, which was expected following the resumption of economic activity previously halted due to a strict nationwide lockdown. However, the recovery remains fragile, due to power shortages and slow structural reforms, with a resurgence in COVID-19 infections possibly creating the necessity for tighter containment measures. The government officially declared the arrival of a second wave of COVID-19 infections in the month of December and posed the possibility of imposing new restrictions to curb the spread of the pandemic. Meanwhile, industrial output contracted by 3.4% y-o-y in October, following a downward revision of 1.9% y-o-y in September. This might signal that the sector's recovery is losing momentum. An output decline was seen for petroleum, chemical products, rubber and plastic products. On a seasonally adjusted monthly basis, manufacturing output expanded by 2.6% in October, following a downward revision to 2.9% in September, as the government may apply new restrictions which would further hinder the rebound of industry, a sector that accounts for 14% of gross domestic product.

Over 3Q20, the unemployment rate surged to 30.8% from 23.3% in 2Q20. This was the highest jobless rate since 2008, with the number of job-seekers surging amid the easing of lockdown restrictions. The number of unemployed individuals increased by 2.2 million to 6.5 million, though employment rose by 543,000 to 14.7 million and the labour force jumped by 2.8 million to 21.2 million.

The inflation rate in South Africa eased to 3.2% in November from 3.3% in October, remaining below the 4.6% recorded in February prior to the pandemic. On a monthly basis, the overall price level was flat, following an increase of 0.3% in October.

Near-term expectations

As newly released GDP data shows, an economic contraction related to the pandemic continued into 4Q20, and several trends in the South African economy have become apparent. Meanwhile, the forward-looking Absa Manufacturing PMI dropped to 52.6 in November from 60.9 in October. However, this is higher than pre-pandemic levels and shows a fourth consecutive expansion in manufacturing activity. In contrast, the RMB/BER business confidence index jumped to 40 in 4Q20 from 24 in 3Q20, recording the highest index level since 2Q18, following the resumption of economic activity in recent months. Fiscal constraints and limited room for monetary stimulus might weaken the consumption and business outlook. Above all, an ongoing second global lockdown will negatively affect the demand outlook.

South Africa's 2020 **GDP** is forecast to contract by 8.0%, and the 2021 GDP to grow by 3%, both unchanged from last month.

Table 3 - 9: South Africa's economic growth rate and revision, 2020–2021*, %

	South Africa
2020	-8.0
Change from previous month	0.0
2021	3.0
Change from previous month	0.0

Note: * 2020–2021 = Forecast.

Source: OPEC.

Russia and Central Asia

Russia

Update on the latest developments

Russia's economy contracted by 3.4% y-o-y in 3Q20, a slight recovery from the 8.0% y-o-y contraction seen in 2Q20. The economy benefitted from the easing of COVID-19 restrictions, as well as a recovery in oil prices, the latter supported by Declaration of Cooperation participant decisions. Unsurprisingly, the hotel and restaurant sector recorded the biggest decline in 3Q20 at 25.9%, following a 56.9% y-o-y tumble in 2Q20.

Private consumption is growing weakly as the economy gradually recovers from the pandemic crisis. Russia's retail trade fell by 2.4% y-o-y in October, after experiencing a 3% slump in September, thus recording the seventh month of decline in retail activity. However, retail trade increased on a monthly basis by 2.1%, following a 1.7% decline in September.

On the **policy front**, the government applied special subsidies and tax breaks for businesses and households impacted by the pandemic, totalling 3.4% of the GDP. This may boost the economy further. Yet, plunging budget revenues might increase the budget deficit. However, the government plans to roll back its stimulus in 2021, which may narrow the deficit while restraining the pace of economic recovery

The **labour market** remained under pressure despite an unchanged unemployment rate in October from the previous month at 6.3%. The number of those officially registered as unemployed declined by 217,000 to 3.470 million.

In November, the **CPI** rose to 4.4% from 4.0% in October, above the central bank's 4% target, to record the highest inflation rate since July 2019. The inflationary rise was mainly driven by increased costs for both food and non-food products. Services inflation stabilized at 2.5%.

Despite recent strengthening of the ruble against the US dollar after a 13% depreciation since June, Russia's Central Bank kept the benchmark **interest rate** unchanged at 4.25%, accounting for the increasing inflation rate. Since March, the Central Bank has lowered the interest rate by 175 basis points.

Russia's **trade** surplus shrank to \$6.44 billion in October this year from \$13.16 billion in October 2019 amid rising COVID-19 cases and new lockdowns that negatively affected global demand. **Exports** declined by \$23.8 billion, but **imports** dropped by a softer 8.8%.

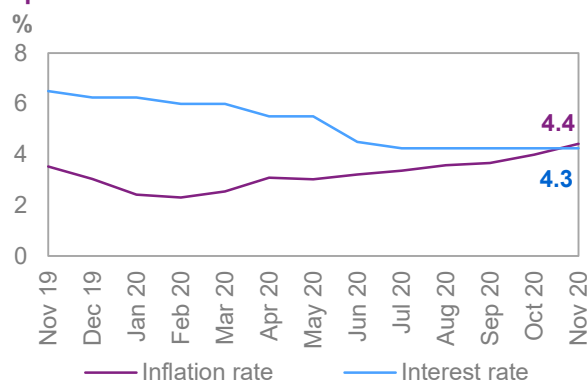
Near-term expectations

Early 4Q20 indicators may suggest a meaningful deterioration with renewed pressure from the COVID-19 pandemic. However, Russia's economy is anticipated to benefit from the ongoing rise in oil prices supported by recent decisions of participants to the Declaration of Cooperation.

Russia's recent **PMI** indices signalled a marginal decline in the manufacturing sector. The IHS Markit Russia Manufacturing PMI dropped to 46.3 in November from 46.9 in October. Meanwhile, the services PMI rose to 48.2 in November from 46.9 the previous month. The reading marked the second consecutive monthly contraction in the sector, most likely caused by the resurgence in COVID-19 infections.

Incorporating recent **GDP growth** data and developments in oil prices, Russia's GDP forecast for 2020 was revised up to a contraction of 4.5% from a contraction of 4.9%. While the 2021 GDP forecast remains unchanged at 2.9%, uncertainty still exists over recent developments in the political scene, namely policies of the new US administration towards Russia, along with COVID-19 infection and vaccination developments.

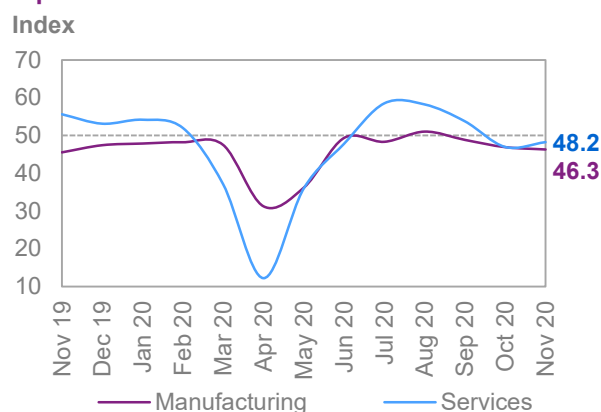
Graph 3 - 17: Russia's inflation vs. interest rate



Sources: Federal State Statistics Service, Central Bank of Russia and Haver Analytics.

Exports declined by

Graph 3 - 18: Russia's PMIs



Sources: IHS Markit and Haver Analytics.

Table 3 - 10: Russia's economic growth rate and revision, 2020–2021*, %

	Russia
2020	-4.5
Change from previous month	0.4
2021	2.9
Change from previous month	0.0

Note: * 2020–2021 = Forecast.

Source: OPEC.

OPEC Member Countries

Saudi Arabia

The IHS Markit **Saudi Arabia** non-oil PMI registered its highest reading in 10 months as it rose to 54.7 in November from 51.0 in October. This also was the third month of expansion in a row in the sector amid the resumption of non-oil activities following the easing of the lockdown restrictions. The Saudi government has announced large-scale measures to secure lending through 2020 to support the non-oil sector, which is facing the impact of COVID-19 containment measures. This would have a positive impact on credit growth and private sector expansion that might continue beyond the current crisis.

Looking ahead, Saudi Arabia has so far been the most successful among Gulf Cooperation Council (GCC) countries in controlling COVID-19 infections. The country's economy recorded growth of 1.2% q-o-q in 3Q20, driven by an expansion of 5.6% q-o-q. Business expectations improved to their highest point according to the IHS market survey. Meanwhile, news about effective vaccines and a recovery in oil prices supported by recent decisions of Declaration of Cooperation participants increased the upside potential for a future economic recovery in Saudi Arabia in 4Q20, driven by policy support and improved oil prices.

Nigeria

Nigeria's real GDP decline by 3.6% y-o-y in 3Q20, after seeing a 6.1% y-o-y contraction in 2Q20. This was the second recession in the country in four years, resulting from a nationwide lockdown implemented in response to the current pandemic. The oil sector fell by 13.9% y-o-y compared with a 6.6% decline in 2Q20, while non-oil economic activities declined by 2.5% y-o-y. This is a slight recovery from the 6.1% y-o-y decline seen in 2Q20. The GDP grew 12.1% on a quarterly basis – the highest quarterly growth seen since 2Q10 and a sharp recovery from the 5% contraction seen in 2Q20.

Inflationary pressure continued to challenge Nigeria's economy, as the CPI rose to 14.2% y-o-y in October from 13.71% in September, due to inflated food prices caused by the adverse effects of ongoing border closures. Otherwise, the manufacturing Purchasing Managers' Index (PMI) continued its momentum and increased to 50.2 in November from 49.4 in October amid an expansion in output and consumption activities.

Like most countries around the globe, particularly commodity producers, the outlook for Nigeria's economy remained challenged by COVID-19 developments and developments in oil prices, along with domestic inflationary pressures and fiscal constraints.

The United Arab Emirates (UAE)

The non-oil **UAE** PMI was unchanged at 49.5 in November amid concerns about a renewed increase in virus cases. Additionally, the UAE's efforts to facilitate a recovery may not materialize until mid-2021 when COVID-19 is firmly under control. Price deflation in the UAE eased to 2.18% y-o-y in October from 2.36% in September, recording the 22nd straight month of deflation. The UAE non-oil economy is most likely to strongly bounce back in 2021 due to a new travel corridor agreement with the UK, the implementation of business-friendly reforms and the recent depreciation of the US dollar. Positive COVID-19 vaccination news and improvements in the oil price would compound this effect.

The impact of the US dollar (USD) and inflation on oil prices

The **USD** generally weakened against most major currencies with the expectation of a relatively larger monetary stimulus in the US when compared with other major developed economies. It declined by 0.5% against the euro m-o-m and by 0.2% against the Swiss franc. Against the pound sterling, it declined by 1.7% on optimism during the month that a deal between the EU and the UK could be reached. Against the yen, the dollar declined by 0.8%.

The dollar dropped by 1.5% against the yuan as in the previous month with the yuan supported by a widening current account surplus. Against the rupee, it increased by 1%, with raising inflation expected to limit interest rate cuts by the Reserve Bank of India. Meanwhile, it declined against the Russian ruble by 0.8% as oil prices recovered, while it decreased by

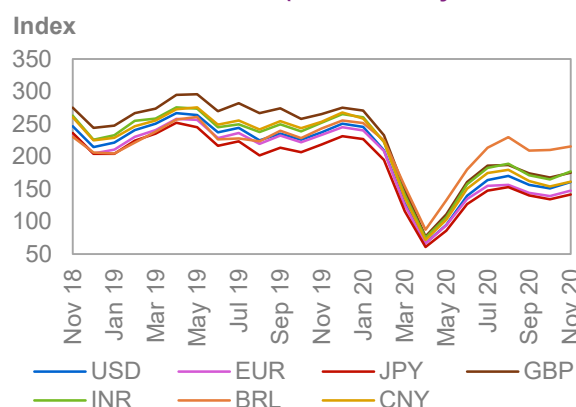
3.7% against the Brazilian real amid improving economic activity and inflation readings. Against the Mexican peso, the dollar declined by 3.9%, as in the previous month, on expectations of receding trade tensions with its main trading partner.

In **nominal terms**, the price of the ORB increased by \$2.53, or 6.3%, from \$40.08/b in October to reach \$42.61/b in November.

In **real terms**, after accounting for inflation and currency fluctuations, the ORB increased to \$26.60/b in November from a revised \$25.12/b (base June 2001=100) the previous month.

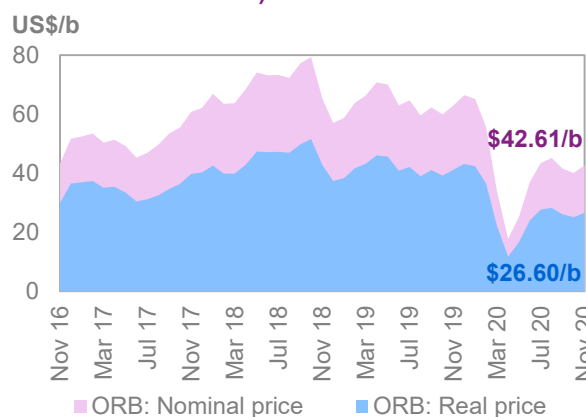
Over the same period, the **USD** declined by 0.5% against the import-weighted modified Geneva I + USD basket, while inflation was slightly down m-o-m.

Graph 3 - 19: ORB crude oil price index compared with different currencies (base January 2016 = 100)



Sources: IMF and OPEC.

Graph 3 - 20: Impact of inflation and currency fluctuations on the spot ORB price (base June 2001 = 100)



Source: OPEC.

World Oil Demand

Global oil demand in 2020 is anticipated to decline by 9.77 mb/d, marginally lower compared to last month's report. Weaker-than-expected data in the OECD during 3Q20, on the back of slower transportation fuels demand in the US and OECD Europe led to a downward revision of 0.18 mb/d. However, non-OECD oil demand was revised higher by 0.16 mb/d, offsetting the downward OECD revisions. Better-than-expected data in China, amid a steady recovery across various economic sectors, as well as improving data from India supported this upward revision. As a result, OECD oil demand is estimated to drop by 5.48 mb/d in 2020 with OECD Americas accounting for the bulk. Non-OECD is projected to drop by 4.29 mb/d, with Other Asia and India accounting for most of the decline. It is important to note that China has recorded growth since the beginning of 3Q20 and is projected to show y-o-y increases in 4Q20. Total oil demand is now estimated to reach 89.99 mb/d during 2020.

For 2021, global oil demand is estimated to increase by 5.90 mb/d, a downward revision of 0.35 mb/d, reflecting the uncertainty surrounding the impact of COVID-19 on transportation fuels in OECD economies in 1H21. Additionally, albeit to a lesser extent, a number of weather forecasts anticipate a milder than normal winter in the northern hemisphere pressuring the middle distillates demand outlook. Generally, the 2021 oil demand outlook assumes an increase of 4.4% in global economic activities supporting demand for industrial fuels, most significantly in OECD Americas and China. This includes increases in infrastructure spending, as well as improving construction and industrial activities. Uncertainties around the structural impact of COVID-19 on the transportation sector, in addition to labour market developments in advanced economies, are estimated to cap the transportation fuels recovery to 2019 levels. Petrochemical feedstocks are expected to gain momentum on the back of recent capacity additions in China and the US. All products are estimated to grow y-o-y following the steep impairment in 2020. On the flip side, fuel efficiency gains, the continuation of oil displacement programs and subsidy removals will limit oil demand growth. Total oil demand is now estimated to reach 95.89 mb/d in 2021.

World oil demand in 2020 and 2021

Table 4 - 1: World oil demand in 2020*, mb/d

	2019	1Q20	2Q20	3Q20	4Q20	2020	Change 2020/19	
							Growth	%
World oil demand								
Americas	25.70	24.34	20.03	22.91	24.30	22.90	-2.80	-10.90
<i>of which US</i>	20.86	19.66	16.38	18.79	19.98	18.70	-2.16	-10.35
Europe	14.25	13.35	10.98	12.84	12.03	12.30	-1.95	-13.70
Asia Pacific	7.79	7.75	6.54	6.74	7.23	7.06	-0.73	-9.33
Total OECD	47.75	45.44	37.56	42.49	43.56	42.27	-5.48	-11.48
China	13.30	10.70	12.85	13.67	13.98	12.81	-0.49	-3.70
India	4.84	4.77	3.51	3.94	4.34	4.14	-0.70	-14.52
Other Asia	9.02	8.23	7.79	8.11	8.70	8.21	-0.82	-9.04
Latin America	6.59	6.11	5.61	6.20	6.08	6.00	-0.59	-8.98
Middle East	8.20	7.88	6.91	7.94	7.50	7.56	-0.64	-7.83
Africa	4.45	4.37	3.77	3.95	4.20	4.07	-0.37	-8.40
Eurasia	5.61	5.21	4.58	4.85	5.11	4.94	-0.67	-11.96
<i>of which Russia</i>	3.61	3.44	3.04	3.20	3.24	3.23	-0.38	-10.54
<i>of which Other Eurasia</i>	2.00	1.78	1.54	1.65	1.87	1.71	-0.29	-14.53
Total Non-OECD	52.02	47.27	45.02	48.67	49.91	47.73	-4.29	-8.25
Total World	99.76	92.71	82.57	91.16	93.47	89.99	-9.77	-9.79
Previous Estimate	99.76	92.71	82.60	90.99	93.67	90.01	-9.75	-9.78
Revision	0.00	0.00	-0.03	0.16	-0.20	-0.02	-0.02	-0.02

Note: * 2020 = Forecast. Totals may not add up due to independent rounding. Source: OPEC.

Table 4 - 2: World oil demand in 2021*, mb/d

	2020	1Q21	2Q21	3Q21	4Q21	2021	Change 2021/20	
							Growth	%
World oil demand								
Americas	22.90	24.30	24.88	23.94	24.77	24.48	1.58	6.88
of which US	18.70	19.85	20.26	19.46	20.32	19.97	1.27	6.78
Europe	12.30	12.35	13.46	13.44	12.71	13.00	0.69	5.64
Asia Pacific	7.06	7.60	7.28	7.21	7.45	7.38	0.32	4.55
Total OECD	42.27	44.26	45.61	44.59	44.93	44.86	2.59	6.13
China	12.81	12.31	13.87	14.71	14.73	13.91	1.10	8.60
India	4.14	4.89	4.19	4.75	4.99	4.71	0.57	13.69
Other Asia	8.21	8.33	8.96	8.57	8.84	8.68	0.47	5.70
Latin America	6.00	6.21	6.27	6.41	6.31	6.30	0.30	5.00
Middle East	7.56	8.07	7.64	8.25	7.75	7.93	0.37	4.88
Africa	4.07	4.46	3.95	4.16	4.39	4.24	0.17	4.05
Eurasia	4.94	5.43	5.17	5.14	5.35	5.28	0.34	6.85
of which Russia	3.23	3.57	3.37	3.37	3.38	3.42	0.19	6.02
of which Other Eurasia	1.71	1.86	1.81	1.77	1.97	1.85	0.14	8.43
Total Non-OECD	47.73	49.71	50.06	51.98	52.36	51.04	3.31	6.93
Total World	89.99	93.97	95.68	96.57	97.29	95.89	5.90	6.56
Previous Estimate	90.01	94.96	96.30	96.61	97.09	96.26	6.25	6.94
Revision	-0.02	-1.00	-0.63	-0.04	0.20	-0.36	-0.35	-0.38

Note: * 2020-2021 = Forecast. Totals may not add up due to independent rounding. Source: OPEC.

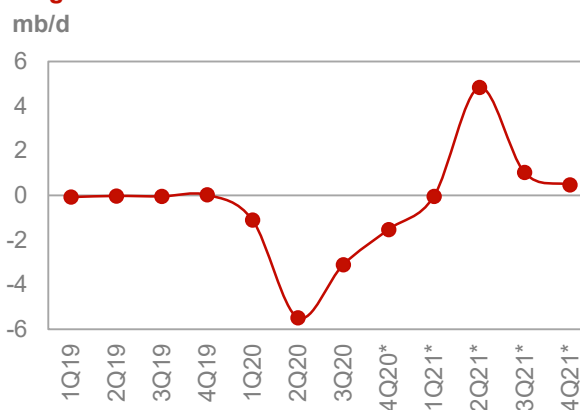
OECD

OECD Americas

Update on the latest developments

A y-o-y decline in oil requirements of 2.85 mb/d was recorded in **OECD Americas** in **September**, indicating a considerable improvement from the 4.21 mb/d y-o-y drop reported in August. The US saw a demand pick up of 0.78 mb/d over the previous month, but still accounted for the bulk of the drop. Canada's oil demand decline showed a steady improvement m-o-m supported by a pick-up in gasoline requirements. Demand declined by 0.62 mb/d y-o-y in September following a drop of 1 mb/d y-o-y in August. Mexican oil demand declined by 0.29 mb/d y-o-y in September versus a drop of 0.47 mb/d y-o-y in August. This was mainly due to improved transportation sector data on the back of a relaxation of mobility restriction measures at the end of 3Q20.

Graph 4 - 1: OECD Americas oil demand, y-o-y change



Note: * 4Q20-4Q21 = Forecast. Source: OPEC.

In **September**, oil demand in the **US** shrunk by 1.94 mb/d y-o-y, following a decline of 2.72 mb/d y-o-y in August. This equates to a m-o-m improvement of 0.78 mb/d. Noticeable improvements were recorded in gasoline demand, with various states easing restriction measures leading to a m-o-m rise in vehicle miles travelled. September saw a y-o-y drop of 8.6% in registered vehicle miles travelled according to Federal Highway Administration, compared to a drop of 12.3% y-o-y in August and 11.2% y-o-y in July. Moreover, total auto sales has also witnessed something of a recovery with a drop of 16.7% y-o-y in September, compared to a decline of 23.0% y-o-y in August and 26.1% y-o-y in July. Additionally, unemployment rates improved lending some support to gasoline demand in light of an increase in commuter trips. The unemployment rate was at 7.7% in September, a huge improvement from April's peak historical unemployment rate of 14.4%. Gasoline consumption during September was down by 0.65 mb/d y-o-y compared to a drop of over 1.33 mb/d y-o-y in August. Diesel demand showed some progress too, declining by only 0.10 mb/d y-o-y in September in comparison to a drop of 0.37 mb/d y-o-y in August. On the macroeconomic front in September, US industrial

World Oil Demand

sector activity retracted marginally, dropping by 7.3% y-o-y in September compared with a decline of 7.0% y-o-y in August.

Table 4 - 3: US oil demand, mb/d

By product	Sep 20	Sep 19	Change 2020/19	
			mb/d	%
LPG	2.63	2.82	-0.19	-6.8
Naphtha	0.17	0.23	-0.05	-24.0
Gasoline	8.55	9.20	-0.65	-7.1
Jet/kerosene	0.93	1.71	-0.78	-45.6
Diesel oil	3.82	3.92	-0.10	-2.6
Fuel oil	0.32	0.31	0.02	4.9
Other products	2.18	2.36	-0.18	-7.4
Total	18.60	20.54	-1.94	-9.5

Note: Totals may not add up due to independent rounding.

Sources: EIA and OPEC.

Near-term expectations

The current lockdown measures across various US states are assumed to continue until the end of the winter season, with tougher measures not envisaged. This assumption is accounted for in the current oil demand outlook. The path the new US administration takes with regards to COVID-19 containment measures is unclear at this stage. Should restriction measures, including mobility, tighten further or linger for longer than the current assumption, oil demand performance will be effected accordingly. Demand for transportation fuels is highly dependent on the how the pandemic evolves in 2021, and uncertainties also surround the unknown structural impact of COVID-19 on consumer behaviour, perhaps most profoundly in the aviation sector. The sector is projected to struggle to return to pre-crisis levels, at least in 2021. On the other hand, stimulus packages are projected to lend some support to economic activities in 2021, particularly in the 2H21. Overall demand growth in OECD Americas is projected to be well supported in **2021**, led by a healthy petrochemical sector, with ethane cracking capacity in the US estimated to provide solid support for demand growth, and an expected steady positive rebound in economic indicators.

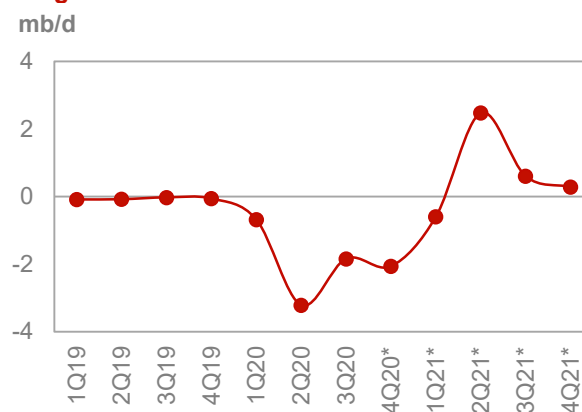
OECD Europe

Update on the latest developments

Petroleum products demand in **OECD Europe** recorded a decline of 1.66 mb/d y-o-y in **September**, compared to a y-o-y drop of 2.20 mb/d in August. On-road diesel posted respectable m-o-m improvements stimulating total diesel requirements. Mobility indicators, utilizing Google maps and Apple locations data, peaked during summer driving season before retreating steeply thereafter on the back of a resurgence in COVID-19 infection cases in the region's main economies. New passenger car registrations remained weak with September data showing a drop of 24.2% y-o-y after a drop of 27.3% y-o-y drop in August, according to the Association des Constructeurs Européens d'Automobiles. Petrochemical feedstock, led by LPG and to a lesser extent naphtha, posted steady gains to record y-o-y increases of 0.08 mb/d and 0.11 mb/d, respectively, compared to September 2019. In fact, LPG posted the second monthly y-o-y growth since August 2018. Petrochemical demand has been well supported by steady requirements for plastics in the healthcare sector and for packaging materials as online shopping expands due to the pandemic. Expansion in industrial activities in September supported fuel oil and diesel, minimizing the y-o-y decline. Fuel oil dropped by 0.16 mb/d y-o-y, but this was higher by around 0.03 mb/d compared to August. While diesel for industrial purposes dropped by 0.03 mb/d y-o-y, it was also higher by more than 0.1 mb/d compared to August. Industrial production (excluding construction), as reported by the Statistical of the European Communities and Haver Analytics, was relatively stable compared to previous months, dropping by 5.7% y-o-y in September, compared to declines of 5.5% in August and 6.5% in July. In terms of countries, despite increases in the number of COVID-19 cases forcing various governments to reintroduce tougher restriction measures, oil demand has held up relatively well. In the UK, demand posted a drop of 0.32 mb/d y-o-y in September, higher than the 0.35 mb/d fall in August, supported by industrial diesel and heating fuel demand. German demand is also showing signs of recovery, with a drop of 0.38 mb/d y-o-y in September, compared to a fall of 0.57 mb/d y-o-y in August, with on-road diesel gaining some traction.

Initial **October** consumption data for the big four consumers in Europe, Germany, France, Italy and the UK, indicate a drop of around 0.49 mb/d y-o-y compared to a decline of 0.61 mb/d y-o-y in September. Small m-o-m developments in transportation fuels, coupled with steady gains in fuel oil compared to September, were behind the improvement. However, data indicates positive developments in France and Germany, whereas the reverse trend continued in Italy and the UK.

Graph 4 - 2: OECD Europe's oil demand, y-o-y change



Note: * 4Q20-4Q21 = Forecast. Source: OPEC.

Table 4 - 4: Europe's Big 4* oil demand, mb/d

By product	Sep 20	Sep 19	Change 2020/19	
			mb/d	%
LPG	0.37	0.40	-0.03	-7.3
Naphtha	0.46	0.47	-0.01	-1.7
Gasoline	1.14	1.21	-0.07	-5.9
Jet/kerosene	0.34	0.93	-0.59	-63.6
Diesel oil	3.10	3.38	-0.28	-8.2
Fuel oil	0.16	0.20	-0.04	-17.9
Other products	0.56	0.67	-0.11	-16.4
Total	6.13	7.25	-1.12	-15.5

Note: * Germany, France, Italy and the UK. Totals may not add up due to independent rounding.

Sources: JODI, UK Department for Business, Energy & Industrial Strategy, Unione Petrolifera and OPEC.

Near-term expectations

The oil demand outlook is surrounded by uncertainties, specifically related to the COVID-19 containment measures and the unclear negative impact of the pandemic on consumer behaviour. The number of countries implementing new lockdown measures, as well as their strength and duration, are also clouding the outlook for the months to come. While these measures are helping reduce the infection rate, or at least stabilizing it, the assumption is that they will remain in place at least until the end of the 1Q21 or until a viable vaccine is available to the majority of citizens across the region. Additionally, there is uncertainty regarding 4Q20 coming in lower-than-anticipated, with actual data available around the end of 1Q21. This might reduce the base line year data even further. That said, 2021 projections account for a strong rebound in OECD Europe economic activities, which includes a respectable acceleration in industrial production, and a return to some degree of normality in daily activities towards the end of the year. As a result, oil demand is projected to increase steadily in **2021** supported first by transportation fuels coming from a low base of 2020, and second by industrial fuels, especially in Germany, France and Spain.

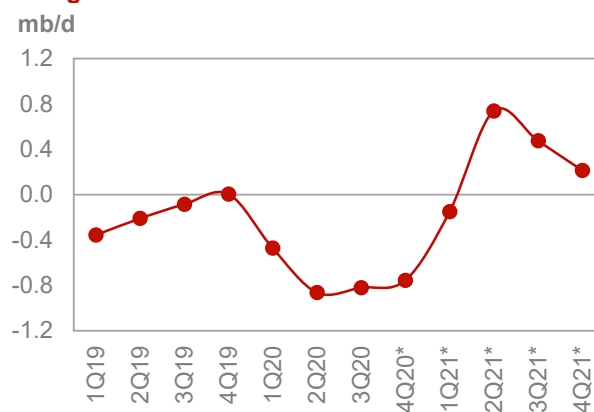
OECD Asia Pacific

Update on the latest developments

South Korean oil demand flipped into positive territory in **September** posting a marginal increase of 0.01 mb/d y-o-y, rising for the second time only in 2020. This is a considerable improvement compared to a y-o-y decline of 0.37 mb/d in August.

Industrial fuels including diesel and fuel oil supported oil demand, registering positive y-o-y gains. Additionally, gasoline also posted a rise y-o-y encouraged by an uptick in registered motor vehicles. The Ministry of Land, Infrastructure and Transport reported an upturn in registered motor vehicles of 2.7% y-o-y in September, following growth of 2.5% y-o-y in August. This is the highest level of monthly y-o-y increases so far this year. On the other hand, light distillates led by naphtha saw another y-o-y drop, amid higher steam cracker maintenance activities. The industrial production indicator was flat in September, as reported by Statistics Korea and Haver Analytics, which is a positive given that it is the first time it has not exhibited a decline since March 2021. This follows a drop of 2.4% in August and 1.6% in July. This supported demand for industrial fuels.

Graph 4 - 3: OECD Asia Pacific oil demand, y-o-y change



Note: * 4Q20-4Q21 = Forecast. Source: OPEC.

Consequently, due to increases in South Korea's oil demand in September, the overall OECD Asia-Pacific demand declines moderated significantly m-o-m. September oil demand data showed a drop of 0.63 mb/d y-o-y, compared to a 1.15 mb/d y-o-y fall in August, the second largest monthly drop ever recorded.

Table 4 - 5: South Korea's oil demand, mb/d

By product	Sep 20	Sep 19	Change 2020/19	
			mb/d	%
LPG	0.33	0.36	-0.03	-7.6
Naphtha	1.11	1.24	-0.12	-10.0
Gasoline	0.23	0.19	0.04	20.3
Jet/kerosene	0.11	0.18	-0.07	-39.7
Diesel oil	0.48	0.39	0.10	24.5
Fuel oil	0.20	0.11	0.08	74.3
Other products	0.18	0.17	0.01	8.3
Total	2.64	2.63	0.01	0.4

Note: Totals may not add up due to independent rounding.

Sources: JODI and OPEC.

Elsewhere in the region, marginal m-o-m improvement was reported in Japan, declining by 0.43 mb/d y-o-y following a drop of 0.51 mb/d y-o-y in August. While in Australia, the decline reached 0.17 mb/d y-o-y in September, compared to a y-o-y drop 0.22 mb/d in August.

Near-term expectations

Oil demand is estimated to continue to decline y-o-y for the remainder of **2020** pressured by challenges related to a resurgence in COVID-19 cases, particularly in Japan. This might lead to localized lockdown measures, which may hinder oil demand development. This is also in spite of fiscal and monetary stimulus measures by the government.

For **2021**, oil demand is estimated to increase for the first time since 2017, when it marginally increased. The low demand registered in 2020, together with improving industrial activities and overall economic conditions, are seen to support demand growth in 2021. However, uncertainties are skewed to the downside and related to the COVID-19 pandemic. In terms of products, jet fuel demand is not assumed to reach 2019 levels and remain under pressure going forward. Oil demand is anticipated to be encouraged by healthier petrochemical sector activity and positive developments in the industrial sector.

Non-OECD

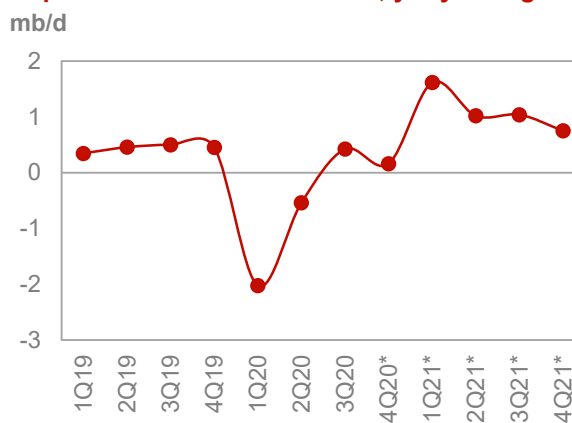
China

Update on the latest developments

Chinese oil demand grew for the fifth consecutive month in **October**, albeit at a slower pace than previous months.

Demand increased by 0.08 mb/d y-o-y in October compared to an increase of 0.20 mb/d y-o-y in September. This is despite a strong performance in petrochemical feedstocks, with both LPG and naphtha outperforming other products. Naphtha grew by 0.29 mb/d y-o-y, higher than the 0.15 mb/d y-o-y growth recorded in September. Two newly commissioned naphtha crackers came into operation during the second half of September, and coupled with a ramping-up of operations at other crackers, as well as healthy margins, led to increases in naphtha requirements in October. Moreover, LPG remained on a rising trend in October, adding 0.06 mb/d y-o-y, almost matching the same level of increase in September. Increased runs in propane dehydrogenation plants due to steady plastic demand supported LPG consumption.

Graph 4 - 4: China's oil demand, y-o-y change



Note: * 4Q20-4Q21 = Forecast. Source: OPEC.

Looking at other sectors, starting with transportation, gasoline dipped into negative territory, shrinking by 0.23 mb/d y-o-y due to a reduction in miles travelled and despite y-o-y increases in vehicle sales, which has given support to automobile manufacturers. On-road passenger traffic shrunk by 36.6% y-o-y in October, compared to a 38.2% drop in September, while passenger car sales posted an increase of 9.8% y-o-y following an increase of 8.6% y-o-y in September, according to China Association of Automobile Manufacturers and Haver Analytics. Jet fuel remained a drag and was in negative territory again, dropping by 0.04 mb/d y-o-y in October. Total air passenger traffic fell by 11.7% y-o-y in October, compared to a drop of 12.5% y-o-y in September. The m-o-m improvement is attributed to an uptick in domestic air travel, with international air traffic remaining lower y-o-y. Industrial fuels exhibited steady performance in October, with diesel declining by 0.15 mb/d y-o-y versus an increase of 0.08 mb/d y-o-y in September, mainly due to the high demand during October 2019, adversely effecting diesel demand. General macroeconomic indicators, such as the Caixin China General Manufacturing PMI, show steady industrial development. The PMI rose to 53.6 in October from 53.0 in September, the highest reading since January 2011.

Table 4 - 6: China's oil demand*, mb/d

By product	Oct 20	Oct 19	Change 2020/19	
			mb/d	%
LPG	2.01	1.95	0.06	2.8
Naphtha	1.25	0.96	0.29	30.3
Gasoline	2.73	2.96	-0.23	-7.8
Jet/kerosene	0.86	0.89	-0.04	-4.2
Diesel oil	3.39	3.54	-0.15	-4.2
Fuel oil	0.58	0.56	0.02	3.1
Other products	2.49	2.36	0.13	5.5
Total	13.30	13.22	0.08	0.6

Note: * Apparent oil demand. Totals may not add up due to independent rounding.

Sources: Argus Global Markets, China OGP (Xinhua News Agency), Facts Global Energy, JODI, National Bureau of Statistics China and OPEC.

Near-term expectations

Recent macroeconomic indicators continue to show positive developments that lend strong support to the oil demand recovery. Total consumption in October remained above 13.0 mb/d for the second consecutive month. Additionally, China's control in limiting COVID-19 infection cases, as well as fiscal and monetary stimulus

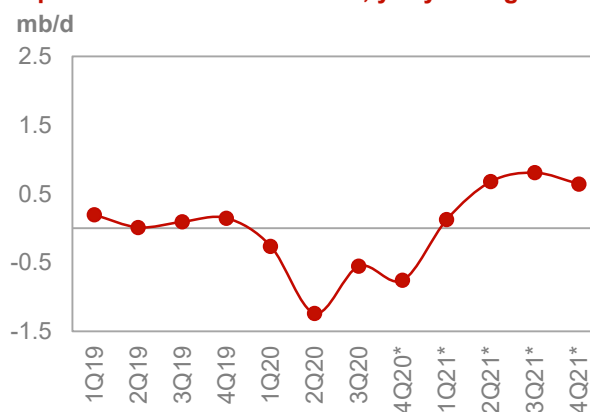
programmes, further support the demand outlook, particularly in 2021. The industrial sector continues to provide support to industrial fuels, while vehicle sales and the increase in miles travelled lend support to transportation fuels going forward. The outlook assumes that the pace of demand recovery will accelerate during the 2H21 due to the availability of COVID-19 vaccines and a strengthening in manufacturing activities and export levels. Petrochemical feedstock, especially LPG, is expected to perform better than other fuels and will be a key driver for China's oil demand growth in **2021**. Jet fuel is expected to witness a sluggish recovery next year, and will not reach 2019 levels due restrictions in international travel.

India

Update on the latest developments

In **India**, oil demand in **October** showed a y-o-y rise for the first time since the start of the pandemic, led by a strong rebound in diesel demand. Gasoline grew y-o-y in September and kept increasing in October. The relaxation of lockdown measures across the country, coupled with a drop in the number of COVID-19 infection cases, supported demand. This marks the second consecutive month of demand growth, backed up by expanding economic activities, including rising industrial production. In terms of fuels, gasoline registered a y-o-y rise of around 0.03 mb/d, supported by the easing in lockdown measures, a steady rise in mobility and healthy vehicle sales. The latter increased at a solid pace as major manufacturers such as Suzuki and Hyundai posted increases of more than 17% y-o-y.

Graph 4 - 5: India's oil demand, y-o-y change



Note: * 4Q20-4Q21 = Forecast. Source: OPEC.

Two wheeler sales witnessed solid gains in October, increasing by more than 19% y-o-y. Diesel also gained momentum and increased for the first time since February, adding a solid 0.12 mb/d y-o-y, a rise for only for the second time this year. India's economic indicators showed strong confidence in manufacturing, with a PMI of 58.9 in October, the highest level in more than 10 years. Agricultural activities, as well as goods and cargo transportation, particularly during the festive holidays supported diesel consumption. However, jet fuel consumption fell by 0.09 mb/d y-o-y, in line with the September drop, with marginal support from increasing domestic air traffic. The number of domestic passengers increased by 30% compared to September, but the level continued to be lower y-o-y. Additionally, a 60% cap on domestic flights was extended until February 2021, while international air travel remains suspended until the end of November.

Table 4 - 7: India's oil demand, mb/d

By product	Oct 20	Oct 19	Change 2020/19	
			mb/d	%
LPG	0.97	0.94	0.03	3.0
Naphtha	0.31	0.26	0.05	18.4
Gasoline	0.75	0.72	0.03	4.4
Jet/kerosene	0.17	0.27	-0.09	-35.2
Diesel oil	1.52	1.40	0.12	8.4
Fuel oil	0.29	0.28	0.01	4.5
Other products	0.57	0.59	-0.02	-3.9
Total	4.58	4.46	0.12	2.7

Note: Totals may not add up due to independent rounding.

Sources: JODI, Petroleum Planning and Analysis Cell of India and OPEC.

Near-term expectations

The recent positive macroeconomic indicators in India are evidently good signs for the remainder of **2020**. Additionally, November data will play a major role in 4Q20 development, with some initial indicators seeing a better than initially expected performance. Developments in industrial activities are certainly worth following in light of the strong manufacturing PMI, however, the higher m-o-m October unemployment rate in both urban and rural areas remains a drag. The unemployment rate in October was recorded at 7%, compared to 6.8% in

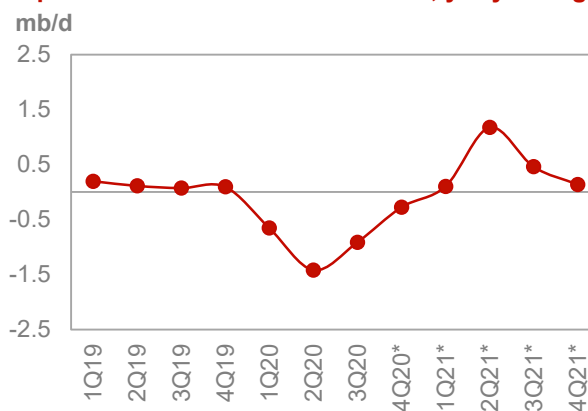
September, according to data from the Centre for Monitoring Indian Economy (CMIE). This reflects the existing fragilities in the labour market, which may hinder developments going forward.

For **2021**, due to the more encouraging economic outlook and the subsequent expected oil demand improvements in the transportation and industrial sectors, total oil demand is estimated to increase solidly. The current oil demand outlook for India takes into account the positive baseline consequence of 2020, in addition to effects of stimulus measures on economic momentum and oil demand.

Update on the latest developments in Other Asia

Oil demand in Other Asia continued to register sharp declines, according to **September** data. A drop of around 0.78 mb/d y-o-y was recorded in the region with Indonesia and Malaysia accounting for the majority of this decline. M-o-m developments showed some 0.1 mb/d in recovered volumes as some COVID-19 containment measures were relaxed. There has been respectable developments across petroleum products with the exception of industrial fuels, which remains lagging. Light distillates and transportation fuels rebounded slightly m-o-m, particularly jet fuel, as domestic flights picked up pace in countries such as Singapore and the Philippines. Light distillates also contributed positively to this slight m-o-m uptick, amid steady plastics consumption.

Graph 4 - 6: Other Asia's oil demand, y-o-y change



Note: * 4Q20-4Q21 = Forecast. Source: OPEC.

Conversely, industrial fuels exhibited a downward m-o-m trend with diesel and fuel oil accelerating the decline in light of slower manufacturing activities in various economies, such as Indonesia and Malaysia. Oil demand in both countries was down by around 0.18 mb/d each, with the pace of recovery, especially in transportation and industrial fuels, appearing to stall.

Near-term expectations

Oil demand is foreseen to remain in negative territory for the rest of **2020** with most of the declines appearing in Malaysia and Indonesia, although other countries in the region are also anticipated to see a continued weakening in oil demand in 2020. Transportation fuels and to a lesser extent industrial fuels are expected to remain under pressure across the whole region, albeit with some support stemming from demand for petrochemical feedstock and additionally, the residential sector.

For **2021**, the transportation sector is anticipated to lead oil demand growth. Gasoline is projected to be the major fuel in the recovery process followed by on-road diesel for trucking and freight. Industrial fuel demand is also anticipated to contribute to the oil demand rebound next year, given expected development in economic activities.

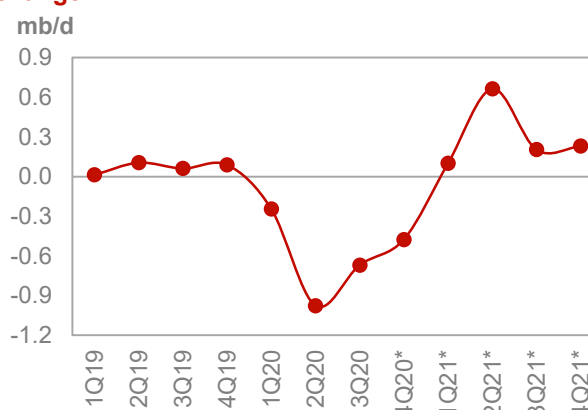
Latin America

Update on the latest developments

In **Latin America**, m-o-m improvements were observed in oil demand data for **September**. While demand shrunk by 0.21 mb/d y-o-y, this was much better when compared to the August drop of 0.45 mb/d y-o-y.

Apart from fuel oil, all other petroleum products showed positive momentum when compared to August. Gasoline and diesel showed a respectable rebound, each increasing by 0.10 mb/d m-o-m primarily because of the positive momentum in Brazil's manufacturing activities. The manufacturing PMI in Brazil remained well in expansion territory, recording a level of 64.9, slightly higher than the 64.7 recorded in August. This boosted industrial fuel demand compared to August, with diesel higher y-o-y

Graph 4 - 7: Latin America's oil demand, y-o-y change



Note: * 4Q20-4Q21 = Forecast. Source: OPEC.

World Oil Demand

and moving into positive territory of 0.03 mb/d y-o-y for the first time since January 2020. The stimulus packages have also supported the economic momentum in the country, hence, encouraging demand for petroleum products. Brazil, despite the slight y-o-y decline of 0.03 mb/d, gained momentum compared to August oil demand data.

On the other hand, Argentina's oil demand was a counterbalance with demand in the country deteriorating further in September impeding a stronger recovery.

Table 4 - 8: Argentina's oil demand*, mb/d

By product	Sep 20	Sep 19	Change 2020/19	
			mb/d	%
LPG	0.05	0.04	0.01	16.3
Naphtha	0.02	0.03	0.00	-12.0
Gasoline	0.11	0.15	-0.04	-29.2
Jet/kerosene	0.00	0.03	-0.03	-86.4
Diesel oil	0.20	0.23	-0.02	-11.0
Fuel oil	0.03	0.04	-0.01	-22.2
Other products	0.10	0.10	0.00	-2.9
Total	0.51	0.62	-0.11	-17.1

Note: * Totals may not add up due to independent rounding.

Sources: JODI, Ministerio de Economia/Secretaria de Energia and OPEC.

Near-term expectations

The picture remains as highlighted in last month's MOMR, with expected improvements in the level of decline in oil demand, especially in Brazil, driven by a steady rebound in economic activity. The risks going forward are linked to developments around COVID-19 infection cases and the governments' readiness to confront large resurgence in cases with containment measures. Additionally, the impact of stimulus programs on economic activities will be also an important factor for oil demand development in the remainder of 2020 and the 1H21. Transportation fuels, which include gasoline, ethanol and jet fuel, are expected to be under pressure in 4Q20. While industrial fuel, diesel and fuel oil, are projected to improve from the levels recorded earlier in the year, they are still anticipated to remain in negative territory.

For 2021, oil demand is forecast to expand, coming from the historically low base of 2020, and in line with improving economic activities. Brazil is seen supporting the demand rebound in 2021, led by transportation fuels, namely gasoline, followed by industrial fuels, namely diesel. However, uncertainties remain high and tilted to the downside, mainly related to COVID-19 pandemic developments, as well as economic hardships, including unemployment levels and currency challenges.

Middle East

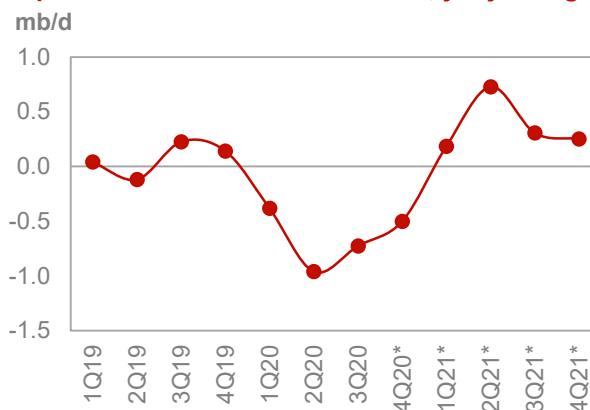
Update on the latest developments

In **September**, Middle East oil demand showed a drop of 0.60 mb/d y-o-y, around 0.08 mb/d higher than the decline recorded in August. Y-o-y declines were observed across all petroleum products with the exception of the 'other' product category, which includes direct crude for the purpose of burning in power generation. The increased usage of air-conditioning during the summer season supported the y-o-y increase in direct crude consumption, especially in Saudi Arabia.

More than half of the total products decline is attributed to transportation fuels. Gasoline and jet fuel dropped by more than 0.32 mb/d collectively y-o-y, indicating that the impact of the pandemic is still strong on transportation fuels.

However, jet fuel did show some progress m-o-m, increasing by 0.05 mb/d compared to August's decline. This was on back of an increase in flight operations in Saudi Arabia and the resumption of some international flights

Graph 4 - 8: Middle East's oil demand, y-o-y change



Note: * 4Q20-4Q21 = Forecast. Source: OPEC.

from the UAE. Industrial fuels remained in decline y-o-y, including fuel oil, and to a lesser extent diesel. The latter gained m-o-m traction, supported by an increase in construction activities, while fuel oil also saw some improvement on a m-o-m basis, supported by an increase in power generation requirements in Saudi Arabia and Kuwait.

Table 4 - 9: Iraq's oil demand, mb/d

By product	Oct 20	Oct 19	Change 2020/19	
			mb/d	%
LPG	0.06	0.07	-0.01	-15.7
Naphtha	0.01	0.00	0.00	67.7
Gasoline	0.15	0.15	0.00	0.5
Jet/kerosene	0.04	0.06	-0.02	-27.7
Diesel oil	0.12	0.16	-0.04	-24.6
Fuel oil	0.15	0.24	-0.09	-37.8
Other products	0.02	0.09	-0.08	-83.6
Total	0.53	0.76	-0.23	-30.1

Note: Totals may not add up due to independent rounding.

Sources: JODI and OPEC.

Near-term expectations

Oil demand is anticipated to gradually recover, but remain in the negative zone. The trend will be dependent on further developments in restriction measures that could evidently heavily impact transportation fuel demand. However, risks of a resurgence of COVID-19 cases remains unclear at this point, but any resurgence will delay the recovery process. The resumption of international flights in Saudi Arabia is slated to take affect at the beginning of 2021, so no material bounce in jet fuel requirements is projected before then. The progress in infrastructure spending due to extensive government stimulus measures is assumed to provide some support to industrial fuels, while the power generation sector usually enters a period of lower than average usage during the coming quarter. Similar trends can be assumed for the rest of the region. However, the re-introduction of any lockdowns in countries is assumed to pressure demand going forward.

In **2021**, assumptions for a strong rebound in economic activity, the normalizing of daily activities with lockdown measures gradually lifted, more mobility and the steep plunge in oil demand during 2020 are all supportive factors for demand to bounce back strongly in 2021. In terms of products, middle distillates are projected to return to solid growth.

World Oil Supply

Non-OPEC liquids production for 2020 was revised down by 0.08 mb/d from the previous month's assessment and is now estimated to contract by 2.50 mb/d. This is mainly due to downward revisions in Brazil, the US, the UK and Norway, following lower-than-expected output in 4Q20, which was partially offset by upward revisions in Russia, Canada, Mexico and other OECD Europe. Preliminary liquids output in 4Q20 is expected at 62.0 mb/d, up by 0.74 mb/d, q-o-q. In the US, drillers have added 74 oil rigs since mid-August, when they bottomed out at 172, which have now reached 246 rigs in the week ended 4 December. In September, US crude oil production in the Lower-48 onshore fields was down by 27 tb/d to average 8.91 mb/d, while total crude output, including offshore, recovered by 0.29 mb/d m-o-m, to average 10.86 mb/d. Non-OPEC oil supply in 2020 is forecast to decline mainly in Russia, the US, Canada, Kazakhstan, Colombia, Malaysia, and Azerbaijan, and is projected to grow in Norway, Brazil, China, and Guyana.

Non-OPEC liquids production for 2021 was adjusted down by 0.1 mb/d is now forecast to grow by 0.85 mb/d, mainly due to downward revisions to Russia, following the new decision taken at the recent Ministerial Meeting of the OPEC and non-OPEC countries participating in the DoC. The US liquids supply forecast remained unchanged at 0.3 mb/d while uncertainties persist. The main drivers for supply growth for the year are expected to be the US, Canada, Brazil, Norway, Ecuador, and Qatar. The majority of this growth, particularly in North America, represents a recovery of production from 2020, rather than new projects.

OPEC NGLs and non-conventional liquids production in 2020 is estimated to decline by 0.13 mb/d y-o-y to average 5.13 mb/d. For 2021, production is forecast to grow by 0.08 mb/d y-o-y, to average 5.21 mb/d.

OPEC-13 crude oil production in November was up by 0.71 mb/d m-o-m to average 25.11 mb/d, according to secondary sources. Preliminary non-OPEC liquids output in November, including OPEC NGLs, is estimated to have increased by 0.91 mb/d m-o-m to average 67.42 mb/d, lower by 4.80 mb/d y-o-y. As a result, preliminary data indicates that global oil supply rose in November by 1.62 mb/d m-o-m to average 92.53 mb/d, down by 8.78 mb/d y-o-y.

Table 5 - 1: Non-OPEC liquids production forecast comparison in 2020–2021*, mb/d

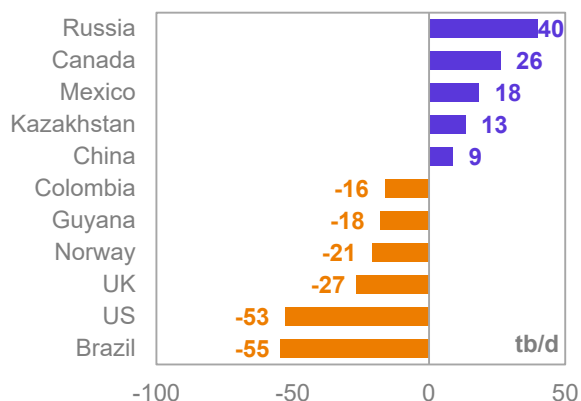
Non-OPEC liquids production	2020	Change 2020/19	2021	Change 2021/20
Americas	24.70	-1.07	25.22	0.52
<i>of which US</i>	17.66	-0.77	17.96	0.30
Europe	3.89	0.18	4.02	0.13
Asia Pacific	0.54	0.01	0.52	-0.02
Total OECD	29.13	-0.88	29.76	0.63
China	4.16	0.11	4.16	0.00
India	0.78	-0.05	0.75	-0.02
Other Asia	2.53	-0.18	2.50	-0.03
Latin America	6.09	0.03	6.38	0.29
Middle East	3.16	-0.04	3.24	0.08
Africa	1.46	-0.08	1.38	-0.08
Eurasia	13.29	-1.23	13.14	-0.15
<i>of which Russia</i>	10.39	-1.05	10.24	-0.15
<i>of which other Eurasia</i>	2.90	-0.18	2.90	0.00
Total Non-OECD	31.47	-1.44	31.56	0.09
Total Non-OPEC production	60.59	-2.31	61.32	0.72
Processing gains	2.07	-0.19	2.20	0.13
Total Non-OPEC liquids production	62.67	-2.50	63.52	0.85

Note: * 2020-2021 = Forecast. Source: OPEC.

Main monthly revisions

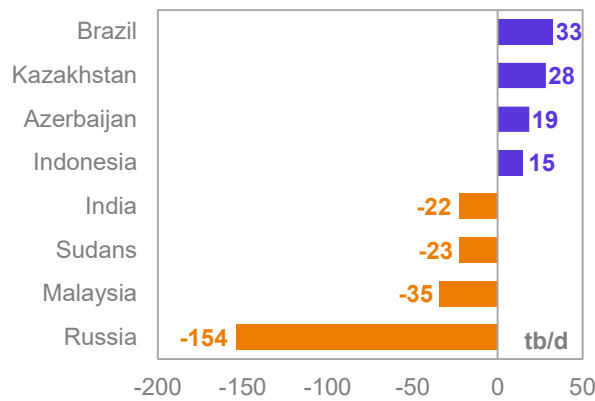
Non-OPEC liquids supply growth in 2020 was revised down by a minor 0.08 mb/d m-o-m and is now forecast to contract by 2.50 mb/d (including processing gains), to average 62.67mb/d. This was mainly due to lower-than-expected production in 3Q20 in the US, Canada, Guyana and the UK, as well as a downward adjustment by 0.1 mb/d to the supply forecast for 4Q20, mainly for the US, because of output outages following the hurricanes in October, and for Brazil, as maintenance deepened at the Tupi field. However, these downward adjustments were partially offset by increases seen in Eurasia.

Graph 5 - 1: Revisions to annual supply growth forecast in 2020*, Dec MOMR/Nov MOMR



Note: * 2020 = Forecast. Source: OPEC.

Graph 5 - 2: Revisions to annual supply growth forecast in 2021*, Dec MOMR/Nov MOMR



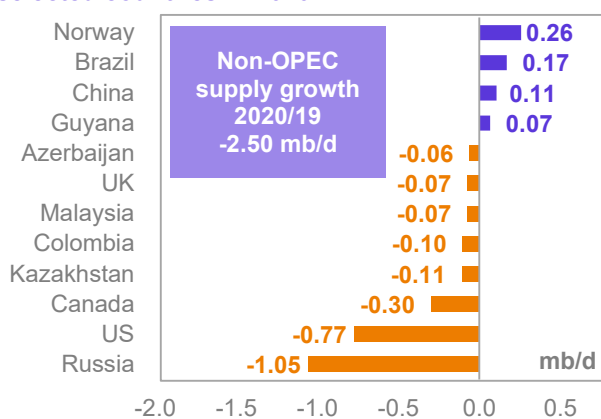
Note: * 2021 = Forecast. Source: OPEC.

Non-OPEC liquids supply growth in 2021 was also revised down by 0.1 mb/d m-o-m and is now forecast to grow by 0.85 mb/d (including processing gains), to average 63.52 mb/d. Russia's liquids supply has been revised down by 154 tb/d due to the decision of the recent Ministerial Meeting under the DoC on 3 December. The liquids supply forecast for Malaysia and Sudans was also adjusted down. On the other hand, the supply forecast for Indonesia, Brazil, Oman, Kazakhstan and Azerbaijan was revised up.

Key drivers of growth and decline

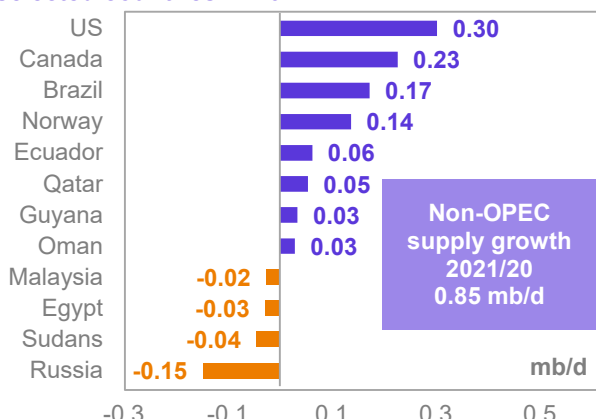
The non-OPEC countries showing the largest liquids supply declines in **2020** are expected to be Russia, the US, Canada, Kazakhstan, Colombia, Malaysia, the UK and Azerbaijan, while increases in oil production growth are expected mainly in Norway, Brazil, China and Guyana.

Graph 5 - 3: Annual liquids production changes for selected countries in 2020*



Note: * 2020 = Forecast. Source: OPEC.

Graph 5 - 4: Annual liquids production changes for selected countries in 2021*



Note: * 2021 = Forecast. Source: OPEC.

For **2021**, the key drivers for non-OPEC supply growth are forecast to be the US, Canada, Brazil, Norway, Ecuador, Qatar, Guyana and Oman, while oil production, mainly in Russia, Sudans, Egypt and Malaysia, is forecast to decline.

Non-OPEC liquids production in 2020 and 2021

Table 5 - 2: Non-OPEC liquids production in 2020*, mb/d

Non-OPEC liquids production	2019	1Q20	2Q20	3Q20	4Q20	2020	Change 2020/19	
							Growth	%
Americas	25.77	26.59	23.55	24.07	24.60	24.70	-1.07	-4.15
<i>of which US</i>	18.43	19.05	16.81	17.33	17.45	17.66	-0.77	-4.17
Europe	3.71	4.03	3.87	3.77	3.88	3.89	0.18	4.85
Asia Pacific	0.52	0.53	0.54	0.54	0.55	0.54	0.01	2.72
Total OECD	30.00	31.16	27.96	28.38	29.03	29.13	-0.88	-2.92
China	4.05	4.15	4.16	4.17	4.15	4.16	0.11	2.60
India	0.83	0.80	0.77	0.78	0.77	0.78	-0.05	-5.71
Other Asia	2.71	2.64	2.47	2.50	2.52	2.53	-0.18	-6.62
Latin America	6.06	6.36	5.84	6.14	6.03	6.09	0.03	0.52
Middle East	3.20	3.19	3.18	3.13	3.13	3.16	-0.04	-1.24
Africa	1.53	1.49	1.48	1.45	1.40	1.46	-0.08	-4.94
Eurasia	14.52	14.67	13.13	12.57	12.83	13.29	-1.23	-8.47
<i>of which Russia</i>	11.44	11.51	10.21	9.84	10.01	10.39	-1.05	-9.20
<i>of which other Eurasia</i>	3.08	3.16	2.92	2.73	2.82	2.90	-0.18	-5.76
Total Non-OECD	32.90	33.29	31.02	30.74	30.83	31.47	-1.44	-4.36
Total Non-OPEC production	62.91	64.44	58.98	59.12	59.86	60.59	-2.31	-3.67
Processing gains	2.26	2.15	1.85	2.15	2.15	2.07	-0.19	-8.47
Total Non-OPEC liquids production	65.17	66.59	60.84	61.26	62.00	62.67	-2.50	-3.84
Previous estimate	65.16	66.57	60.83	61.45	62.11	62.73	-2.43	-3.72
Revision	0.01	0.01	0.01	-0.19	-0.10	-0.07	-0.08	-0.12

Note: * 2020 = Forecast. Totals may not add up due to independent rounding. Source: OPEC.

Table 5 - 3: Non-OPEC liquids production in 2021*, mb/d

Non-OPEC liquids production	2020	1Q21	2Q21	3Q21	4Q21	2021	Change 2021/20	
							Growth	%
Americas	24.70	24.53	24.71	25.39	26.22	25.22	0.52	2.09
<i>of which US</i>	17.66	17.41	17.74	18.02	18.65	17.96	0.30	1.71
Europe	3.89	3.99	3.94	3.98	4.17	4.02	0.13	3.45
Asia Pacific	0.54	0.54	0.51	0.52	0.51	0.52	-0.02	-3.27
Total OECD	29.13	29.06	29.16	29.89	30.90	29.76	0.63	2.17
China	4.16	4.16	4.14	4.14	4.19	4.16	0.00	0.01
India	0.78	0.76	0.76	0.75	0.74	0.75	-0.02	-2.96
Other Asia	2.53	2.50	2.51	2.50	2.50	2.50	-0.03	-1.16
Latin America	6.09	6.36	6.35	6.33	6.50	6.38	0.29	4.80
Middle East	3.16	3.20	3.24	3.25	3.26	3.24	0.08	2.47
Africa	1.46	1.38	1.40	1.38	1.36	1.38	-0.08	-5.44
Eurasia	13.29	12.92	13.22	13.22	13.21	13.14	-0.15	-1.12
<i>of which Russia</i>	10.39	10.05	10.30	10.30	10.30	10.24	-0.15	-1.42
<i>of which other Eurasia</i>	2.90	2.87	2.92	2.91	2.91	2.90	0.00	-0.07
Total Non-OECD	31.47	31.28	31.61	31.57	31.76	31.56	0.09	0.29
Total Non-OPEC production	60.59	60.34	60.77	61.46	62.67	61.32	0.72	1.19
Processing gains	2.07	2.20	2.20	2.20	2.20	2.20	0.13	6.17
Total Non-OPEC liquids production	62.67	62.54	62.97	63.66	64.87	63.52	0.85	1.36
Previous estimate	62.73	63.00	63.03	63.71	64.97	63.68	0.95	1.51
Revision	-0.07	-0.46	-0.06	-0.05	-0.11	-0.17	-0.10	-0.16

Note: * 2020-2021 = Forecast. Totals may not add up due to independent rounding. Source: OPEC.

OECD

OECD liquids production in 2020 is forecast to decline by 0.88 mb/d y-o-y to average 29.13 mb/d, revised down by 37 tb/d m-o-m. This is due to a downward revision of 8 tb/d in the production forecast for OECD Americas, which is now projected to decline by 1.07 mb/d to average 24.70 mb/d. Oil supply in OECD Europe was revised down by 24 tb/d, is now forecast to grow by 0.18 mb/d, to average at 3.89 mb/d, and OECD Asia Pacific is expected to grow by 0.01mb/d, to average 0.54 mb/d, following a downward revision of 5 tb/d.

For **2021**, the OECD liquids production forecast was adjusted down by 36 tb/d, but remained unchanged in terms of growth at 0.63 mb/d, for an average of 29.76 mb/d. OECD Americas is expected to grow by 0.52 mb/d to average 25.22 mb/d. Oil supply in OECD Europe is anticipated to grow by 0.13 mb/d y-o-y to average 4.02 mb/d, and OECD Asia Pacific is forecast to decline by 0.02 mb/d and average 0.52 mb/d.

OECD Americas

US

US liquids supply in 2020 was revised down by 53 tb/d, following downward revisions in 3Q20 and 4Q20, due to hurricane production outages in the Gulf of Mexico (GoM) in October, and is now forecast to decline by 0.77 mb/d and average 17.66 mb/d.

US liquids production in September 2020 was higher by 0.26 mb/d m-o-m, to average 17.34 mb/d, mainly due to production recovery in GoM of 0.32 mb/d following hurricanes Marco and Laura, but was again affected by tropical storm Sally. Liquids output in September was down by 1.47 mb/d compared to a year earlier.

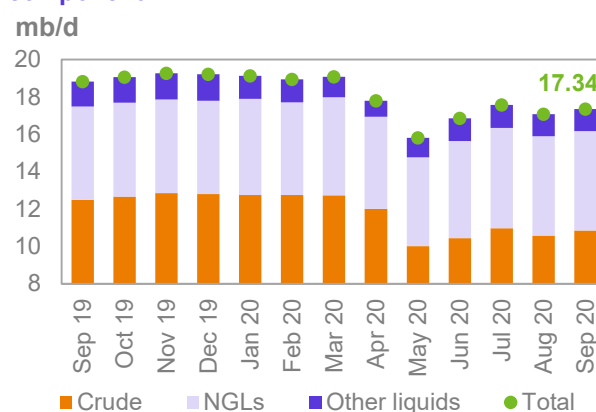
Crude oil and condensate production in September increased by 286 tb/d, m-o-m, to average 10.86 mb/d, 1.63 mb/d lower than a year ago.

NGLs output showed a decrease of 16 tb/d in September m-o-m, to average 5.31 mb/d, but was up by 0.32 mb/d y-o-y, higher than pre-COVID levels. Non-conventional liquids, particularly ethanol, decreased by 43 tb/d in August m-o-m, to average 1.18 mb/d, according to official data, and preliminary data for September indicates a more or less flat development.

Production of crude oil, including field condensates, in September increased mainly in the Gulf Coast, or Petroleum Administration for Defence District (PADD) 3, by 0.27 mb/d to average 7.31 mb/d, due to production recovery following the hurricanes in August and September in GoM. In Texas, oil output declined by 60 tb/d to average 4.63 mb/d. In the Midwest, production rose by 44 tb/d m-o-m, with oil output up by 61 tb/d in North Dakota to average 1.22 mb/d, while production declined in Oklahoma by 12 tb/d to average 0.45 mb/d. In the Rocky Mountains (PADD 4), oil output in Colorado, host of the Niobrara shale, dropped by 27 tb/d to 0.42 mb/d.

US tight crude production had peaked in March 2020 at 8.24 mb/d, followed by a drop in April by 620 tb/d and a drastic plunge in May by 1,386 tb/d, to average 6.23 mb/d. Since then, tight crude output has started to show some recovery in most key regions.

Graph 5 - 5: US monthly liquids output by key component



Source: OPEC.

Table 5 - 4: US crude oil production by state, tb/d

State	Production (tb/d)		Change Sep 20/Aug 20
	Aug 20	Sep 20	
Colorado	445	418	-27
Alaska	444	442	-2
Oklahoma	457	445	-12
New Mexico	1,005	1,024	19
North Dakota	1,154	1,215	61
Gulf of Mexico (GoM)	1,195	1,510	315
Texas	4,688	4,628	-60
Total	10,574	10,860	286

Sources: EIA and OPEC.

In September, tight crude output rose by 67 tb/d to average 7.21 mb/d. This was mainly in the Permian Basin, which averaged 3.88 mb/d, up by 74 tb/d y-o-y. The nine-month average indicates a drop by 0.22 mb/d in total US tight crude compared to the same period in 2019.

In other key shale regions, oil output in the Eagle Ford declined by 26 tb/d m-o-m to average 0.94 mb/d, while the Bakken shale showed higher output by 39 tb/d, to average 1.21 mb/d. Tight crude output in Niobrara dropped by 12 tb/d to average 0.43 mb/d and production in other shale regions declined by 15 tb/d m-o-m in September to average 0.71 mb/d. Shale operators appear to be focusing more on the Permian and Williston basins, rather than other shale regions, mainly because of high productivity and lower breakeven cost.

US crude oil production in 2020 is expected to decline by 0.95 mb/d to average 11.30 mb/d, revised down by 0.07 mb/d m-o-m. Tight crude is projected to decline by 0.35 mb/d to average 7.40 mb/d. Production from the GoM is forecast to drop by 0.26 mb/d to average 1.64 mb/d, and onshore conventional crude is forecast to decline by 0.34 mb/d to average 2.27 mb/d largely due to continued shut in of stripper wells.

On the other hand, the US NGLs production forecast was revised up by 0.03 mb/d to grow by 0.38 mb/d y-o-y and average 5.20 mb/d, of which 4.37 mb/d refers to unconventional NGLs. And finally, unconventional liquids, mainly ethanol, are likely to decline by 0.2 mb/d in the current year to average 1.16 mb/d.

Table 5 - 5: US tight oil production breakdown, mb/d

US tight oil	2019	Change 2019/18	2020*	Change 2020/19	2021*	Change 2021/20
Permian tight	3.72	0.87	3.92	0.20	4.17	0.25
Bakken shale	1.42	0.16	1.23	-0.19	1.35	0.12
Eagle Ford shale	1.23	0.05	1.05	-0.18	1.00	-0.05
Niobrara shale	0.52	0.07	0.46	-0.06	0.37	-0.09
Other tight plays	0.87	0.08	0.74	-0.13	0.52	-0.22
Total	7.75	1.24	7.40	-0.35	7.41	0.01

Note: * 2020-2021 = Forecast. Source: OPEC.

Tight crude output will see the largest contraction among liquids components in 2020, by 0.35 mb/d, revised up by 0.09 mb/d compared to a month earlier. Despite overall declining tight crude production in 2020, output in the Permian Basin is expected to grow by 210 tb/d y-o-y.

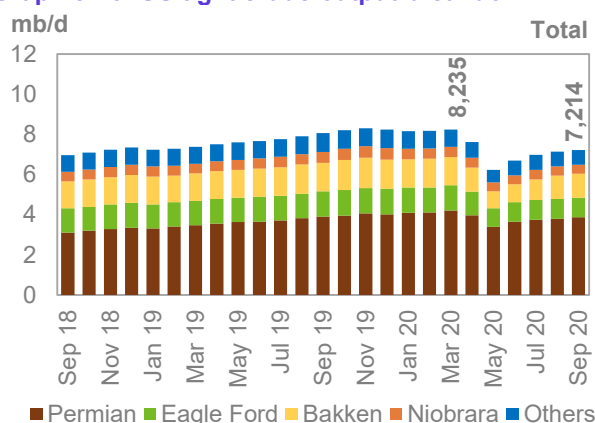
It is worth noting that the easing of COVID-19-related restrictions has led to a rebound in demand for fuel and related products. This has led to employment in the oilfield sector rising by 0.4% in November as companies seek to balance increasing oil and gas production. Employment rose slightly for a third straight month, with the sector adding an estimated 2,665 jobs in November, according to the Bureau of Labor Statistics and PESA analysis.

Table 5 - 6: US liquids production breakdown, mb/d

US liquids	2018	2019	Change 2019/18	2020*	Change 2020/19	2021*	Change 2021/20
Tight crude	6.51	7.75	1.24	7.40	-0.35	7.41	0.01
Gulf of Mexico crude	1.76	1.90	0.14	1.64	-0.26	1.94	0.30
Conventional crude oil	2.69	2.60	-0.09	2.27	-0.34	2.04	-0.22
Unconventional NGLs	3.58	4.01	0.44	4.37	0.36	4.42	0.05
Conventional NGLs	0.79	0.81	0.02	0.83	0.02	0.86	0.03
Biofuels + Other liquids	1.35	1.36	0.00	1.16	-0.20	1.29	0.13
US total supply	16.69	18.43	1.74	17.66	-0.77	17.96	0.30

Note: * 2020-2021 = Forecast. Sources: EIA, OPEC and Rystad Energy.

Graph 5 - 6: US tight crude output breakdown



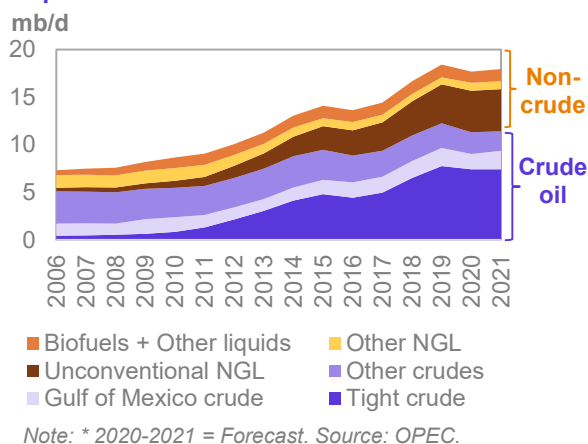
Sources: EIA, Rystad Energy and OPEC.

US crude oil production for 2021 was revised down by 0.07 mb/d is now forecast to grow by 0.10 mb/d y-o-y, to average 11.40 mb/d. This includes field condensates, which are projected to average around 0.8 mb/d.

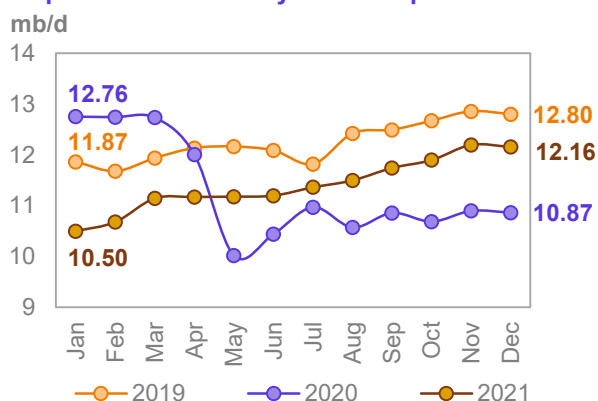
Tight crude is likely to grow by a minor 0.01 mb/d y-o-y, to average 7.41 mb/d, while production from the GoM is forecast to recover by 0.30 mb/d y-o-y, to average 1.94 mb/d.

Onshore conventional crude is forecast to continue to decline by 0.22 mb/d and average 2.04 mb/d, largely due to continued shut ins of stripper wells.

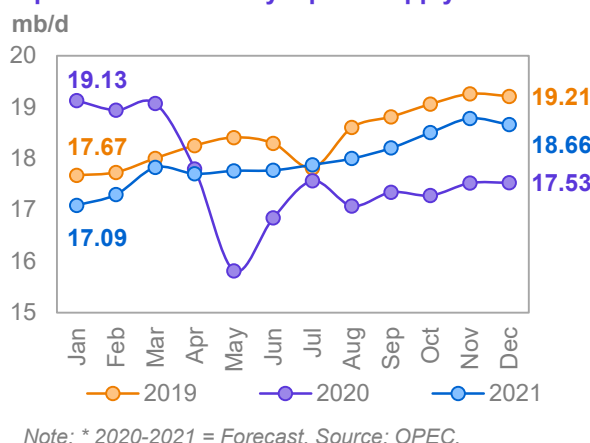
Graph 5 - 7: US liquids supply developments by component and forecast of 2020 and 2021



Graph 5 - 8: US monthly crude oil production



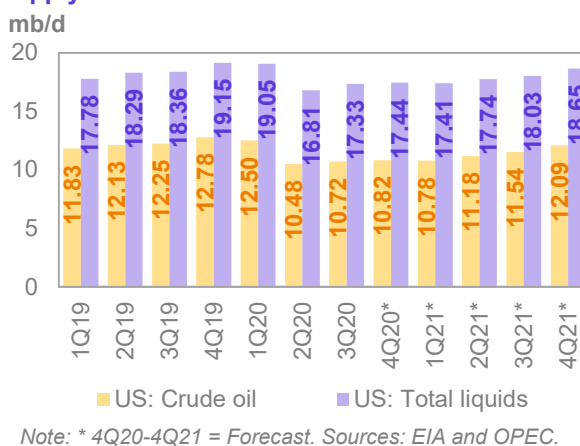
Graph 5 - 9: US monthly liquids supply



US NGL production in 2021 is forecast to grow by 0.07 mb/d to average 5.27 mb/d, while biofuels and other non-conventional liquids are forecast to recover by 0.13 mb/d to average 1.29 mb/d, but still remain lower than the average of 1.36 mb/d in 2019.

The **US liquids production forecast for 2021** was revised down in terms of absolute supply by 0.05 mb/d, compared to last month's projection, to average 17.96 mb/d. However, in terms of growth, it is broadly unchanged from a month earlier and is projected to grow by 0.30 mb/d y-o-y, but still remains 0.47 mb/d below the 2019 level.

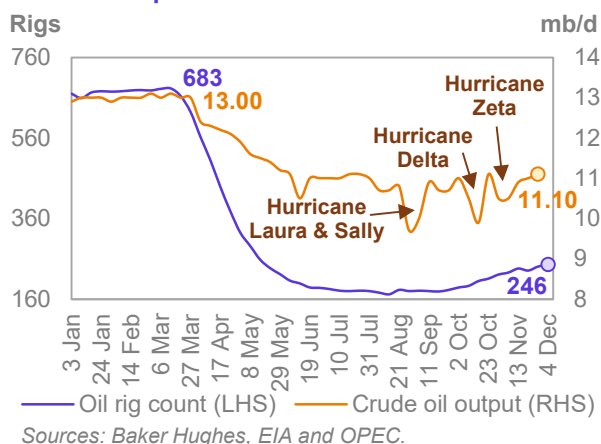
Graph 5 - 10: US crude and total liquids quarterly supply



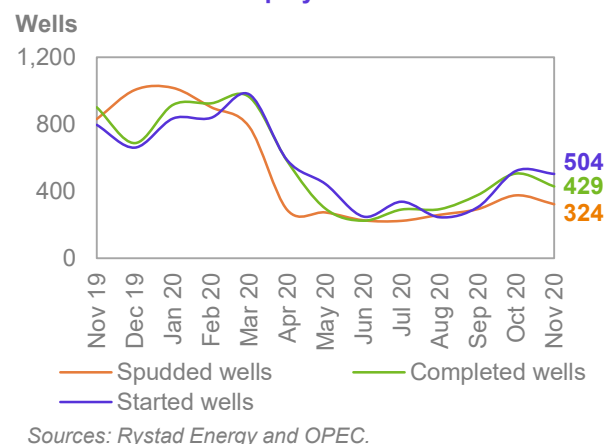
US rig count, spudded, completed, DUC wells and fracking activity

Since 13 March 2020 when oil prices plummeted, the cumulative US rig count declined by 469 oil and gas rigs, or 59%, y-o-y, to 323 rigs in the week ending 4 December, according to Baker Hughes. The oil rig count has increased by 74 rigs to 246 rigs since 14 August when the count was bottomed out at 172 oil rigs, while gas rigs were down by 58 y-o-y to 75 gas rigs. The US operators had idled 437 oil rigs since crude prices started plummeting from 13 March. Total horizontal rigs (oil and gas) decreased by 406 units, or ~58%, y-o-y since that time, to stand at 289 rigs on 4 December.

Graph 5 - 11: US weekly rig count vs US weekly crude oil output



Graph 5 - 12: Spudded, completed and started wells in the US shale plays



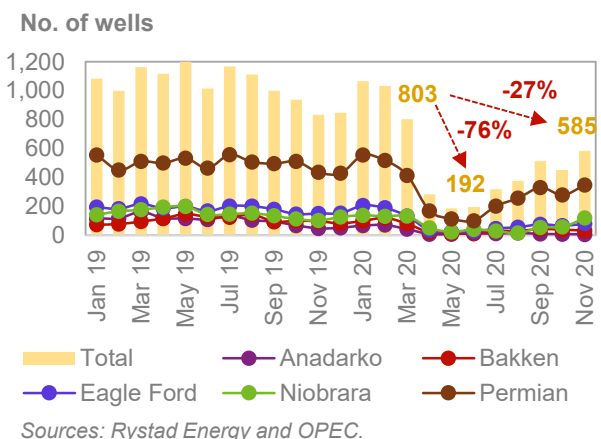
Regarding major basins, 164 oil rigs were active in the Permian Basin, adding 3 rigs w-o-w, as of 4 December, still lower by 236 rigs, or 59%, y-o-y. At the same time, the number of active rigs in the Eagle Ford Basin was 23 units, down by 62% y-o-y. The Williston Basin reported 11 active rigs, down by 79% y-o-y, and finally 6 units were reported in the DJ-Niobrara Basin, down by 71% y-o-y. With regard to spudding, completion and started wells in all US shale plays, as reported by Rystad Energy, 324 horizontal wells were spudded in November (as per preliminary information), a drop of 53 wells m-o-m, and this compares to 832 spudded wells in November 2019.

The preliminary number of completed wells is estimated at 429 in November, lower by 77 m-o-m, and lower by 52% or 473 completed wells from a year ago. At the same time, the number of started wells was down by 18 units to 504 wells, lower by 293 wells, or 37%, y-o-y.

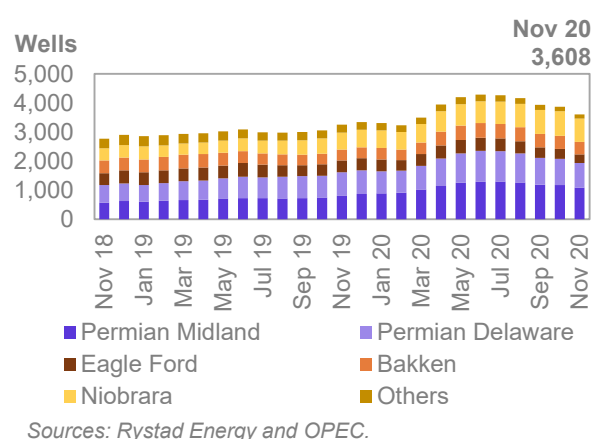
After a temporary drop of 63 fracked wells in October m-o-m, the fracked wells count increased to 585 in November, up by 134 m-o-m. The number of fracked wells has risen m-o-m in the DJ Basin – Niobrara shale – adding 62 fracked wells to average 120 wells in November. In other regions, fracking increased by 68 wells m-o-m in the Permian Basin to average 347 wells and in the Eagle Ford, up by 13, to average 80 wells. However, the number of fracked wells in the Bakken shale in North Dakota and Anadarko region declined by 7 and 2 to average 32 and 6 fracked wells, respectively. It is worth noting that comparing the number of fracked wells in June and November with the March level of 805 wells, an improvement from a 75% decline in June to a 28% decline in November can be seen. Strong fracking would likely help sustain US onshore production, as operators bring online their drilled, but uncompleted, (DUC) wells.

Following a m-o-m decrease of 234 uncompleted wells in September, the number of DUC horizontal wells in US shale plays in October dropped again by another 66 wells m-o-m to stand at 3,864 wells. As per preliminary data, the DUC count dropped by another 256 m-o-m in November to stand at 3,608 uncompleted wells.

Graph 5 - 13: Number of stimulated wells per month



Graph 5 - 14: US horizontal DUC count by shale play



Canada

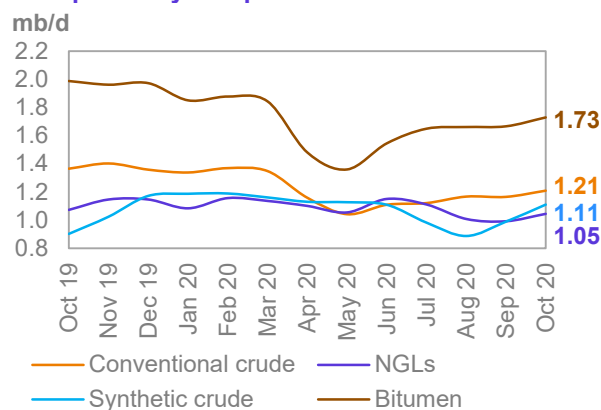
Canada's liquids production in October was up by 0.28 mb/d m-o-m, to average 5.14 mb/d, down from 5.37 mb/d of a year ago. The increase in Canadian oil output which began in September is mainly due to maintenance ending. Higher synthetic crude production in October by 121 tb/d, to average 1.11 mb/d, was also due to the planned and unplanned maintenance ending. Bitumen – mainly in-situ production – was also up by 63 tb/d, to average 1.67 mb/d. Preliminary data of conventional crude and NGLs in October indicates higher output by 44 tb/d, to average 1.21 mb/d, and an increase of 52 tb/d to average 1.05 mb/d, respectively. November oil production is expected to continue increasing.

Similar to the merger of Conoco-Concho, and Pioneer-Parsley in the US, the two Canadian firms of Cenovus and Husky announced a merger on 25 October. In an effort to reduce costs further consolidations and mergers are planned in Canada for 2021.

The Alberta government announced on 23 October, that it would lift production curtailments, ratified in 2018, starting from January 2021. Despite the ongoing COVID-19 pandemic, Canada is preparing to expand its pipeline capacity. According to an announcement by Enbridge, the Line 3 replacement project, projected to add capacity of 0.37 mb/d, was given the final approval by US Minnesota regulators on 30 November 2020. This, as well as the TransMountain expansion project is forecast to increase the country's crude export capacity as of late 2021.

Canada's oil supply in 2020 was revised up by 26 tb/d, following an upward adjustment to 4Q20 by 168 tb/d, and is now estimated to contract by 0.30 mb/d, y-o-y, for an average of 5.11 mb/d. For 2021, the supply forecast remained unchanged at growth of 0.23 mb/d, y-o-y, to average 5.34 mb/d.

Graph 5 - 15: Canada monthly liquids production development by component

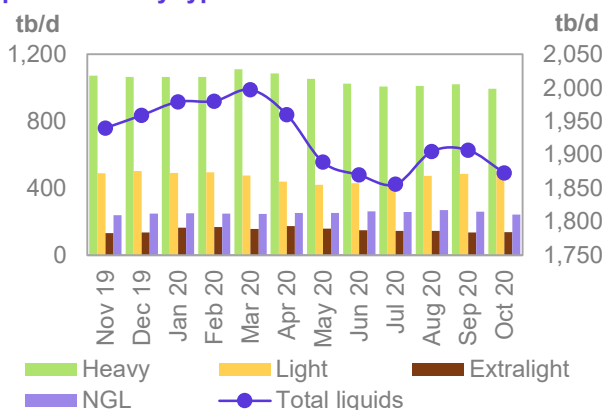


Sources: National Energy Board and OPEC.

Mexico

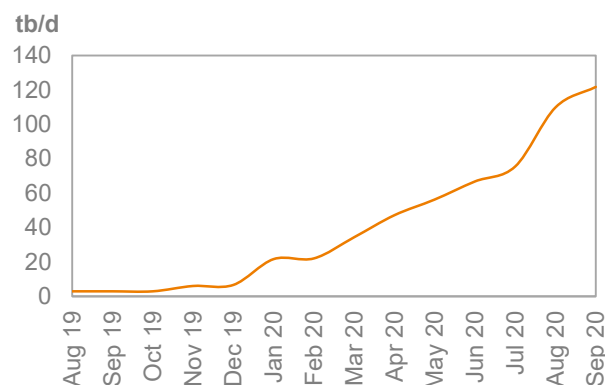
Mexico's liquids output in October declined by 0.04 mb/d, m-o-m, to average 1.87 mb/d. Crude oil output was down by 16 tb/d, m-o-m, to average 1.63 mb/d, mainly due to outages related to Hurricane Delta. Production of NGLs was also down by 18 tb/d, m-o-m, to average 243 tb/d. Oil production in November and December is expected to rise, to average 1.93 mb/d. As such, oil output in 4Q20 would be higher by 0.02 mb/d, q-o-q.

Graph 5 - 16: Mexico's monthly liquids and crude production by type



Sources: PEMEX and OPEC.

Graph 5 - 17: Pemex priority fields production



Sources: The National Hydrocarbons Commission of Mexico and OPEC.

According to the National Hydrocarbons Commission (CNH) figures, reported total private (non-Pemex) oil production stood at 56.91 tb/d in September 2020, up by 28% y-o-y. The CNH started publishing private production in May 2017, while the production was just at 2 tb/d. Thirteen companies reported production in September this year. ENI Mexico, Petrofrac, Deutsche Erdoel and Diavaz are Mexico's main private producers

at the moment. CNH has also pointed out that the estimated average production of 54.3 tb/d in 2020 would increase to 118 tb/d, including Pemex production, taking into account the Ek-Balam contract (61.5 tb/d).

According to CNH, Pemex only met 49% of its target of 240 tb/d for the ninth month of 2020 in its 22 priority fields, of which 17 have been developed since August 2019. Pemex produced only 121.7 tb/d in these fields in September 2020, despite the start-ups of Octli and Cheek fields. The NOC has only drilled 29% of the 62 expected wells so far. According to the official Hydrocarbons Mexico website; the fields that contributed the most to production were Mulach (19 tb/d), Pokche (11tb/d) and Chekekbal (9tb/d).

Mexico’s liquids production forecast in **2020** was revised up by 18 tb/d due to the upward adjustment of output of 4Q20, and is now expected flat, y-o-y, to average 1.92 mb/d.

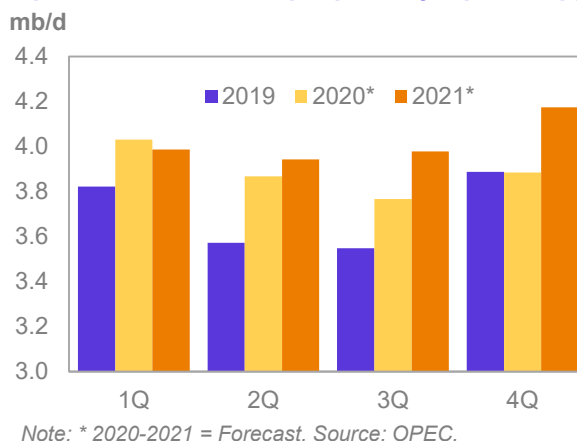
For **2021**, oil production in Mexico is forecast to see a minor decline of 0.01 mb/d, y-o-y, to average 1.91 mb/d.

OECD Europe

OECD Europe’s liquids production in 2020 was revised down by 0.02 mb/d from last month’s assessment, and is projected to grow by 0.18 mb/d, y-o-y, to average 3.89 mb/d. Nevertheless, in October, OECD Europe’s liquids supply was up by 0.22 mb/d m-o-m, to average 3.75 mb/d.

For **2021**, oil production is forecast to increase to 4.02 mb/d, revised down in absolute terms by 0.02mb/d, while y-o-y growth remained unchanged from last month’s forecast at 0.13 mb/d for the region.

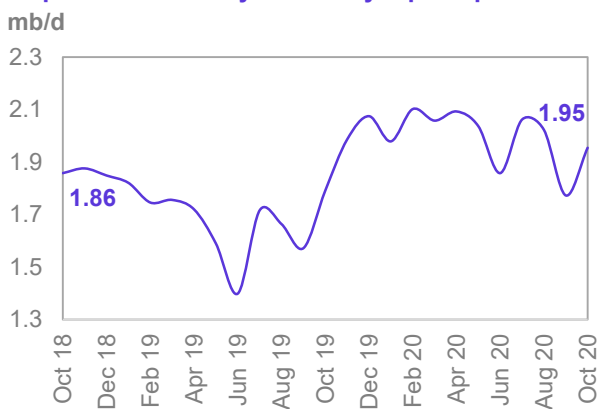
Graph 5 - 18: OECD Europe quarterly liquids supply



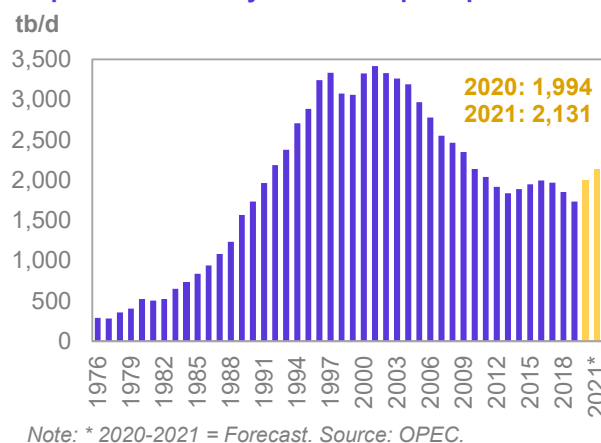
Norway

Norwegian liquids production in October increased by 0.11 mb/d m-o-m to 1.88 mb/d, mainly due to the increase of 126 tb/d of crude oil production to average 1.61 mb/d, according to the Norwegian Petroleum Directorate (NPD). NPD has said that the production figure for crude oil in October was in line with the announced curtailment for 2H20. Crude oil production in October was 6.6% lower than the NPD’s forecast, but 8.3% higher than October 2019.

Graph 5 - 19: Norway’s monthly liquids production



Graph 5 - 20: Norway’s annual liquids production



The main reasons that production in October was below forecast are strikes and maintenance work in some fields, according to NDP. In October, Norway also produced 267 tb/d of NGLs and condensate, down by 19 tb/d, m-o-m.

Norway’s oil supply in **2020** was revised down by 0.02 mb/d is now expected to grow by 0.26 mb/d to average 1.99 mb/d, while in **2021** growth is forecast to slow down to 0.14 mb/d, y-o-y, for an average of 2.13 mb/d.

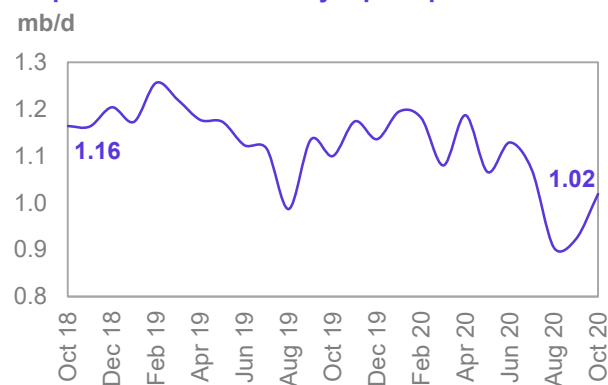
UK

UK liquids production in October increased by 0.10 mb/d, m-o-m, returning to a level of 1.02 mb/d, owing to an increase of 55 tb/d in crude oil output to average 0.86 mb/d and an rise in NGLs production by 41 tb/d, m-o-m, to average 0.11 mb/d.

Regarding the weak output in the UK in 2020, not only low performance in small oilfields has impacted the daily production but also lingering field maintenance, lack of new projects, natural decline in mature fields and falling investment, are all weighing on UK oil production.

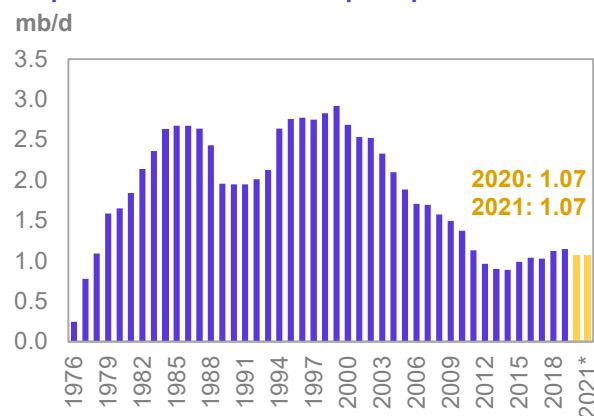
UK oil supply in **2020** was revised down by 26 tb/d in 3Q20 and down by 80 tb/d for 4Q20, and is now expected to decline by 0.07 mb/d, to average 1.07 mb/d. For **2021**, oil production is forecast to remain flat at 1.07 mb/d.

Graph 5 - 21: UK's monthly liquids production



Sources: Department of Energy & Climate Change and OPEC.

Graph 5 - 22: UK's annual liquids production



Note: * 2020-2021 = Forecast. Source: OPEC.

Non-OECD

Non-OECD liquids production for 2020 was revised down by 0.04 mb/d, m-o-m, and is forecast to decline by 1.44 mb/d, y-o-y, to average 31.47 mb/d, mainly due to downward revisions in Latin America. China's liquids supply is expected to grow by 0.11 mb/d, y-o-y, to average 4.16 mb/d. India's liquids supply is expected to decline by 0.05 mb/d, y-o-y, to average 0.78 mb/d and Other Asia is projected to decline by 0.18 mb/d to average 2.53 mb/d. Meanwhile, Latin America is expected to grow by only 0.3 mb/d y-o-y, due to heavy declines in Colombia by 0.10 mb/d and in Ecuador by 0.07 mb/d, mainly due to the shutting of wells in costly oil fields, to average 6.09 mb/d. Oil production in the Middle East is projected to decline by 0.04 mb/d, y-o-y, to average 3.16 mb/d and Africa is also expected to decline by 0.08 mb/d, y-o-y, to average 1.46 mb/d. Oil production in Eurasia is expected to decline by 1.23 mb/d, y-o-y, to average 13.22 mb/d, mainly due to a downward adjustment to Russia's production.

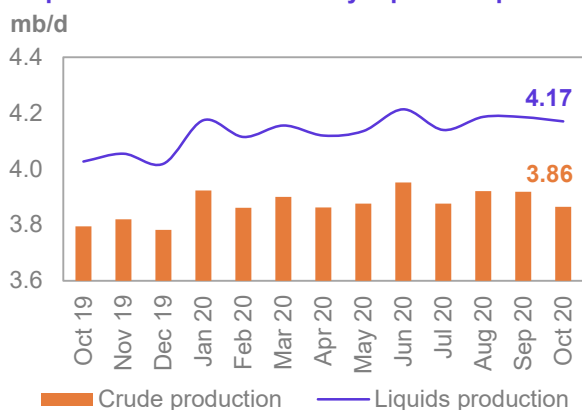
For **2021**, liquids production in non-OECD countries was revised down by 103 tb/d and is forecast to grow by 0.09 mb/d, y-o-y, to average 31.56 mb/d. China is forecast to remain unchanged to average at 4.16 mb/d. India is projected to decline by 0.02 mb/d next year, at an average of 0.75 mb/d. Oil supply is projected to decline in Other Asia by a minor 0.03 mb/d, y-o-y, to average 2.50 mb/d. Latin America remains the key driver in the non-OECD with y-o-y forecast growth of 0.29 mb/d, to average 6.38 mb/d. Production in Africa is forecast to decline by 0.08 mb/d, y-o-y, to average 1.38 mb/d. Oil production in the Middle East is forecast to grow by 0.08 mb/d, y-o-y, due to higher NGL production in Oman and Qatar, to average 3.24 mb/d. Oil production in Eurasia is projected to show a decline of 0.15 mb/d, y-o-y, to average 13.14 mb/d.

China

China's liquids production in October declined by 0.06 mb/d, m-o-m, at an average of 4.13 mb/d, up by 0.10 mb/d y-o-y, according to official data. Crude oil output in October declined by 54 tb/d, m-o-m, at an average of 3.86 mb/d, up by 0.07 mb/d, y-o-y. Despite the start-up of the Liuhua offshore field in September, oil production is likely to decline in 4Q20 by 0.06 mb/d q-o-q, to average 4.11 mb/d, due to lower drilling activities onshore. Non-crude output, mainly CTL, was steady at 0.26 mb/d in October, unchanged m-o-m.

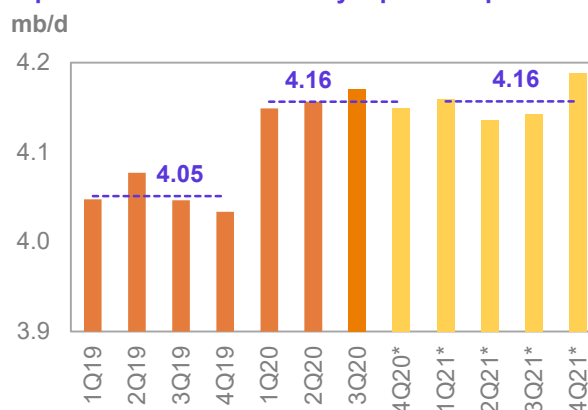
Moreover, unlike the strong increases seen in the past two years, lower spending on oil sector E&P compared with higher capex allocated to boosting natural gas production, is expected to lead to oil production remaining flat next year, compared to the remarkable growth of 0.11 mb/d y-o-y in 2020, to average 4.16 mb/d.

Graph 5 - 23: China's monthly liquids output



Sources: CNPC and OPEC.

Graph 5 - 24: China's monthly liquids output



Note: * 4Q20-4Q21 = Forecast. Sources: CNPC and OPEC.

Latin America

Latin America's total liquids supply in October decreased by a minor 0.01 mb/d, m-o-m, to average 6.01 mb/d, down by 0.18 mb/d y-o-y.

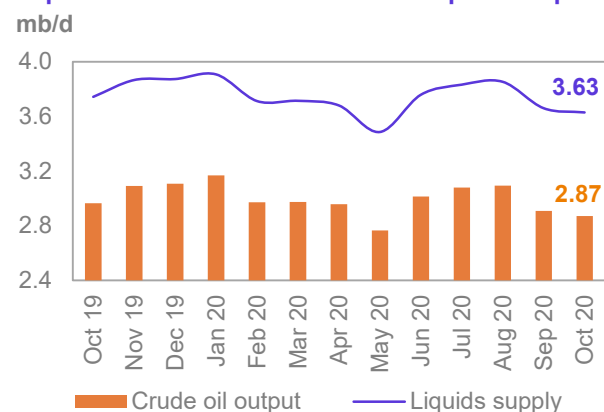
Liquids production in 2020 is projected to increase in Brazil by 0.17 mb/d, to average 3.71 mb/d, and in Guyana by 0.07 mb/d, to average 0.07 mb/d. Meanwhile, oil production in other countries of the region is forecast to decline. Latin America's oil supply in 3Q20 increased by 0.30 mb/d q-o-q to average 6.14 mb/d and output in 4Q20 is expected to decline to 6.03 mb/d. Latin America's oil supply for 2020 is forecast to inch up only by 0.03 mb/d, y-o-y, to average 6.09 mb/d mainly due to lower-than-expected oil output in Colombia, Ecuador and Argentina, following the shut in of wells on the back of COVID-19 and slowdown in drilling and operations, as well as the prolonged maintenance in Brazil.

For 2021, oil production is projected to grow by 0.29 mb/d, y-o-y, to average 6.38 mb/d. Oil production in Brazil, Peru and Guyana is forecast to increase, owing to production ramp-ups of fields started up in 2020 and 2019. Production in Ecuador is projected to recover by 0.06 mb/d from outages seen in 2020, to average 0.55 mb/d. Oil production is likely to remain flat in other countries.

Brazil

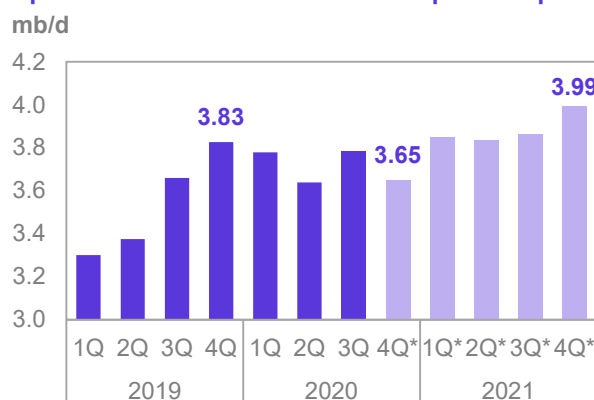
Brazil's crude oil production was down by 37 tb/d in October, m-o-m, to average 2.87 mb/d, a drop of 94 tb/d y-o-y, mainly due to planned field maintenance in the Tupi oil field, which is expected to continue in November. The output decline in September continued in October, not only because of maintenance, but also due to COVID-19-related safety measures leading to the postponement of scheduled work from 4Q20 to the beginning of 2021, according to Petrobras.

Graph 5 - 25: Brazil's crude oil and liquids output



Sources: ANP, Petrobras and OPEC.

Graph 5 - 26: Brazil's crude oil and liquids output



Note: * 4Q20-4Q21 = Forecast. Sources: ANP and OPEC.

Petrobras has put more fields up for sale in November, around 50% of its stakes in the Marlim, Voador, Marlim Leste and Marlim Sul concessions in the deepwater Campos basin, according to Offshore Magazine.

In October, Brazil liquids production, including biofuels, declined by 0.03 mb/d, m-o-m, to average 3.63 mb/d.

In **2020**, liquids supply is expected to grow by 0.17 mb/d y-o-y, to average 3.71 mb/d.

For **2021**, liquids supply was revised up by 0.03 mb/d, and is now forecast to grow by 0.17 mb/d to average 3.89 mb/d, mainly due to crude oil from pre-salt areas.

Eurasia

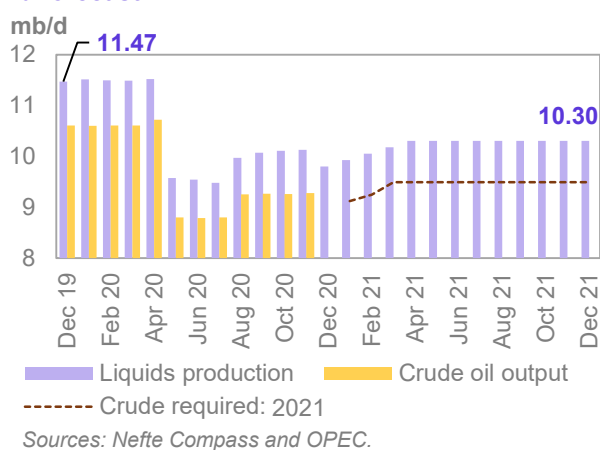
The **oil supply forecast for Eurasia (FSU + other Europe) for 2020** was revised up by 61 tb/d from last month's assessment to show a lesser contraction of 1.23 mb/d and average 13.29 mb/d. Production in the three countries participating in the DoC – Russia, Kazakhstan and Azerbaijan– is forecast to decline by 1.05 mb/d, 0.11 mb/d and 0.06 mb/d, respectively in 2020.

For **2021**, oil production in the region is forecast to decline by 0.15 mb/d, y-o-y, to average 13.14 mb/d, of which Russia is forecast to decline by 0.15 mb/d, while production in Kazakhstan and Azerbaijan is projected to inch up by a minor 0.01 mb/d, each. Other Eurasia is projected to decline by 0.02 mb/d.

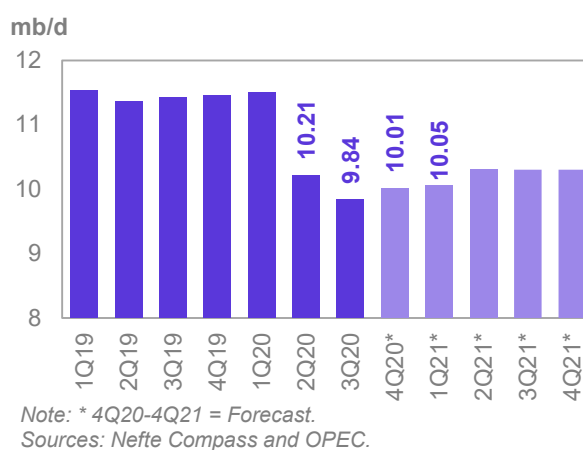
Russia

Preliminary data for **Russia's liquids production in November** shows a slight increase of 0.02 mb/d m-o-m for an average of 10.13 mb/d. This is lower by 1.32 mb/d y-o-y. Crude oil production in November is estimated at 9.28 mb/d, up from 9.26 mb/d in October. Production of condensate and NGLs from gas condensate fields was estimated flat at 0.85 mb/d in October and November. Russia has good potential for NGLs production with production of 914 tb/d in Jan 2020 and 922 tb/d in December 2018. Condensate and NGLs output in 2021 is forecast to average 0.81 mb/d.

Graph 5 - 27: Russia's monthly liquids production and forecast



Graph 5 - 28: Russia's quarterly liquids output



Russia's liquids supply in 3Q20 was pegged at 9.84 mb/d and for 4Q20 it is expected to average above 10.0 mb/d. Russia's average crude oil production from May to November is estimated at 9.07 mb/d. Annual liquids production in **2020** was revised up by 0.04 mb/d and is now forecast to decrease by 1.05 mb/d y-o-y to average 10.39 mb/d.

For **2021**, Russian liquids supply was revised down by 154 tb/d and is forecast to decline by 0.15 mb/d, y-o-y, to average 10.24 mb/d.

Caspian

Kazakhstan

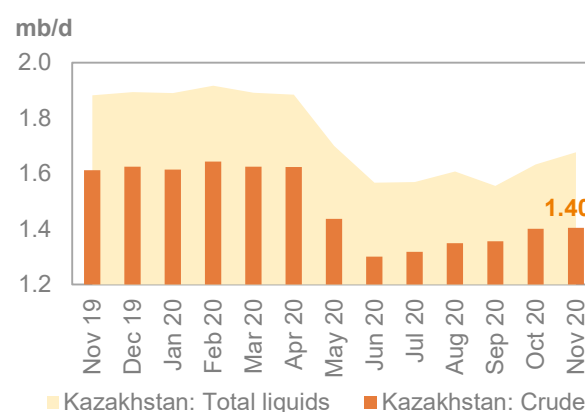
Kazakhstan's preliminary liquids production in November shows an increase of 0.05 mb/d, m-o-m, to average 1.68 mb/d, down by 0.20 mb/d y-o-y. Following a decline of 0.14 mb/d q-o-q, liquids output in 3Q20 averaged 1.58 mb/d. In 4Q20, oil production is expected to grow by 0.07 mb/d to average 1.65 mb/d, as the planned maintenance at the Tengiz oil field is now postponed into 2021.

Crude oil production in October and November was flat at 1.40 mb/d, while NGLs output in November rose by 41 tb/d to average 0.27 mb/d, the same level of January and February 2020.

Kazakhstan’s liquids production in **2020** is expected to decline by 0.11 mb/d, to average 1.71 mb/d, mainly due to the production adjustment under the agreement in DoC.

For **2021**, production is forecast to grow by minor 0.01 mb/d, y-o-y to average 1.68 mb/d.

Graph 5 - 29: Kazakhstan monthly crude and total liquids output



Sources: Nefte Compass and OPEC.

Azerbaijan

Azerbaijan’s preliminary liquids output in October was flat m-o-m at an average of 0.70 mb/d. Azerbaijan has reduced its output from 1Q20 by 0.06 mb/d to average 0.73 mb/d in 2Q20, and saw a further reduction by 0.04 mb/d to average 0.69 mb/d in 3Q20 in line with the agreement under the DoC. For 4Q20, output is forecast to increase slightly to 0.70 mb/d.

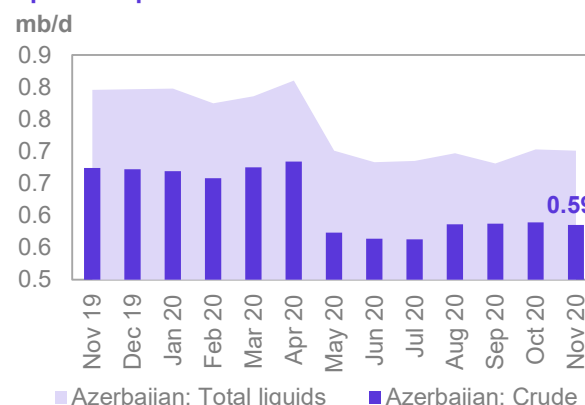
Production of condensate has increased since the start-up of production from the Shakh-Deniz gas-condensate field and output is expected to rise as the Shakh-Deniz partners plan to commission the field’s deepwater East South flank in the first half of 2021, according to Argus.

On the other hand, crude production from the offshore ACG complex was nearly 11% lower y-o-y at 482 tb/d in the first-nine months of 2020. Oil production from Azeri-Chirag-Guneshli has fallen steadily from a peak of more than 820 tb/d in 2010, due to natural decline.

Production of condensate and NGLs has been more or less steady at 1.15 mb/d in October and November. Crude output in August-to-November was flat at 0.59 mb/d.

For **2020**, liquids production is forecast to decline by 0.06 mb/d, y-o-y, to average 0.73 mb/d. For **2021**, a minor increase of 0.01 mb/d y-o-y, is forecast.

Graph 5 - 30: Azerbaijan monthly crude and total liquids output



Sources: Nefte Compass and OPEC.

OPEC NGL and non-conventional oils

OPEC NGLs and non-conventional liquids were up by 0.04 mb/d in October m-o-m, to average 5.04 mb/d, down by 0.25 mb/d, y-o-y. Production of OPEC NGLs and non-conventional oils has been declining since the beginning of the year, from 5.35 mb/d in January to 5.04 mb/d in October. Preliminary output in November is estimated at 5.06 mb/d. Production of non-conventional liquids was steady at 0.11 mb/d.

For **2020**, a contraction of 0.13 mb/d, y-o-y, is forecast to average 5.13 mb/d, revised down by 0.02 mb/d, m-o-m.

For **2021**, growth of 0.08 mb/d, y-o-y, is forecast to average 5.21 mb/d, revised down by 0.01 mb/d, m-o-m.

Graph 5 - 31: OPEC NGLs and non-conventional liquids output

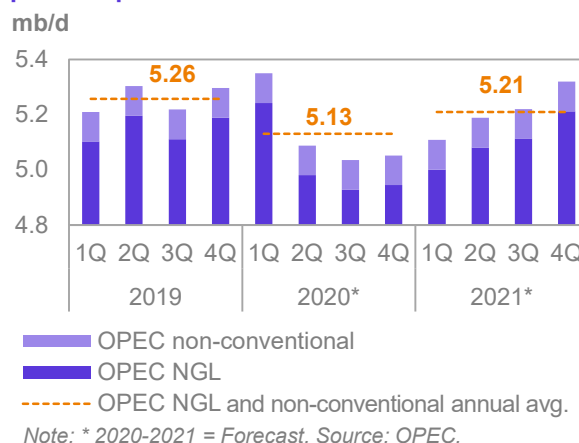


Table 5 - 7: OPEC NGL + non-conventional oils, mb/d

OPEC NGL and non-conventional oils	Change		Change		1Q21	2Q21	3Q21	4Q21	2021	Change
	2019	19/18	2020	20/19						
OPEC NGL	5.15	-0.08	5.02	-0.13	5.00	5.08	5.11	5.21	5.10	0.08
OPEC non-conventional	0.11	0.00	0.11	0.00	0.11	0.11	0.11	0.11	0.11	0.00
Total	5.26	-0.08	5.13	-0.13	5.11	5.19	5.22	5.32	5.21	0.08

Note: 2020-2021 = Forecast. Source: OPEC.

OPEC crude oil production

According to secondary sources, total **OPEC-13 crude oil production** averaged 25.11 mb/d in November 2020, up by 0.71 mb/d m-o-m. Crude oil output increased mainly in Libya and UAE, while production decreased primarily in Iraq.

OPEC crude oil production based on direct communication is shown in **Table 5 – 9**.

Table 5 - 8: OPEC crude oil production based on secondary sources, tb/d

Secondary sources	2018	2019	1Q20	2Q20	3Q20	Sep 20	Oct 20	Nov 20	Change
Algeria	1,042	1,022	1,016	878	840	855	857	856	0
Angola	1,505	1,401	1,388	1,267	1,213	1,236	1,185	1,179	-6
Congo	317	324	295	296	286	289	272	282	9
Equatorial Guinea	125	117	122	110	112	103	104	104	-1
Gabon	187	208	195	201	186	182	190	179	-10
Iran, I.R.	3,553	2,356	2,052	1,949	1,942	1,957	1,947	1,986	39
Iraq	4,550	4,678	4,560	4,127	3,697	3,690	3,841	3,764	-76
Kuwait	2,745	2,687	2,741	2,464	2,245	2,292	2,288	2,291	3
Libya	951	1,097	348	84	121	155	453	1,108	656
Nigeria	1,718	1,786	1,800	1,617	1,478	1,460	1,481	1,472	-10
Saudi Arabia	10,311	9,771	9,796	9,212	8,766	8,958	8,960	8,963	3
UAE	2,986	3,094	3,202	2,871	2,595	2,511	2,443	2,518	75
Venezuela	1,354	796	730	501	362	391	382	407	25
Total OPEC	31,344	29,337	28,246	25,578	23,842	24,077	24,402	25,109	707

Notes: Totals may not add up due to independent rounding. Source: OPEC.

Table 5 - 9: OPEC crude oil production based on *direct communication*, tb/d

Direct communication	2018	2019	1Q20	2Q20	3Q20	Sep 20	Oct 20	Nov 20	Change Nov/Oct
Algeria	1,040	1,023	1,018	874	843	861	860	862	2
Angola	1,473	1,373	1,402	1,267	1,253	1,216	1,194	1,219	25
Congo	323	329	308	311	301	311	302	..	..
Equatorial Guinea	120	110	126	107	115	112	107	103	-4
Gabon	193	218	224	227	201	200	175	..	..
Iran, I.R.	..	..	..	..	..	..	..	..	..
Iraq	4,410	4,576	4,490	4,088	3,625	3,600	3,842	3,685	-157
Kuwait	2,737	2,678	2,744	2,474	2,245	2,290	2,290	2,295	5
Libya	..	..	..	..	..	..	..	..	..
Nigeria	1,602	1,737	1,761	1,515	1,351	1,332	1,347	1,329	-18
Saudi Arabia	10,317	9,808	9,755	9,317	8,813	8,982	8,974	8,972	-2
UAE	3,008	3,058	3,173	2,921	2,525	2,476	2,414	2,511	97
Venezuela	1,510	1,013	821	568	395	397	473	434	-39
Total OPEC	..	..	..	..	..	..	..	..	..

Notes: .. Not available. Totals may not add up due to independent rounding. Source: OPEC.

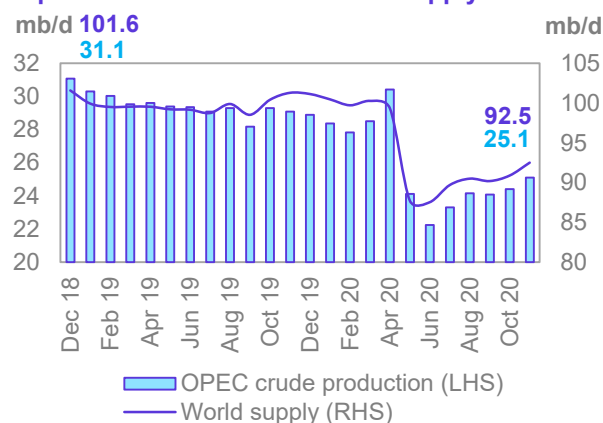
World oil supply

Preliminary data indicates that **global liquids production in November** increased by 1.62 mb/d to average 92.53 mb/d, compared with the previous month, but was lower by 8.78 mb/d, y-o-y.

Non-OPEC liquids production (including OPEC NGLs) increased in November by 0.91 mb/d compared with the previous month to average 67.42 mb/d, lower by 4.80 mb/d y-o-y. The preliminary increases in production during November 2020 were mainly driven by Canada, Norway and the US.

The **share of OPEC crude oil in total global production** up by 0.3% in November to 27.1% compared with the previous month. Estimates are based on preliminary data from direct communication for non-OPEC supply, OPEC NGLs and non-conventional oil, while estimates for OPEC crude production are based on secondary sources.

Graph 5 - 32: OPEC and world oil supply



Product Markets and Refinery Operations

Refining margins globally came under pressure as severe gasoline weakness reached record-breaking lows, yet refining economics region-wise showed mixed results. The USGC, the sole positive-performing region, benefitted from solid strength at the middle and bottom sections of the barrel, which overshadowed the weakness from the top section of the barrel. Sharp declines in diesel floating storage and reduced jet/kerosene refinery output were the main drivers of this upturn.

However, in Europe, seasonality as well as reinforcement of lockdown measures due to a rise in COVID-19 cases weighed heavily on product markets and outweighed support registered at the middle and bottom sections of the barrel. The return of refineries from heavy turnarounds led to stronger processing rates and placed further pressure on European refining economics.

In Asia, margins weakened, affected by lower regional naphtha and gasoline consumption amid a closed arbitrage window and stronger feedstock prices. A rise in Chinese refinery intakes in response to the release of the recent batch of export quotas led to an exacerbated oversupply environment in the region with product volumes stranded due to limited delivery destinations.

Refinery margins

US refinery margins rose, supported by heavy turnarounds in early November amid refinery capacity losses, as well as a continued recovery in demand in both the US and Latin America in November.

Although fuel consumption continued to resemble a recovery, the rise in COVID-19 case numbers and hospitalizations combined with tightening measures from governments limited further demand recovery and resulted in a more sizeable upturn in refining economics.

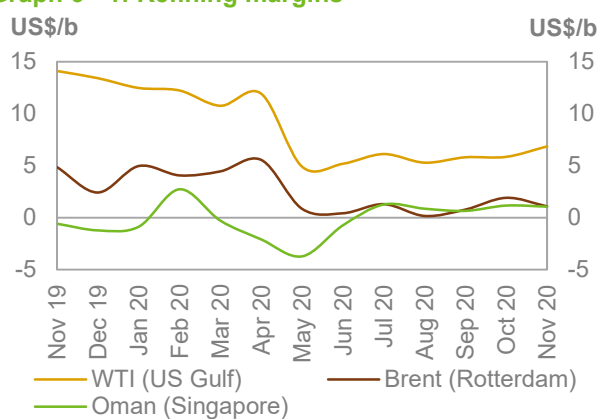
Thanksgiving travel activity fell only marginally as compared to average levels, as they were 10% lower y-o-y, according to secondary sources. US refinery margins for WTI averaged \$6.86/b in November, up by \$1.00/b m-o-m, but down by \$7.24 y-o-y.

Refinery margins in **Europe** suffered to the greatest extent compared with the other main regions, similar to what was witnessed in the previous month. This weakness was attributed to softer mobility activities as Europe's largest economies – Germany, France and the United Kingdom – intensified quarantines due to rising COVID-19 infection rates. Over the month, Spain's Cepsa mothballed a 100 tb/d CDU at its 220 tb/d Huelva refinery, and Petroineos has announced plans to shut down nearly half of the primary refining capacity at its 200 tb/d Grangemouth refinery in Scotland. This points to further demand-side pressure and a call for refiners to deepen intake cuts to limit margin losses going forward. Refinery margins for Brent in Europe averaged \$1.09/b in November, down by 82¢ compared with a month earlier and down by \$3.76 y-o-y.

Asian product markets weakened slightly, pressured by a surge in oil prices amid strong refinery processing rates. Improvements in jet/kerosene and gasoil cracks were insufficient to overturn the gasoline weakness. As export outlets for middle distillates remain scarce, refining economics in the region are set to remain subdued in the near term.

In China, refinery processing rates were high, driven by the most recent release of export quotas. Given the scarce product delivery requests and the end of heavy turnarounds globally, Singapore is set to continue to suffer from a product surplus in the near term. Refinery margins for Oman in Asia lost 10¢ m-o-m to average \$1.05/b in November, which was higher by \$1.64 y-o-y.

Graph 6 - 1: Refining margins



Sources: Argus and OPEC.

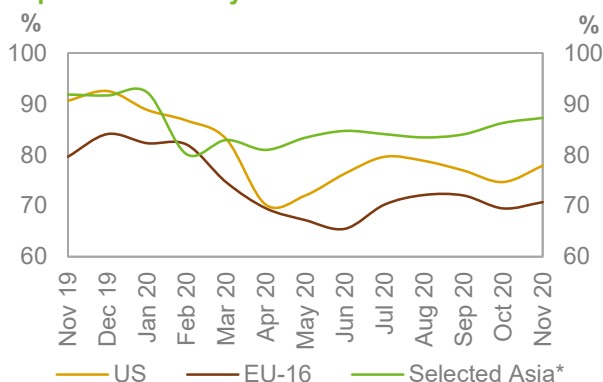
Refinery operations

US refinery utilization rates increased in November to average 77.84%, which corresponds to a throughput of 14.49 mb/d. This represented a rise of 3.2 pp and 590 tb/d, respectively, compared with the previous month. Y-o-y, the November refinery utilization rate was down by 12.8 pp, with throughputs showing a drop of 2.5 mb/d.

European refinery utilization averaged 70.72%, corresponding to a throughput of 8.7 mb/d. This is a m-o-m rise of 1.2 pp or 80 tb/d. On a y-o-y basis, utilization rates fell by 12.4 pp, while throughput was down by 1.6 mb/d.

In **selected Asia** — comprising Japan, China, India Singapore and South Korea — refinery utilization rates declined, averaging 87.26% in November, corresponding to a throughput of 24.79 mb/d. Compared with the previous month, throughputs were up by 1.0 pp and 280 tb/d. Meanwhile, y-o-y they were down by 4.6 pp or 1.2 mb/d.

Graph 6 - 2: Refinery utilization rates



Note: * China, India, Japan, Singapore and South Korea. Sources: Argus, EIA, Euroilstock, PAJ and OPEC.

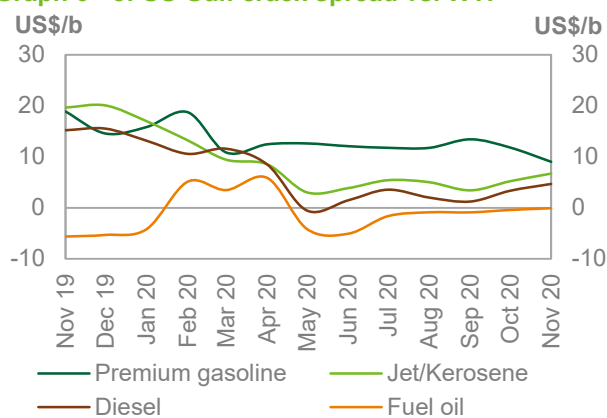
Product markets

US market

US gasoline crack spreads suffered the deepest downturn compared to all other main products in the US as gasoline demand fell to a new record-breaking low over the month.

During the Thanksgiving holiday, traditionally, gasoline markets in the US have been directly impacted by mobility dynamics. This year, however, according to secondary sources, passenger Vehicle Miles Travelled (VMT) on US interstate highways fell by 17% y-o-y in the week to 29 November. This was the deepest percentage loss in weekly interstate VMTs since late July as many Americans opted to stay home rather than visit family due to COVID-19.

Graph 6 - 3: US Gulf crack spread vs. WTI



Sources: Argus and OPEC.

The fall in weekly driving during Thanksgiving was likely attributed to the lower-than-usual number of discretionary trips as well as the usual slowdown in commuting around the holiday. US gasoline crack spreads lost \$2.81 m-o-m to average \$9.01 in November, down by \$9.89/b y-o-y.

USGC **jet/kerosene** strengthened, exhibiting the strongest positive performance relative to other key products, backed by supply-side pressure, as refineries underwent heavy turnarounds amid recent improvements in the demand picture. This resulted in a relatively tighter balance in November. The US jet/kerosene crack spread against WTI averaged \$6.71/b, up by \$1.50 m-o-m, but down by \$12.95 y-o-y.

US **gasoil crack spreads** against WTI gained some solid ground supported by strong inventory drawdowns amid relatively lower refinery outputs. The US gasoil crack spread against WTI averaged \$4.70/b, up by \$1.34 m-o-m, but down by \$10.52 y-o-y.

US **fuel oil crack spreads** against WTI benefitted from declining stock levels attributed to run cuts. At the same time, fuel oil prices in November jumped by \$2.14/b and showed a rising trend for the third consecutive month. In November, the US fuel oil crack spread against WTI averaged minus 8¢/b, up by 34¢ m-o-m and by 5.55¢ y-o-y.

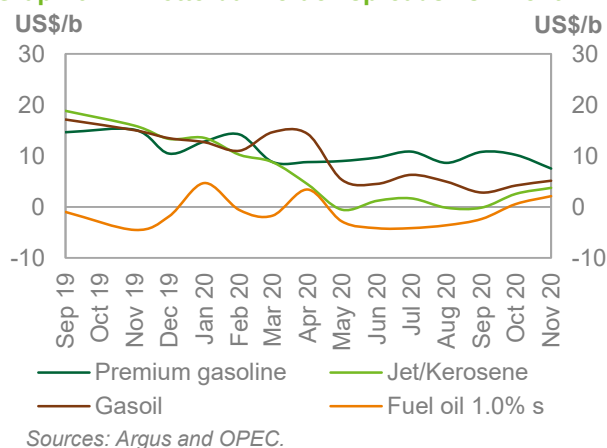
European market

Gasoline crack spreads in Rotterdam plummeted to a multi-year record low, affected by stricter quarantines implemented over the month in response to a resurgence in COVID-19 cases. This weighed heavily on mobility activities and gasoline consumption.

In November, gasoline prices fell for the fourth consecutive month to \$48.86/b, affected by strong gasoline availability amid seasonal weakness. In addition, transatlantic exports proved less supportive for cracks given the reintroduction of lockdown measures in several states.

The gasoline crack spread against Brent averaged \$7.51/b in November, down by \$2.67 m-o-m and by \$7.60 y-o-y.

Graph 6 - 4: Rotterdam crack spreads vs. Brent



Jet/kerosene crack spreads against Brent rose over the month with supplies coming under added pressure as production rates for the same product declined further in the region. Support from the aviation sector remained limited as Europe represented the region with the lowest recovery in flight numbers in early December amid high levels of refining overcapacity. ARA jet floating storage eased to below 1.0 mb in early December, but European onshore stocks should remain elevated. The Rotterdam jet/kerosene crack spread against Brent averaged \$3.72/b, up by \$1.18 m-o-m but down by \$12.21 y-o-y.

Gasoil crack spreads jumped in response to extended European refinery maintenance and a tighter regional balance. Moreover, increased transatlantic bookings in line with a strong heating oil spread continued to pull barrels away from Europe, exacerbating the tightness in ARA gasoil stocks. However, as refineries return from turnarounds, the market tightness is expected to be alleviated. In addition, more European governments have reintroduced lockdown restrictions amid surging infection rates. Such developments could most likely keep European diesel markets under added pressure going forward, and therefore, with the return of refineries following maintenance season, set the stage for a potential diesel oversupply with excess volumes in the region. The gasoil crack spread against Brent averaged \$5.10/b, which was higher by 94¢ m-o-m but lower by \$9.93 y-o-y.

At the bottom of the barrel, **fuel oil 3.5% crack spreads** in Rotterdam saw an extension of its upward trend and inched closer to positive territory supported by a tighter fuel oil balance as refinery intake reductions due to poor economics and maintenance led to lower supplies and kept prices sustained. Strong fuel oil deliveries from Russia were fed into the region over the month and softened the upside but were insufficient to overturn the upward trend witnessed in November. In Europe, fuel oil cracks averaged minus \$2.45/b in November, gaining 44¢ m-o-m and \$31.34 y-o-y.

Asian market

The **Asian gasoline 92 crack spread** fell, affected by the record high Chinese crude intakes recorded in the previous month, which boosted gasoline exports from that country and exacerbated the oversupply environment in the region. At the same time, limited export opportunities from Northeast Asia contributed further to the poor gasoline market performance witnessed in November. The recent release of export quotas to Rongsheng's refinery could most likely keep gasoline supply at high levels as its refinery is geared towards light ends rather than middle distillates. The Singapore gasoline crack spread against Oman in November averaged minus \$2.18/b, down by \$1.91 m-o-m and by \$7.30 y-o-y.

Singapore **light distillate naphtha crack spreads** fell for the second consecutive month and entered negative territory in line with a rise in naphtha volume arrivals into Asia, with Taiwan having registered the highest imports since at least 2017. On the other hand, barrel deliveries from Asia in November declined sharply to a 15-month low. With the majority of known turnarounds in Asia concentrated on naphtha-focused setups, the negative impact on naphtha crack spreads was notable. On the other hand, tightness in key derivatives further downstream helped steam cracking margins for naphtha reach a near 30-month record high. The return of steam cracking capacity from turnarounds in December should lead to a tighter balance in the coming month and support naphtha crack spreads within the region in the near term.

Product Markets and Refinery Operations

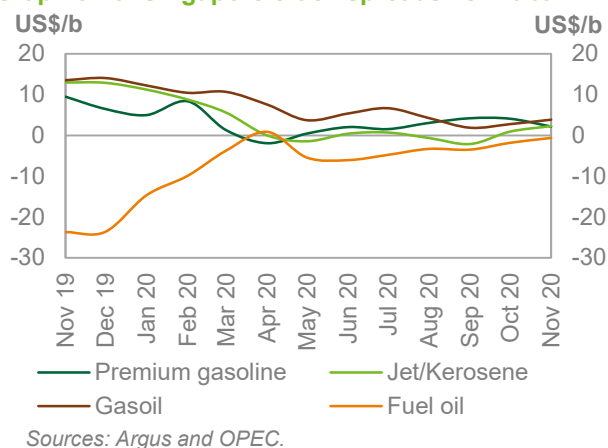
The Singapore naphtha crack spread against Oman averaged minus \$2.62/b, having decreased by \$3.80 m-o-m and by 47¢ y-o-y.

In the middle of the barrel, **jet/kerosene crack spreads** in Asia climbed to their highest levels seen since March 2020 supported by a slight uptick in aviation demand and expectations for firmer winter heating demand for kerosene. Jet fuel cracks have nearly doubled over the last month as demand for kerosene picked up ahead of peak winter in Japan and South Korea. Jet fuel and kerosene belong to the same grade of oil products, with jet margins determining the profitability of both. Scheduled flights operating globally were 46% lower in November y-o-y, but showed moderate y-o-y improvement relative to the previous month, according to external sources. The Singapore jet/kerosene crack spread against Oman averaged \$2.31/b, up by \$1.36 m-o-m, but was down by \$10.67 y-o-y.

The Singapore **gasoil crack spread** extended its upward trend to reach a 3-month high in November as gasoil consumption recovered, supported by growth in Chinese and South Korean factory activity in November along with a stabilization in Japanese manufacturing activities. However, regional demand remains vulnerable to infection spikes. The Singapore gasoil crack spread against Oman averaged \$3.82/b, up by \$1.09/b m-o-m, but down by \$9.67 y-o-y.

The Singapore **fuel oil crack spread** strengthened in November, backed by robust bunkering demand, with support coming from Pakistan, while South Korea's seasonal fine-dust management policy during winter forced 9 to 16 coal-fired plants to shut down (one more than last winter), which will likely boost imports of LSFO in the coming months. Singapore's fuel oil cracks against Oman averaged minus 61 ¢/b, up by \$1.19 m-o-m and by \$23.11 y-o-y.

Graph 6 - 5: Singapore crack spreads vs. Dubai



Sources: Argus and OPEC.

Table 6 - 1: Short-term prospects for product markets and refinery operations

Event	Time frame	Asia	Europe	US	Observations
Winter season	Dec 20–Jan 20	↑ Limited positive impact on product markets	↑ Limited positive impact on product markets	↑ Limited positive impact on product markets	Should lend support to heating fuel markets due to home office and residential heating demand, despite forecasts of a warmer winter.
Refinery closures	2Q21–3Q21	↑ Positive impact on product markets	↑ Positive impact on product markets	↑ Positive impact on product markets	In the immediate near term, no impact is expected. However, once markets recover and consumption levels get fully restored to pre-pandemic levels, the product deficit could support market particularly during summer months.
COVID-19 (vaccine developments)	Summer 2021	↑ Positive impact on product markets	↑ Positive impact on product markets	↑ Positive impact on product markets	Product markets are expected to show y-o-y improvement in product cracks mainly during the 2021 driving season.

Source: OPEC.

Table 6 - 2: Refinery operations in selected OECD countries

	Refinery throughput, mb/d				Refinery utilization, %			
	Sep 20	Oct 20	Nov 20	Change Nov/Oct	Sep 20	Oct 20	Nov 20	Change Nov/Oct
US	14.14	13.90	14.49	0.59	76.90	74.65	77.84	3.2 pp
Euro-16	8.93	8.61	8.69	0.08	72.04	69.50	70.72	1.2 pp
France	0.76	0.74	0.74	0.01	60.63	58.71	59.27	0.6 pp
Germany	1.66	1.70	1.62	-0.08	76.01	77.47	73.95	-3.5 pp
Italy	1.14	1.08	1.21	0.12	55.77	52.93	58.90	6.0 pp
UK	1.05	0.87	0.86	-0.01	79.59	66.34	65.80	-0.5 pp
Selected Asia*	23.97	24.51	24.79	0.28	84.04	86.27	87.26	1.0 pp

Note: * Includes Japan, China, India, Singapore and South Korea.

Sources: EIA, Euroilstock, PAJ, FGE, and OPEC.

Table 6 - 3: Refinery crude throughput, mb/d

	2017	2018	2019	4Q19	1Q20	2Q20	3Q20	4Q20
Refinery crude throughput								
OECD Americas	19.11	19.31	18.96	18.82	18.27	15.31	16.27	16.48
of which US	16.90	17.31	16.99	16.85	16.36	13.65	14.55	14.34
OECD Europe	12.44	12.17	12.09	11.99	11.64	9.90	10.68	10.74
of which:								
France	1.17	1.10	1.00	0.82	0.65	0.58	0.75	0.68
Germany	1.91	1.80	1.78	1.83	1.80	1.69	1.72	1.62
Italy	1.40	1.35	1.35	1.33	1.22	0.99	1.15	1.03
UK	1.10	1.06	1.08	1.14	1.11	0.81	0.92	0.84
OECD Asia Pacific	7.04	6.98	6.79	6.61	6.67	5.53	5.49	5.85
of which Japan	3.22	3.11	3.02	2.97	2.94	2.23	2.25	2.57
Total OECD	38.59	38.46	37.84	37.41	36.58	30.74	32.43	33.08
China	11.33	12.03	12.98	13.68	12.04	13.76	14.00	14.05
India	4.79	4.89	5.03	5.08	5.09	3.86	4.00	4.35
Other Asia	4.84	5.10	4.89	4.78	5.34	4.11	4.13	4.37
Latin America	4.48	4.22	4.02	3.98	3.97	3.27	3.87	3.89
Middle East	6.92	7.05	6.92	6.63	6.07	5.15	5.90	6.37
Africa	2.17	2.16	2.17	2.28	2.28	1.90	1.96	2.02
Eurasia	7.39	7.64	7.59	7.71	7.56	6.63	6.94	6.91
of which Russian	5.59	5.72	5.70	5.83	5.88	5.10	5.28	5.18
of which Other Eurasia	1.80	1.92	1.89	1.88	1.68	1.53	1.66	1.73
Total Non-OECD	41.92	43.10	43.59	44.14	42.35	38.68	40.80	41.96
Total world	80.51	81.56	81.43	81.54	78.93	69.42	73.23	75.04

Note: Totals may not add up due to independent rounding.

Sources: AFREC, APEC, EIA, IEA, Euroilstock, PAJ, Ministry data, including Ministry of Energy of the Russian Federation, Ministry of Petroleum and Natural Gas of India, OPEC and JODI.

Product Markets and Refinery Operations

Table 6 - 4: Refined product prices, US\$/b

	Oct 20	Nov 20	Change Nov/Oct	Annual avg. 2019	Year-to-date 2020
US Gulf (Cargoes FOB)					
Naphtha*	40.41	40.86	0.45	56.86	37.36
Premium gasoline (unleaded 93)	51.35	50.34	-1.01	79.66	51.31
Regular gasoline (unleaded 87)	48.20	47.78	-0.42	72.70	47.06
Jet/Kerosene	44.74	48.04	3.30	79.32	45.99
Gasoil (0.2% S)	42.89	46.03	3.14	74.61	44.08
Fuel oil (3.0% S)	37.37	39.84	2.47	52.55	33.91
Rotterdam (Barges FoB)					
Naphtha	41.26	40.67	-0.59	55.71	38.21
Premium gasoline (unleaded 98)	50.19	49.86	-0.33	79.52	50.95
Jet/Kerosene	42.55	46.07	3.52	80.22	44.95
Gasoil/Diesel (10 ppm)	44.17	47.45	3.28	79.50	48.62
Fuel oil (1.0% S)	40.57	44.46	3.89	60.15	40.04
Fuel oil (3.5% S)	39.09	42.17	3.08	54.19	36.93
Mediterranean (Cargoes FOB)					
Naphtha	41.07	40.34	-0.73	54.48	36.71
Premium gasoline**	45.56	45.45	-0.11	71.36	44.87
Jet/Kerosene	40.89	44.62	3.73	77.77	42.18
Diesel	44.43	47.43	3.00	79.03	47.94
Fuel oil (1.0% S)	43.27	46.17	2.90	63.42	42.89
Fuel oil (3.5% S)	36.10	38.25	2.15	50.55	32.50
Singapore (Cargoes FOB)					
Naphtha	41.88	40.71	-1.17	57.10	40.01
Premium gasoline (unleaded 95)	45.96	46.67	0.71	72.45	45.97
Regular gasoline (unleaded 92)	44.79	45.51	0.72	69.45	44.31
Jet/Kerosene	41.65	45.64	3.99	77.26	43.92
Gasoil/Diesel (50 ppm)	43.77	47.35	3.58	77.78	48.64
Fuel oil (180 cst)	43.28	47.01	3.73	75.98	47.27
Fuel oil (380 cst 3.5% S)	38.90	42.72	3.82	56.70	36.75

Note: * Barges. ** Cost, insurance and freight (CIF).

Sources: Argus and OPEC.

Tanker Market

Dirty tanker rates remained weak in November, at the historically low levels so far in 2H20, amid ample tonnage lists. However, signs indicating that November could be the bottom of the market have provided some hope for ship owners as they look to 2021.

Clean tanker rates picked up from multi-year lows, supported by improving West of Suez activities.

Spot fixtures

Global spot fixtures rose m-o-m in November, after dipping lower the month before, increasing 0.22 mb/d, or 1.5%, to average 15.09 mb/d. The increase came as Chinese refiners returned to the market after a pause due to the Golden Week holiday and as independent refiners received another round of import quotas. Spot fixtures were still 4.9 mb/d, or almost 25%, lower than the same month last year, reflecting the overall muted environment due to the COVID-19 pandemic.

Table 7 - 1: Spot fixtures, mb/d

	Sep 20	Oct 20	Nov 20	Change Nov 20/Oct 20
All areas	14.91	14.87	15.09	0.22
OPEC	9.86	9.89	10.19	0.30
Middle East/East	6.07	5.90	6.49	0.59
Middle East/West	0.89	1.25	0.68	-0.57
Outside Middle East	2.90	2.74	3.02	0.28

Sources: Oil Movements and OPEC.

OPEC spot fixtures averaged 10.19 mb/d in November, representing an increase of 3% m-o-m, or 0.3 mb/d. Compared to the same month last year, OPEC spot fixtures were 28% lower, or almost 4 mb/d, reflecting in part production adjustments by OPEC countries.

Fixtures from the **Middle East-to-East** averaged 6.5 mb/d in November, representing a gain of 0.6 mb/d, or 10%, m-o-m. Y-o-y, this represents a decline of 1.6 mb/d or almost 20%.

In contrast, **Middle East-to-West** fixtures were sharply lower in November, falling 46%, or 0.6 mb/d, to average 0.7 mb/d. This was still 0.9 mb/d, or 56%, lower compared with the same month last year.

Outside of the Middle East, fixtures increased 10% m-o-m, or 0.3 mb/d, to average just under 3.0 mb/d. In annual terms, fixtures were down by almost 32% or 1.4 mb/d.

Sailings and arrivals

OPEC sailings increased 1.7% in November, or 0.35 mb/d, to average 21.07 mb/d, compared with a year-high of 25.5 mb/d recorded in April. The increase came as more Libyan barrels became available in the market. Y-o-y, OPEC sailings were 4.3 mb/d, or 17%, lower.

Middle East sailings averaged 14.6 mb/d, representing an increase of 0.3 mb/d, or 2% m-o-m, but down almost 3.9 mb/d, or 21%, compared to the same month last year.

Crude arrivals in November increased m-o-m in all regions except North America. Far East arrivals led gains, increasing 14% m-o-m, or 1.4 mb/d, to average 11.1 mb/d. Arrivals in Europe continued to move higher m-o-m, averaging 10.3 mb/d, representing a gain of 3%, or 0.3 mb/d, over the previous month, but were still 1.3 mb/d, or close to 12%, lower y-o-y. Arrivals in West Asia were higher by 2.5% m-o-m, or 0.1 mb/d, to average 5.38 mb/d.

Table 7 - 2: Tanker sailings and arrivals, mb/d

	Sep 20	Oct 20	Nov 20	Change Nov 20/Oct 20
Sailings				
OPEC	20.11	20.72	21.07	0.35
Middle East	14.41	14.93	14.63	-0.30
Arrivals				
North America	7.82	7.85	7.63	-0.22
Europe	9.95	10.00	10.31	0.31
Far East	8.42	9.72	11.09	1.37
West Asia	4.74	5.25	5.38	0.13

Sources: Oil Movements and OPEC.

Dirty tanker freight rates

Very large crude carriers (VLCCs)

VLCC spot rates continued to edge lower in November, falling on average 5% m-o-m, as tonnage demand continued to be weak and the unwinding of floating storage increased availability.

Rates on the **Middle East-to-East** route fell a further 5% m-o-m in November to average WS26 points. Y-o-y, rates were more than 70% lower compared with the same month last year.

Rates on the **Middle East-to-West** route declined 7% m-o-m to average WS17 points. Y-o-y, rates have declined 70%.

Rates also dropped on the **West Africa-to-East** route, decreasing 2% m-o-m to average WS30 points. Rates were 69% lower compared with November 2019.

Table 7 - 3: Dirty VLCC spot tanker freight rates, Worldscale (WS)

	Size 1,000 DWT	Sep 20	Oct 20	Nov 20	Change Nov 20/Oct 20
VLCC					
Middle East/East	230-280	30	28	26	-2
Middle East/West	270-285	21	18	17	-1
West Africa/East	260	34	31	30	-1

Sources: Argus and OPEC.

Suezmax

Suezmax rates managed a positive performance in November, with **average spot freight rates** gaining 12% on average m-o-m, as the market picked up from a dip October. However, they were still 68% lower y-o-y.

On the **West Africa-to-US Gulf Coast (USGC)** route, Suezmax rates averaged WS32 points in November, representing a 19% gain from the month before. Y-o-y, rates were 70% lower than in November last year.

The **Northwest Europe (NWE)-to-USGC** route rose 6% m-o-m to average WS31 points, but this still represented a 66% decline from the same month last year.

Table 7 - 4: Dirty Suezmax spot tanker freight rates, WS

	Size 1,000 DWT	Sep 20	Oct 20	Nov 20	Change Nov 20/Oct 20
Suezmax					
West Africa/US Gulf Coast	130-135	32	27	32	5
Northwest Europe/US Gulf Coast	130-135	32	29	31	2

Sources: Argus and OPEC.

Aframax

Aframax rates also turned in a positive performance in November, increasing for the second-consecutive month. Compared to the previous month, rates were up 8% in November, but still 61% lower y-o-y. The **Caribbean-to-US East Coast (USEC)** route was the main contributor to the increase, enjoying a 49% improvement m-o-m in November to average WS69, yet 55% lower y-o-y.

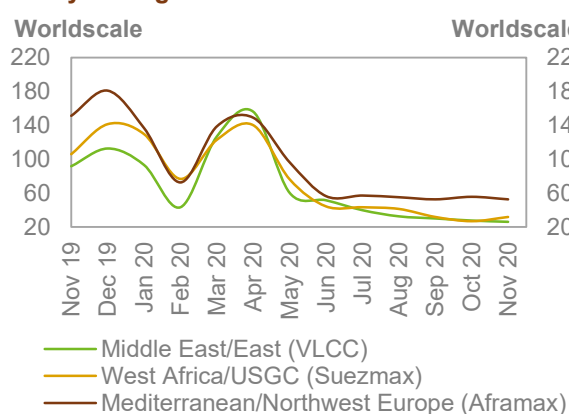
Table 7 - 5: Dirty Aframax spot tanker freight rates, WS

	Size 1,000 DWT	Sep 20	Oct 20	Nov 20	Change
					Nov 20/Oct 20
Aframax					
Indonesia/East	80-85	70	56	53	-3
Caribbean/US East Coast	80-85	57	46	69	23
Mediterranean/Mediterranean	80-85	57	60	62	2
Mediterranean/Northwest Europe	80-85	53	56	53	-3

Sources: Argus and OPEC.

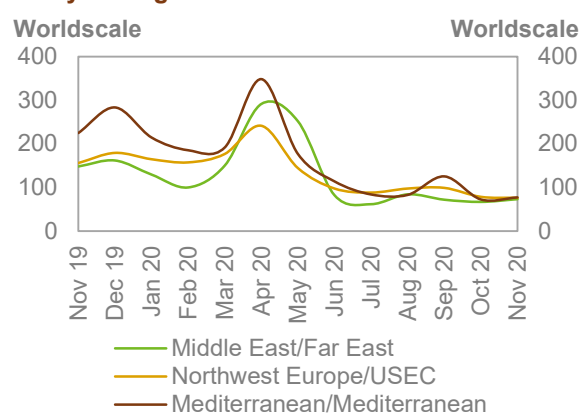
Developments in the Mediterranean were mixed. The **Cross-Med** route continued to increase, gaining 3% m-o-m to average WS62. In contrast, the **Mediterranean-to-NWE** route declined 5% m-o-m to average WS53, which represented a 65% drop y-o-y. The **Indonesia-to-East** route also declined 5% m-o-m to average WS53, some 62% lower y-o-y.

Graph 7 - 1: Crude oil spot tanker freight rates, monthly average



Sources: Argus and OPEC.

Graph 7 - 2: Products spot tanker freight rates, monthly average



Sources: Argus and OPEC.

Clean tanker freight rates

Clean spot freight rates continued to edge higher m-o-m in November, up 2% due to an ongoing improvement on **West of Suez** routes. Rates on westward routes were 5% higher on the month. The Mediterranean region experienced gains both **Cross-Med** and **Med-to-NWE**, increasing by 7% and 13%, to average WS77 and WS83 points, respectively. Rates on the **NWE-to-USEC** route declined by 3% m-o-m to average WS76 points.

Table 7 - 6: Clean spot tanker freight rates, WS

	Size 1,000 DWT	Sep 20	Oct 20	Nov 20	Change
					Nov 20/Oct 20
East of Suez					
Middle East/East	30-35	72	67	73	6
Singapore/East	30-35	90	103	94	-9
West of Suez					
Northwest Europe/US East Coast	33-37	99	79	76	-2
Mediterranean/Mediterranean	30-35	125	72	77	5
Mediterranean/Northwest Europe	30-35	135	74	83	9

Sources: Argus and OPEC.

East of Suez rates edged down 1% m-o-m in November and remained some 47% lower compared with November 2019. Gains on the **Middle East-to-East** route were not enough to offset losses on the **Singapore-to-East** route, which averaged WS73 and WS94, respectively.

Crude and Refined Products Trade

Preliminary data shows US crude imports remained at a 28-year low for the second consecutive month, averaging 5.3 mb/d in November. US crude exports picked up from an almost two-year low the month before to average just under 3 mb/d in November, supported by a return of China buying with the release of 2021 import quotas. US product exports fell below 5 mb/d for the first time in five months, as diesel outflows declined, amid improving domestic demand.

Japan's crude imports recovered from a decline the month before to average 2.3 mb/d in October, as the onset of cooler weather pointed to improving demand.

China's crude imports averaged 10.0 mb/d in October, falling below 11 mb/d for the first time in six months. The decline came as independent refineries awaited new quotas and amid a pause due to the Golden Week holiday, which also reduced product imports. Preliminary data for November shows crude imports recovering to 11.1 mb/d. Meanwhile, China's product exports jumped 40% in November to average close to 1.5 mb/d amid increased heating demand in the region and as refiners looked to shed high inventory levels.

India's crude imports declined further, although at a slower pace, to average 3.4 mb/d in October. India's product imports plunged by almost half to average 0.6 mb/d in October, as inflows were almost solely limited to LPG.

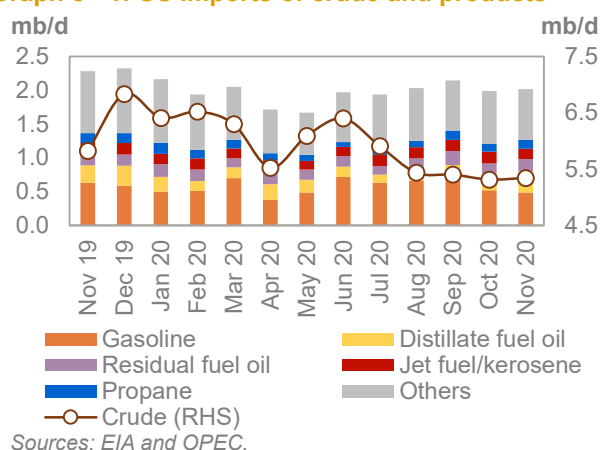
US

Preliminary data shows **US crude imports** in November remained close to a three-decade low, averaging 5.3 mb/d. Crude imports were broadly unchanged from the previous month but almost 0.5 mb/d lower than the same month last year, reflecting ongoing COVID-19 impacts on product demand and refinery runs.

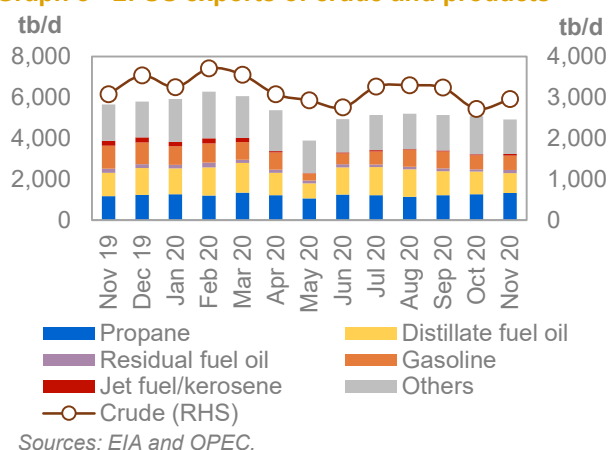
US crude exports partly recovered from the dip seen in the previous month, to average just under 3.0 mb/d in November. Crude outflows rose 0.2 mb/d m-o-m, but were still 0.1 mb/d lower than in the same month last year.

The latest monthly data for US crude exports by destination shows continued strong buying by China in September, averaging 0.7 mb/d. US flows to China have been exceptionally strong since May 2020. Canada came in second with 0.5 mb/d, followed by India with 0.3 mb/d.

Graph 8 - 1: US imports of crude and products



Graph 8 - 2: US exports of crude and products



US net crude imports averaged 2.4 mb/d in November, down from 2.6 mb/d the month before. Net imports were some 0.2 mb/d, or 8%, lower than the same month last year.

On the product side, preliminary data shows **US product imports** edged 1% higher m-o-m in November to average 2.0 mb/d. Compared to the same month last year, US product imports were 0.3 mb/d, or around 12%, lower.

US product exports averaged 5.0 mb/d in November, representing a m-o-m decline of about 0.2 mb/d or around 3%. Product exports were a considerable 0.7 mb/d, or 13%, lower than the same month last year.

As a result, **US net product exports** averaged just under 2.9 mb/d in November, compared to 3.1 mb/d in October 2020 and almost 3.4 mb/d in November 2019.

Preliminary data indicates that the US remained a **net crude and product exporter** for the fifth-month in a row in November with net outflows of 0.5 mb/d.

Table 8 - 1: US crude and product net imports, tb/d

US	Sep 20	Oct 20	Nov 20	Change Nov 20/Oct 20
Crude oil	2,160	2,590	2,382	-207
Total products	-2,993	-3,088	-2,909	179
Total crude and products	-833	-499	-527	-28

Note: Totals may not add up due to independent rounding.

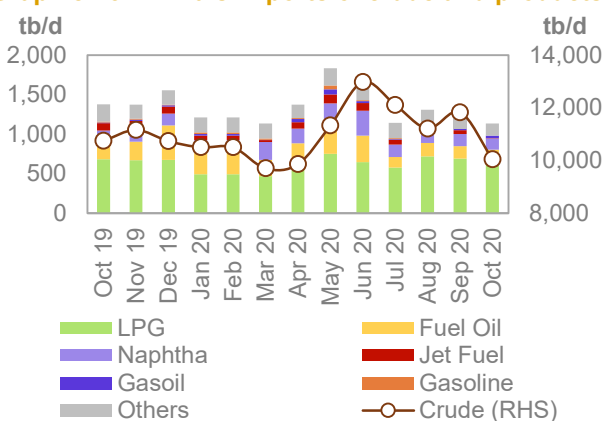
Sources: EIA and OPEC.

China

After five months above 11 mb/d, China's **crude imports** fell back to average 10.1 mb/d in October. While that may be low relative to recent levels, it was last year's average and a level first reached in November 2018, reflecting the impressive growth in refinery capacity seen in recent years. Inflows were 1.8 mb/d lower than the month before and 0.7 mb/d below the same month last year. The decline came as independent refineries awaited new quotas and amid a pause due to the Golden Week holiday, which also reduced product imports. Preliminary figures for November show crude imports returning above 11 mb/d.

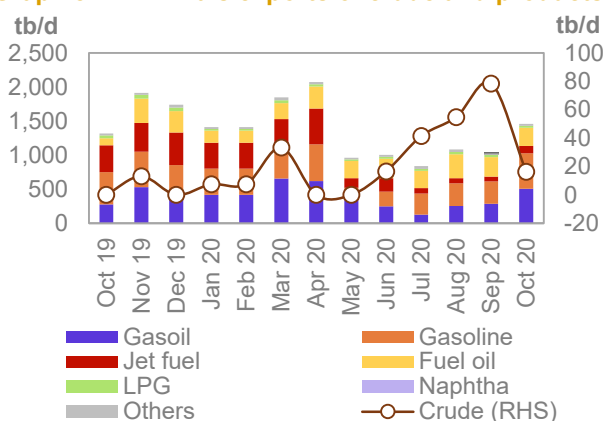
Russia reclaimed the title of top **crude supplier** to China in October, with a share of 16%, representing almost 1.6 mb/d in imports. Saudi Arabia came in second with 1.4 mb/d, representing a 14% share, followed by Iraq with 1.1 mb/d and Angola with 0.8 mb/d. US arrivals fell back to 0.4 mb/d after reaching almost 1.0 mb/d in the previous month.

Graph 8 - 3: China's imports of crude and products



Sources: China, Oil and Gas Petrochemicals and OPEC.

Graph 8 - 4: China's exports of crude and products



Sources: China, Oil and Gas Petrochemicals and OPEC.

Product imports declined 10% m-o-m in October to average 1.1 mb/d and were 17% lower y-o-y. LPG imports remained steady, while fuel oil and naphtha contributed to the decline.

Product exports averaged 1.5 mb/d in October, representing an increase of 0.4 mb/d over the previous month and a gain of 0.1 mb/d from the same month last year. The increase was driven mainly by gasoil and gasoline.

As a result, China became a **net product exporter** for the first time in six months in October, with net exports of 0.6 mb/d. This compares to net imports of 0.2 mb/d the month before and 54 mb/d in October 2019.

Table 8 - 2: China's crude and product net imports, tb/d

China	Aug 20	Sep 20	Oct 20	Change Oct 20/Sep 20
Crude oil	11,157	11,751	10,033	-1,718
Total products	223	226	-323	-549
Total crude and products	11,380	11,977	9,710	-2,267

Note: Totals may not add up due to independent rounding.

Sources: China, Oil and Gas Petrochemicals and OPEC.

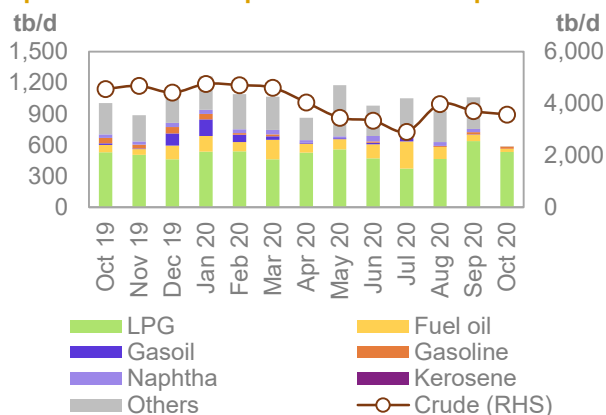
India

India's **crude imports** declined further from a temporary spike in August, although the decrease came at a slower pace, to average 3.5 mb/d in October. Crude inflows fell 0.1 mb/d m-o-m, but were almost 1.0 mb/d lower compared to the same month last year. With the easing of lockdown measures, India's crude imports are likely to move higher in November.

India's **product imports** plunged by almost half m-o-m to average 0.6 mb/d in October, as inflows were almost solely limited to LPG. Imports were similarly lower compared to the same month last year, down 0.4 mb/d.

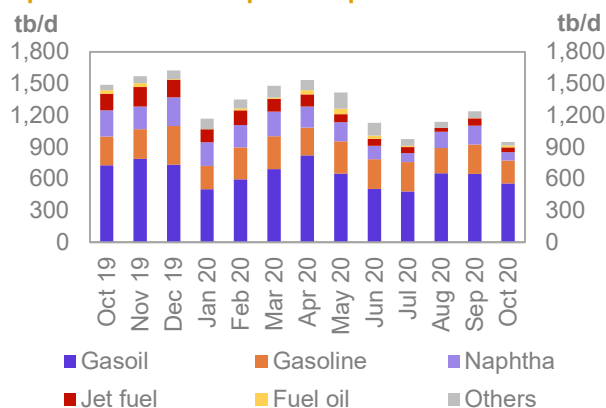
India's **product exports** averaged just under 1.0 mb/d in October, registering the first m-o-m decline in two months. Losses were led by naphtha. Compared to the same month last year, product exports were down 0.5 mb/d.

Graph 8 - 5: India's imports of crude and products



Sources: PPAC and OPEC.

Graph 8 - 6: India's exports of products



Sources: PPAC and OPEC.

India's **net product exports** expanded in October, with net exports of 0.4 mb/d, compared to 0.2 mb/d the month before and 0.5 mb/d the same month last year.

Table 8 - 3: India's crude and product net imports, tb/d

India	Aug 20	Sep 20	Oct 20	Change Oct 20/Sep 20
Crude oil	3,981	3,704	3,575	-129
Total products	-214	-178	-360	-183
Total crude and products	3,767	3,526	3,214	-312

Note: Totals may not add up due to independent rounding.

India data table does not include information for crude import and product export by Reliance Industries.

Sources: PPAC and OPEC.

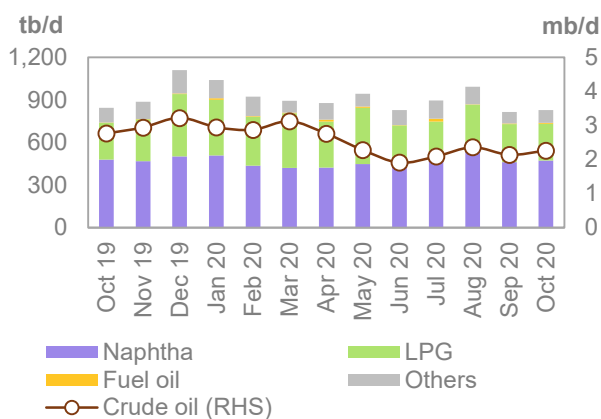
Japan

Japan's **crude imports** recovered from the decline seen the month before to average 2.3 mb/d in October. Crude inflows were 0.1 mb/d higher m-o-m but a more substantial 0.5 mb/d lower than the same month last year.

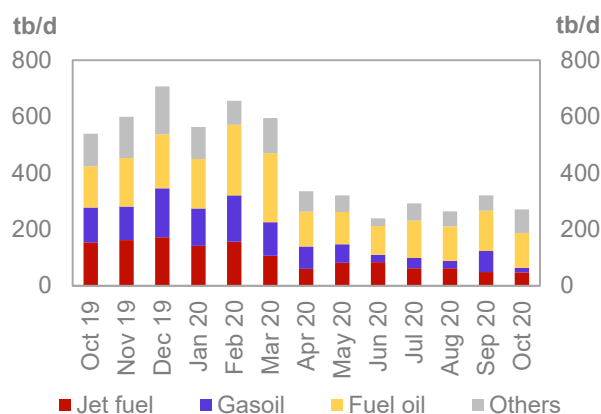
Saudi Arabia remained the **top supplier of crude** to Japan in October, averaging just under 1.0 mb/d, representing a share of 42%. The UAE stood in second place with a share of around 31%, followed by Kuwait with around 8%.

Product imports to Japan, including LPG, were broadly stable at 0.8 mb/d. This represented a gain of less than 2% m-o-m. Increases were seen across all major products, with gasoline, naphtha, gasoil and fuel oil seeing positive movement from the previous month. Kerosene was flat from the previous month but was substantially higher y-o-y. Jet fuel imports stood at zero, while LPG declined around 4% partially offsetting other gains.

Product exports, including LPG, were lethargic once again in October, averaging less than 0.3 mb/d, representing a drop of around 50 tb/d from the previous month. The marginal m-o-m decline was mainly due to decreased gasoil and fuel oil outflows. Y-o-y, product exports were 0.3 mb/d lower.

Graph 8 - 7: Japan's imports of crude and products

Sources: METI and OPEC.

Graph 8 - 8: Japan's exports of products

Sources: METI and OPEC.

As a consequence, Japan's **net product imports** averaged 558 tb/d in October, representing an increase of 63 tb/d m-o-m and a gain of 253 mb/d y-o-y.

Table 8 - 4: Japan's crude and product net imports, tb/d

Japan	Aug 20	Sep 20	Oct 20	Change Oct 20/Sep 20
Crude oil	2,361	2,140	2,263	122
Total products	730	495	558	63
Total crude and products	3,090	2,636	2,821	185

Note: Totals may not add up due to independent rounding.

Sources: METI and OPEC.

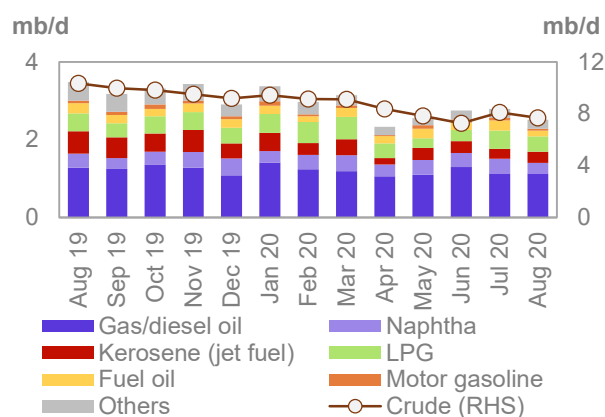
OECD Europe

The latest available data shows **OECD Europe crude imports**, excluding intra-regional trade, continued on a general downward trend, after a temporary rise the month before. Imports to the region average 7.7 mb/d in August, representing a decline of 0.4 mb/d m-o-m and a massive 2.7 mb/d drop compared to the same month last year.

OECD Europe crude exports, excluding intra-regional trade, fell back from the good performance seen in the month before, to average 0.4 mb/d in August. Crude flows out of the region declined 0.2 mb/d m-o-m but were 0.2 mb/d higher y-o-y. The gains over the previous year represent increased volumes from Norway, which have been favoured by China's independent refiners, although a backlog of floating storage dampened demand in August.

OECD Europe **net crude imports** averaged 7.3 mb/d in August, representing a decline of 0.2 mb/d, or around 3%, m-o-m and a more considerable decline of 2.9 mb/d, or 28% mb/d, compared to the same month last year.

OECD Europe **product imports** averaged 2.5 mb/d in August, representing a drop of 0.3 mb/d, or 10%, m-o-m, but a decline of almost 1.0 mb/d or nearly 28% y-o-y.

Graph 8 - 9: OECD Europe imports of crude and products

Sources: IEA and OPEC.

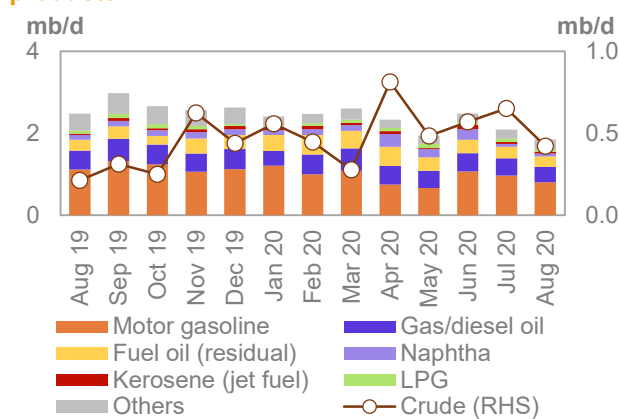
Crude and Refined Products Trade

Product exports averaged 1.9 mb/d in August, representing a decline of 0.2 mb/d, or around 12%, from the previous month and some 0.6 mb/d, or 26%, lower than in August 2019. The decline was mainly driven by a drop in motor fuels outflows, as well as fuel oil and LPG to a lesser extent.

As a result, **OECD Europe net product imports** averaged 0.7 mb/d in August, in line with the previous month and compared to 1.0 mb/d in August 2019.

Combined, **net crude and product imports** averaged 7.9 mb/d in August, compared to 8.2 mb/d the month before and 11.1 mb/d in the same month last year.

Graph 8 - 10: OECD Europe exports of crude and products



Sources: IEA and OPEC.

Table 8 - 5: OECD Europe's crude and product net imports, tb/d

OECD Europe	Jun 20	Jul 20	Aug 20	Change Aug 20/Jul 20
Crude oil	6,698	7,464	7,260	-205
Total products	269	702	660	-42
Total crude and products	6,967	8,166	7,920	-247

Note: Totals may not add up due to independent rounding.

Sources: IEA and OPEC.

Eurasia

Total crude oil exports from Russia and Central Asia rose 0.2 mb/d, or 3.7%, to average 6.0 mb/d in October. Y-o-y, total crude exports from the region were 1.5 mb/d, or 20%, lower, reflecting ongoing production adjustments carried out since June.

Crude exports through the **Transneft system** were 0.2 mb/d, or 5%, higher, averaging 3.5 mb/d. Compared to the same month last year, exports were sharply lower, down 1.1 mb/d or 24%.

Total shipments from the Black Sea increased by 34 tb/d m-o-m, or around 9%, to average 418 tb/d in October. Total Baltic Sea exports also increased, up 42 tb/d, or 5%, m-o-m to average 881 tb/d in October, with shipments from Primorsk up by 5% to 580 tb/d and Ust-Luga exports 5% higher at 301 tb/d. Meanwhile, shipments via the Druzhba pipeline increased 5% m-o-m to average 949 tb/d in October. Kozmino shipments increased by less than 2% m-o-m to average 655 tb/d. Exports to China via the ESPO pipeline averaged 637 tb/d in October, representing a gain of over 8% from the previous month.

In the **Lukoil system**, exports via the Barents Sea increased by 18% to 101 tb/d in October, while those from the Baltic Sea were broadly unchanged.

On other routes, **Russia's Far East** exports rose 4% m-o-m to average 349 tb/d, which represented a decline of 12% compared to October of last year.

Central Asia's total exports averaged 204 tb/d in October, broadly unchanged from the month before but a decline of 12% y-o-y.

Black Sea total exports were broadly edged up 5% to average 1.3 mb/d in October, with an increase at the Novorossiysk port terminal (CPC) outweighing a decline at the Supsa port terminal.

Total product exports from Russia and Central Asia edged up 1%, m-o-m to average 2.6 mb/d in October. Gains in gasoline, fuel oil, and VGO offset declines in naphtha and gasoil, as well as jet fuel. Y-o-y, total product exports were 404 tb/d, or 13%, lower in October, led by declines in gasoil and naphtha.

Commercial Stock Movements

Preliminary October data saw total OECD commercial oil stocks down by 46.3 mb m-o-m. At 3,145 mb, they were 252.5 mb higher than the same time one year ago and 200.3 mb above the latest five-year average. Within the components, crude and products stocks declined m-o-m by 21.5 mb and 24.8 mb, respectively.

In terms of days of forward cover, OECD commercial stocks fell m-o-m by 1.0 day in October to stand at 72.2 days. This is 11.1 days above the October 2019 level and 10.1 days above the latest five-year average.

Preliminary data for November showed that total US commercial oil stocks fell m-o-m by 22.6 mb to stand at 1,354 mb. This is 64.0 mb, or 5.0%, above the same month a year ago, and 59.5 mb, or 4.6%, higher than the latest five-year average. Crude stocks rose by 3.6 mb, while product stocks fell by 26.2 mb m-o-m.

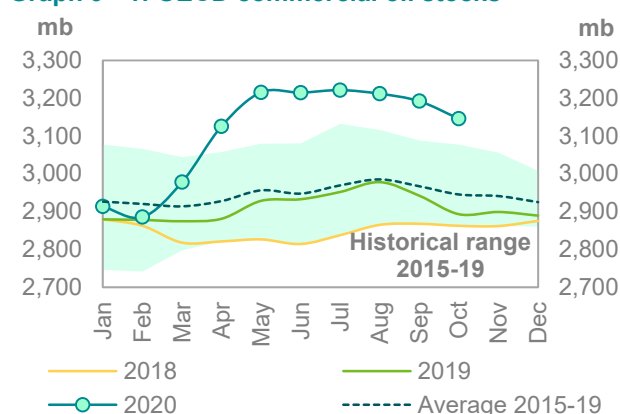
OECD

Preliminary October data saw **total OECD commercial oil stocks** down by 46.3 mb m-o-m. At 3,145 mb, they were 252.5 mb higher than the same time one year ago and, 200.3 mb above the latest five-year average.

Within the components, crude and products stocks declined m-o-m by 21.5 mb and 24.8 mb, respectively. Commercial oil stocks in October fell m-o-m in three OECD regions.

OECD **commercial crude stocks** fell in October by 21.5 mb to stand at 1,528 mb in October. This is 77.2 mb higher than the same time a year ago, and 48.2 mb above the latest five-year average.

Graph 9 - 1: OECD commercial oil stocks



Sources: Argus, EIA, Euroilstock, IEA, METI and OPEC.

Compared with the previous month, OECD Americas and OECD Europe crude stocks fell by 12.9 mb and 8.3 mb, respectively, while OECD Asia Pacific crude stocks fell slightly by 0.3 mb.

Total product inventories in October stood at 1,618 mb. This is 175.2 mb above the same time a year ago, and 152.1 mb higher than the latest five-year average.

Within the OECD regions, product stocks in the Asia Pacific and Europe increased m-o-m by 0.2 mb and 0.5 mb, respectively, while product stocks in OECD America fell m-o-m by 24.8 mb.

In terms of **days of forward cover**, OECD commercial stocks fell m-o-m by 1.0 days in October to stand at 72.2 days. This is 11.1 days above the October 2019 level and 10.1 days above the latest five-year average.

All OECD regions were above the latest five-year averages: the Americas by 6.1 days at 67.9 days; Europe by 21.9 days at 91.8 days; and the Asia Pacific by 5.3 days at 55.7 days.

Table 9 - 1: OECD's commercial stocks, mb

	Oct 19	Aug 20	Sep 20	Oct 20	Change Oct 20/Sep 20
OECD stocks					
Crude oil	1,451	1,557	1,549	1,528	-21.5
Products	1,442	1,655	1,642	1,618	-24.8
Total	2,893	3,211	3,192	3,145	-46.3
Days of forward cover	61.1	74.0	73.3	72.2	-1.0

Note: Totals may not add up due to independent rounding.

Sources: Argus, EIA, Euroilstock, IEA, METI and OPEC.

OECD Americas

OECD Americas total commercial stocks fell by 38.4 mb m-o-m in October to settle at 1,649 mb. This is 127.4 mb above the same month last year and 94.9 mb higher than the latest five-year average.

Commercial crude oil stocks in OECD Americas fell by 12.9 mb m-o-m in October to stand at 846 mb, which is 50.7 mb higher than in October 2019 and 34.5 mb above the latest five-year average. The fall came despite lower crude runs in October, which dropped by 0.17 mb/d to average 13.34 mb/d.

Total product stocks in OECD Americas fell m-o-m by 25.6 mb in October, reversing the build of the previous month to stand at 803 mb. This was 76.8 mb higher than the same month one year ago and 60.3 mb above the latest five-year average. Improvements in regional consumption was behind the stocks draws.

OECD Europe

OECD Europe's total commercial stocks fell m-o-m by 7.8 mb in October to end the month at 1,081 mb. This is 105.8 mb higher than the same time a year ago and 113.8 mb above the latest five-year average.

OECD Europe's **commercial crude stocks** fell m-o-m by 8.3 mb in October to end the month at 454 mb, which is 11.0 mb higher than one-year ago and 30.0 mb above the latest five-year average. The drop in October crude oil inventories came on the back of higher m-o-m refinery throughputs in the EU-14 plus to UK and Norway, which increased by 40 tb/d to stand at 8.9 mb/d.

OECD Europe's **commercial product stocks** rose m-o-m by 0.5 mb to end October at 627 mb. This is 94.8 mb higher than a year ago and 83.9 mb above the latest five-year average. The build came on the back of weakening demand in the region.

OECD Asia Pacific

OECD Asia Pacific's total commercial oil stocks fell slightly m-o-m by 0.1 mb in October to stand at 416 mb. This is 19.3 mb higher than a year ago, but 8.4 mb below the latest five-year average.

OECD Asia Pacific's **crude inventories** fell by 0.3 mb m-o-m to end October at 228 mb, which is 15.6 mb higher than one year ago, but 16.3 mb below the latest five-year average.

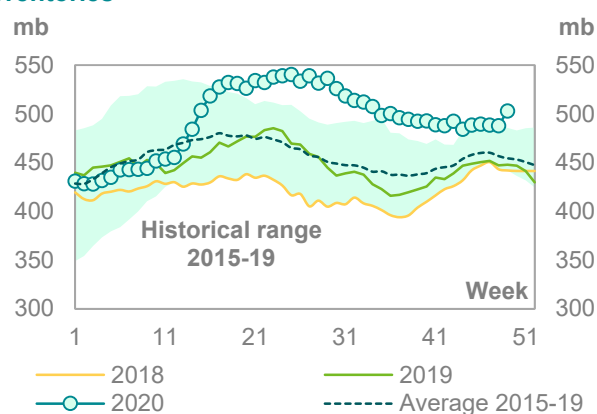
In contrast, OECD Asia Pacific's **total product inventories** rose by 0.2 mb m-o-m to end October at 188 mb. This is 3.7 mb higher than the same time a year ago, and 7.9 mb above the latest five-year average.

US

Preliminary data for November showed that **total US commercial oil stocks** fell m-o-m by 22.6 mb to stand at 1,354 mb. This is 64.0 mb, or 5.0%, above the same month a year ago, and 59.5 mb, or 4.6%, higher than the latest five-year average. Crude stocks rose by 3.6 mb, while product stocks fell by 26.2 mb, m-o-m.

US commercial crude stocks rose by 3.6 mb m-o-m in November to stand at 488 mb. This is 42.2 mb, or 9.5%, above the same month last year, and 29.0 mb, or 6.3%, above the latest five-year average. The build was driven despite higher November crude runs, which increased by 0.59 mb/d to stand at 14.49 mb/d.

Graph 9 - 2: US weekly commercial crude oil inventories



Sources: EIA and OPEC.

In contrast, **total product stocks** in November fell m-o-m, dropping by 26.2 mb, to stand at 866 mb. This is 28.6 mb, or 3.4%, above November 2019 levels, and 35.3 mb, or 4.2%, above the latest five-year average. Within the components, with the exception of gasoline, all products experienced stock draws.

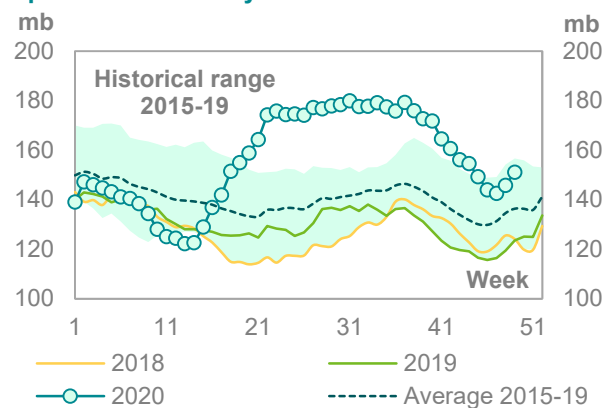
Gasoline stocks rose m-o-m in November by 6.0 mb to settle at 234 mb. This is 0.1 mb below the same month last year, and 4.5 mb, or 2.0%, higher than the latest five-year average. The monthly stock build came mainly on the back of lower gasoline demand, which fell by more than 400 tb/d to average 7.99 mb/d.

In contrast, **distillate stocks** fell by 8.8 mb m-o-m in November to stand at 146 mb. This is 19.6 mb, or 15.6%, higher than a year ago, and 4.9 mb, or 3.5%, above the latest five-year average.

Residual fuel oil stocks also fell m-o-m in November, dropping by 1.8 mb. At 29.9 mb, this was 2.7 mb, or 8.4%, lower than a year ago, and 5.4 mb, or 15.3%, below the latest five-year average.

Jet fuel fell m-o-m by 0.2 mb, ending November at 37.2 mb. This is 3.4 mb, or 8.4%, lower than the same month last year, and 3.6 mb, or 8.9%, below the latest five-year average.

Graph 9 - 3: US weekly distillate inventories



Sources: EIA and OPEC.

Table 9 - 2: US commercial petroleum stocks, mb

	Nov 19	Sep 20	Oct 20	Nov 20	Change Nov 20/Oct 20
US stocks					
Crude oil	445.9	497.3	484.4	488.0	3.6
Gasoline	233.7	226.5	227.7	233.6	6.0
Distillate fuel	126.2	171.7	154.6	145.9	-8.8
Residual fuel oil	32.7	32.1	31.7	29.9	-1.8
Jet fuel	40.6	40.1	37.4	37.2	-0.2
Total products	837.4	924.7	892.1	865.9	-26.2
Total	1,290.0	1,422.0	1,376.5	1,354.0	-22.6
SPR	635.0	642.2	639.3	638.2	-1.1

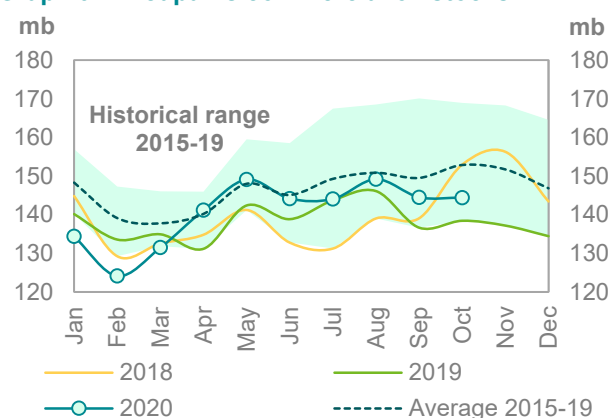
Sources: EIA and OPEC.

Japan

In **Japan**, **total commercial oil stocks** in October fell slightly by 0.1 mb m-o-m to settle at 144.4 mb. This is 6.0 mb, or 4.3%, higher than the same month last year, but 8.5 mb, or 5.5%, below the latest five-year average. Crude stocks fell m-o-m by 0.3 mb, while product stocks rose by 0.2 mb, m-o-m.

Japanese **commercial crude oil stocks** fell in October to stand at 78.4 mb. This is 4.4 mb, or 5.9%, above the same month a year ago, but 8.7 mb, or 10%, lower than the latest five-year average. The drop came despite higher crude imports, which increased by around 120 tb/d to average 2.26 mb/d.

Graph 9 - 4: Japan's commercial oil stocks



Sources: METI and OPEC.

In contrast, Japan's **total product inventories** rose m-o-m by 0.2 mb to end October at 66.0 mb. This is 1.6 mb, or 2.5%, higher than the same month last year, and 0.3 mb, or 0.4%, higher than the latest five-year average. The picture was mixed within products, with gasoline and naphtha seeing stocks draw, while middle distillates and residual fuel oil stocks registered stock builds, when compared to the previous month.

Gasoline stocks in October fell m-o-m by 0.1 mb to stand at 12.2 mb. This was 2.0 mb, or 19.3%, higher than a year ago, and 2.1 mb, or 20.4%, above the latest five-year average. The draw in gasoline stocks was driven by lower production, which fell by 0.5% m-o-m. Lower gasoline domestic sales limited further gasoline stock draws.

Commercial Stock Movements

Distillate stocks rose by 0.4 mb m-o-m to end October at 33.5 mb. This is 2.1 mb, or 6.6%, higher than the same month a year ago, and 1.2 mb, or 3.6%, above the latest five-year average. Within distillate components, kerosene and gasoil stocks increased m-o-m by 2.3% and 0.6%, respectively, while jet fuel stocks fell by 0.6%.

Total residual fuel oil stocks rose by 0.2 mb in October to stand at 12.1 mb. This is 1.2 mb, or 9.0%, lower than the same month last year, and 1.6 mb, or 11.8%, below the latest five-year average. Within the components, fuel oil A stocks rose 5.1%, while fuel oil B.C stocks remained unchanged in October, when compared to the previous month.

Table 9 - 3: Japan's commercial oil stocks*, mb

	Oct 19	Aug 20	Sep 20	Oct 20	Change Oct 20/Sep 20
Japan's stocks					
Crude oil	74.1	84.0	78.8	78.4	-0.3
Gasoline	10.2	12.2	12.2	12.2	-0.1
Naphtha	9.5	8.3	8.6	8.2	-0.4
Middle distillates	31.4	32.4	33.1	33.5	0.4
Residual fuel oil	13.3	12.3	11.9	12.1	0.2
Total products	64.4	65.2	65.8	66.0	0.2
Total**	138.5	149.2	144.5	144.4	-0.1

Note: * At the end of the month. ** Includes crude oil and main products only.

Sources: METI and OPEC.

EU-15 plus Norway

Preliminary data for October showed that **total European commercial oil stocks** fell by 7.8 mb m-o-m, reversing the previous monthly build. At 1,176 mb, they were 92.5 mb, or 8.5%, above the same month a year ago, and 82.1 mb, or 7.5%, higher than the latest five-year average. Crude stocks dropped m-o-m by 8.3 mb, while products stocks rose m-o-m by 0.5 mb.

European **crude inventories** fell in October to stand at 487 mb. This is 5.0 mb, or 1.0%, higher than the same month a year ago, and 8.9 mb, or 1.9%, above the latest five-year average. The drop in October crude oil inventories came on the back of higher m-o-m refinery throughputs in the EU-16, which increased by 40 tb/d to stand at 8.9 mb/d.

European **total product stocks** rose m-o-m by 0.5 mb to end October at 689 mb. This is 87.5 mb, or 14.5%, higher than the same month a year ago, and 73.2 mb, or 11.9%, above the latest five-year average. The build was attributed to the demand decline in the region during October.

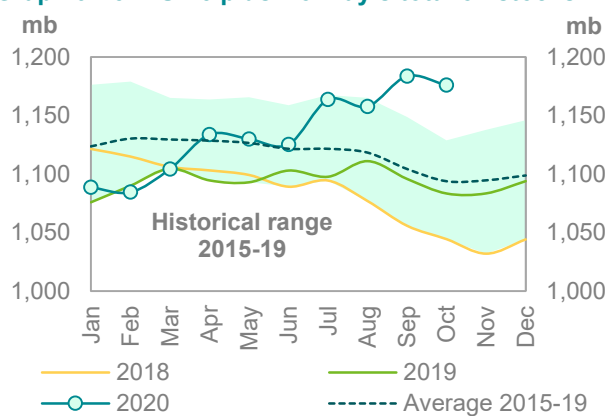
Gasoline stocks rose m-o-m by 1.5 mb in October to stand at 117 mb. This is 9.3 mb, or 8.6%, higher than the level registered the same time a year ago, and 7.3 mb, or 6.6%, above the latest five-year average.

Distillate stocks rose m-o-m by 0.4 mb in October to stand at 469 mb. This is 65.8 mb, or 16.3%, higher than the same month last year, and 56.1 mb, or 13.6%, higher than the latest five-year average.

In contrast, **naphtha stocks** fell m-o-m by 0.6 mb in October, ending the month at 32 mb. This is 8.5 mb, or 36.0%, above the October 2019 level, and 6.6 mb, or 26.2%, higher than the latest five-year average.

Residual fuel stocks fell m-o-m by 0.8 mb in October to 71.0 mb. This is 4.0 mb, or 5.9%, higher than the same month one year ago, and 3.2 mb, or 4.7%, above the latest five-year average.

Graph 9 - 5: EU-15 plus Norway's total oil stocks



Sources: Argus, Euroilstock and OPEC.

Table 9 - 4: EU-15 plus Norway's total oil stocks, mb

	Oct 19	Aug 20	Sep 20	Oct 20	Change Oct 20/Sep 20
EU stocks					
Crude oil	481.5	493.5	494.8	486.6	-8.3
Gasoline	107.7	115.6	115.4	117.0	1.5
Naphtha	23.6	29.8	32.7	32.0	-0.6
Middle distillates	403.5	446.5	468.8	469.3	0.4
Fuel oils	67.1	72.4	71.9	71.1	-0.8
Total products	601.9	664.3	688.8	689.3	0.5
Total	1,083.4	1,157.7	1,183.6	1,175.9	-7.8

Sources: Argus, Euroilstock and OPEC.

Singapore, Amsterdam-Rotterdam-Antwerp (ARA) and Fujairah

Singapore

At the end of October, **total product stocks in Singapore** fell by 2.3 mb m-o-m reversing the stock builds of the last month to stand at 50.6 mb. This is 6.0 mb, or 13.5%, higher than the same month a year ago. Within products, light and fuel oil stocks registered draws, while middle distillates experienced stock builds.

Light distillate stocks fell m-o-m by 1.7 mb in October to stand at 11.9 mb. This is 0.2 mb, or 1.7%, higher than the same month one year ago.

Residual fuel oil stocks fell by 0.8 mb, ending October at 23.2 mb, which is 1.5 mb, or 6.9%, higher than in October 2019.

In contrast, **middle distillate stocks** rose by 0.2 mb in October to stand at 15.5 mb. This is 4.3 mb, or 38.4%, higher than a year ago.

ARA

Total product stocks in ARA fell m-o-m by 1.4 mb in October reversing the stock build of the previous month. They now stand at 50.5 mb, which is 9.9 mb, or 24.4%, higher than the same month a year ago.

Gasoline stocks in October fell m-o-m by 1.6 mb to stand at 9.7 mb, which is 2.9 mb, or 42.6%, above the same month one year ago.

Gasoil stocks fell by 1.4 mb m-o-m in October to stand at 19.3 mb, which is the same level as in October 2019.

Residual fuel stocks remained unchanged m-o-m to end October at 8.8 mb. This is 2.2 mb, or 33.3%, above the level registered one year ago.

In contrast, **jet oil** rose m-o-m by 1.9 mb to end October at 9.3 mb. This is 3.6 mb, or 63.2%, above the level one year ago.

Fujairah

During the week ending 30 November, **total oil product stocks in Fujairah** rose by 0.47 mb w-o-w to stand at 20.59 mb, according to data from FEDCom and S&P Global Platts. At this level, total oil stocks were 0.23 mb lower than the same time a year ago. Within products, light and middle distillates witnessed stock draws, while heavy distillates registered a build.

Light distillate stocks fell by 0.09 mb w-o-w to stand at 6.60 mb, which is 1.94 mb higher than a year ago.

Middle distillate stocks fell by 0.79 mb to stand at 6.38 mb, which is 2.0 mb higher than a year ago. In contrast, **heavy distillate stocks** rose by 1.34 mb to stand at 8.62 mb, which is 4.17 mb below the same time last year.

Balance of Supply and Demand

Demand for OPEC crude in 2020 has been revised up by 0.1 mb/d from the previous month to stand at 22.2 mb/d. This is around 7.1 mb/d lower than in 2019. According to secondary sources, OPEC crude production averaged 28.2 mb/d in 1Q20, which is about 7.5 mb/d higher than demand for OPEC crude. In 2Q20, OPEC crude production averaged 25.6 mb/d, which is 8.9 mb/d higher than demand for OPEC crude. In 3Q20, OPEC crude production averaged 23.8 mb/d, which is 1.0 mb/d lower than demand for OPEC crude.

Demand for OPEC crude in 2021 has been revised down by 0.2 mb/d from the previous month to stand at 27.2 mb/d. This is 5.0 mb/d higher than in 2020.

Balance of supply and demand in 2020

Demand for OPEC crude in 2020 has been revised up by 0.1 mb/d from the previous month to stand at 22.2 mb/d. This is around 7.1 mb/d lower than in 2019.

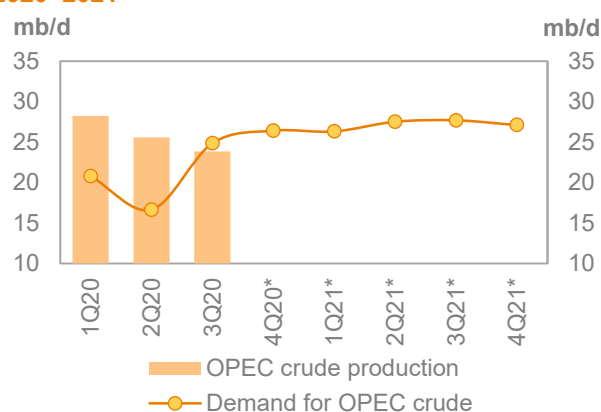
Demand for OPEC crude in the first two quarters remained unchanged, while 3Q20 has been revised up by 0.4 mb/d. The 4Q20 is revised down by 0.1 mb/d, from the previous monthly assessment.

When compared with the same quarters in 2019, demand for OPEC crude in 1Q20 and 2Q20 is expected to be 8.4 mb/d and 12.2 mb/d lower, respectively. The 3Q20 shows a decline of 5.6 mb/d, while 4Q20 is expected to see a drop of 2.5 mb/d.

According to secondary sources, OPEC crude production averaged 28.2 mb/d in 1Q20, which is about 7.5 mb/d higher than demand for OPEC crude.

In 2Q20, OPEC crude production averaged, 25.6 mb/d, which is 8.9 mb/d higher than demand for OPEC crude. In 3Q20, OPEC crude production averaged 23.8 mb/d, which is 1.0 mb/d lower than demand for OPEC crude.

Graph 10 - 1: Balance of supply and demand, 2020–2021*



Note: * 4Q20-4Q21 = Forecast. Source: OPEC.

Table 10 - 1: Supply/demand balance for 2020*, mb/d

	2019	1Q20	2Q20	3Q20	4Q20	2020	Change 2020/19
(a) World oil demand	99.76	92.71	82.57	91.16	93.47	89.99	-9.77
Non-OPEC liquids production	65.17	66.59	60.84	61.26	62.00	62.67	-2.50
OPEC NGL and non-conventionals	5.26	5.35	5.09	5.04	5.05	5.13	-0.13
(b) Total non-OPEC liquids production and OPEC NGLs	70.43	71.94	65.93	66.30	67.06	67.80	-2.63
Difference (a-b)	29.34	20.78	16.65	24.86	26.42	22.20	-7.14
OPEC crude oil production	29.34	28.25	25.58	23.84			
Balance	0.00	7.47	8.93	-1.02			

Note: * 2020 = Forecast. Totals may not add up due to independent rounding. Source: OPEC.

Balance of supply and demand in 2021

Demand for OPEC crude in 2021 has been revised down by 0.2 mb/d from the previous month to stand at 27.2 mb/d. This is 5.0 mb/d higher than in 2020.

Demand for OPEC crude in the first two quarters has been revised down by 0.5 mb/d and 0.6 mb/d, respectively. The 3Q20 remained unchanged, while 4Q20 has been revised up by 0.3 mb/d from the previous monthly assessment.

When compared to the same quarters in 2020, demand for OPEC crude in 1Q21 and 2Q21 is forecast to be 5.5 mb/d and 10.9 mb/d higher, respectively. The 3Q21 is projected to show an increase of 2.8 mb/d y-o-y, while 4Q21 is expected to be higher by 0.7 mb/d y-o-y.

Table 10 - 2: Supply/demand balance for 2021*, mb/d

	2020	1Q21	2Q21	3Q21	4Q21	2021	Change 2021/20
(a) World oil demand	89.99	93.97	95.68	96.57	97.29	95.89	5.90
Non-OPEC liquids production	62.67	62.54	62.97	63.66	64.87	63.52	0.85
OPEC NGL and non-conventionals	5.13	5.11	5.19	5.22	5.32	5.21	0.08
(b) Total non-OPEC liquids production and OPEC NGLs	67.80	67.65	68.16	68.88	70.19	68.73	0.93
Difference (a-b)	22.20	26.32	27.52	27.69	27.10	27.17	4.97

Note: * 2020–2021 = Forecast. Totals may not add up due to independent rounding. Source: OPEC.

Appendix

Table 11 - 1: World oil demand and supply balance, mb/d

	2017	2018	2019	1Q20	2Q20	3Q20	4Q20	2020	1Q21	2Q21	3Q21	4Q21	2021
World oil demand and supply balance													
World demand													
Americas	25.11	25.73	25.70	24.34	20.03	22.91	24.30	22.90	24.30	24.88	23.94	24.77	24.48
<i>of which US</i>	20.27	20.82	20.86	19.66	16.38	18.79	19.98	18.70	19.85	20.26	19.46	20.32	19.97
Europe	14.41	14.32	14.25	13.35	10.98	12.84	12.03	12.30	12.35	13.46	13.44	12.71	13.00
Asia Pacific	8.15	7.95	7.79	7.75	6.54	6.74	7.23	7.06	7.60	7.28	7.21	7.45	7.38
Total OECD	47.67	47.99	47.75	45.44	37.56	42.49	43.56	42.27	44.26	45.61	44.59	44.93	44.86
China	12.32	12.86	13.30	10.70	12.85	13.67	13.98	12.81	12.31	13.87	14.71	14.73	13.91
India	4.53	4.73	4.84	4.77	3.51	3.94	4.34	4.14	4.89	4.19	4.75	4.99	4.71
Other Asia	8.69	8.91	9.02	8.23	7.79	8.11	8.70	8.21	8.33	8.96	8.57	8.84	8.68
Latin America	6.51	6.53	6.59	6.11	5.61	6.20	6.08	6.00	6.21	6.27	6.41	6.31	6.30
Middle East	8.23	8.13	8.20	7.88	6.91	7.94	7.50	7.56	8.07	7.64	8.25	7.75	7.93
Africa	4.20	4.33	4.45	4.37	3.77	3.95	4.20	4.07	4.46	3.95	4.16	4.39	4.24
Eurasia	5.36	5.50	5.61	5.21	4.58	4.85	5.11	4.94	5.43	5.17	5.14	5.35	5.28
<i>of which Russia</i>	3.48	3.55	3.61	3.44	3.04	3.20	3.24	3.23	3.57	3.37	3.37	3.38	3.42
<i>of which other Eurasia</i>	1.88	1.95	2.00	1.78	1.54	1.65	1.87	1.71	1.86	1.81	1.77	1.97	1.85
Total Non-OECD	49.84	50.99	52.02	47.27	45.02	48.67	49.91	47.73	49.71	50.06	51.98	52.36	51.04
(a) Total world demand	97.52	98.98	99.76	92.71	82.57	91.16	93.47	89.99	93.97	95.68	96.57	97.29	95.89
<i>Y-o-y change</i>	<i>1.79</i>	<i>1.46</i>	<i>0.78</i>	<i>-6.16</i>	<i>-16.18</i>	<i>-9.49</i>	<i>-7.27</i>	<i>-9.77</i>	<i>1.25</i>	<i>13.10</i>	<i>5.41</i>	<i>3.82</i>	<i>5.90</i>
Non-OPEC liquids production													
Americas	21.51	24.05	25.77	26.59	23.55	24.07	24.60	24.70	24.53	24.71	25.39	26.22	25.22
<i>of which US</i>	14.42	16.69	18.43	19.05	16.81	17.33	17.45	17.66	17.41	17.74	18.02	18.65	17.96
Europe	3.83	3.84	3.71	4.03	3.87	3.77	3.88	3.89	3.99	3.94	3.98	4.17	4.02
Asia Pacific	0.39	0.41	0.52	0.53	0.54	0.54	0.55	0.54	0.54	0.51	0.52	0.51	0.52
Total OECD	25.73	28.30	30.00	31.16	27.96	28.38	29.03	29.13	29.06	29.16	29.89	30.90	29.76
China	3.97	3.98	4.05	4.15	4.16	4.17	4.15	4.16	4.16	4.14	4.14	4.19	4.16
India	0.86	0.86	0.83	0.80	0.77	0.78	0.77	0.78	0.76	0.76	0.75	0.74	0.75
Other Asia	2.82	2.75	2.71	2.64	2.47	2.50	2.52	2.53	2.50	2.51	2.50	2.50	2.50
Latin America	5.72	5.79	6.06	6.36	5.84	6.14	6.03	6.09	6.36	6.35	6.33	6.50	6.38
Middle East	3.14	3.20	3.20	3.19	3.18	3.13	3.13	3.16	3.20	3.24	3.25	3.26	3.24
Africa	1.50	1.53	1.53	1.49	1.48	1.45	1.40	1.46	1.38	1.40	1.38	1.36	1.38
Eurasia	14.20	14.44	14.52	14.67	13.13	12.57	12.83	13.29	12.92	13.22	13.22	13.21	13.14
<i>of which Russia</i>	11.17	11.35	11.44	11.51	10.21	9.84	10.01	10.39	10.05	10.30	10.30	10.30	10.24
<i>of which other Eurasia</i>	3.03	3.09	3.08	3.16	2.92	2.73	2.82	2.90	2.87	2.92	2.91	2.91	2.90
Total Non-OECD	32.20	32.55	32.90	33.29	31.02	30.74	30.83	31.47	31.28	31.61	31.57	31.76	31.56
Total Non-OPEC production	57.93	60.86	62.91	64.44	58.98	59.12	59.86	60.59	60.34	60.77	61.46	62.67	61.32
Processing gains	2.22	2.25	2.26	2.15	1.85	2.15	2.15	2.07	2.20	2.20	2.20	2.20	2.20
Total Non-OPEC liquids production	60.15	63.11	65.17	66.59	60.84	61.26	62.00	62.67	62.54	62.97	63.66	64.87	63.52
OPEC NGL + non-conventional oils	5.18	5.33	5.26	5.35	5.09	5.04	5.05	5.13	5.11	5.19	5.22	5.32	5.21
(b) Total non-OPEC liquids production and OPEC NGLs	65.33	68.44	70.43	71.94	65.93	66.30	67.06	67.80	67.65	68.16	68.88	70.19	68.73
<i>Y-o-y change</i>	<i>0.87</i>	<i>3.11</i>	<i>1.99</i>	<i>2.21</i>	<i>-3.95</i>	<i>-3.92</i>	<i>-4.81</i>	<i>-2.63</i>	<i>-4.29</i>	<i>2.23</i>	<i>2.58</i>	<i>3.13</i>	<i>0.93</i>
OPEC crude oil production (secondary sources)	31.48	31.34	29.34	28.25	25.58	23.84							
Total liquids production	96.81	99.78	99.76	100.18	91.50	90.14							
Balance (stock change and miscellaneous)	-0.71	0.80	0.00	7.47	8.93	-1.02							
OECD closing stock levels, mb													
Commercial	2,860	2,875	2,889	2,978	3,214	3,192							
SPR	1,569	1,552	1,535	1,537	1,561	1,551							
Total	4,428	4,427	4,425	4,515	4,776	4,743							
Oil-on-water	1,025	1,058	1,011	1,186	1,329	1,329							
Days of forward consumption in OECD, days													
Commercial onland stocks	60	60	68	79	76	73							
SPR	33	33	36	41	37	36							
Total	92	93	105	120	112	109							
Memo items													
(a) - (b)	32.19	30.54	29.34	20.78	16.65	24.86	26.42	22.20	26.32	27.52	27.69	27.10	27.17

Note: Totals may not add up due to independent rounding.

Source: OPEC.

Appendix

Table 11 - 2: World oil demand and supply balance: changes from last month's table*, mb/d

	2017	2018	2019	1Q20	2Q20	3Q20	4Q20	2020	1Q21	2Q21	3Q21	4Q21	2021
World oil demand and supply balance													
World demand													
Americas	-	-	-	-	-	-0.56	-	-0.15	-	-0.31	-0.56	-	-0.22
<i>of which US</i>	-	-	-	-	-	-0.54	-	-0.14	-	-0.31	-0.54	-	-0.21
Europe	-	-	-	0.01	-0.03	-0.05	-0.20	-0.07	-0.80	-0.23	-0.20	0.20	-0.26
Asia Pacific	-	-	-	-	-	0.22	-0.10	0.04	-0.20	-0.10	0.17	-0.10	-0.06
Total OECD	-	-	-	0.01	-0.03	-0.39	-0.30	-0.18	-1.00	-0.63	-0.59	0.10	-0.53
China	-	-	-	-	-	0.31	0.11	0.11	-	-	0.31	0.11	0.11
India	-	-	-	-	-	0.39	-	0.10	-	-	0.39	-	0.10
Other Asia	-	-	-	-	-	-0.23	-	-0.06	-	-	-0.23	-	-0.06
Latin America	-	-	-	-	-	0.04	-	0.01	-	-	0.04	-	0.01
Middle East	-	-	-	-	-	0.06	-	0.02	-	-	0.06	-	0.02
Africa	-	-	-	-	-	-0.02	-	-0.01	-	-	-0.02	-	-0.01
Eurasia	-	-	-	-	-	-0.01	-	-	-	-	-0.01	-	-
<i>of which Russia</i>	-	-	-	-	-	0.01	-	0.01	-	-	0.01	-	0.01
<i>of which other Eurasia</i>	-	-	-	-	-	-0.01	-	-0.01	-	-	-0.01	-	-0.01
Total Non-OECD	-	-	-	-	-	0.55	0.10	0.17	-	-	0.55	0.11	0.17
(a) Total world demand	-	-	-	0.01	-0.03	0.17	-0.21	-0.02	-1.00	-0.63	-0.04	0.21	-0.37
Y-o-y change	-	-	-	0.01	-0.03	0.17	-0.21	-0.02	-1.00	-0.60	-0.21	0.41	-0.35
Non-OPEC liquids production													
Americas	-	-	-	-	-0.02	-0.14	0.12	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01
<i>of which US</i>	-	-	-	-	-	-0.08	-0.13	-0.06	-0.05	-0.06	-0.05	-0.06	-0.06
Europe	-	-	-	-	-	0.02	-0.11	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03
Asia Pacific	-	-	-	-	-	-0.02	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01
Total OECD	-	-	-	-	-0.02	-0.14	-0.01	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04
China	-	-	-	-	-	-	0.04	0.01	0.01	0.01	0.01	0.01	0.01
India	-	-	-	-	-	-	-0.04	-0.01	-0.04	-0.02	-0.03	-0.04	-0.04
Other Asia	-	-	-	-	-	0.01	0.03	0.01	-0.03	-0.01	-0.01	-0.01	-0.01
Latin America	-	-	-	-	0.01	-0.04	-0.39	-0.11	-0.09	-0.06	-0.04	-0.09	-0.07
Middle East	-	-	-	-	-	-0.02	0.01	-0.01	-0.01	0.03	0.03	0.03	0.02
Africa	-	-	-	-	-	-0.01	0.01	-0.01	-0.03	-0.02	-0.02	-0.02	-0.02
Eurasia	-	0.01	0.01	0.02	0.02	-0.01	0.26	0.07	-0.27	0.05	0.05	0.05	-0.04
<i>of which Russia</i>	-	-	-	-	-	-	0.16	0.04	-0.31	-0.06	-0.06	-0.06	-0.12
<i>of which other Eurasia</i>	-	0.01	0.01	0.02	0.02	-0.01	0.10	0.03	0.04	0.10	0.10	0.10	0.09
Total Non-OECD	-	0.01	0.01	0.02	0.03	-0.06	-0.10	-0.04	-0.43	-0.03	-0.02	-0.08	-0.14
Total Non-OPEC production	-	0.01	0.01	0.02	0.01	-0.20	-0.11	-0.07	-0.47	-0.06	-0.05	-0.11	-0.17
Processing gains	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Non-OPEC liquids production	-	0.01	0.01	0.02	0.01	-0.20	-0.11	-0.07	-0.47	-0.06	-0.05	-0.11	-0.17
OPEC NGL + non-conventional oils	-	-	-	-	-	-	-0.01	-0.01	-	-	-	-	-
(b) Total non-OPEC liquids production and OPEC NGLs	-	0.01	0.01	0.02	0.01	-0.20	-0.11	-0.07	-0.47	-0.06	-0.05	-0.11	-0.17
Y-o-y change	-	0.01	0.01	0.01	0.01	-0.21	-0.13	-0.08	-0.48	-0.07	0.15	-	-0.10
OPEC crude oil production (secondary sources)	-	-	-	-0.01	-0.01	0.02							
Total liquids production	-	0.01	0.01	0.01	0.01	-0.18							
Balance (stock change and miscellaneous)	-	0.01	0.01	0.01	0.03	-0.35							
OECD closing stock levels, mb													
Commercial	-	-	-	1	2	14							
SPR	-	-	-	-	-1	-2							
Total	-	-	-	1	1	12							
Oil-on-water	-	-	-	-	-	-							
Days of forward consumption in OECD, days													
Commercial onland stocks	-	-	1	1	1	1							
SPR	-	-	1	1	1	1							
Total	-	-	1	1	2	2							
Memo items													
(a) - (b)	-	-0.01	-0.01	-0.02	-0.04	0.36	-0.10	0.06	-0.54	-0.57	0.02	0.31	-0.20

Note: * This compares Table 11 - 1 in this issue of the MOMR with Table 11 - 1 in the November 2020 issue.
This table shows only where changes have occurred.

Source: OPEC.

Table 11 - 3: OECD oil stocks and oil on water at the end of period

	2017	2018	2019	3Q18	4Q18	1Q19	2Q19	3Q19	4Q19	1Q20	2Q20	3Q20
OECD oil stocks and oil on water												
Closing stock levels, mb												
OECD onland commercial	3,007	2,860	2,875	2,868	2,875	2,875	2,932	2,942	2,889	2,978	3,214	3,192
Americas	1,598	1,498	1,544	1,543	1,544	1,504	1,559	1,553	1,518	1,575	1,713	1,687
Europe	995	948	930	933	930	989	983	988	978	1,033	1,099	1,088
Asia Pacific	414	413	402	392	402	381	391	401	394	369	402	416
OECD SPR	1,601	1,569	1,552	1,570	1,552	1,557	1,549	1,544	1,535	1,537	1,561	1,551
Americas	697	665	651	662	651	651	647	647	637	637	658	644
Europe	483	481	481	486	481	488	485	482	482	484	487	490
Asia Pacific	421	423	420	422	420	417	417	416	416	416	416	417
OECD total	4,608	4,428	4,427	4,438	4,427	4,432	4,481	4,486	4,425	4,515	4,776	4,743
Oil-on-water	1,102	1,025	1,058	1,041	1,058	1,013	995	1,012	1,011	1,186	1,329	1,329
Days of forward consumption in OECD, days												
OECD onland commercial	63	60	60	60	60	61	61	61	64	79	76	73
Americas	64	58	60	60	61	59	60	60	62	79	75	69
Europe	69	66	65	66	66	70	67	70	73	94	86	90
Asia Pacific	51	52	52	49	49	51	52	50	51	56	60	58
OECD SPR	34	33	33	33	33	33	32	32	34	41	37	36
Americas	28	26	26	26	26	26	25	25	26	32	29	26
Europe	33	34	34	34	34	34	33	34	36	44	38	41
Asia Pacific	52	53	54	53	51	56	55	52	54	64	62	58
OECD total	97	92	94	93	93	94	93	94	97	120	112	109

Sources: Argus, EIA, Euroilstock, IEA, JODI, METI and OPEC.

Table 11 - 4: Non-OPEC liquids production and OPEC natural gas liquids, mb/d*

	2017	2018	2019	3Q20	4Q20	2020	Change 20/19	1Q21	2Q21	3Q21	4Q21	2021	Change 21/20
Non-OPEC liquids production and OPEC NGLs													
US	14.4	16.7	18.4	17.3	17.5	17.7	-0.8	17.4	17.7	18.0	18.6	18.0	0.3
Canada	4.9	5.3	5.4	4.8	5.2	5.1	-0.3	5.2	5.1	5.4	5.6	5.3	0.2
Mexico	2.2	2.1	1.9	1.9	1.9	1.9	0.0	1.9	1.9	1.9	1.9	1.9	0.0
Chile	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
OECD Americas	21.5	24.0	25.8	24.1	24.6	24.7	-1.1	24.5	24.7	25.4	26.2	25.2	0.5
Norway	2.0	1.9	1.7	2.0	2.0	2.0	0.3	2.1	2.0	2.1	2.3	2.1	0.1
UK	1.0	1.1	1.1	1.0	1.1	1.1	-0.1	1.1	1.1	1.0	1.1	1.1	0.0
Denmark	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Other OECD Europe	0.7	0.7	0.7	0.8	0.8	0.7	0.0	0.7	0.7	0.7	0.7	0.7	0.0
OECD Europe	3.8	3.8	3.7	3.8	3.9	3.9	0.2	4.0	3.9	4.0	4.2	4.0	0.1
Australia	0.3	0.3	0.5	0.5	0.5	0.5	0.0	0.5	0.4	0.5	0.5	0.5	0.0
Other Asia Pacific	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
OECD Asia Pacific	0.4	0.4	0.5	0.5	0.5	0.5	0.0	0.5	0.5	0.5	0.5	0.5	0.0
Total OECD	25.7	28.3	30.0	28.4	29.0	29.1	-0.9	29.1	29.2	29.9	30.9	29.8	0.6
China	4.0	4.0	4.1	4.2	4.1	4.2	0.1	4.2	4.1	4.1	4.2	4.2	0.0
India	0.9	0.9	0.8	0.8	0.8	0.8	0.0	0.8	0.8	0.8	0.7	0.8	0.0
Brunei	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Indonesia	0.9	0.9	0.9	0.9	0.9	0.9	0.0	0.9	0.9	0.9	0.9	0.9	0.0
Malaysia	0.7	0.7	0.7	0.6	0.6	0.6	-0.1	0.6	0.6	0.6	0.6	0.6	0.0
Thailand	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.5	0.5	0.5	0.5	0.5	0.0
Vietnam	0.3	0.3	0.3	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.0
Asia others	0.3	0.3	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.3	0.2	0.0
Other Asia	2.8	2.8	2.7	2.5	2.5	2.5	-0.2	2.5	2.5	2.5	2.5	2.5	0.0
Argentina	0.7	0.7	0.7	0.7	0.7	0.7	0.0	0.7	0.7	0.7	0.7	0.7	0.0
Brazil	3.3	3.3	3.5	3.8	3.7	3.7	0.2	3.8	3.8	3.9	4.0	3.9	0.2
Colombia	0.9	0.9	0.9	0.8	0.8	0.8	-0.1	0.8	0.8	0.8	0.8	0.8	0.0
Ecuador	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.5	0.6	0.6	0.6	0.6	0.1
Guyana	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0
Latin America others	0.4	0.4	0.4	0.3	0.3	0.3	0.0	0.4	0.4	0.4	0.4	0.4	0.0
Latin America	5.7	5.8	6.1	6.1	6.0	6.1	0.0	6.4	6.3	6.3	6.5	6.4	0.3
Bahrain	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.0
Oman	1.0	1.0	1.0	0.9	0.9	0.9	0.0	1.0	1.0	1.0	1.0	1.0	0.0
Qatar	1.9	1.9	1.9	1.9	1.9	1.9	0.0	2.0	2.0	2.0	2.0	2.0	0.1
Syria	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
Yemen	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Middle East	3.1	3.2	3.2	3.1	3.1	3.2	0.0	3.2	3.2	3.2	3.3	3.2	0.1
Cameroon	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.1	0.0
Chad	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Egypt	0.7	0.7	0.7	0.6	0.6	0.6	0.0	0.6	0.6	0.6	0.6	0.6	0.0
Ghana	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.0
South Africa	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Sudans	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.0
Africa other	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Africa	1.5	1.5	1.5	1.5	1.4	1.5	-0.1	1.4	1.4	1.4	1.4	1.4	-0.1
Russia	11.2	11.3	11.4	9.8	10.0	10.4	-1.1	10.1	10.3	10.3	10.3	10.2	-0.1
Kazakhstan	1.7	1.8	1.8	1.6	1.6	1.7	-0.1	1.7	1.7	1.7	1.7	1.7	0.0
Azerbaijan	0.8	0.8	0.8	0.7	0.7	0.7	-0.1	0.7	0.7	0.7	0.7	0.7	0.0
Other Eurasia	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.5	0.5	0.4	0.4	0.5	0.0
Eurasia	14.2	14.4	14.5	12.6	12.8	13.3	-1.2	12.9	13.2	13.2	13.2	13.1	-0.1
Total Non-OECD	32.2	32.6	32.9	30.7	30.8	31.5	-1.4	31.3	31.6	31.6	31.8	31.6	0.1
Non-OPEC production	57.9	60.9	62.9	59.1	59.9	60.6	-2.3	60.3	60.8	61.5	62.7	61.3	0.7
Processing gains	2.2	2.3	2.3	2.1	2.1	2.1	-0.2	2.2	2.2	2.2	2.2	2.2	0.1
Non-OPEC supply	60.2	63.1	65.2	61.3	62.0	62.7	-2.5	62.5	63.0	63.7	64.9	63.5	0.8
OPEC NGL	5.1	5.2	5.1	4.9	4.9	5.0	-0.1	5.0	5.1	5.1	5.2	5.1	0.1
OPEC Non-conventional	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
OPEC (NGL+NCF)	5.2	5.3	5.3	5.0	5.1	5.1	-0.1	5.1	5.2	5.2	5.3	5.2	0.1
Non-OPEC & OPEC (NGL+NCF)	65.3	68.4	70.4	66.3	67.1	67.8	-2.6	67.6	68.2	68.9	70.2	68.7	0.9

Note: Totals may not add up due to independent rounding.
Source: OPEC.

Table 11 - 5: World rig count, units

	2017	2018	2019	Change 2019/18	4Q19	1Q20	2Q20	3Q20	Oct 20	Nov 20	Change Nov/Oct
World rig count											
US	875	1,031	944	-88	819	784	396	254	280	311	31
Canada	207	191	134	-57	138	196	25	49	81	95	14
Mexico	17	27	37	10	48	46	43	36	36	37	1
OECD Americas	1,099	1,249	1,114	-135	1,005	1,026	464	339	397	443	46
Norway	15	15	17	2	18	16	16	16	15	19	4
UK	9	7	15	7	13	8	4	5	8	7	-1
OECD Europe	92	85	149	63	154	129	111	109	101	102	1
OECD Asia Pacific	15	21	29	8	30	30	22	17	19	19	0
Total OECD	1,206	1,355	1,292	-64	1,189	1,184	597	465	517	564	47
Other Asia*	208	222	221	-1	212	214	190	184	162	158	-4
Latin America	119	131	129	-2	119	107	26	40	50	64	14
Middle East	68	65	68	3	69	69	59	50	46	47	1
Africa	38	45	55	11	63	61	46	35	35	31	-4
Total Non-OECD	432	462	474	12	463	451	321	309	293	300	7
Non-OPEC rig count	1,638	1,817	1,766	-52	1,652	1,635	917	774	810	864	54
Algeria	54	50	45	-5	41	38	33	27	24	29	5
Angola	3	4	4	1	3	6	2	1	2	3	1
Congo	2	3	3	0	2	2	1	0	0	0	0
Equatorial Guinea**	1	1	2	1	1	1	1	1	1	1	0
Gabon	1	3	7	4	9	9	2	0	0	0	0
Iran**	156	157	117	-40	117	117	117	117	117	117	0
Iraq	49	59	74	14	77	74	54	30	27	27	0
Kuwait	54	51	46	-5	48	53	52	44	29	31	2
Libya	1	5	14	10	16	14	11	11	8	12	4
Nigeria	9	13	16	2	18	19	11	8	7	8	1
Saudi Arabia	118	117	115	-2	109	113	108	87	70	60	-10
UAE	52	55	62	7	67	66	58	50	40	41	1
Venezuela	49	32	25	-8	25	25	6	1	0	0	0
OPEC rig count	547	550	529	-21	534	537	455	377	325	329	4
World rig count***	2,185	2,368	2,295	-73	2,185	2,172	1,373	1,151	1,135	1,193	58
<i>of which:</i>											
Oil	1,678	1,886	1,800	-87	1,717	1,707	1,027	851	854	889	35
Gas	466	448	464	15	431	411	288	265	243	266	23
Others	42	33	31	-2	38	54	57	35	38	38	0

Note: * Other Asia includes India and China

** Estimated data when Baker Hughes Incorporated did not report the data.

*** Data excludes onshore China and Eurasia.

Totals may not add up due to independent rounding.

Sources: Baker Hughes and OPEC.

Glossary of Terms

Abbreviations

b	barrels
b/d	barrels per day
bp	basis points
bb	billion barrels
bcf	billion cubic feet
cu m	cubic metres
mb	million barrels
mb/d	million barrels per day
mmbtu	million British thermal units
mn	million
m-o-m	month-on-month
mt	metric tonnes
q-o-q	quarter-on-quarter
pp	percentage points
tb/d	thousand barrels per day
tcf	trillion cubic feet
y-o-y	year-on-year
y-t-d	year-to-date

Acronyms

ARA	Amsterdam-Rotterdam-Antwerp
BoE	Bank of England
BoJ	Bank of Japan
BOP	Balance of payments
BRIC	Brazil, Russia, India and China
CAPEX	capital expenditures
CCI	Consumer Confidence Index
CFTC	Commodity Futures Trading Commission
CIF	cost, insurance and freight
CPI	consumer price index
DoC	Declaration of Cooperation
DCs	developing countries
DUC	drilled, but uncompleted (oil well)
ECB	European Central Bank
EIA	US Energy Information Administration
Emirates NBD	Emirates National Bank of Dubai
EMs	emerging markets
EV	electric vehicle

FAI	fixed asset investment
FCC	fluid catalytic cracking
FDI	foreign direct investment
Fed	US Federal Reserve
FID	final investment decision
FOB	free on board
FPSO	floating production storage and offloading
FSU	Former Soviet Union
FX	Foreign Exchange
FY	fiscal year
GDP	gross domestic product
GFCF	gross fixed capital formation
GoM	Gulf of Mexico
GTLs	gas-to-liquids
HH	Henry Hub
HSFO	high-sulphur fuel oil
ICE	Intercontinental Exchange
IEA	International Energy Agency
IMF	International Monetary Fund
IOCs	international oil companies
IP	industrial production
ISM	Institute of Supply Management
JODI	Joint Organisations Data Initiative
LIBOR	London inter-bank offered rate
LLS	Light Louisiana Sweet
LNG	liquefied natural gas
LPG	liquefied petroleum gas
LR	long-range (vessel)
LSFO	low-sulphur fuel oil
MCs	(OPEC) Member Countries
MED	Mediterranean
MENA	Middle East/North Africa
MOMR	(OPEC) Monthly Oil Market Report
MPV	multi-purpose vehicle
MR	medium-range or mid-range (vessel)
NBS	National Bureau of Statistics
NGLs	natural gas liquids
NPC	National People's Congress (China)
NWE	Northwest Europe
NYMEX	New York Mercantile Exchange
OECD	Organisation for Economic Co-operation and Development
OPEX	operational expenditures
OIV	total open interest volume
ORB	OPEC Reference Basket
OSP	Official Selling Price
PADD	Petroleum Administration for Defense Districts
PBoC	People's Bank of China
PMI	purchasing managers' index
PPI	producer price index

Glossary of Terms

RBI	Reserve Bank of India
REER	real effective exchange rate
ROI	return on investment
SAAR	seasonally-adjusted annualized rate
SIAM	Society of Indian Automobile Manufacturers
SRFO	straight-run fuel oil
SUV	sports utility vehicle
ULCC	ultra-large crude carrier
ULSD	ultra-low sulphur diesel
USEC	US East Coast
USGC	US Gulf Coast
USWC	US West Coast
VGO	vacuum gasoil
VLCC	very large crude carriers
WPI	wholesale price index
WS	Worldscale
WTI	West Texas Intermediate
WTS	West Texas Sour

OPEC Basket average price

US\$/b



up 2.53 in November

November 2020	42.61
October 2020	40.08
Year-to-date	40.75

November OPEC crude production

mb/d, according to secondary sources



up 0.71 in November

November 2020	25.11
October 2020	24.40

Economic growth rate

per cent

	World	OECD	US	Euro-zone	Japan	China	India
2020	-4.2	-5.3	-3.6	-7.3	-5.2	2.0	-9.2
2021	4.4	3.5	3.4	3.7	2.8	6.9	6.8

Supply and demand

mb/d

2020		20/19	2021		21/20
World demand	90.0	-9.8	World demand	95.9	5.9
Non-OPEC liquids production	62.7	-2.5	Non-OPEC liquids production	63.5	0.8
OPEC NGLs	5.1	-0.1	OPEC NGLs	5.2	0.1
Difference	22.2	-7.1	Difference	27.2	5.0

OECD commercial stocks

mb

	Oct 19	Aug 20	Sep 20	Oct 20	Oct 20/Sep 20
Crude oil	1,451	1,557	1,549	1,528	-21
Products	1,442	1,655	1,642	1,618	-25
Total	2,893	3,211	3,192	3,145	-46
Days of forward cover	61.1	74.0	73.3	72.2	-1.0

Next report to be issued on 14 January 2021.