



Organization of the Petroleum Exporting Countries



# OPEC Monthly Oil Market Report

11 November 2020

**Feature article:**  
*Development of global oil inventories in 2020*

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## Note on updated 2017 purchasing power parity (ppp) reference base:

Global economic growth and all regional aggregations have been recalculated based on **2017 ppp levels**, as published by the World Bank's International Comparison Program (ICP) and applied by the International Monetary Fund (IMF).

The 2017 ppp-based GDPs are used as weights to compute regional and global real GDP growth. With findings from the ICP's 2017 ppp adjustments, the weight of OECD economies was lifted by around 3%. Consequently, non-OECD economies were lowered by around the same magnitude. Regional and world output and growth reported in this report have been revised based on the new 2017 ppp level from the earlier 2011 ppp. Consequently, data history has been recalculated and historic comparisons are now also based on this new measurement.

As of the *November 2020 Monthly Oil Market Report (MOMR)*, the new reference base for ppp levels of the year 2017 has been applied to the reported data groupings, according to the below list:

	OECD - World GDP share	Non-OECD - World GDP share
2017 (Status ppp <b>2011</b> )	44	56
2017 (Status ppp <b>2017</b> )	47	53

	2020	2021
<b>World</b> growth based on ppp <b>2011</b>	-4.1	4.5
<b>World</b> growth based on ppp <b>2017</b>	-4.3	4.4

# Oil Market Highlights

## Crude Oil Price Movements

The OPEC Reference Basket (ORB) fell by \$1.46, or 3.5%, month-on-month (m-o-m), to average \$40.08/b in October. Year-to-date (y-t-d), the ORB averaged \$40.57/b, or \$23.34 lower than the same period last year. Crude oil futures prices extended losses, with oil market sentiment continuing to be dominated by concerns about the recovery in global oil demand, amid a sharp increase in the number of daily COVID-19 cases in several regions. Crude oil futures prices on both sides of the Atlantic settled lower in October. ICE Brent was down 35¢/b, m-o-m, to stand at \$41.52/b, while NYMEX WTI edged 7¢ lower to settle at \$39.55/b, keeping the Brent-WTI spread narrow at just below \$2/b. In terms of market structure, NYMEX WTI, ICE Brent and DME Oman were in sustained contango during October. Hedge funds and money managers in WTI slightly reduced their net long positions during the month, while in ICE Brent there was a slight increase in net long positions, albeit remaining at low levels, given the high uncertainty surrounding market outlooks.

## World Economy

The global economic growth forecast continues to show a contraction of 4.3% for 2020, while the 2021 forecast is revised down to growth of 4.4%, down from 4.5% forecast of last month, with all numbers now based on the newly-implemented 2017 purchasing power parity (PPP) levels. US economic forecast is revised up to show a contraction of 3.6% in 2020, while growth in 2021 is revised lower to 3.4%. The Euro-zone forecast is revised up to minus 7.2% from minus 7.7%, while the 2021 forecast is revised lower to 3.7%. Japan's economic growth forecast remains at minus 5.7% for 2020 and 2.8% for 2021. China's economic growth remains at 2.0% for 2020 and 6.9% in 2021. The forecast for India is revised down to minus 9.2%, while growth in 2021 remains at 6.8%. Brazil's forecasts is revised higher to minus 6.0% in 2020 and growth of 2.5% in 2021. Russia's economic growth forecast in 2020 remains unchanged, with a contraction of 4.9% this year and growth of 2.9% in 2021.

## World Oil Demand

The global oil demand forecast for 2020 is revised down by 0.3 mb/d, given weaker-than-expected demand in OECD Americas in 3Q20 and the recently announced additional COVID-19 containment measures by various governments in OECD Europe. Transportation and industrial fuel are expected to remain adversely affected throughout 4Q20. As a result, world oil demand is now expected to contract by around 9.8 mb/d, y-o-y, in 2020. For 2021, oil demand growth is expected to grow by 6.2 mb/d, y-o-y, representing a downward revision of 0.3 mb/d compared to last month's assessment. These downward revisions mainly take into account downward adjustments to the economic outlook in OECD economies due to COVID-19 containment measures, with the accompanying adverse impacts on transportation and industrial fuel demand through mid-2021.

## World Oil Supply

The non-OPEC liquids production forecast for 2020 is revised marginally lower by 0.06 mb/d from the last month's assessment, to now show a contraction of 2.4 mb/d. The marginal downward revision is due to production outages in the US Gulf of Mexico, as well as lower-than-expected output in Norway, the UK, and Mexico. Oil supply in 2020 is forecast to decline mainly in Russia, the US and Canada, partially offset by growth led by Norway, Brazil, China and Guyana. The 2021 supply forecast is revised higher by 0.06 mb/d, to average 0.95 mb/d, mainly due to a higher expectations for Oman production next year. Uncertainties regarding the ability to achieve sufficient well completions and spending levels remain. The main drivers for supply growth in 2021 are expected to be the US with 0.3 mb/d, followed by Canada, Brazil and Norway. OPEC NGLs are expected to decline by 0.1 mb/d in 2020 then grow by 0.1 mb/d, y-o-y, to average 5.2 mb/d in 2021. OPEC crude oil production in October increased by 0.32 mb/d, m-o-m, to average 24.39 mb/d, according to secondary sources.

### Product Markets and Refining Operations

Globally, refining margins gained limited ground in October, with a positive performance seen at the middle and bottom of the barrel, impacted by lower processing rates, amid peak maintenance season and lower overall offline capacity, y-o-y. In addition, a decline in feedstock prices towards the end of the month lent further support to refining economics. In the US, margins remained almost flat, exhibiting only moderate gains, supported by a combination of product supply disruptions due to maintenance and a heavy hurricane season. The prompt start-up of refineries following weather-related disruptions, amid demand side pressure, prevented a steeper upturn. In Europe, margins showed the largest gains relative to other regions, with simple configurations benefiting the most. Meanwhile, margins in Asia saw support from economically driven run cuts in some countries within the region, the sharp fall in oil prices, and a robust product market performance, mainly in India.

### Tanker Market

The weaker tanker market continued into October, with dirty tanker rates depressed by ample tonnage availability along with sluggish tanker demand as COVID-19 disruptions weighed on trade. High inventories and the unwinding of floating storage have also negatively impacted dirty tanker rates. After a brief pick-up in the Mediterranean last month, clean tanker rates in October turned lower West of Suez. East of Suez rates, however, managed an increase on gains on the Singapore-to-East route.

### Crude and Refined Products Trade

Preliminary data shows US crude imports picked up, from an almost three-decade low, to average 5.4 mb/d in October. US crude exports fell further below 3 mb/d in October, impacted by lower demand amid renewed lockdown measures in Europe and as strong Chinese buying began to wind down. The latest data showed OECD Europe crude imports picked up in July to average 7.9 mb/d, after having declined for five-straight months to a 15-year low. China's crude imports rebounded in September, averaging 11.8 mb/d, the third-highest on record after the levels seen in June and July this year. China's crude imports are expected to be lower in 4Q20, as independent refiners have topped out import quotas for the year, with preliminary data showing China's crude imports averaged 10.1 mb/d in October. India's crude imports fell back after improving the previous month, averaging 3.7 mb/d in September, but performed better y-o-y than in previous months, amid an easing of lockdown measures.

### Commercial Stock Movements

Preliminary data showed total OECD commercial oil stocks down 15.3 mb, m-o-m, in September. At 3,179 mb, inventories were 237.1 mb higher, y-o-y, and 211.9 mb above the latest five-year average. Within this, crude and products stocks declined 13.0 mb and 2.2 mb, m-o-m, respectively. OECD crude stocks stood at 78.6 mb above the latest five-year average, while product stocks exhibited a surplus of 133.3 mb above the latest five-year average. In terms of days of forward cover, OECD commercial stocks fell, m-o-m, by 1.3 days in September to stand at 71.7 days. This is 10.3 days higher, y-o-y, and 9.4 days above the latest five-year average.

### Balance of Supply and Demand

Demand for OPEC crude in 2020 is revised down by 0.2 mb/d from the previous month to stand at 22.1 mb/d, which is around 7.2 mb/d lower than in 2019. Demand for OPEC crude in 2021 is revised down by 0.6 mb/d from the previous month to stand at 27.4 mb/d, which is around 5.2 mb/d higher than in 2020.

## Feature Article

### Development of global oil inventories in 2020

The spread of COVID-19 has disrupted the global oil market balance in 2020, pushing global oil inventories to a record high. Indeed, the accuracy of oil storage data is impacted by many factors including time lags and estimation approaches. While OECD oil inventory data is regularly updated through national government reporting systems, assessing inventories in non-OECD countries is particularly challenging, as it requires estimations based on a mix of official data and own assessments, complemented by the JODI database.

In the first three quarters of 2020, the massive global stock build came as oil demand contracted sharply, by 10.7 mb/d, compared to the same period in 2019, outpacing the 5.4 mb/d decline in global oil supply during the same period (**Graph 1**).

The decline in global supply was due to OPEC Member Countries voluntarily reducing their average production by 3.5 mb/d, compared to the same period a year earlier, and non-OPEC participants in the Declaration of Cooperation (DoC) voluntarily reducing their average production by 1.2 mb/d. At the same time, other non-OPEC oil producing countries reduced their supply by about 0.6 mb/d.

Despite these production reduction efforts, global inventories have registered a sharp build, as OECD stocks saw a build of around 290 mb, while non-OECD stocks are estimated to have built by about 540 mb.

Furthermore, the oil futures curve flip into contango in March 2020 made it profitable for traders to purchase relatively cheap crude barrels to store at sea, in order to sell forward. In addition, the lack of demand for oil resulted in cargoes being stuck at destination ports, waiting for discharge orders. Therefore, in the first three quarters of 2020, oil-at-sea is estimated to have risen by 162 mb, or around 0.6 mb/d. With this, total global inventories have surged by more than 1 billion barrels since the beginning of this year.

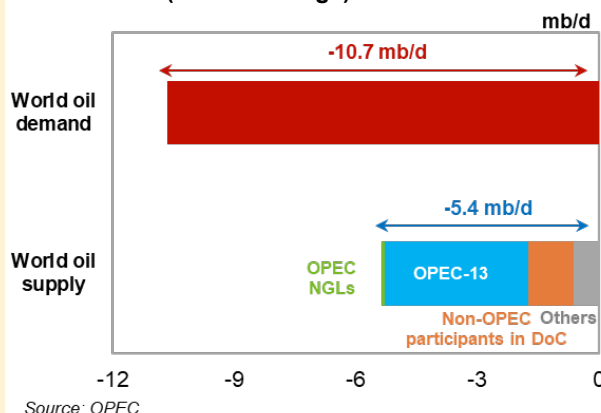
In anticipation of this market imbalance, the OPEC and participating non-OPEC oil producing countries of the DoC reached a landmark decision for production adjustments in April 2020, as a necessary and timely response to the urgent need to support market stability. This historic effort focused on accelerating the drawdown of the global stock overhang in order to bring forward market rebalancing.

As a result, between the end of 2Q20 and the end of 3Q20, global inventories declined across all components by around 250 mb. It should be highlighted that, without the DoC production adjustments, global inventories would have continued rising.

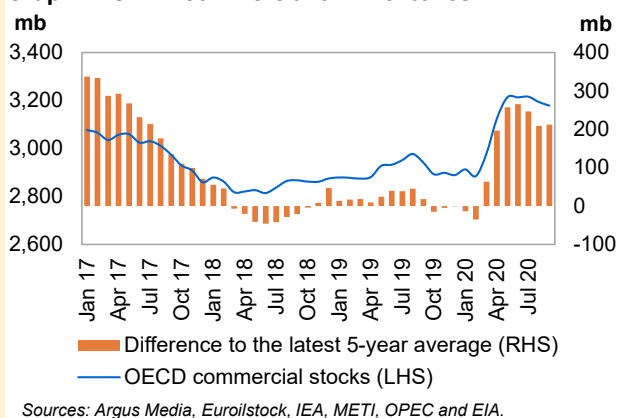
Instead, OECD commercial inventories – which act as a key indicator of market fundamentals – have fallen between end-2Q20 and end-3Q20 by 44 mb, the bulk of which was crude stocks (**Graph 2**). Similarly, non-OECD inventories are estimated to have declined by around 55 mb over the same period. Meanwhile, oil at sea, including floating storage, has also fallen, dropping by about 150 mb.

The high conformity levels of the DoC participating countries to their voluntary adjustments have gradually scaled back high oil inventory levels. However, given the renewed lockdown measures implemented in several major economies, the market situation requires vigilance and continuous close monitoring in order to take into account the large uncertainties going forward. The 180<sup>th</sup> Meeting of the OPEC Conference and the 12<sup>th</sup> OPEC and non-OPEC Ministerial Meeting will convene on 30 November and 1 December, respectively, to further assess market developments and consider how best to continue relentless efforts to maintain oil market stability.

**Graph 1: World oil demand and supply changes, 2020 vs. 2019 (1Q-3Q average)**



**Graph 2: OECD commercial oil inventories**



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## Crude Oil Price Movements

Spot crude oil prices retreated in October for the second consecutive month, along with futures prices, as the expected healthy recovery of global oil demand in 4Q20 was slowing and as global refinery throughputs remained low amid a severe second wave of COVID-19 infections in several regions around the world. Expectations of higher crude oil supply in the coming months also weighed on spot prices.

The OPEC Reference Basket (ORB) value fell in October for the second consecutive month, declining by \$1.46, or 3.5% m-o-m, on a monthly average to settle at \$40.08/b. Compared to the previous year, the y-t-d ORB was down \$23.34, or 36.5%, from \$63.91/b in 2019 to an average of \$40.57/b so far this year.

Crude oil futures prices fell further in October as oil market sentiment remained dominated by concerns about the global oil demand recovery amid sharp increases of daily COVID-19 cases in several regions. Nonetheless, the decline in futures prices was limited due to oil supply disruptions in several regions and supportive data on oil demand in China and India. The ICE Brent front month fell by 35¢, or 0.8% m-o-m, in October to average \$41.52/b, and NYMEX WTI eased by 7¢, or 0.2% m-o-m, to average \$39.55/b. Y-t-d, ICE Brent was \$21.78 lower, or 33.9%, at \$42.42/b, while NYMEX WTI was \$18.42 lower, or 32.4%, at \$38.35/b, compared with the same period a year earlier. DME Oman crude oil futures prices fell in October by 29¢ m-o-m, or 0.7%, to settle at \$41.13/b. Y-t-d, DME Oman was lower by \$21.82, or 34.2%, at \$42.08/b versus the same period a year earlier.

Hedge funds and other money managers moved their positions and risk exposures slightly in October due to high uncertainty regarding the global oil demand outlook as the surge of COVID-19 infections is resulting in renewed lockdowns in some regions.

The forward curves of all three markets were in a sustained contango in October as the oil supply/demand outlooks worsened. In late October, the ICE Brent and NYMEX WTI structures steepened further as surging COVID-19 cases and lockdown measures weighed on near-month prices.

The value of sour crude continued to settle at a premium against sweet crude in Europe and in Asia, while, in the USGC, the sweet/sour crude differential widened.

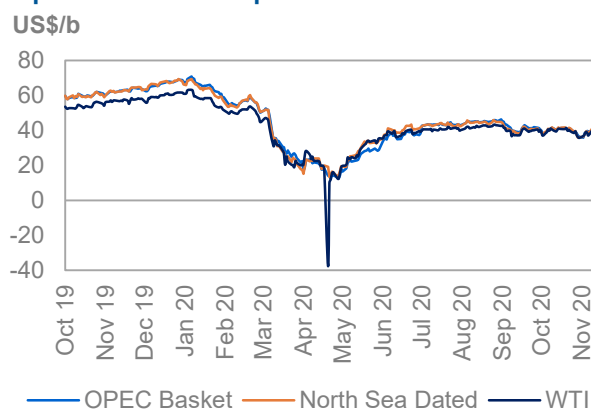
## Crude spot prices

**Spot crude oil prices** retreated again in October for the second consecutive month, along with futures prices, as the expected healthy recovery of global oil demand in 4Q20 eased amid a severe second wave of COVID-19 infections in several regions around the world. Moreover, demand for crude oil was subdued, as global refinery throughputs remained low. On the other hand, investors were pricing expectation of higher oil supply in the coming months as well as the steady recovery of Libyan crude production that reached more than 1 mb/d, according to the Libyan National Oil Corporation. Nonetheless, the oil price decline in the first part of October was limited as supply disruptions in the North Sea and an active hurricane season in the Gulf of Mexico (GoM) gave some support to the market.

North Sea Brent, WTI and Dubai first month ended October sharply lower, falling about 6.1%, 7.6% and 10.0%, respectively, compared to early in the month, to hit their lowest level in five months, as several countries renewed lockdowns and mobility restrictions.

The North Sea dated value remained under pressure over last month amid an ample crude supply of light sweet crude in the Atlantic Basin, although demand from Asia Pacific, specifically from China and India, drew down some volumes. In the North Sea, Forties crude differentials slipped to negative territory and fell to 72¢/b, its lowest since May 2020, due to weak demand and sluggish buying interest, with several cargoes for November loadings on offer amid muted demand, while floating storage in the North Sea remained significant. The offer of a ship-to-ship (STS) basis of a Forties cargo added further downward pressure. On a m-o-m basis, North Sea

**Graph 1 - 1: Crude oil price movement**



Sources: Argus, OPEC and Platts.

## Crude Oil Price Movements

Dated fell 57¢/b, or 1.4%, in October to average at \$40.01/b. The WTI first month value declined by 8¢/b, or 0.2%, less than North Sea Dated and Dubai prices, to average \$39.53/b, as US crude values found support from lower supply in the GoM, although US crude oil data was disappointing and EIA weekly data showed lower US refinery runs and utilization rates in October. Sustained US crude exports also provided support. The weekly US utilization of refinery operable capacity stood at 72.9% and 74.6%, respectively, in the weeks to 16 and 23 October. Dubai first month also fell by 75¢/b, or 1.8%, m-o-m, in October, to settle at \$40.70/b, amid thin demand.

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

	Sep 20	Oct 20	Change		Year-to-date	
			Oct/Sep	%	2019	2020
<b>OPEC Reference Basket</b>	<b>41.54</b>	<b>40.08</b>	<b>-1.46</b>	<b>-3.5</b>	<b>63.91</b>	<b>40.57</b>
Arab Light	42.09	40.32	-1.77	-4.2	64.81	41.06
Basrah Light	42.09	40.60	-1.49	-3.5	63.53	40.54
Bonny Light	40.78	39.64	-1.14	-2.8	65.58	40.67
Djeno	33.13	32.56	-0.57	-1.7	61.43	35.17
Es Sider	39.18	37.71	-1.47	-3.8	63.47	39.23
Girassol	41.10	40.72	-0.38	-0.9	65.81	41.59
Iran Heavy	41.93	40.24	-1.69	-4.0	61.77	39.70
Kuwait Export	42.12	40.38	-1.74	-4.1	64.11	40.54
Merey	28.22	26.23	-1.99	-7.1	55.46	27.76
Murban	41.88	41.06	-0.82	-2.0	64.65	42.31
Rabi Light	39.38	39.01	-0.37	-0.9	63.28	39.11
Sahara Blend	40.98	39.76	-1.22	-3.0	64.20	41.27
Zafiro	40.62	39.99	-0.63	-1.6	65.39	40.44
<b>Other Crudes</b>						
North Sea Dated	40.58	40.01	-0.57	-1.4	64.03	40.76
Dubai	41.45	40.70	-0.75	-1.8	63.50	41.45
Isthmus	38.06	38.15	0.09	0.2	63.40	35.23
LLS	41.07	40.81	-0.26	-0.6	62.68	40.41
Mars	40.56	39.96	-0.60	-1.5	61.05	39.18
Minas	39.81	39.30	-0.51	-1.3	60.00	40.35
Urals	40.98	40.26	-0.72	-1.8	64.12	40.84
WTI	39.61	39.53	-0.08	-0.2	56.73	38.44
<b>Differentials</b>						
North Sea Dated/WTI	0.97	0.48	-0.49	-	7.30	2.32
North Sea Dated/LLS	-0.49	-0.80	-0.31	-	1.35	0.35
North Sea Dated/Dubai	-0.87	-0.69	0.18	-	0.53	-0.69

Sources: Argus, Direct Communication, OPEC and Platts.

## OPEC Reference Basket (ORB)

The **ORB** value fell in October for the second consecutive month. On a monthly basis, the ORB declined by \$1.46, or 3.5%, to average \$40.08/b. Compared to the previous year, the y-t-d ORB was down \$23.34, or 36.5%, from \$63.91/b in 2019 to an average of \$40.57/b so far this year. The decline in the ORB value was more than other spot and futures references due to lower m-o-m official selling prices and crude oil differentials for almost all grades. West and North African Basket components – Bonny Light, Djeno, Es Sider, Girassol, Rabi Light, Sahara Blend and Zafiro – dropped 83¢/b, or 2.1% m-o-m, on average, to \$38.48/b, and multiple regions' destination grades – Arab Light, Basrah Light, Iran Heavy and Kuwait Export – fell \$1.67, or 4.0% m-o-m, on average, to settle at \$40.39/b. Murban crude declined by 82¢/b, or 2.0% m-o-m, on average, to settle at \$41.06/b. The Merey component fell the most, dropping by \$1.99, or 7.1% m-o-m, on average, to settle at 26.23/b.

## The oil futures market

**Crude oil futures prices** fell further in October as oil market sentiment remained dominated by concerns about the global oil demand recovery amid sharp increases in daily COVID-19 cases in several regions. Nonetheless, the decline in futures prices was limited in October, on a monthly average. Crude oil supply disruptions in the GoM and in the North Sea, as well as supportive data on oil demand in China and India, helped offset part of the negative impacts of uncertainty on the outlook of global oil supply and demand fundamentals.

In October, ICE Brent averaged 35¢/b lower, m-o-m, at \$41.52/b, while NYMEX WTI was little changed m-o-m, falling by 7¢, to settle at \$39.55/b, m-o-m.

Crude oil futures prices remained range-bound during the first three weeks of October, finding support from temporary supply disruptions. Indeed, oil prices rose after several Norwegian offshore fields were shut in following a strike, which threatened about 25% of the country's oil and gas production, according to the Norwegian Oil and Gas Association. In the GoM, a series of tropical storms and hurricanes have led companies to evacuate and shut down oil and gas platforms in several regions. According to the US Bureau of Safety and Environmental Enforcement, offshore companies have shut down about 1.7 mb/d, or about 92%, of oil production in the GoM due to Hurricane Delta. Oil prices rose further on supportive data related to oil demand from the world's second and third largest consumers. China's official data showed robust economic indicators with the country's crude oil imports in September rising by 5.5% compared to August, settling at an average of about 11.8 mb/d. Official data in India also showed a gradual recovery in oil demand, which was reflected in gasoline and gasoil consumption.

Investor optimism on signs of progress over the potential for more US fiscal relief that could provide a boost to the economy and oil demand also added support to the oil market. The market also buoyed by the positive performances in overall conformity levels for participating OPEC and non-OPEC Countries of the Declaration of Cooperation (DoC), which reached 102% in September.

However, oil prices sharply dropped in the last week of October, falling about 10%, as the COVID-19 daily cases hit records in several regions, specifically in Europe and in the US. This led the largest two economies in Europe, France and Germany, as well as other countries, to renew tighter mobility restrictions and national lockdowns. The new, tighter measures to contain the rapid spread of the pandemic have raised concerns about the pace of global oil demand recovery in 4Q20 and next year. Moreover, the risk premium to oil supply that supported oil prices in the first part of October faded, as investors observed the steady recovery of Libyan crude oil production, and await decisions on oil supply from Doc producers starting in January of next year.

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

	Sep 20	Oct 20	Change		Year-to-date	
			Oct/Sep	%	2019	2020
<b>Future crude</b>						
<b>NYMEX WTI</b>	39.63	39.55	-0.07	-0.2	56.76	38.35
<b>ICE Brent</b>	41.87	41.52	-0.35	-0.8	64.21	42.42
<b>DME Oman</b>	41.41	41.13	-0.29	-0.7	63.90	42.19
<b>Spread</b>						
<b>ICE Brent-NYMEX WTI</b>	2.25	1.97	-0.28	-12.4	7.44	4.07

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

*Sources: CME, DME, ICE and OPEC.*

The **ICE Brent** front month fell by 35¢, or 0.8%, in October to average \$41.52/b, and **NYMEX WTI** eased by 7¢, or 0.2%, to average \$39.55/b. Y-t-d, ICE Brent was \$21.78 lower, or 33.9%, at \$42.42/b, while NYMEX WTI was \$18.42 lower, or 32.4%, at \$38.35/b, compared with the same period a year earlier. **DME Oman** crude oil futures prices fell in October by 29¢ m-o-m, or 0.7%, to settle at \$41.13/b. Y-t-d, DME Oman was lower by \$21.71, or 34.0%, at \$42.19/b.

On 10 November, ICE Brent stood at \$43.61/b and NYMEX WTI at \$41.36/b.

**ICE Brent/NYMEX WTI** tightened further in October, averaging \$1.97/b, a decline of 28¢ m-o-m, as the value of the international benchmark Brent fell more than the US benchmark WTI. Concerns about the global oil demand outlook and a well-supplied crude market, particularly in the Atlantic Basin, weighed on the Brent benchmark, while the value of WTI remained supported by supply disruptions in the GoM amid an active hurricane season and resilient US crude oil exports that reached 3.5 mb/d in the week to 23 October. The value

## Crude Oil Price Movements

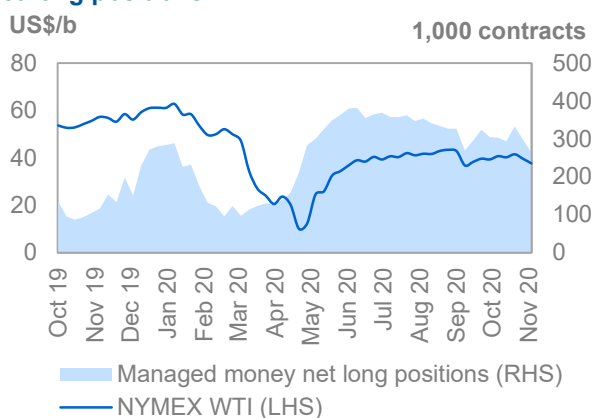
of WTI in the USGC also strengthened against North Sea Dated and turned negative. The North Sea Dated-WTI Houston spread fell by 34¢, from a premium of 17¢/b to a discount of 17¢/b.

**Hedge funds and other money managers** moved their positions and risk exposures slightly over October due to high uncertainty regarding the global oil demand outlook as the surge of COVID-19 infections worldwide led to the re-imposition of lockdowns in some regions. Money managers were also awaiting the next decision of OPEC and participating non-OPEC countries in the DoC, while some speculators bet on a potential delay of the supply adjustment decision. Nonetheless, speculators had different outlooks on the crude oil futures contracts. While they cut combined futures and options net long positions in NYMEX WTI, by 7,153 lots in October, they raised combined futures and options net long positions in ICE Brent by 47,309 contracts, although, the net long positions in ICE Brent still remained below levels recorded in early September.

Money managers recouped some of their bullish positions in ICE Brent during October after falling in late September to their lowest since Mars this year. Combined futures and options net long positions in ICE Brent increased by 47,309 contracts, or 48.7%, to reach 144,531 lots in the week of 27 October, according to the ICE Exchange. In the week ending 27 October, gross short positions fell by 19,445 lots, or 15.3%, to 107,728 contracts, while gross long positions rose by 27,864 lots, or 12.4%, to 252,259 contracts, during the same period.

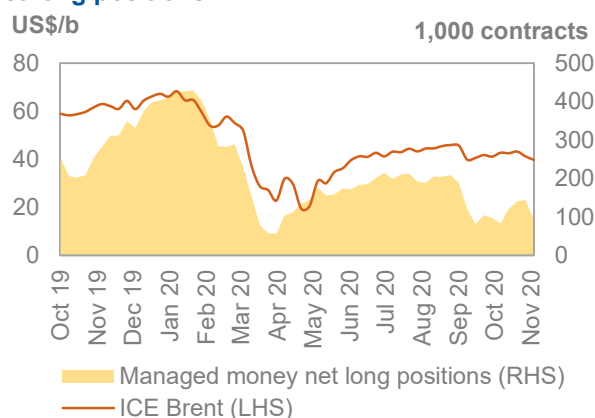
However, despite an active hurricane season in the GoM that caused crude oil supply disruption in the region, hedge funds and money managers cut their bullish positions slightly. Speculators cut their related NYMEX WTI net long positions in October by 2.3%, or 7,153 contracts, to stand at 297,661 lots in the week of 27 October. This is due to a decline in short positions by 2,081 lots, or 2.3%, to 89,216 contracts, and a cut of 9,234 contracts, or 2.3%, in long positions, to 386,877 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 remained unchanged in October at 2:1 in the week to 29 October, compared with the same ratio at 2:1 in September. Similarly, the NYMEX WTI long-to-short ratio remained at about 4:1 in late October, compared to the same ratio of 4:1 in September, on average, reflecting the same cautious outlook for oil prices compared to the previous month.

**Total futures and options open interest volumes** on the two exchanges fell over October, falling by 4.2%, or 231,654 contracts, to stand at 5.3 million contracts in the week ending 27 October.

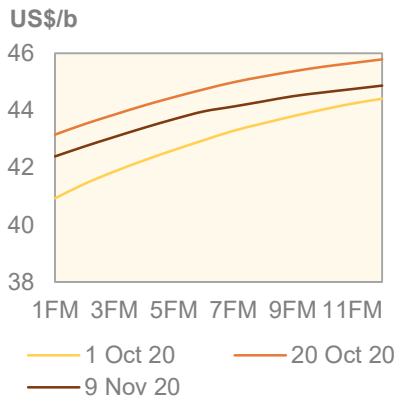
## The futures market structure

The **forward curves** of all three markets were in a sustained contango during October as the oil supply/demand outlooks worsened. In late October, the ICE Brent and NYMEX WTI structures steepened further as surging COVID-19 cases and lockdown measures weighed on near-month prices.

The ICE Brent market structure remained in contango over the month amid a well-supplied crude oil market, particularly in the Atlantic Basin, and persistent low global oil refinery throughput, while worries about increasing COVID-19 cases in Europe and renewed mobility restrictions added concerns about further weakening oil demand. The gradual comeback of Libyan crude oil production and exports, as well as expectation of increasing oil supply from OPEC+ producers also weighed on prompt month prices and contributed to steepening the Brent

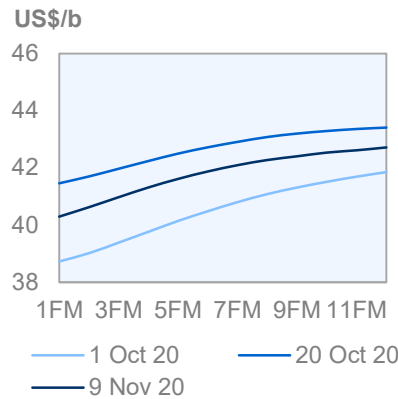
futures structure. The ICE Brent M1-M3 contango narrowed by 23¢, from \$1.02/b in September to 79¢/b in October.

**Graph 1 - 4: ICE Brent forward curves**



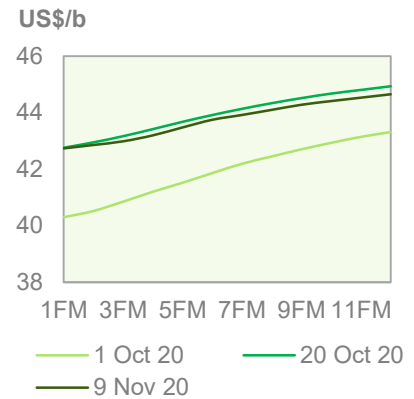
Sources: ICE and OPEC.

**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 price structure** also remained in contango in October as US crude oil stocks remained high and were little changed between late September and the week to 23 October. Crude oil stocks at Cushing also increased to reach 60.4 mb in the week to 16 October, their highest level since last May, to stand at 60.0 mb in the week to 23 October, according to EIA data. On the other hand, crude demand from refiners weakened due to disruptions caused by hurricanes that hit the USGC region. Weekly US refiner net input of crude oil fell to 13.0 mb/d in the week to 16 October before rising to 13.4 mb/d in the week to 23 October, according to EIA data. The NYMEX WTI M1-M3 contango was little changed in October, narrowing by only 3¢/b m-o-m, to 63¢/b, compared with a contango of 66¢/b in September.

The **DME Oman contango structure** flattened slightly in October as healthy demand from Asia Pacific refiners, specifically from China, lent support to prices. On a monthly average, the DME Oman M1-M3 narrowed by 19¢, from a contango of 66¢/b in September to 47¢/b in October.

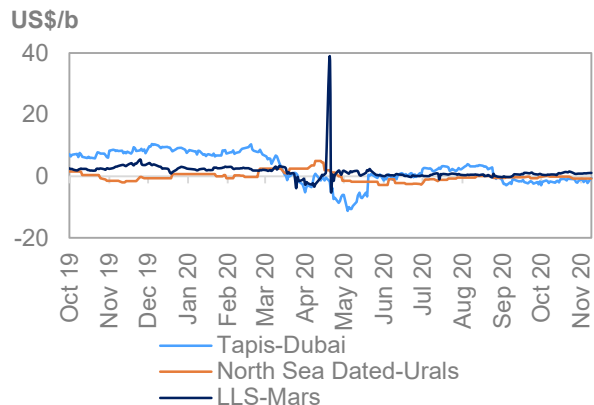
Regarding the **M1/M3 structure**, the North Sea Brent M1/M3 contango was unchanged in October on a monthly average at 91¢/b. In the US, the WTI M1/M3 contango narrowed slightly in October by 2¢ to 62¢/b compared to a contango of 64¢/b in September. However, the Dubai M1/M3 monthly average spread widened marginally by 4¢, from a contango of 57¢/b in September to a contango of 61¢/b in October.

## Crude spreads

The value of sour crude continued to settle at a premium against sweet crude in Europe and in Asia, while, in the USGC, the sweet/sour crude differential widened.

In **Europe**, the value of medium sour crude Urals settled at a premium against the light sweet benchmark North Sea Dated, as Urals was supported by firm demand from refiners in the Mediterranean and Asia. A narrow Brent-Dubai differential has made the arbitrage of Urals to Asia favourable. The Urals value strengthened further after data showed a lower November loading programme compared to October owing to higher demand from refineries in Russia. The Urals value in the Mediterranean and in Northwest Europe rose in October to its highest level since last July.

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



Sources: Argus, OPEC and Platts.

However, the value of light sweet crude in Northwest Europe and in the Atlantic Basin was under pressure amid plentiful supply and subdued demand, while rising US crude exports and increasing Libya crude oil supply also added downward pressure on light sweet values. Sustained floating storage in the North Sea as well as offers

## Crude Oil Price Movements

on an STS basis weighed on Dated-related grades. The Brent-Urals spread narrowed by 15¢ in October on a monthly average, from a discount of 40¢/b in September to a discount of 25¢/b in October.

Similarly, in **Asia**, the Tapis-Dubai differential remained at a discount as the value of Tapis light sweet crude was below the value of Dubai on a monthly basis in October. Light sweet crude in Asia weakened on thin demand from Asian refiners as well as plentiful supply of similar grades. A narrow Brent-Dubai spread also opened arbitrage of similar light sweet crude in the Atlantic Basin to Asia, which added further pressure on light sweet values in Asia. The Tapis-Dubai spread widened by 34¢/b m-o-m in October to a discount of \$1.53/b, compared to a discount of \$1.86/b in September. The front-month Brent-Dubai Exchange of Futures for Swaps (EFS) remained low, although it rose slightly in October. On a monthly average, the Brent-Dubai EFS rose 18¢ m-o-m to 18¢/b in October compared to the flat differential in September.

However, in the **USGC**, the LLS-Mars spread widened by 34¢ in October to average 85¢/b as LLS light sweet crude performed better than the sour grade Mars. The sour crude value in Louisiana, including Mars, came under pressure in October as the deep-water Cameron Highway Oil Pipeline System that transports crude production from Louisiana to Texas City and Port Arthur remained offline. Furthermore, some refineries in Louisiana were offline due to power outages in New Orleans. Consequently, the value of Mars crude weakened amid high availability of sour crude in Louisiana.

# Commodity Markets

Energy commodity prices were mixed in October. Crude oil declined for the second consecutive month, but natural gas showed large price increases across regions supported by several outages and the expectation of colder than average temperatures in North East Asia and coal prices recovered for the second consecutive month. Base metals advanced for the second consecutive month supported by the expansion in global manufacturing. In the group of precious metals, gold prices declined for the second consecutive month as real interest rates increased in the US.

## Trends in selected commodity markets

The **energy price index** advanced by around 0.5% m-o-m in October, led by a recovery in natural gas and coal prices, but crude oil prices proved a drag. The index was down by 33.5% in the January-to-October period, compared with the same period of 2019.

The **non-energy index** rose m-o-m by 1.5%, with the base metals and the agriculture indexes rising by 1.3% and 2.0%, respectively. The non-energy index was up by 0.7% in the first ten months of 2020 compared to the same period last year.

**Table 2 - 1: Commodity prices**

Commodity	Unit	Monthly averages			% Change Oct 20/Sep 20	Year-to-date	
		Aug 20	Sep 20	Oct 20		2019	2020
<b>Energy*</b>	Index	<b>53.8</b>	<b>51.0</b>	<b>51.2</b>	<b>0.5</b>	<b>76.0</b>	<b>50.5</b>
Coal, Australia	US\$/mt	50.1	54.6	58.4	7.0	80.1	58.2
Crude oil, average	US\$/b	43.4	40.6	39.9	-1.7	61.3	40.4
Natural gas, US**	US\$/mbtu	2.3	1.9	2.4	24.6	2.6	1.9
Natural gas, Europe	US\$/mbtu	2.9	4.0	4.9	23.7	4.8	2.8
<b>Non-energy*</b>	Index	<b>85.4</b>	<b>87.5</b>	<b>88.8</b>	<b>1.5</b>	<b>81.4</b>	<b>82.0</b>
Base metal*	Index	<b>83.6</b>	<b>85.2</b>	<b>86.3</b>	<b>1.3</b>	<b>81.8</b>	<b>77.3</b>
Precious metals*	Index	<b>152.3</b>	<b>148.1</b>	<b>145.2</b>	<b>-1.9</b>	<b>104.2</b>	<b>131.6</b>

Note: \* World Bank commodity price indices (2010 = 100). \*\* October 2020 figure is based on EIA's assessment.

Sources: World Bank and OPEC.

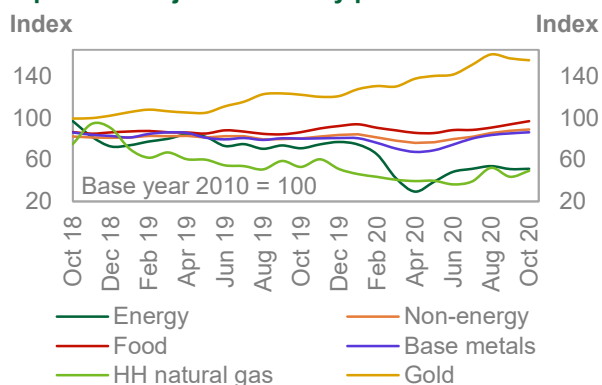
In October, the **Henry Hub natural gas index** rose on average by 24.6% m-o-m to \$2.39/mmbtu. This index was supported by the expectation of higher heating demand due to colder than average temperatures and by increasing demand for LNG exports, as price differentials with Asia and Europe became supportive. Meanwhile, production ran well behind last year levels during the month, down by around 9% y-o-y – according to IHS Markit, estimations, providing support to prices. According to the Energy Information Administration utilities withdrew 36 bcf from working gas underground storage during the week ending 30 October – the first withdrawal of the season. This withdrawal left total working gas in underground storage at 3,919 bcf, which was 5% above the latest five-year average, versus 12% above the five-year average at the end of September.

**Natural gas prices in Europe** rose strongly with the average **Title Transfer Facility price** up by 24% m-o-m to 4.9/mmbtu. Prices were supported by the expectation of colder temperatures towards the beginning of November, the prospect of outages in Norway due to an oil workers' strike and an accident at the country's largest LNG facility at the end of September, as well as soaring LNG prices in Asia to around \$6.2/mmbtu, which favour LNG exports to that region., Inventories ended the month of October around 94.5% full, almost unchanged from the previous month, according to Gas Infrastructure Europe, and slightly below the 97% seen at the end of October 2019.

Inventories in Europe and the US are at comfortable levels, and as such, any swing toward a forecast of mild winter conditions would make it difficult to sustain the ongoing recovery in prices.

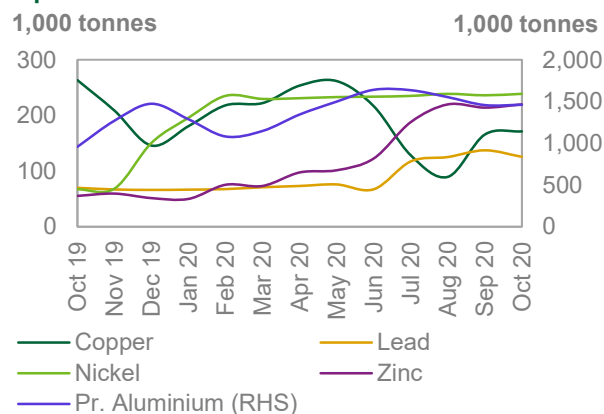


**Graph 2 - 1: Major commodity price indices**



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

**Graph 2 - 2: Inventories at the LME**



Sources: LME, Thomson Reuters and OPEC.

**Australian thermal coal prices** rose for the second consecutive month, increasing by 8.9% m-o-m to average \$58.4/mt supported by the expectation of colder than average winter temperatures in North East Asia and higher natural gas prices. However, Chinese coal imports restrictions limited upside potential. In October, Chinese coal imports were down 27% m-o-m and by 47% compared to October 2019, according to customs data. Any price upside will likely be limited until there is more clarity regarding coal import curbs. Coal output in September declined by 0.9% y-o-y in China, and remained relatively flat in the period of January to September, according to data from the China National Bureau of Statistics. While electricity demand increased in September by 5% y-o-y, the majority of the increase was covered by increases in hydroelectric power generation and other renewable sources, leaving thermal power generation relatively flat in September, y-o-y.

The **base metal price index** rose by 1.3% m-o-m in October, the sixth consecutive monthly rise. Metal prices have anticipated the recovery in global manufacturing, led by China. The recovery in investor sentiment since April has also been a supportive factor for the metals group.

**Average monthly copper prices** rose slightly in October by 0.1% m-o-m to \$6,714/mt. They generally traded sideways during the month following a swing in investor sentiment and some increase in stocks. According to International Copper Study Group (ICGS) estimates, the refined copper balance (adjusted for unreported Chinese inventories) in the January-to-July 2020 period showed a deficit of 278,000, unchanged from the January-June estimation. Most recently in October, inventories at London Metal Exchange (LME)-designated warehouses rose to 171,300 tonnes from 165,600 tonnes in September, suggesting more stable demand.

**Iron ore prices** declined in October by 3.2% m-o-m to around \$119.8/mt as Chinese imports slowed, following five consecutive months of gains. According to the latest custom data, Chinese imports declined by 22.7% y-o-y, but were still up by 6.5% in the January-to-October period compared to the same period in 2019. Chinese steel output rose by around 8.4% y-o-y to 94.8 mn mt in August, up 3.7% y-o-y in the January-to-August period, according to the World Steel Association. As noted in the previous report, steel output this year has experienced negative growth in almost all countries outside of China.

In the group of **precious metals**, gold was down by 1.1% m-o-m in October to average \$1,900.2/ troy oz, as the trend of declining real interest rates stalled. Silver prices meanwhile declined by 5.9%, while platinum prices dropped by 3.5%.

## Investment flows into commodities

**Money managers' net length** increased for natural gas and copper, both in absolute terms and as a share of the open interest during the last month. At the same time, money managers' net length was relatively stable for crude oil, while it declined for gold.

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

Selected commodity	Open interest		Net length			
	Sep 20	Oct 20	Sep 20	% OI	Oct 20	% OI
Crude oil	2,570	2,553	304	12	307	12
Natural gas	1,276	1,239	117	9	136	11
Gold	1,009	909	146	14	129	14
Copper	245	243	76	31	83	34

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

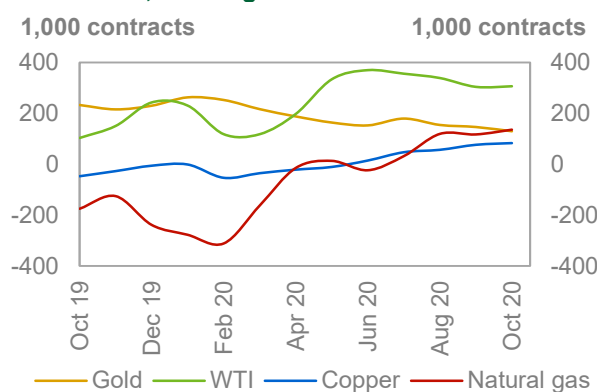
Sources: CFTC and OPEC.

**Henry Hub's natural gas open interest (OI)** fell by 2.9% m-o-m in October. Money managers' net long position increased by 15% to 135,506 contracts in October from 116,732 contracts during the month, as LNG exports recovered and the pace of inventory slowed significantly reducing the surplus versus the latest five-year average.

**Copper's OI** decreased by 0.8% in October. Money managers' net long positions rose by 9% m-o-m to 82,544 contracts from 75,992 contracts in September on bets of a continuing recovery in global manufacturing activity.

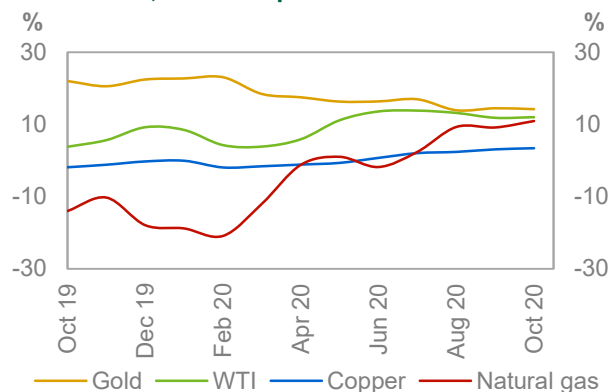
**Gold OI** decreased by 9.9% in October. Money managers decreased their net length by 11.6% to 129,438 contracts from 146,189 the previous month with real interest rates firming for the second consecutive month. However, the decline in Money Managers' net length as a share of the open interest was minimal.

**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

Uncertainties in the global economy remain high. While 3Q20 growth was stronger than expected in major OECD economies, 4Q20 growth is forecast to be impacted on a larger scale by a rise in COVID-19 infections, leading to a rise in hospitalisation and fatality rates. In addition, some important emerging and developing economies faced ongoing challenges regarding their domestic COVID-19 situation, as well as lessening foreign investment. With the compensatory factor of a better-than-expected 3Q20 in the OECD driving full-year estimates higher for the region and the expectation of continuing challenges in some emerging and developing economies, global growth remains unchanged at -4.3%. The slowdown in 4Q20, amid the COVID-19 impact in the OECD, is forecast to carry over into 2021. This will also lead global growth slightly lower to stand at 4.4%, compared with 4.5% the previous month. 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, increasing challenges in the US as well. This slower-than-expected momentum, especially in the OECD, is forecast to continue in 2021. An upside to this forecast may come especially from further large stimulus measures in the US, but also from the Euro-zone or Japan. While China is forecast to continue outperforming other major economies, no considerable additional stimulus, beyond the ongoing measures, is expected throughout the forecasting period. Further support, currently unaccounted for, may come from an effective and widely distributable vaccine as soon as 1H21. However, further downside risks to the current growth outlook may stem from ongoing challenges due to Brexit, rising geopolitical challenges in selective regions, unexpected repercussions from quickly rising global debt levels, and mounting social unrest in some countries as a consequence of COVID-19 and rising inequality.

In greater numerical detail, the OECD growth forecast for 2020 was revised up to stand at -5.4% y-o-y, compared with -5.8% the previous month. This is followed by downward-revised growth of 3.5% y-o-y in 2021, compared with 3.8% the previous month. In the emerging economies, India's 2020 GDP growth was revised down to -9.2% y-o-y from -7.5% the previous month. For 2021, its growth forecast remains at 6.8% y-o-y. Brazil's 2020 GDP growth forecast was revised up to -6.0 y-o-y, compared with -6.2% the previous month. The Brazilian economy is forecast to grow by 2.4% y-o-y in 2021. China's 2020 GDP growth forecast remains at 2.0% y-o-y. In 2021, China is forecast to grow by 6.9% y-o-y. Russia's 2020 GDP remains at -4.9%. The 2021 recovery is forecast to reach 2.9%, with the country benefiting from the ongoing Declaration of Cooperation (DoC) process.

Importantly, global economic growth and all regional aggregations are based on 2017 purchasing power parity (ppp) levels, as published by the World Bank's International Comparison Programme (ICP) and applied by the International Monetary Fund (IMF). With these findings, the weight of OECD economies was lifted by around 3% and consequently non-OECD economies were lowered by the same magnitude.

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

	World	OECD	US	Euro-zone	UK	Japan	China	India	Brazil	Russia
<b>2020</b>	<b>-4.3</b>	<b>-5.4</b>	<b>-3.6</b>	<b>-7.2</b>	<b>-9.6</b>	<b>-5.7</b>	<b>2.0</b>	<b>-9.2</b>	<b>-6.0</b>	<b>-4.9</b>
<b>Change from previous month</b>	0.0	0.4	0.6	0.5	-0.6	0.0	0.0	-1.7	0.2	0.0
<b>2021</b>	<b>4.4</b>	<b>3.5</b>	<b>3.4</b>	<b>3.7</b>	<b>3.8</b>	<b>2.8</b>	<b>6.9</b>	<b>6.8</b>	<b>2.5</b>	<b>2.9</b>
<b>Change from previous month</b>	-0.1	-0.3	-0.5	-0.5	-0.2	0.0	0.0	0.0	0.1	0.0

Note: \* 2020–2021 = Forecast.

The GDP numbers have been adjusted to reflect 2017 ppp, in line with the IMF and World Bank's forecast update in October 2020.

Source: OPEC.

## Global

### Update on latest developments

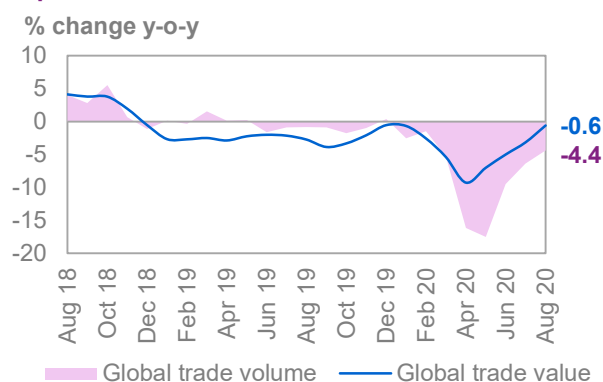
Global economic progress remains firmly influenced by COVID-19-related developments. All economies continue to be either directly or indirectly impacted by domestic COVID-19-related developments and/or spillovers from foreign investment or external trade. Lately, this development has been considerably negative in major OECD economies as infections have increased considerably, especially in the Euro-zone, leading to a critical rise in hospitalisation rates in various Euro-zone economies. Developments have also worsened in the US, and a negative impact is likely from these developments in 4Q20, not necessarily only due to lockdown

measures, but also because of voluntary social distancing, as was seen in 1H20. The most recent developments came after a very strong 3Q20, particularly in the US and the Euro-zone, when GDP growth was very much supported by stimulus measures. A trend that has also continued in the past weeks has been relative sluggishness in the services sector, accounting for more than two-thirds of major advanced countries' economies. Within the services sector, the contact-intensive sub-sectors of travel and transportation, tourism, hospitality and leisure will remain affected and most likely face ongoing challenges in 2021.

After Presidential elections in the US, a winning candidate was announced, and while markets have gained visibility once again, the outcome and consequences of the election remain to be seen. No additional stimulus measures have been announced so far; any major announcement and its implementation could lead to a growth lift in the near term. Labour markets across the world remain negatively impacted by the pandemic, but given the extraordinary stimulus measures across the world, the fallout from COVID-19 has been contained. The downside to this was a sharp rise in debt levels in most economies, leading to very high total debt-to-GDP ratios, now at almost 400% in the US, 700% in Japan and more than 400% in Italy, the three economies with the largest sovereign debt levels.

**Global trade levels** have recently recovered from lows and it remains to be seen how the trade policy of the incoming US administration will look. Data available up to August shows that trade continued to recover. World trade volume levels declined by 4.4% y-o-y in August, compared with a fall of 6.4% y-o-y in July, based on the CPB World Trade Index, provided by the Netherlands Bureau of Economic Policy Analysis. Trade in value terms improved as well, falling by only 0.6% y-o-y in August, compared with a drop of 3.2% y-o-y in July.

**Graph 3 - 1: Global trade**



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

## Near-term expectations

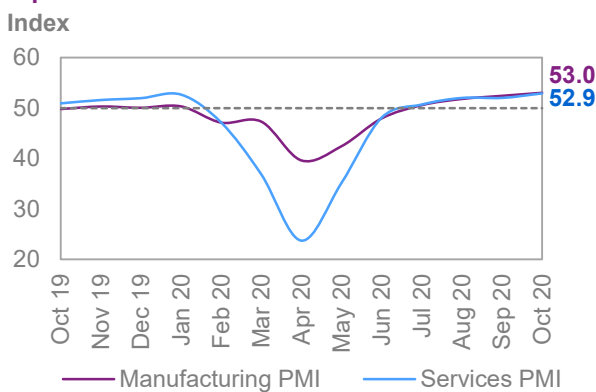
While stimulus-led 3Q20 GDP growth was very strong in most economies, the latest resurrection of COVID-19 infections is currently pushing several health systems to their limits. This is pointing to a slowdown in 4Q20, with the expectation of a consequent spill-over into 1H21. The latest news of an effective vaccination to be available in the near-term could limit the decline in 2021, but developments remain to be seen. On a global basis, the quarterly slowdown in 1H20 was remarkable. GDP growth declined by more than 5% y-o-y in 1H20. However, it picked up strongly in 3Q20, rising by almost 4% q-o-q in 3Q20, though is now expected to slow to 0.4% q-o-q in 4Q20. Slowing growth stemming both from lockdown measures and voluntary social distancing is forecast to carry over into 1H21. The forecast assumes that COVID-19-related restrictions will continue throughout 1H21, being gradually lifted in 2H21 with the availability of an effective vaccination, a forceful treatment or a natural easing of the effects of COVID-19.

Moreover, stimulus measures especially in the US, but also in the Euro-zone, could lift growth further, as an earlier available vaccine could already support growth in 1H21, providing an upside to the current global economic growth forecast. China is anticipated to outperform other major economies, as it implemented tight measures to contain COVID-19 in 1H20 and successfully managed to recover. It is forecast to be the only major economy to show positive annual growth in 2020. India remains very much embattled by COVID-19, having entered the pandemic in an already fragile situation. The trend of relatively better performance in OECD economies and China is expected to continue in 2021. India is also expected to post significant growth, but risks remain skewed to the downside. Japan is expected to see relatively slower growth momentum in 2021 compared with other OECD economies, but seems to currently benefit from effective control of the pandemic.

In sectoral terms, those that have been severely impacted by the pandemic, such as travel and tourism, leisure and hospitality, are not expected to achieve pre-COVID-19 levels of activity before the end of 2021. Compensating for some of this shortfall, sectors such as health, IT and communications are forecast to accelerate.

**Global purchasing managers' indices (PMIs)** in October supported the view of an ongoing recovery, The global manufacturing PMI rose to 53 in October, compared with 52.4 in September. The global services sector PMI rose to 52.9 in October, compared with 52 in September.

**Graph 3 - 2: Global PMI**



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

With some improvement in the OECD, but somewhat further weakening growth trends in emerging and developing economies, the 2020 **GDP growth** forecast remains at -4.3% y-o-y. This anticipates a strong recovery in 3Q20 and some softening in 4Q20. 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 continuation of lockdown measures in combination with voluntary social distancing. In addition, the recovery next year foresees no further challenges that will impact economic growth.

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

	World
<b>2020</b>	<b>-4.3</b>
<b>Change from previous month</b>	0.0
<b>2021</b>	<b>4.4</b>
<b>Change from previous month</b>	-0.1

Note: \* 2020–2021 = Forecast.

Source: OPEC.

Further issues that may derail the recovery in 2021 include potential consequences from rising debt levels, further social unrest in some economies, geopolitical issues, trade-related challenges and Brexit. Compared with last month's global GDP growth level assumption of 4.5%, it is anticipated that growth in contact-intensive services areas will be less strong. This would lead to a 2021 GDP growth revision to 4.4%. Any major upside may come from the comprehensive containment of COVID-19, be it an effective and distributable vaccination, COVID-19's natural end, or the establishment of a powerful treatment. Additional stimulus could push growth higher compared with the current forecast.

It is important to note that global economic growth and all regional aggregations are based on 2017 ppp levels, as published by the World Bank's International Comparison Program (ICP) and applied by the International Monetary Fund (IMF). The 2017 ppp-based GDPs are used as weights to compute regional and global real GDP growth. With findings from the ICP's 2017 ppp adjustments, the weight of OECD economies was lifted by around 3%. Consequently, non-OECD economies were lowered by the same magnitude. Regional and world output and growth reported in OPEC Secretariat publications have been revised based on the new 2017 ppp level from the earlier 2011 ppp. Consequently, data history has been recalculated and historic comparisons are now also based on this new measurement.

## OECD

### OECD Americas

### US

#### Update on the latest developments

The US continued with strong growth in 3Q20; the labour market continued improving and the important wealth factors of both equity and housing markets continued to perform very well. This was supported by strong fiscal and monetary stimulus. While this has led to a V-shaped recovery, the recent ongoing rise in COVID-19 cases will most probably dampen the recovery in 4Q20. Although asset markets responded positively to the

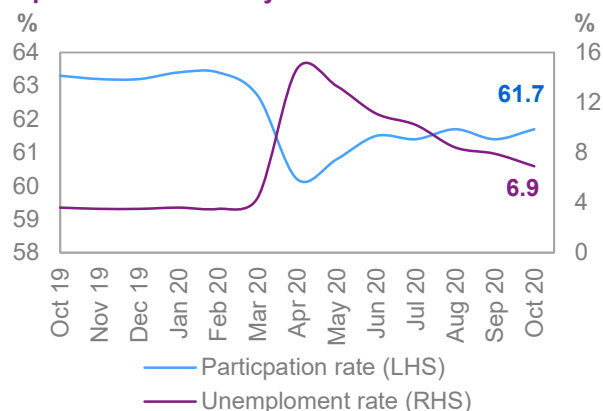
announcement of a winning candidate in the US presidential elections, uncertainties about the final outcome and the consequences of the elections remain.

In its first estimate of 3Q20 GDP growth, the Bureau of Economic Analysis provided a strong growth number. GDP growth for 3Q20 is estimated at 33.1% q-o-q seasonally adjusted annualised rate (SAAR), an exceptional recovery compared with a similarly impressive decline of 31.4% q-o-q SAAR in 2Q20. The recovery was visible across the board, but very much fuelled by private consumption and investment. The strong momentum is in line with improvements in the labour market. However, consumer confidence retracted slightly in October, standing as measured by the Conference Board at 100.9 compared with 101.3 in September.

**US industrial** sector activity retracted again slightly as it fell by a non-seasonally adjusted rate of 7.3% y-o-y in September compared with -7.0% y-o-y in August. Exports improved, declining by 15.7% y-o-y in September compared with -18.3% y-o-y in August and -20% y-o-y in July.

The labour market showed continued signs of a recovery. In October, the **unemployment rate** improved to stand at 6.9%, after seeing 7.9% in September, a continuous improvement since peak unemployment in April, when the rate stood at 14.7%.

**Graph 3 - 3: US monthly labour market**



Sources: Bureau of Labor Statistics and Haver Analytics.

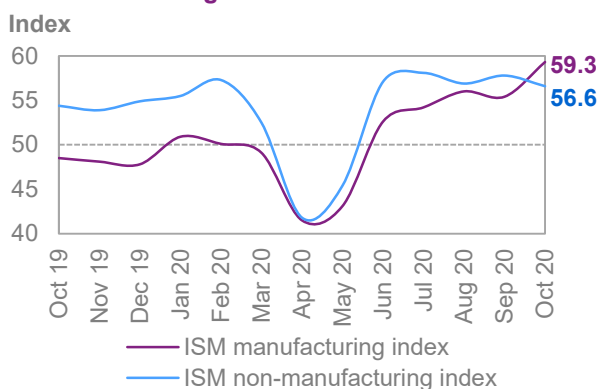
## Near-term expectations

After a strong 3Q20 recovery, growth is estimated to slow in 4Q20. This is mainly due to the consequences of a rise in COVID-19 infections, leading not only lockdown measures, but also voluntary social distancing, hence impacting the contact-intensive services industry. 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. So far, negotiations in Congress about a further fiscal stimulus package have stalled and there is only a small probability that further stimulus will be implemented ahead of the inauguration of the next president. While it is still possible that some sort of further fiscal stimulus will be agreed upon, the forecast does not include an additional package, which could provide some upside, depending on its structure. Independent of that development, economic performance in the coming year is expected to pick up significantly. However, the 4Q20 slowdown is forecast to carry over into 1H21. The slowing effect will come mainly from the impact on the services industry. Additionally, consequences from the outcome of the most recent presidential election remain to be seen. Another concern going forward may be the rising debt level, which will need close monitoring.

For the time being, COVID-19's impact is anticipated to remain at around the current level in 1H21, as partial and localized lockdowns may be necessary. Moreover, 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 **October PMI** levels as provided by the Institute for Supply Management (ISM). The manufacturing PMI rose strongly to reach 59.3 in October, compared with 55.4 in September and 56.0 in August. The services sector index retracted slightly to 56.6 in October, compared with 57.8 in September and 56.9 in August.

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



Sources: Institute for Supply Management and Haver Analytics.

Given the strong **GDP growth** in 3Q20, 2020 GDP growth for the US has been revised up to stand at -3.6% y-o-y, compared with -4.2% the previous month. 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, albeit at a lower level than estimated the previous month.

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

	<b>US</b>
<b>2020</b>	<b>-3.6</b>
<b>Change from previous month</b>	0.6
<b>2021</b>	<b>3.4</b>
<b>Change from previous month</b>	-0.5

Note: \* 2020–2021 = Forecast.

Source: OPEC.

Moreover, COVID-19-related uncertainties and political challenges remain. By taking further downside risks into consideration — stemming from a continued lower-than-previously anticipated level in consumption and investment — 2021 US GDP growth is forecast at 3.4% y-o-y, compared with 3.9% the previous month. This assumes a carryover of the 4Q20 slowdown into 1H21, while a further rebound is forecast for 2H21. Higher 2H21 growth is based on the assumption of an improving COVID-19-related situation.

Some potential upside could further materialize if the virus's impact lessens, an effective vaccine becomes marketable in 1H20, or current improvements in the labour market continue. Moreover, greater stimulus measures and liquidity injections by the Fed could push growth up more than is currently accounted for in the forecast.

## OECD Europe

### Euro-zone

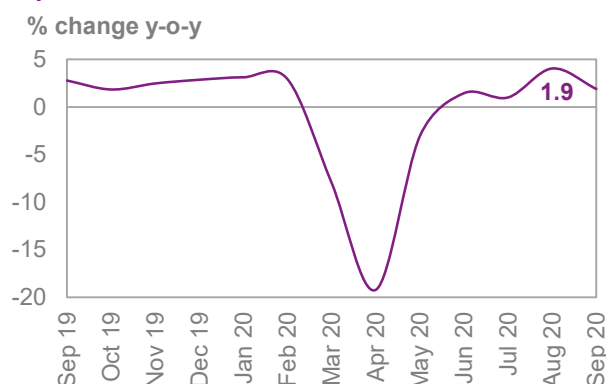
#### Update on the latest developments

After a strong V-shaped recovery in 3Q20, the Euro-zone is again in the midst of drastically rising COVID-19 infections and hospitalisation rates in large parts of the region. The situation is reflected in slowing economic activity indicators of the past few weeks. GDP growth in 3Q20 was reported at 12.7% q-o-q on a seasonally adjusted (SA) basis, while the annualised rate stood at more than 60% or almost twice the growth level of the US. While labour market subsidies in most economies have so far avoided a major fallout, consumption has again started to slow down. Contact-intensive areas of the economy have especially been affected by the tightening of lockdown measures and voluntary social distancing. Economies that rely more on travel, tourism hospitality and leisure have been more affected by the ongoing developments, while countries with stronger manufacturing sectors have seen a stronger recovery trend. In this respect, Germany has suffered less than the economies of Spain and Italy.

The European Central Bank (ECB) has continued its accommodative monetary policy measures as inflation remains low and is expected to potentially increase its stimulus. Fiscal measures supportive of the **labour market** in the Euro-zone have thus far kept the unemployment rate at a relatively modest level. The latest available September numbers from Eurostat point to a stable development as the unemployment rate remained at 8.3%.

**Retail sales** retracted again in September, growing by 1.9% y-o-y in value terms, compared with 4% y-o-y in August. Industrial production (IP) recovered in August, declining by 6.5% y-o-y, after a decline of 7% y-o-y was seen in July.

**Graph 3 - 5: Euro-zone retail sales**



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

#### Near-term expectations

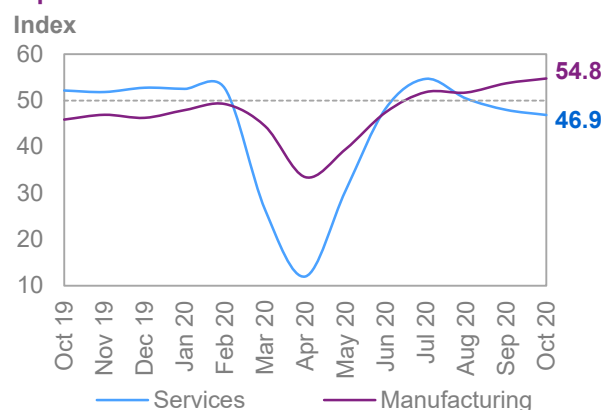
After the strong pickup in 3Q20, the rise in infections and its consequent effect on growth are forecast to weigh on GDP developments in 4Q20. Many countries – including the major ones of Germany, France, Spain and Italy – have again implemented lockdown measures that will weigh on 4Q20 economic performance. The new measures are forecast to lead to a decline in private household consumption and investment. As a result, 4Q20

GDP is forecast to decline by 2.5% q-o-q SA. However, much will depend on COVID-19-related developments towards the end of the year, with seasonal shopping being an important element of annual retail sales.

Facing a contraction in 4Q20, the ECB is likely to expand its monetary stimulus at a time when lending activity has picked up considerably. Monetary stimulus, in combination with the likely distribution of the €750 billion rescue fund, will help support the gradual recovery in 2021. This assumes that infection rates in 1H21 do not exceed the average level of 2H20 and that only localised actions are undertaken to contain the virus. Depending on the availability of a vaccine and/or other treatments, an important area of uncertainty is the depth of the recovery in travel and tourism and leisure and hospitality, as these two sectors are very important for many Euro-zone economies, particularly France, Italy and Spain. It also remains to be seen how global trade will develop, and while trade is forecast to recover in 2H20 and in 2021, it will probably remain subdued.

The October **PMIs** for the Euro-zone economy reflect the rise in momentum in manufacturing, while the services sector remains fragile. The manufacturing PMI improved to 54.8 in October from 53.7 in September. The PMI for services, the largest sector in the Euro-zone, fell to 46.9 in October from 48 in September and 50.5 in August.

**Graph 3 - 6: Euro-zone PMIs**



Sources: IHS Markit and Haver Analytics.

Taking into account the strong and better-than-expected 3Q20 GDP developments, while at the same time accommodating a contraction in 4Q20 amid rising COVID-19 infections, the **GDP forecast for 2020** was revised up to -7.2%. While growth is forecast to recover in 1Q21, supported by stimulus measures and an expected improvement in the COVID-19 situation, the recovery is forecast to be less strong than expected in the previous month.

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

	Euro-zone
<b>2020</b>	<b>-7.2</b>
<b>Change from previous month</b>	0.5
<b>2021</b>	<b>3.7</b>
<b>Change from previous month</b>	-0.5

Note: \* 2020–2021 = Forecast.

Source: OPEC.

The contraction in 4Q20 is also forecast to weigh on 1H21, while 2H21 should gain traction with an anticipated improvement in the COVID-19 situation. Taken together, **2021 GDP growth** was revised down to 3.7% compared with 4.2% in the previous month. Upside support would come from a vaccine or an effective treatment, assuming that these are available in 1H21. Moreover, Brexit will need close monitoring as it may impact growth in the Euro-zone in 2021.

## OECD Asia Pacific

### Japan

#### Update on latest developments

While the pandemic seems to be better contained in Japan than in some other countries, local demand is following its pre-pandemic trend of soft growth. Exports have improved, but are impacted by the ongoing challenges in global trade. The Japanese labour market stabilised after a few months of decline, and the jobless rate remained at 3.0% in September, although this is the highest level of unemployment in more than three years. In general Japan seems to have benefitted from the 3Q20 recovery.



**Industrial production** improved on a monthly basis, rising by 3.3% m-o-m in September, compared to 2.3% in August. This is the fourth consecutive monthly increase. On a yearly comparison this translates into a decline of 10% y-o-y, compared with -11.1% in August, after a decline of 14.2% y-o-y in July and 19.8% y-o-y in June.

**Exports** improved as well on a monthly basis, rising by 4.5% m-o-m in September, compared to 4.7% m-o-m in August. On yearly basis, this is a decline of 8.5% y-o-y in September, compared to 12.1% y-o-y in August, all on a seasonally adjusted basis. Based on the usually applied non-seasonally adjusted view, exports even declined less in September, falling only by 4.9% y-o-y.

**Retail sales** fell sharply, declining by 8.8% y-o-y in September, compared to a decline of 2% y-o-y in August. This decline was influenced by last year's very strong September sales ahead of the sales tax increase in October.

**Consumer sentiment**, as reported by the Cabinet Office, rose to 33.9 in October from 33.3 in September and 29.8 in August.

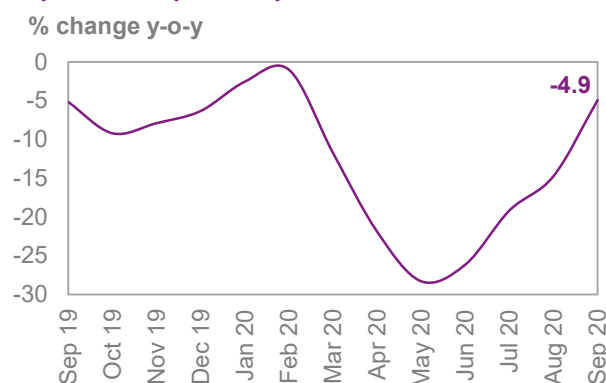
### Near-term expectations

Japan's economy is forecast to continue following its pre-pandemic path of low growth. After a decline of 2.3% q-o-q SAAR in 1Q20 and 28.1% q-o-q SAAR in 2Q20, the economy is forecast to rebound in 3Q20 by 14% q-o-q SAAR, and to soften to 7% q-o-q SAAR in 4Q20, in line with the growth trend in other major OECD economies. The trend is forecast to soften in 2021 from the ongoing considerable 2H20 growth levels, albeit recovering from the significant 1H20 decline. The relatively low number of COVID-19 infections is forecast to benefit the economy, and the ongoing recovery in global trade is also forecast to support economic growth in 2021. Further stimulus measures may support growth, but it remains to be seen if this will be something that the government will pursue under its new leadership.

October **PMIs** point at the ongoing fragility of the recovery in Japan in both the services and manufacturing sectors. While the manufacturing PMI rose to 48.7 in October from 47.7 in September and 47.2 in August, 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 47.7 in October from 46.9 in September and 45 in August, indicating a contraction in this important sector as well.

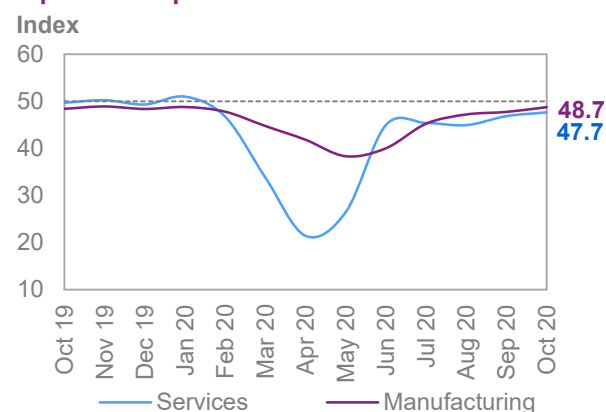
The underlying assumption for the **GDP growth** forecast considers that after the downturn in 1Q20 and 2Q20, some rebound may take hold in both 3Q20 and at a milder rate in 4Q20. With unchanged quarterly assumptions, the 2020 GDP growth forecast remains at -5.7%, the same level as in the previous month. Further downside risks remain, with ongoing sluggishness in domestic activity and sentiment indicators.

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	-5.7
Change from previous month	0.0
2021	2.8
Change from previous month	0.0

Note: \* 2020–2021 = Forecast.

Source: OPEC.

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 investment, GDP growth in 2021 is unchanged from last month to stand at 2.8%.

## Non-OECD

### China

#### Update on the latest developments

**China's economy** expanded by 4.9% in 3Q20 following growth of 3.2% in 2Q20, reflecting the economic benefits of swift pandemic restrictions and the prompt resumption of manufacturing activity. However, the recovery registered in 3Q20 was lower than expected due to slower growth in private consumption and infrastructure investment. Moreover, the economy embarked on an uneven resumption between the supply and demand GDP. While the main recovery drivers in 2Q20 were the investment, infrastructure and real estate sectors, in 3Q20 exports and services were key performers.

Regarding **demand-side GDP contributions**, the final consumption expenditure contribution to real GDP contracted by 2.4% y-t-d in 3Q20 compared to almost -3% in 2Q20, suggesting a positive contribution in 3Q20. Gross capital formation expanded by almost 3% y-t-d versus 1.5%. Both external demand and total domestic demand also expanded, but at a slow pace as net exports recorded marginal growth of 0.1% y-t-d compared to 0.2%.

Regarding **supply-side contributions to the GDP** over the same period, agricultural activity expanded by 4% y-o-y compared to 3.4% y-o-y, while the industrial sector grew by 5.6% y-o-y following growth of 4.1% y-o-y. Construction activity grew by 8.1% y-o-y following growth of 7.8% y-o-y, which lifted the sector out of the double-digit contraction of 17.5% y-o-y in 1Q20. Hotel and catering service activity stayed in negative territory, yet recorded a slight recovery in 3Q20 with a contraction of 5.0% y-o-y after a decline of 18% y-o-y in 2Q20, and grew by 12.9 pp on a quarterly basis.

**On the policy front**, in contrast to the rest of the world, the People's Bank of China (PBoC) may consider a pullback in stimulus and reduce its monetary easing policies as the economy is experiencing a stronger than anticipated recovery, while the default risks of private companies have increased, which may create instability in the financial system. However, the exiting of the current policy based on changing conditions and market demand. On the other hand, as the using of the 2020 bond quota ended by the end of October marked the deadline, infrastructure investment growth in 4Q20 may slow due to the decline of local government bond issuance.

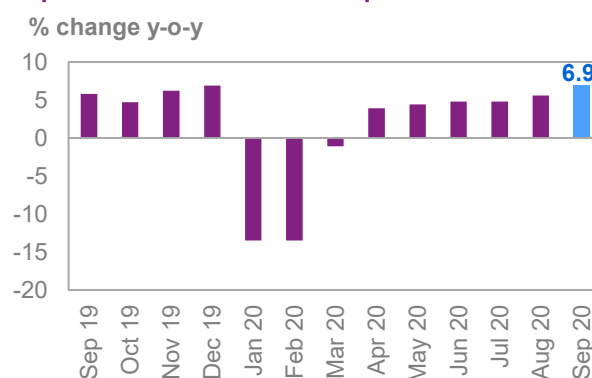
China's **industrial production** rose by 6.9% y-o-y in September 2020, registering its highest level since December 2019 amid the continuation of the sector's recovery from the COVID-19 shock and benefiting from the global need for medical equipment and work-from-home technology.

**Retail sales** expanded by 3.3% y-o-y in September 2020 following growth of 0.5% in August, the second straight month of expansion and the highest since December 2019, as domestic consumption kept recovering following the loosening of COVID-19 restrictions. Consumer confidence rose to 120.50 points in September from 116.40 points in the previous month.

**Regarding external demand**, China's trade surplus jumped to \$58.44 billion in October 2020 from \$42.3 billion in October 2019. Exports leaped by 11.4% y-o-y to \$237.18 billion in October 2020, after growth of 9.9% in September. This was the fifth monthly increase and the fastest in 19 months, driven by robust shipments of medical supplies and electronic products.

China's imports boomed as well for the second month and rose by 4.7% y-o-y to \$178.74 billion in October 2020, following growth of 13.2% in September. The **trade surplus** with the US widened to \$31.37 billion in October from \$30.75 billion in the previous month.

**Graph 3 - 9: China's industrial production**



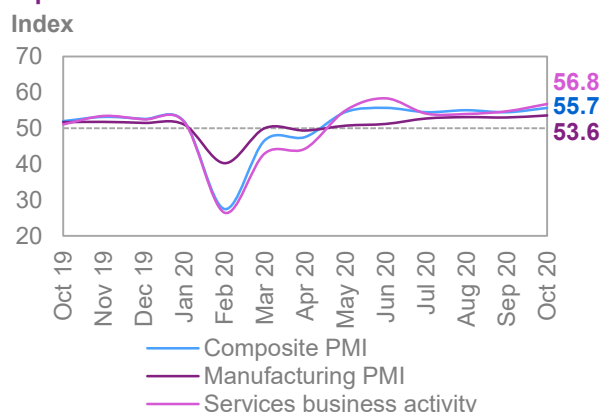
Sources: China National Bureau of Statistics and Haver Analytics.

China's **CPI inflation** eased to 1.7% y-o-y in September 2020 from 2.4% y-o-y in August, the lowest since February 2019 as food prices declined. The food **producer price index (PPI)** fell by 2.1% y-o-y in 3Q20 and by 3.3% in 2Q20. On a monthly basis, consumer prices increased by only 0.2% in September, the lowest in three months, following a 0.4% increase in the previous month.

### Near-term expectations

China's economy is expected to sustain its recovery in 4Q20. October **PMI** readings marked a steady improvement in the manufacturing and services sectors. The Caixin China General Manufacturing PMI rose to 53.6 in October from 53.0 in September, the highest reading since January 2011. The Caixin China General Services PMI jumped to 56.8 in October from 54.8 in September, reflecting strong growth in the services industry. October's service sector PMI recorded the second-fastest expansion since August 2010.

Graph 3 - 10: China's PMI



Sources: Caixin, IHS Markit and Haver Analytics.

China's **GDP is on the verge of V-shaped recovery in 2020** as growth continued to rise, driven by industrial output and the recent improvement in external demand. Nonetheless, rising COVID-19 infection rates in the rest of the world may pose a challenge to the external demand outlook. China's GDP growth for 2020 and 2021 remain unchanged from last month's projections at 2.0% and 6.9%, respectively.

Looking ahead, China's economy might almost recover what it lost during the contraction of 1Q20. Business confidence remained strongly positive amid signs that COVID-19 remained largely under control in the country. Yet the unparalleled strengthening between the demand and the supply sides of the economy might pose challenges. The increased levels of production without an equivalent private demand boost would most likely translate into higher inventory levels, which in turn would hold back future output.

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 a double-digit decline in 2Q20, some of India's macroeconomic indicators showed signs of marginal rebound – specifically in industrial output. However, the COVID-19 lockdown has led to a substantial economic losses. Leaving India's economy facing a decisive phase in the fight against COVID-19 along with subordinate fiscal support in comparison with other nations.

There was a fragile improvement in household demand in the last two months. The **consumer confidence index** fell by 2.9% y-o-y in September 2020 compared to a decline of 4.8% y-o-y in the previous month. **Passenger vehicle sales** rose 26.4% y-o-y in September compared to 14.2% in July. Similarly, industrial output contracted at a slower rate in August, declining 8.0% from a year earlier, after falling by a revised 10.8% in July. The unemployment rate in both urban and rural areas spiked in October. According to data from the Centre for Monitoring Indian Economy (CMIE), the country's **jobless rate** jumped to about 7.0% in October from 6.8% in September, reflecting that labour market conditions are still weak, especially in urban areas.

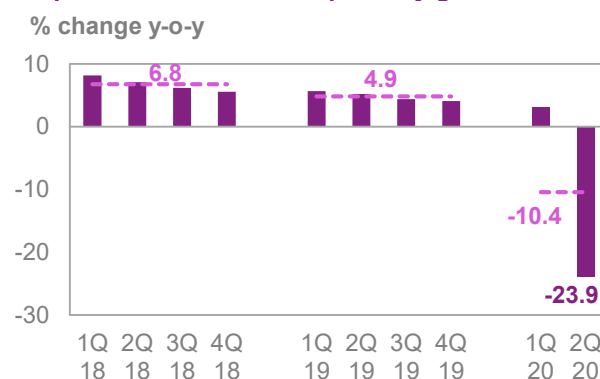
On the policy front, the government increased fiscal stimulus by about \$10 billion in an effort to boost private consumption. Yet compared to other countries, the total fiscal stimulus is still moderate and accounts for only 1.3% of GDP. On the monetary policy end, the Reserve Bank of India (RBI) kept its **policy rate** at 4% due to the increased inflationary pressures.

Indeed, the **Consumer Price Index (CPI)** stood at 7.4% in September of 2020, up from 6.7% in August 2020, which is above the upper limit target of the (RBI) and driven mainly by food and fuel price inflation.

Meanwhile, the RBI offered unconventional measures to arrest the downtrend of economic activity through additional special open market bond operations, and it increased the securities ratio that private banks can hold until maturity within their statutory liquidity ratio (SLR) in order to reduce losses driven by market volatility. The RBI also forecast that the economy would contract by 9.5% in the current fiscal year.

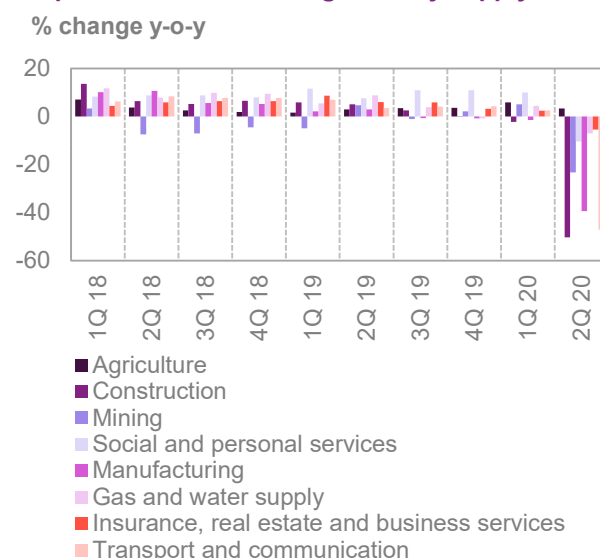
India's **trade deficit** narrowed to \$8.78 billion in October 2020, compared to \$11.76 billion in October 2019. Exports fell by 5.4% to \$24.82 billion while imports declined by 11.56% to \$33.6 billion, after a 19.6% decline in September.

**Graph 3 - 11: India's GDP quarterly growth**



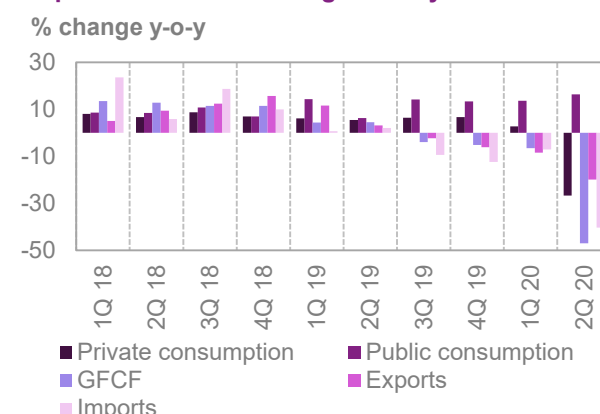
Sources: National Informatics Centre (NIC) and Haver Analytics.

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



Sources: Central Statistics Office and Haver Analytics.

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



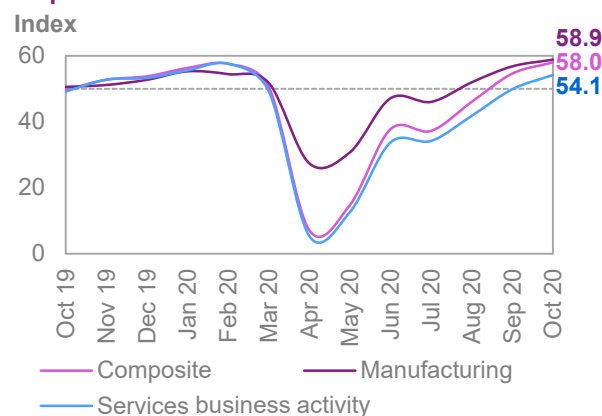
Sources: Central Statistics Office and Haver Analytics.

## Near-term expectations

Considering the marginal uptick in industrial output and household spending, as well as the slower growth in the COVID-19 infection rate, India's economy is likely to rebound at a faster pace in the near term. This positive sentiment was reflected in the recent PMI reading, which showed strong improvement in both the manufacturing and non-manufacturing sectors.

The manufacturing PMI surged to 58.9 in October 2020, from 56.8 in September. The services PMI registered the first expansion in the sector, rising to 54.1 in October 2020 from 49.8 in the September.

Graph 3 - 14: India's PMIs



Sources: Nikkei, IHS Markit and Haver Analytics.

Despite the improvement in business and consumer sentiment, both investment and private consumption may continue to face challenges stemming from the unforeseen impacts of the first wave of COVID-19 and the resulting nationwide lockdown. Moreover, the balance sheet stresses of the financial and non-financial sectors weigh on the prospects for investment recovery. Additional fiscal stimulus might not be possible due to limited manoeuvring room to provide support. Moreover, the economy could also be affected by the lower sovereign ratings recently adopted by several rating agencies.

India's **2020 GDP growth** forecast is revised down, to -9.2%, from -7.5% in the previous month. Incorporating the deep economic shock resulting from the nationwide lockdown aimed at halting the first wave of COVID-19 infections. The uncertainty surrounding this forecast is still high considering the global COVID-19 developments.

For **2021**, the Indian economy is forecast to bounce back and grow by 6.8%, the same as last month.

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

	India
<b>2020</b>	<b>-9.2</b>
<b>Change from previous month</b>	<b>-1.7</b>
<b>2021</b>	<b>6.8</b>
<b>Change from previous month</b>	<b>0.0</b>

Note: \* 2020–2021 = Forecast.

Source: OPEC.

## Latin America

### Brazil

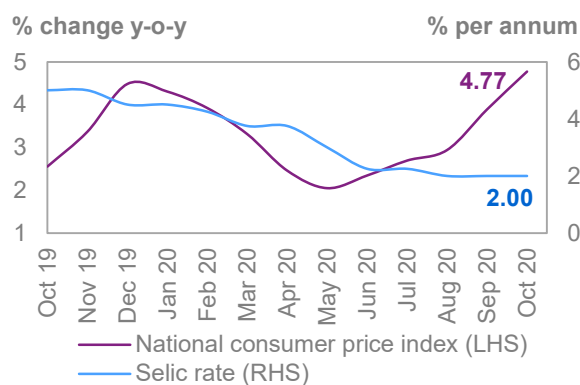
#### Update on latest developments

Monthly data on key indicators suggest that **Brazil's economy** is on a rebound, supported by billions of dollars in fiscal stimulus targeted to support private consumption. Simultaneously, the industrial sector has benefited from the easing of social distancing measures. Nonetheless, Brazil's rebound has been uneven since it was mainly driven by retail trade and manufacturing output, while other economic activities such as services were constrained by COVID-19 containment measures. Moreover, **consumer confidence** declined to 42.8 in 3Q20 from 47.3 in 4Q19.

**Retail sales** surged 6.10% y-o-y in August 2020, following growth of 5.5% in July. **Industrial production** returned to pre-coronavirus levels as output increased 3.4% y-o-y in September, following a downwardly revised decline of 2.5% in the previous month.

The jobless rate in Brazil surged to the highest level on record of 14.4% in August from 12.9% in the March-to-May period, according to the Brazilian Institute of Geography and Statistics (IBGE). The number of **unemployed** increased by 8.5% to 13.79 million and total employment fell by 5% to 81.66 million. Correspondingly, the labour force participation rate fell by 2.1 pp to 54.7%, an all-time low. On an encouraging note, Ministry of the Economy data indicated that net job creation continued to grow in August and the economy added 250,000 new jobs in July, up from 131,000 in June.

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



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

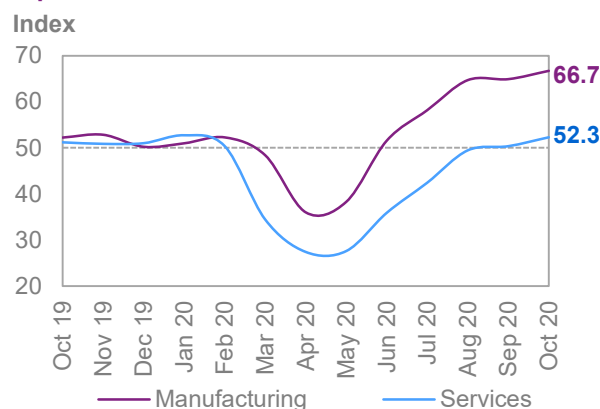
Regarding external demand, Brazil's **trade surplus** widened to \$5.47 billion in October 2020 from \$2.55 billion in October 2019. Adjusted for a working day average, both exports and imports declined in October 2020. Exports for the month fell by 8.8 % y-o-y to \$17.86 billion. Exports to the US fell by 15.4% and increased by 4.2% to Europe. Imports fell 27.3% y-o-y to \$12.38 billion.

### Near-term expectations

Despite the considerable decline in the death rate from COVID-19, uncertainty about the pandemic continues to weigh on the economy. For the time being, factory activity has benefitted from the easing of lockdown measures and policy support.

IHS Markit Brazil's manufacturing **PMI** rose to 66.7 in October from 64.9 in September, pointing to the fifth consecutive monthly expansion in manufacturing activity. The services PMI rose to 52.3 in October from 50.4 in September, strengthened by the sector business confidence as well optimism fuelled by hopes of a COVID-19 vaccine and predictions of more relaxed containment measures. The Industrial Entrepreneur Confidence Index reflected the improvement in the economy. The index registered the highest reading since February, rising to 61.8 in October from 61.6 in the previous month. However, expectations about the economic outlook for the next six months fell to 60.6 in October from 61.2 in September.

**Graph 3 - 16: Brazil's PMIs**



Sources: IHS Markit and Haver Analytics.

Accounting for the improvement in the key economic indicators, namely industrial output, Brazil's **2020 GDP** forecast is revised up from -6.2% in October to -6.0% and the economy is forecast to grow by 2.5% in **2021**.

Nonetheless, as the ongoing recovery is supported mainly by the fiscal and monetary measures, any risk of fiscal adjustments might weigh on the recovery.

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

	Brazil
<b>2020</b>	<b>-6.0</b>
<b>Change from previous month</b>	0.2
<b>2021</b>	<b>2.5</b>
<b>Change from previous month</b>	0.1

Note: \* 2020–2021 = Forecast.

Source: OPEC.

## Africa

### South Africa

#### Update on latest developments

South Africa's manufacturing production declined on a slower September supported by increased output in the food industry. Sector output was up by 8.5 percentage points in September, recording a decline of only 2.6% y-o-y over the month, compared with a revised 11.1% y-o-y decline in August. On a quarterly basis the sector, which accounts for approximately 11% of the nation's GDP, expanded by 32.9% q-o-q, reflecting a positive contribution to 3Q20 output. However, as fears increase regarding a second wave of COVID-19 infections, the South African government may consider re-imposing new restrictions aimed at containing the spread of the virus, which subsequently may lead to higher economic costs.

The government announced the Economic Reconstruction and Recovery Plan, which if implemented is anticipated to push South Africa's real GDP growth rate to 3%. It aims to increase investment in new energy generation projects to secure a reliable and sufficient electricity supply in the short term. It would also create 800,000 new jobs over the medium term and generate about \$64.3 trillion in infrastructure investment over the next four years. In contrast, South Africa's National Treasury announced proposals to reduce its medium-term budget by about (\$19 billion) amid concerns around the high public debt burden. The target of the announced plan is a primary budget surplus in the 2026 fiscal year, when debt is expected to peak at 95.3% of GDP.

On the prices front, inflationary pressures in South Africa slowed slightly as the inflation rate dropped to 3% in September from 3.1% in August. Yet, following 300 bps in rate cuts so far this year, the Reserve Bank kept the benchmark repo rate unchanged at 3.5% in September, considering ongoing inflationary pressures, as well as risks to the growth outlook.

#### Near-term expectations

As the pandemic continued into 4Q20, several trends in the South African economy have become apparent. Meanwhile, confidence in the manufacturing outlook is rising, with upside potential for 3Q20 growth as a result of increased business activity, new sales and lower inventories. The upward trend is also identifiable in recent PMI indicators.

Indeed, South Africa's Absa Manufacturing PMI came in well above pre-pandemic levels, surging to 60.9 in October following an upwardly revised reading of 58.5 in September. Additionally, the RMB/BER business confidence index jumped to 24 in 3Q20 following a record low of 5 in 2Q20.

Nonetheless, the 2020 economic contraction is irreversible, as the 2Q20 collapse was deep and recovery is uneven. Additionally, fiscal constraints and limited room for monetary stimulus might weaken the consumption and business outlook. Above all, the ongoing second global lockdown will negatively affect the demand outlook.

Considering the deep 2Q20 contraction and second pandemic wave, leading to global lockdown developments, South Africa's 2020 GDP is forecast to contract by 8.0%, down from last month's prediction of a 7.5% contraction. The 2021 GDP forecast is unchanged, with growth of 3%.

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

	South Africa
<b>2020</b>	<b>-8.0</b>
<b>Change from previous month</b>	-0.5
<b>2021</b>	<b>3.0</b>
<b>Change from previous month</b>	0.0

Note: \* 2020–2021 = Forecast.

Source: OPEC.

## Russia and Central Asia

### Russia

#### Update on the latest developments

Russia's economy in 3Q20 benefitted from the easing of COVID-19 restrictions, as well as the recovery in oil prices, the latter supported by the DoC. However, the introduction of new lockdown measures in some countries and local COVID-19 infections might elevate the uncertainty and volatility, which could impact oil prices as well as the economic outlook. The labour market in Russia remained under pressure despite the marginal decline of unemployment in September and the jobless rate is still higher than pre-pandemic levels. The rate declined by only 0.1 pp in September from 6.4% in August. The latest available data on labour force participation in Russia showed that rate was unchanged at 61.70% in May compared to April. September industrial production data marked the sixth consecutive month of contraction, falling 5% y-o-y compared to a downwardly revised 4.2% y-o-y decline in August.

During the course of 2020, the Russian government introduced special subsidies and tax breaks as part of its fiscal stimulus, amounting to 3.4% of GDP, to support households and economic activity hit by the lockdown. Consequently, the budget deficit widened to approximately 5% of GDP in 2020. The government plans to withdraw the stimulus in 2021 in an effort to narrow the budget deficit to 2.4% of GDP.

In October 2020, Russia's Central Bank kept the benchmark **interest rate** unchanged at 4.25%, accounting for the increasing inflation rate. Indeed, the **CPI** reached the Central Bank's target and registered the highest rate since September 2019. In October the CPI rose to 4.0% from 3.7% in September following the domestic demand recovery amid the easing of the lockdown along with the depreciation of the ruble. So far, the Central Bank has lowered interest rates by 175 basis points since March.

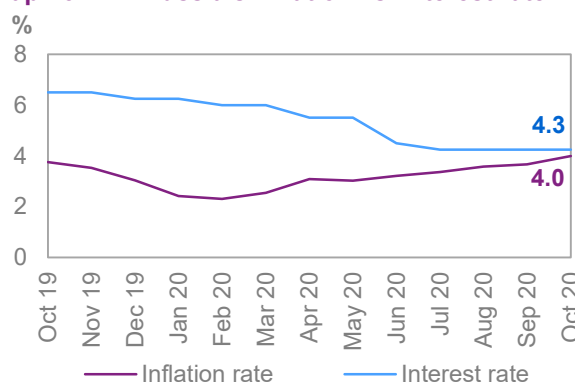
Russia's **trade surplus** dropped sharply to \$3.72 billion in August compared to \$12.35 billion in August 2019. Exports fell by 32.3% y-o-y to \$23.26 billion. Imports fell as well by 11.1% y-o-y to \$19.54 billion in August 2020.

#### Near-term expectations

Russia's economic recovery is highly dependent on oil prices, which declined on average 30-40% y-o-y in 2020, and on containing COVID-19. At the same time the floating ruble may have boosted fiscal revenues, but it increased the inflationary pressures, which may lower private consumption and hurt domestic output due to high borrowing costs.

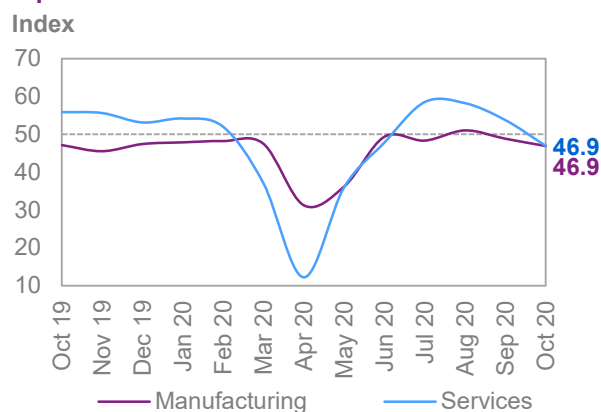
The forward-looking **PMI** indicators deteriorated, reflecting slower growth rates in both the manufacturing and services sectors. The IHS Markit Russia manufacturing PMI fell to 46.9 in October from 48.9 in the September due to the decline in new orders on the back of weak client demand. Similarly, Russia's services PMI fell to 46.9 in October 2020 from 53.7 in the previous month, amid concerns about the resurgence of COVID-19.

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



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

Graph 3 - 18: Russia's PMIs



Sources: IHS Markit and Haver Analytics.



Russia's **GDP** forecast for 2020 and 2021 remains unchanged at -4.9% and 2.9%, respectively.

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

	Russia
<b>2020</b>	<b>-4.9</b>
<b>Change from previous month</b>	0.0
<b>2021</b>	<b>2.9</b>
<b>Change from previous month</b>	0.0

Note: \* 2020–2021 = Forecast.

Source: OPEC.

## OPEC Member Countries

### Saudi Arabia

Saudi Arabia's GDP declined by 4.2% y-o-y in 3Q20, following a contraction of 7% y-o-y in 2Q20. On a seasonally adjusted quarterly basis, the GDP rebounded by 1.2%, following a contraction of 4.9% in 2Q20. Recent data indicate that the economy has outperformed consensus expectations in the last two quarters, supported by extensive government stimulus measures. Inflation fell to 5.7% in September from 6% in both July and August, reflecting a marginal recovery in local demand in 3Q20. Moreover, non-oil PMI increased to 51.0 in October 2020 from 50.7 in September, signalling the second straight month of expansion in non-oil output. However, renewed lockdowns in some countries have affected the growth of new business and external demand. Nevertheless, encouraging early results of a COVID-19 vaccine candidate and the DoC supported a further recovery in oil prices. As a result, the Saudi economy is most likely to witness a further recovery in 4Q20, driven by policy support and improved oil prices.

### Nigeria

The Central Bank of Nigeria composite PMI for the manufacturing sector increased to 49.4 in October 2020 from 46.9 in September, though it is still within contraction territory for the sixth straight month in a row. Both new orders and output stabilized. Consumer confidence in Nigeria rose to -21.20 points in 3Q20 from -29.20 points in 2Q20. The inflation rate surged to the highest level since February 2018 due to the ongoing border closures and the pandemic crisis combined with lower interest rates. The annual inflation rate surged to 13.7% y-o-y in September 2020 from 13.22% y-o-y in August. On a monthly basis, consumer prices rose by 1.48%, following a 1.3% increase in August. The sharp acceleration in inflation, along with weak consumer demand, may disrupt business activity and weigh on the economic recovery in 4Q20.

### The United Arab Emirates (UAE)

The non-oil private sector PMI fell to 49.5 in October, down from 51.0 in September. The decline followed a spike in COVID-19 infections, which affected the supply chain and worsened the outlook for non-oil activities. This was the second drop in business sentiment as the UAE's non-oil economy struggles to maintain its recovery from the COVID-19 lockdown earlier in the year. Consumer price deflation eased as it dropped to 2.4% y-o-y in September 2020 from its 2.6% y-o-y decline in August. Considering the sizable contribution of the travel and tourism sectors to the UAE's GDP, the rebound following the reopening of the economy in the last few months may be challenged by the new lockdown measures imposed in some leading global economies. Nonetheless, there is high optimism about an economic rebound in 2021 fuelled by fiscal and monetary stimulus support, the pickup in real estate, and an anticipated recovery in the tourism sector from Expo 2020, which has been shifted to next year.

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

The **US dollar (USD)** was mixed on average against the major currencies. It rose slightly by 0.1% against the euro m-o-m, but it declined by 0.2% against the Swiss franc, by 0.1% against the pound sterling and by 0.3% against the Japanese yen. As mentioned in the previous report, the central banks of major European economies are likely to engage in further monetary policy accommodation to stem the effects of the current partial lockdown measures in their economies, especially in light of weakening inflation trends.

The dollar dropped by 1.5% against the yuan, supported by a widening current account surplus, but it was stable against the rupee m-o-m. Meanwhile, it advanced against the Russian ruble by 2.6% for the second consecutive month on the impacts of lower oil prices.

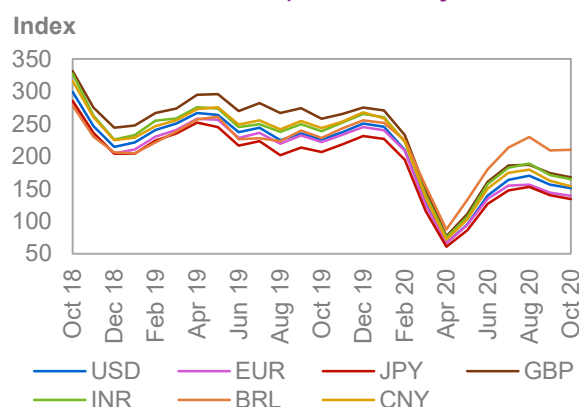
The dollar rose by 4.2% against the Brazilian real on expectations that the country's Central Bank would keep rates low in spite of some stronger inflation readings. Against the Mexican peso, the dollar declined by 1.76% during the month on expectations of receding trade tensions between the US and its main trading partner.

In **nominal terms**, the price of the ORB decreased by \$1.46, or 3.5%, from \$41.54/b in September to reach \$40.08/b in October.

In **real terms**, after accounting for inflation and currency fluctuations, the ORB decreased to \$25.14/b in September from a revised \$26.05/b (base June 2001=100) the previous month.

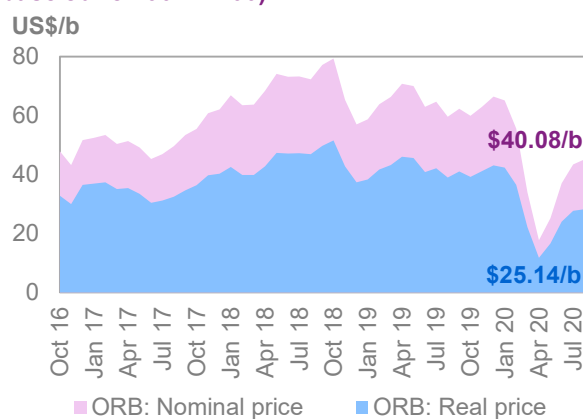
Over the same period, the **USD** was stable against the import-weighted modified Geneva I + USD basket, while inflation was relatively stable m-o-m as well.

**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

As new COVID-19 infection cases continued to rise during October in the US and Europe, forcing governments to re-introduce a number of restrictive measures, various fuels including transportation fuel are thought to bear the brunt going forward. Previous expectations for the demand recovery has diminished and a further deterioration in demand is now anticipated. As such, oil demand was revised lower by 0.3 mb/d to show a decline of 9.8 mb/d on an annualized basis. Total global oil demand is now seen at slightly above 90.0 mb/d.

In the OECD, demand was revised lower by 0.5 mb/d m-o-m, to show an estimated decline of around 5.3 mb/d in 2020. The latest announcements by various governments in Europe, such as France, Germany and the UK, introducing curfews and partially or fully shutting down hospitality services — including banning restaurants and encouraging teleworking — are estimated to adversely impact demand throughout the remainder of 2020. In OECD Americas, adjustments were made to reflect lower-than-expected demand in the transportation sector in 3Q20, as well as a continuation of a slower demand recovery in 4Q20.

In the non-OECD, demand was revised higher by 0.2 mb/d compared with last month, to show an estimated decline of around 4.5 mb/d in 2020. The positive momentum witnessed in China in 3Q20 and expectation for similar performance throughout the rest of 2020 instigated the upward adjustment. China's demand was supported by rebounding economic activity, including improving industrial activity indicators and growth in the petrochemical sector. In India and Other Asia, oil demand estimates remain as noted in the previous month's report, showing some degree of stabilization.

In 2021, oil demand was revised lower by 0.3 mb/d compared with the previous month's estimates. Global demand is now foreseen rising by 6.2 mb/d. Total global demand is estimated to reach 96.3 mb/d. The downward revision takes into account the m-o-m adjusted economic outlook in the OECD region due to recent developments regarding COVID-19 measures. As a result, the oil demand recovery will be severely hampered and sluggishness in transportation and industrial fuel demand is now assumed to last until mid-2021.

All petroleum products are forecast to increase y-o-y, with gasoline projected to record the highest gains, followed by diesel, amid a steep decline in transportation fuel consumption in 2020 and an improved economic outlook for 2021. Jet fuel is estimated to increase y-o-y, however, developments in the aviation sector will lag behind 2019 levels amid an assumed reduction in international and domestic flight traffic due to uncertainty around COVID-19 pandemic developments. In terms of regions, OECD Americas is projected to lead demand growth next year, mainly as transportation fuel bounces back to growth territory. Meanwhile, in China and India, transportation fuel is anticipated to be the driver for demand growth, in addition to petrochemical feedstock and industrial fuel.

Finally, risks remain with regard to oil demand going forward. Ongoing developments in the COVID-19 pandemic will continue to dominate a recovery amid the latest news relating to a potential imminent vaccine. The structural impact of the pandemic on various sectors, especially the transportation sector, will linger well into 2021. Also, developments in labor markets, potential new policies governing the energy sector, as well as the effectiveness of the large scale monetary and fiscal stimulus measures will determine the strength of the rebound in economic activities in the year to come.

## 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	%
<b>World oil demand</b>								
<b>Americas</b>	25.70	24.34	20.03	23.47	24.30	23.04	-2.66	-10.35
<i>of which US</i>	20.86	19.66	16.38	19.32	19.98	18.84	-2.03	-9.71
<b>Europe</b>	14.25	13.35	11.01	12.89	12.23	12.37	-1.88	-13.22
<b>Asia Pacific</b>	7.79	7.75	6.54	6.52	7.33	7.03	-0.76	-9.71
<b>Total OECD</b>	<b>47.75</b>	<b>45.44</b>	<b>37.59</b>	<b>42.87</b>	<b>43.86</b>	<b>42.44</b>	<b>-5.30</b>	<b>-11.10</b>
<b>China</b>	13.30	10.70	12.85	12.97	13.58	12.53	-0.77	-5.79
<b>India</b>	4.84	4.77	3.51	3.55	4.34	4.04	-0.80	-16.53
<b>Other Asia</b>	9.02	8.23	7.79	8.33	8.70	8.26	-0.76	-8.42
<b>Latin America</b>	6.59	6.11	5.61	6.17	6.08	5.99	-0.60	-9.11
<b>Middle East</b>	8.20	7.88	6.91	7.88	7.50	7.54	-0.66	-8.00
<b>Africa</b>	4.45	4.37	3.77	3.97	4.20	4.08	-0.37	-8.32
<b>Eurasia</b>	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
<b>Total Non-OECD</b>	<b>52.02</b>	<b>47.27</b>	<b>45.02</b>	<b>48.12</b>	<b>49.81</b>	<b>47.57</b>	<b>-4.45</b>	<b>-8.56</b>
<b>Total World</b>	<b>99.76</b>	<b>92.71</b>	<b>82.60</b>	<b>90.99</b>	<b>93.67</b>	<b>90.01</b>	<b>-9.75</b>	<b>-9.78</b>
<b>Previous Estimate</b>	99.76	92.68	82.58	90.99	94.86	90.29	-9.47	-9.49
<b>Revision</b>	0.00	0.03	0.02	0.00	-1.19	-0.28	-0.28	-0.28

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	%
<b>World oil demand</b>								
<b>Americas</b>	23.04	24.30	25.18	24.49	24.77	24.69	1.65	7.17
<i>of which US</i>	18.84	19.85	20.56	19.99	20.32	20.18	1.34	7.13
<b>Europe</b>	12.37	13.15	13.68	13.64	12.51	13.25	0.88	7.10
<b>Asia Pacific</b>	7.03	7.80	7.38	7.04	7.55	7.44	0.41	5.81
<b>Total OECD</b>	<b>42.44</b>	<b>45.25</b>	<b>46.24</b>	<b>45.17</b>	<b>44.83</b>	<b>45.38</b>	<b>2.94</b>	<b>6.92</b>
<b>China</b>	12.71	12.31	13.87	14.40	14.63	13.81	1.10	8.67
<b>India</b>	4.04	4.89	4.19	4.36	4.99	4.61	0.57	14.02
<b>Other Asia</b>	8.26	8.33	8.96	8.79	8.84	8.73	0.47	5.66
<b>Latin America</b>	5.99	6.21	6.27	6.37	6.31	6.29	0.30	5.00
<b>Middle East</b>	7.54	8.07	7.64	8.19	7.75	7.91	0.37	4.89
<b>Africa</b>	4.08	4.46	3.95	4.17	4.39	4.24	0.17	4.05
<b>Eurasia</b>	4.94	5.43	5.17	5.14	5.35	5.28	0.34	6.85
<i>of which Russia</i>	3.23	3.57	3.37	3.37	3.38	3.42	0.19	6.02
<i>of which Other Eurasia</i>	1.71	1.86	1.81	1.77	1.97	1.85	0.14	8.43
<b>Total Non-OECD</b>	<b>47.57</b>	<b>49.71</b>	<b>50.06</b>	<b>51.43</b>	<b>52.26</b>	<b>50.88</b>	<b>3.31</b>	<b>6.96</b>
<b>Total World</b>	<b>90.01</b>	<b>94.96</b>	<b>96.30</b>	<b>96.61</b>	<b>97.09</b>	<b>96.26</b>	<b>6.25</b>	<b>6.94</b>
<b>Previous Estimate</b>	90.29	95.43	96.98	96.60	98.28	96.84	6.54	7.25
<b>Revision</b>	-0.28	-0.47	-0.68	0.00	-1.19	-0.58	-0.30	-0.31

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

Source: OPEC.

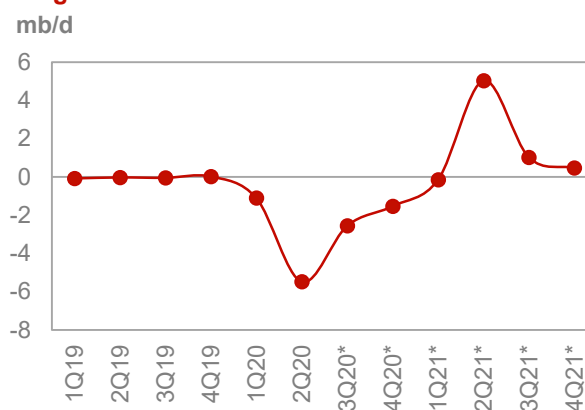
## OECD

### OECD Americas

#### Update on the latest developments

Lower-than-expected demand for gasoline during summer driving season in the US has negatively impacted the overall demand recovery in OECD Americas. In **August**, OECD Americas petroleum product consumption shrunk by 4.2 mb/d y-o-y, nearly 0.5 mb/d less than July's decline, predominantly attributed to sluggish transportation fuel performance during the summer peak driving season. Diesel also registered strong declines, as both industrial diesel and heating fuel demand worsened over July levels. Demand slowed further in Canada m-o-m, recording a nearly 1.0 mb/d drop y-o-y compared with a decline of 0.70 mb/d y-o-y in July. On the other hand, Mexican oil demand improved m-o-m to record a drop of 0.3 mb/d y-o-y in August compared with a decline of 0.4 mb/d y-o-y in July.

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



Note: \* 3Q20-4Q21 = Forecast. Source: OPEC.

Stagnation in transportation fuel recovery halted improvements in **US** oil demand in August. Both gasoline and jet fuel dropped by as much as 2.1 mb/d y-o-y compared with a decline of around 2.0 mb/d y-o-y in July. Various indicators were in line with a slow transportation fuel recovery, one of which is the vehicle miles travelled indicator, which showed a drop of 12.3% y-o-y compared with a drop of 11.2% y-o-y in July, according to the Federal Highway Administration. Increases in COVID-19 infection cases reduced mobility, particularly during the traditional summer driving season. On the other hand, the labour market showed signs of recovery. The latest September data showed an increase in the unemployment rate to stand at 7.9%, after recording 8.4% in August. This shows a continuous improvement from peak unemployment levels reached in April, when they stood at 14.7%. The aviation sector remained in the doldrums, affected by a reduction in international and domestic flights compared with last year. Tourism industry data exemplify the negative impact of COVID-19 on the US tourism industry. The US tourism arrival indicator, as reported by the National Travel and Tourism Office was steeply down by nearly 91% y-o-y in August, indicating a massive decline in international air traffic. Diesel weakened y-o-y by 0.4 mb/d, some 0.06 mb/d lower m-o-m, matching slower macroeconomic indicators. Consumer confidence, for example, as measured by the Conference Board, recorded 86.3 in August, compared with 92.6 in July. US industrial sector activity retracted again, falling by 7.9% y-o-y in August, compared with a decline of 7.6% y-o-y in July.

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

By product	Aug 20	Aug 19	Change 2020/19	
			mb/d	%
LPG	2.63	2.61	0.02	0.9
Naphtha	0.20	0.23	-0.03	-12.3
Gasoline	8.51	9.83	-1.33	-13.5
Jet/kerosene	1.03	1.84	-0.82	-44.3
Diesel oil	3.66	4.03	-0.37	-9.1
Fuel oil	0.31	0.33	-0.02	-7.3
Other products	2.40	2.58	-0.18	-7.1
<b>Total</b>	<b>18.73</b>	<b>21.45</b>	<b>-2.72</b>	<b>-12.7</b>

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

Sources: EIA and OPEC.

#### Near-term expectations

For the remainder of **2020**, partial and localized lockdowns may be necessary to minimize the spread of COVID-19, adversely affecting transportation fuel demand. However, further announcements of lockdown measures will impair demand more than currently assumed and are a major downside uncertainty factor for

the remainder of 2020 and 1H21. That said, oil demand is estimated to decline in 4Q20 and only turn to growth in 2021. Gasoline and jet fuel are estimated to be under pressure despite recent improvements in labour market data, while some support from light distillates is estimated to continue going forward.

In **2021**, stimulus measures are estimated to help economic activity rebound, hence oil consumption is estimated to increase y-o-y. However, large uncertainties will remain across various sectors, particularly the transportation sector, in line with developments towards a permanent solution to COVID-19, in addition to developments in the labour market. Petrochemical feedstock is estimated to provide strong support for demand growth in 2021.

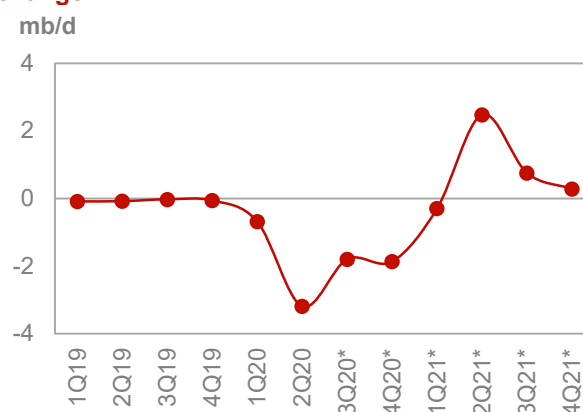
## OECD Europe

### Update on the latest developments

Similar to OECD Americas, petroleum product demand in OECD Europe posted steeper declines in **August** compared with July. The oil demand recovery momentum stalled in August and was 0.2 mb/d lower m-o-m, to show a decline of 2.2 mb/d y-o-y. The big four consuming countries in OECD Europe have all dropped sharply, with Germany registering the steepest decline of 0.53 mb/d, followed by the UK with 0.29 mb/d, France by 0.25 mb/d and Italy by 0.13 mb/d y-o-y. Looking at the product mix, transportation fuel remained a major drag on demand recovery. Jet fuel declined by over 1.0 mb/d y-o-y, similar to the previous month's levels, while the drop in gasoline demand exceeded 0.10 mb/d y-o-y after dropping by 0.09 mb/d y-o-y in July.

New vehicle registrations, according to the Association des Constructeurs Européens d'Automobiles and Haver analytic, showed an accelerated drop of 27.3% y-o-y in August compared with a fall of 17.8% y-o-y in July. Diesel shed 0.6 mb/d y-o-y, nearly 0.2 mb/d lower than July levels, with stagnating macroeconomic indicators. August unemployment numbers from Eurostat point to a modest increase in unemployment to 8.1% from 8.0% in July. Industrial production showed some improvement in prior months, declining by 7.8% y-o-y in July, after a dropping by 11.7% y-o-y in June. Initial oil demand data for **September** show relatively improving momentum in the big four consuming countries, apart from the UK. Demand in the big four is assumed to have declined by around 1.0 mb/d y-o-y compared with a 1.2 mb/d y-o-y decline in August.

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



Note: \* 3Q20-4Q21 = Forecast. Source: OPEC.

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

By product	Aug 20	Aug 19	Change 2020/19	
			mb/d	%
LPG	0.37	0.40	-0.03	-7.9
Naphtha	0.45	0.53	-0.08	-15.0
Gasoline	1.11	1.20	-0.09	-7.6
Jet/kerosene	0.39	0.93	-0.54	-58.3
Diesel oil	2.89	3.21	-0.32	-9.9
Fuel oil	0.16	0.21	-0.05	-24.3
Other products	0.53	0.61	-0.08	-13.0
<b>Total</b>	<b>5.91</b>	<b>7.10</b>	<b>-1.19</b>	<b>-16.8</b>

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 outlook for the region's oil demand in **2020** was adjusted lower due to governments re-imposing strict lockdowns impacting 4Q20 oil consumption estimates. Many European countries, such as France, Germany and the UK are facing a second wave of COVID-19 infections, despite lower fatality rates. According to the European Centre for Disease Prevention and Control (ECDC), while COVID-19 infection cases are rising in

the UK, France, Spain, Germany and other European countries, deaths are not rising at the same rate. Some economic sectors, especially hospitality, are partially or fully closing down, and that will have a negative impact on petroleum product consumption. Additionally, low leisure and travel activity will weigh on transportation fuel consumption going forward. This, together with the continuation of an escalation in COVID-19 cases, causes further downside risk to this year and next year's projections.

For **2021**, oil consumption is anticipated to increase y-o-y. However, the 1H21 outlook was revised lower, in line with an expected delay in the transportation fuel recovery amid re-imposed lockdown measures and a lower economic outlook for the region compared with last month. Generally, the still positive economic outlook for OECD Europe will support rising oil demand next year, following historically low consumption this year. Rising COVID-19 infection cases with no permanent solution will increase downside uncertainties, while high debt-related issues, as well as Brexit, will also hinder oil demand growth potential.

## OECD Asia Pacific

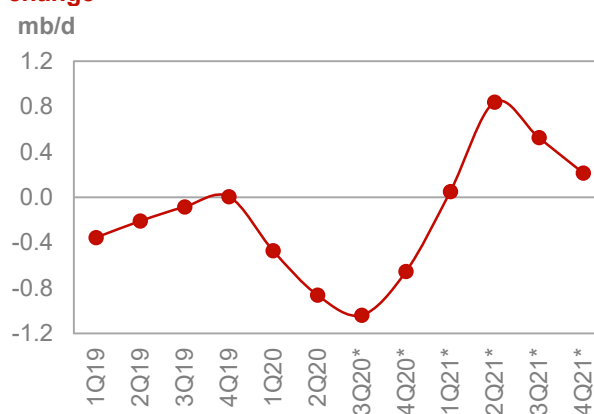
### Update on the latest developments

In OECD Asia Pacific, South Korea led declines in oil demand in **August**, dropping by a significant 0.37 mb/d y-o-y while the whole of OECD Asia Pacific posted a drop of 0.9 mb/d y-o-y. A reduction in light distillate requirements in South Korea mainly dominated those declines, as naphtha consumption fell by 0.17 mb/d y-o-y after declining by more than 0.12 mb/d in July. An increase in steam cracker-scheduled maintenance activities and somewhat weaker naphtha margins compared with prior months contributed to a reduction in naphtha demand. A similar picture can be drawn in Japan, where demand for petrochemical feedstock faced a declining trend amid steam cracker-planned maintenance. Naphtha demand in Japan fell by around 0.06 mb/d y-o-y.

Looking into other petroleum product performance, transportation fuel was also a drag on oil demand requirements in OECD Asia Pacific, as both gasoline and jet fuel declined by more than 0.4 mb/d y-o-y, with most of these declines appearing in Australia. Momentum is anticipated to remain sluggish throughout the remainder of the year in light of slower economic activity in the region. In Australia, consumption also fell by 0.22 mb/d y-o-y compared with a drop of 0.20 mb/d in July.

Initial data for the month of **September**, as reported by Japan's Ministry of Economy, Trade and Industry (MITI), indicate an accelerated decline m-o-m, with consumption dropping by 0.35 mb/d y-o-y compared with a 0.29 mb/d y-o-y fall in August.

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



Note: \* 3Q20-4Q21 = Forecast. Source: OPEC.

**Table 4 - 5: Japan's domestic sales, mb/d**

By product	Sep 20	Sep 19	Change 2020/19	
			mb/d	%
LPG	0.28	0.25	0.03	10.8
Naphtha	0.68	0.70	-0.02	-3.0
Gasoline	0.85	0.91	-0.07	-7.2
Jet/kerosene	0.25	0.39	-0.13	-34.5
Diesel oil	0.69	0.75	-0.06	-7.7
Fuel oil	0.20	0.23	-0.03	-11.9
Other products	0.29	0.36	-0.07	-18.5
<b>Total</b>	<b>3.25</b>	<b>3.59</b>	<b>-0.34</b>	<b>-9.6</b>

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

Sources: JODI, METI and OPEC.

## Near-term expectations

For the remainder of **2020**, oil demand is estimated to continue showing y-o-y declines, despite fiscal and monetary stimulus measures. Additionally, potential localized lockdown measures may hinder an oil demand recovery going into 4Q20 and 1H21.

For **2021**, oil demand in OECD Asia Pacific is estimated to grow for the first time in seven years. The low consumption recorded during the current year, coupled with improving economic momentum, are estimated to support a demand rise next year. However, risks are currently estimated to be to the downside, in line with COVID-19 pandemic developments. Oil demand is projected to be led by a y-o-y healthier petrochemical industry and positive momentum in the industrial sector. Similar to other regions, jet fuel requirements in the aviation sector do not match pre-COVID-19 levels, due to a reduced appetite for international business and leisure travel.

## Non-OECD

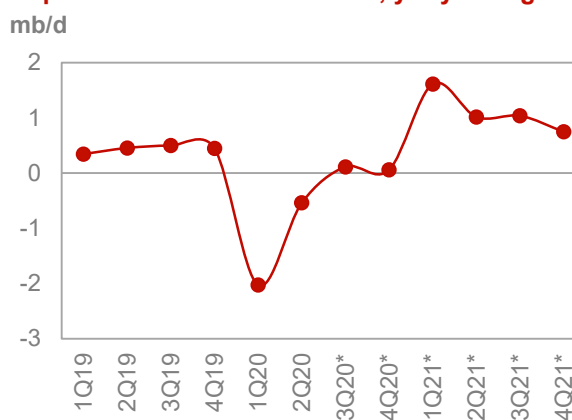
### China

#### Update on the latest developments

Oil demand has been recovering firmly since April of the current year. Unlike other regions, 3Q20 oil demand data showed y-o-y growth every month. This necessitated an upward revision to Chinese oil demand data in 2H20.

Various sectors within the economy continued to progress positively, lending support to oil demand. In **September**, oil demand increased by more than 0.22 mb/d y-o-y, though that's nearly 0.17 mb/d lower than August's growth. Light distillates continued to record steady growth; LPG added 0.05 mb/d y-o-y while naphtha posted stronger gains of more than 0.1 mb/d y-o-y. The petrochemical sector strongly supported oil demand recovery since lockdown measures were lifted back at the end of March and early April. Demand for polypropylene edged higher post COVID-19 restriction measures, which in turn supported increased propylene dehydrogenation plant (PDH) utilization rates. Together with the additional PDH capacity seen over the past years, as well as healthy petrochemical margins, light distillate consumption is foreseen supported going forward.

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



Note: \* 3Q20-4Q21 = Forecast. Source: OPEC.

Globally, transportation fuel has been a key contributor to oil demand decline amid mobility and travel restrictions, and is also a major fuel in the recovery process. In China, gasoline, remained increasing for the third consecutive month, recording a 0.06 mb/d rise y-o-y in September. Support stemmed from improving miles travelled as well as encouraging vehicle sales. The latter have increased by 11.8% y-o-y in September, taking the 3Q20 rise in vehicle sales up to 13.8% y-o-y compared with an increase of 9.3% y-o-y in 2Q20, according to China's association of automobile manufacturers. Jet fuel remained in the negative zone amid reduced international travel, 0.08 mb/d lower y-o-y. Diesel, on the other hand, rose by 0.08 mb/d y-o-y in September, in line with improving manufacturing activities, as illustrated by the manufacturing PMI. The PMI posted 51.5 points in September compared with 51.0 in August, highlighting an ongoing expansion in manufacturing activities.



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

By product	Sep 20	Sep 19	Change 2020/19	
			mb/d	%
LPG	2.17	2.11	0.06	2.6
Naphtha	1.15	1.01	0.14	14.4
Gasoline	3.44	3.38	0.06	1.8
Jet/kerosene	0.84	0.92	-0.08	-8.7
Diesel oil	3.40	3.32	0.08	2.3
Fuel oil	0.44	0.45	-0.01	-1.6
Other products	1.75	1.78	-0.03	-1.5
<b>Total</b>	<b>13.19</b>	<b>12.96</b>	<b>0.22</b>	<b>1.7</b>

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

Economic activity has been recovering in China and is estimated to continue improving for the rest of **2020**. COVID-19 has been contained well so far in the country, promoting a quick recovery in oil demand data, coupled with fiscal and monetary stimulus programmes lending further support to petroleum product demand. Currently, oil demand projections assume a continuation of the economic recovery, with the possibility of oil demand flipping into positive territory highly depending on actual 4Q20 data. Petrochemical feedstock, LPG and naphtha, as well as industrial fuel, will be important to monitor going forward.

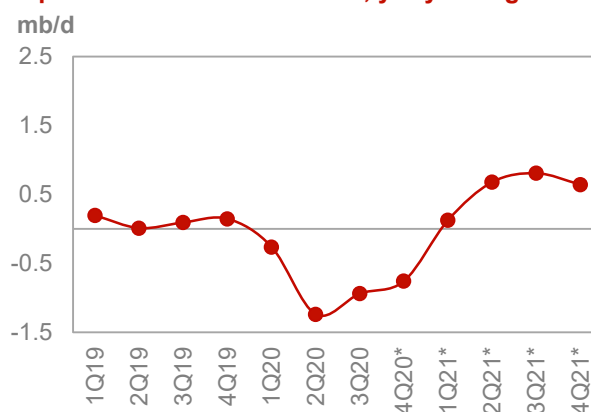
In **2021**, economic momentum is estimated to improve compared with 2020, with the GDP rising by 6.9%, providing strong support to oil demand growth next year. Following a historic drop in the current year, oil demand is estimated to recover in 2021, with transportation fuel anticipated to lead growth. Transportation fuel is assumed to be supported by an expansion in vehicle sales coupled with improved miles travelled compared with 2020. Jet fuel is estimated to recover more slowly than other fuels and will not reach 2019 levels due to reductions in leisure and business travel.

## India

### Update on the latest developments

Oil demand recovered swiftly in **September**, as data showed a drop of only 0.14 mb/d y-o-y compared with a decline of more than 0.7 mb/d in August, down 0.50 mb/d y-o-y for July. A further easing of lockdown measures supported an upward trend in oil requirements. When compared with August data, a noticeable improvement can be observed across all petroleum products, especially diesel and naphtha. Looking at the product mix, jet/kerosene remained in negative territory, dropping by around 0.1 mb/d y-o-y in September, indicating a struggle in the aviation sector, coupled with a reduction in kerosene demand in household usage in lieu of LPG, which posted an increase of 0.04 mb/d y-o-y. Gasoline demand flipped into positive for the first time since February, recording gains of 0.02 mb/d y-o-y, compared with a y-o-y decline of 0.05 mb/d in August.

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



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

As more people chose to use private cars to travel to and from work rather than using public transport, demand for gasoline inched higher, together with higher passenger vehicle sales, which rose by 35% y-o-y in September, supporting gasoline demand. Naphtha demand also inched up in August, recording a gain of around 0.01 mb/d y-o-y and was significantly higher than the decline registered in August by more than 0.10 mb/d. Generally positive developments in the overall economy were reflected in petrochemical feedstock demand and margins. Diesel demand jumped by more than 0.20 mb/d m-o-m, though it continued to be lower on a y-o-y basis by 0.08 mb/d. Demand was supported by a further easing of lockdown measures, leading to

an improvement in economic activity. Industrial activity improved significantly, as the manufacturing PMI recorded 56.8 points in September compared with 52.0 in August.

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

By product	Sep 20	Sep 19	Change 2020/19	
			mb/d	%
LPG	0.97	0.93	0.04	4.3
Naphtha	0.29	0.28	0.01	3.8
Gasoline	0.74	0.72	0.02	3.1
Jet/kerosene	0.12	0.21	-0.09	-43.7
Diesel oil	1.59	1.67	-0.08	-4.9
Fuel oil	0.20	0.21	-0.01	-4.4
Other products	0.72	0.75	-0.03	-4.2
<b>Total</b>	<b>4.63</b>	<b>4.77</b>	<b>-0.14</b>	<b>-2.9</b>

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

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

### Near-term expectations

For **2020**, the first signs of positive development emerged in September and it will remain to be seen if they will continue to improve given the challenges facing the Indian economy in terms of still high COVID-19 infection cases, high unemployment and the size of stimulus measures currently in place. For now, oil demand is estimated to be in negative territory for the remainder of the year, pressured by economic woes, decreases in transportation fuel and slower manufacturing momentum compared with 2019. The transportation, construction and tourism sectors are anticipated to be most affected by COVID-19 in 2020.

In **2021**, in light of an anticipated robust rebound in economic activity, oil demand is projected to bounce back swiftly. This rise is a reflection of positive policy measures promoting increases in private consumption and investment. Together with the 2020 baseline decline, oil demand is projected to record historical increases in 2021. Demand for transportation fuel will lead product demand, followed by middle distillates.

### Update on the latest developments in Other Asia

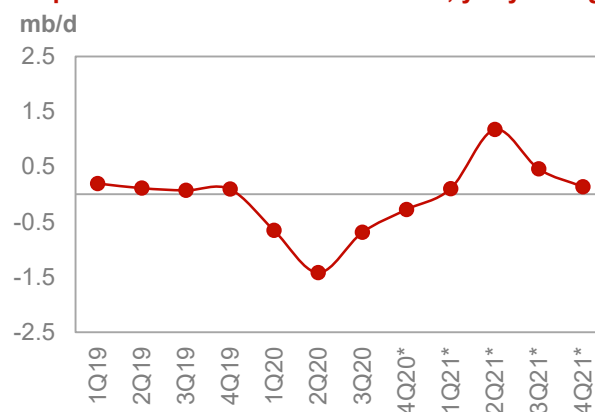
In Other Asia, oil demand has been hovering around an average monthly decline of 0.85 mb/d for the past three months. In August, demand fell by around 0.86 mb/d y-o-y, led by steep drop in transportation fuel requirements, particularly jet fuel. Jet fuel showed no significant improvement m-o-m, while gasoline also remained in negative territory, though marginally improving from July levels. Industrial fuel, as well as petrochemical feedstock, declined considerably in light of slower economic momentum. The diesel decline accelerated in August compared with July, as momentum and economic activity struggled to recover. Most of diesel's weakness appeared in Malaysia, where industrial production indicators fell to 0.17% y-o-y in August from 1.14% y-o-y in July, according to the Department of Statistics of Malaysia and Haver Analytics.

In terms of countries, demand declined most in Indonesia and Singapore, with some improvement m-o-m. Both countries dropped by around 0.22 mb/d y-o-y each in August compared with a 0.40 mb/d y-o-y drop in July. On the other hand, in Malaysia and the Philippines, oil demand deteriorated further in August m-o-m as both countries dropped by around 0.32 mb/d y-o-y in August compared with a 0.26 mb/d y-o-y decline in July.

### Near-term expectations

Looking ahead, oil demand is anticipated to continue declining for the remainder of **2020**. Malaysia, Indonesia, Singapore and the Philippines are to account for the bulk of this decline, while other countries in the region are expected to experience weakness in petroleum product consumption in 2020.

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



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

The transportation sector is expected to lead oil demand growth in Other Asia in **2021**. Gasoline is assumed to be an important product for transportation sector consumption growth, followed by on-road diesel. Transportation fuel demand will be determined by the degree of recovery in economic activity and the level of decline in 2020.

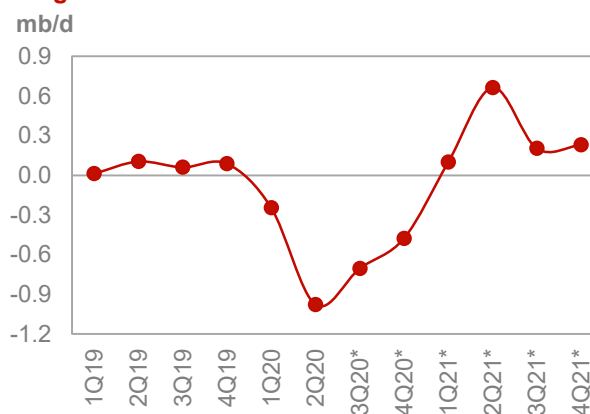
## Latin America

### Update on the latest developments

In **August**, oil demand remained steeply in the negative zone, recording marginal improvement compared with July's decline. Oil demand fell by around 0.45 mb/d y-o-y, around 0.04 mb/d compared with July's drop. Demand declined most in Brazil, followed by Argentina, with the latter exhibiting slight improvement m-o-m.

**September** Brazilian oil demand increased by more than 0.20 mb/d m-o-m and showed a marginal decline of 0.03 mb/d compared with the same period last year. Developments in the transportation sector were encouraging, as the number of light vehicles on toll roads increased by more than 6% m-o-m, while heavy vehicles rose by nearly 3% m-o-m. Additionally, gasoline consumption posted gains for the first time since March. On the other hand, ethanol continued to decline. Gasoline recorded gains of around 0.01 mb/d y-o-y. Conversely, ethanol recorded a decline of 0.04 mb/d y-o-y. Diesel gained momentum and moderated its decline, as consumption was higher by more than 0.07 mb/d y-o-y, supported by trucking demand.

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



Note: \* 2Q20-4Q20 = Forecast. Source: OPEC.

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

By product	Sep 20	Sep 19	Change 2020/19	
			mb/d	%
LPG	0.24	0.23	0.01	4.1
Naphtha	0.14	0.15	-0.01	-4.1
Gasoline	0.66	0.65	0.01	1.2
Jet/kerosene	0.05	0.12	-0.07	-58.9
Diesel oil	1.10	1.03	0.07	7.1
Fuel oil	0.06	0.07	-0.01	-10.7
Other products	0.42	0.45	-0.04	-8.0
<b>Total</b>	<b>2.66</b>	<b>2.69</b>	<b>-0.03</b>	<b>-1.1</b>

Note: \* = Inland deliveries. Totals may not add up due to independent rounding.

Sources: JODI, Agencia Nacional do Petroleo, Gas Natural e Biocombustiveis and OPEC.

### Near-term expectations

For the remainder of **2020**, Latin America's oil demand is expected to weaken y-o-y, with some gradual recovery towards the end of year. COVID-19 is expected to distress oil demand potential in 4Q20 and result in less transportation fuel demand and slower economic activity compared with last year. Gasoline and jet fuel are estimated to be affected the most, in addition to diesel.

In **2021**, oil demand in Latin America is anticipated to increase y-o-y in line with an improved economic outlook. It is expected to record the highest level of annual growth in the past seven years. All countries are projected to record growth, with Brazil leading the region. In terms of petroleum product projections, diesel is assumed to account for most of the gains, followed by transportation fuel. The greatest increase in oil requirements is estimated to be witnessed in 2Q21, the result of a steep base year decline in 2Q20.

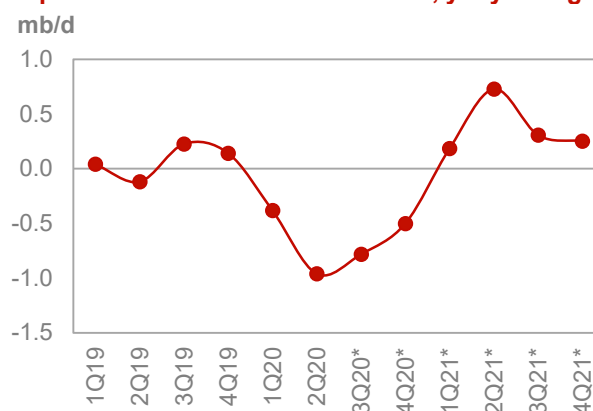
## Middle East

### Update on the latest developments

Despite easing of lockdown mobility restriction measures in the Middle East, oil demand lagged behind any significant recovery, as seen in the latest available data. In **August**, oil demand shrunk by 0.68 mb/d y-o-y, nearly matching the same level of decline registered in July, hence no significant recovery trend has been observed. It's worth highlighting that this level of decline is higher than that registered in June by 0.14 mb/d. Transportation fuel remains most affected, with both jet fuel and gasoline falling by around 0.38 mb/d y-o-y, collectively. Reduced international flights, and to a lesser extent domestic flights, have contributed negatively to the jet fuel recovery, with numbers lower than the declines registered in July by nearly 0.03 mb/d. Additionally, gasoline weakened by 0.15 mb/d y-o-y in August, though showing some slight improvement from July's registered declines. Looking at industrial fuel, the picture was mixed between industrial diesel and fuel oil. While diesel requirements improved m-o-m in light of an uptick in construction and trucking activities, particularly in Saudi Arabia, fuel oil dropped further, registering a fall of 0.33 mb/d y-o-y, some 0.15 mb/d lower than July's decline. This despite experiencing the summer air-conditioning season which supported an uptick in direct crude consumption by more than 0.1 mb/d y-o-y. In terms of countries, Saudi Arabia posted the steepest decline of 0.26 mb/d y-o-y, followed by Iraq with a drop of around 0.20 mb/d y-o-y then IR Iran with a decline of 0.09 mb/d y-o-y.

In **September**, oil demand fell by more than 0.2 mb/d y-o-y in Saudi Arabia, up by 0.03 mb/d compared with August. Transportation fuel remained lagging, despite an easing of mobility restrictions; jet fuel and gasoline fell by 0.07 mbd and 0.08 mb/d, y-o-y, respectively. Diesel and fuel oil declined by more than 0.06 mb/d y-o-y each. In Iraq, September oil demand data also posted a drop of around 0.18 mb/d, around 0.02 mb/d higher than August's decline.

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



Note: \* 3Q20-4Q21 = Forecast. Source: OPEC.

**Table 4 - 9: Saudi Arabia oil demand, mb/d**

By product	Sep 20	Sep 19	Change 2020/19	
			mb/d	%
LPG	0.05	0.04	0.00	10.6
Naphtha	0.00	0.01	-0.01	-100.0
Gasoline	0.48	0.57	-0.09	-15.1
Jet/kerosene	0.03	0.10	-0.07	-71.6
Diesel oil	0.52	0.59	-0.06	-11.0
Fuel oil	0.60	0.66	-0.06	-9.0
Other products	0.69	0.63	0.06	9.6
<b>Total</b>	<b>2.38</b>	<b>2.61</b>	<b>-0.23</b>	<b>-8.7</b>

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

Sources: JODI and OPEC.

### Near-term expectations

For the remainder of **2020**, oil demand is expected to continue falling y-o-y, while exhibiting some improvement in the level of decline. The risk of a resurgence of COVID-19 cases is still high, particularly in Saudi Arabia, where infection cases are stabilizing at lower levels than highs seen in 2Q20. Additionally, positive developments in infrastructure projects, together with improving requirements for power generation, are estimated to lend support to industrial fuels going forward.

In **2021**, as the economic outlook is foreseen to recover from the current year decline, coupled with the estimated historically low 2020 baseline, oil demand is expected to record gains. In terms of products, middle distillates are projected to return to solid growth.

## World Oil Supply

The non-OPEC liquids production forecast for 2020 was revised down by 0.06 mb/d from the previous month's assessment and is now estimated to contract by 2.43 mb/d, owing to downward revision in the US due to production outages in the GoM following two hurricanes in October, as well as the lower-than-expected output in Norway, the UK, and Mexico. Following a drastic decline of 5.74 mb/d in 2Q20 q-o-q, non-OPEC supply in 3Q20 rose by 0.62 mb/d q-o-q, as shut-in wells in the US lower-48 onshore fields were reactivated. Since 18 September, drillers have added 47 oil rigs for seven consecutive weeks to reach 226 rigs in the week ended 6 November. In August, US crude oil production in the Lower-48 onshore fields rose by 57 tb/d to average 8.93 mb/d, while total crude output - including offshore - dropped by 0.4 mb/d m-o-m to average 10.58 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, Guyana and Australia.

The non-OPEC liquids production forecast for 2021 was adjusted up by 0.06 mb/d is now expected to grow by 0.95 mb/d, mainly due to upward revisions in Oman and China. US liquids supply was revised up by 12 tb/d and is forecast to grow by 0.30 mb/d, as uncertainties regarding sufficient well completions and upstream spending levels prevail. The main drivers for supply growth are expected to be the US, Canada, Brazil, Norway, Ecuador, Qatar, Oman and Guyana. 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 was revised down by 0.03 mb/d, and is now estimated to decline by 0.13 mb/d y-o-y to average 5.13 mb/d. For 2021, it is forecast to grow by 0.08 mb/d y-o-y, to average 5.21 mb/d, revised down by 0.02 mb/d compare to the previous forecast.

OPEC-13 crude oil production in October was up by 0.32 mb/d m-o-m to average 24.39 mb/d, according to secondary sources. Preliminary non-OPEC liquids output in October, including OPEC NGLs, is estimated to have increased by 0.25 mb/d m-o-m to average 66.79 mb/d, lower by 4.35 mb/d y-o-y. As a result, preliminary data indicates that global oil supply rose in October by 0.58 mb/d m-o-m to average 91.17 mb/d, down by 9.25 mb/d y-o-y.

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

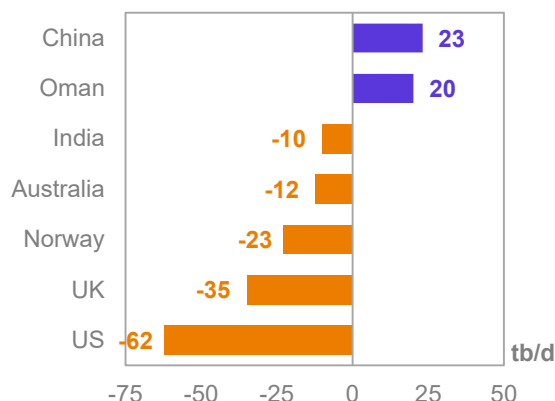
Non-OPEC liquids production	2020	Change 2020/19	2021	Change 2021/20
<b>Americas</b>	24.71	-1.06	25.22	0.51
<i>of which US</i>	17.71	-0.72	18.01	0.30
<b>Europe</b>	3.91	0.20	4.04	0.13
<b>Asia Pacific</b>	0.54	0.02	0.53	-0.02
<b>Total OECD</b>	<b>29.17</b>	<b>-0.84</b>	<b>29.80</b>	<b>0.63</b>
<b>China</b>	4.15	0.10	4.15	0.00
<b>India</b>	0.79	-0.04	0.79	0.00
<b>Other Asia</b>	2.52	-0.19	2.51	-0.01
<b>Latin America</b>	6.20	0.14	6.45	0.25
<b>Middle East</b>	3.16	-0.04	3.22	0.06
<b>Africa</b>	1.46	-0.07	1.40	-0.06
<b>Eurasia</b>	13.22	-1.29	13.18	-0.05
<i>of which Russia</i>	10.35	-1.09	10.36	0.01
<i>of which other Eurasia</i>	2.87	-0.20	2.82	-0.05
<b>Total Non-OECD</b>	<b>31.50</b>	<b>-1.40</b>	<b>31.69</b>	<b>0.19</b>
<b>Total Non-OPEC production</b>	<b>60.66</b>	<b>-2.23</b>	<b>61.48</b>	<b>0.82</b>
<b>Processing gains</b>	2.07	-0.19	2.20	0.13
<b>Total Non-OPEC liquids production</b>	<b>62.73</b>	<b>-2.43</b>	<b>63.68</b>	<b>0.95</b>

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

## Main monthly revisions

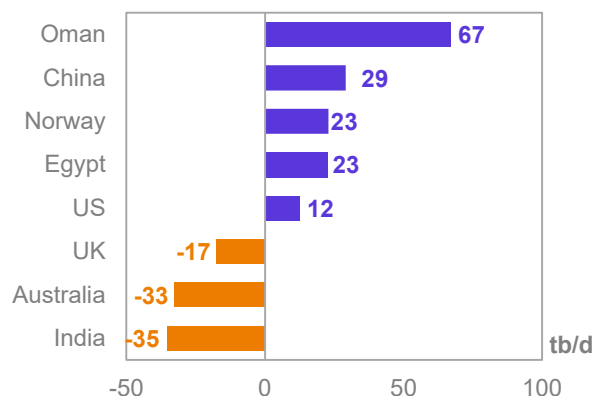
**Non-OPEC liquids supply growth in 2020** was revised down by minor 0.06 m-o-m and is now forecast to contract by 2.43 mb/d (including processing gains), to average 62.73mb/d. This was mainly due to the lower-than-expected production in 3Q20 in Norway, the US, and the UK. However, these downward adjustments were largely offset by increases seen in Oman, China, other OECD Europe, Bahrain and Brazil. For 4Q20, the supply forecast for the UK, Australia, India, and OPEC NGLs was revised down, while Oman and China saw upward revisions.

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



Note: \* 2020 = Forecast. Source: OPEC.

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



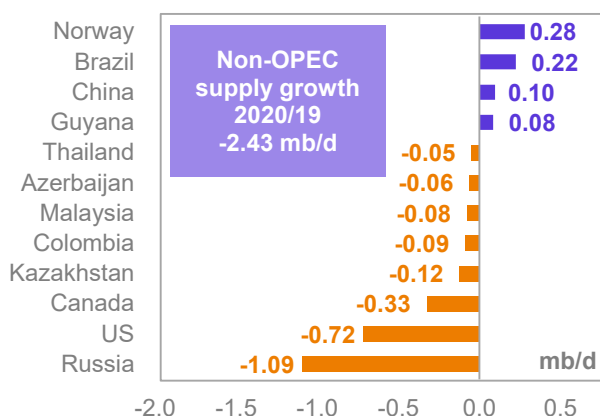
Note: \* 2021 = Forecast. Source: OPEC.

Conversely, **non-OPEC liquids supply growth in 2021** was revised up by a minor 0.06 mb/d m-o-m and is now forecast to see growth of 0.95 mb/d (including processing gains), to average 63.68 mb/d. The liquids supply forecast for India, Australia and the UK was revised down, while the supply forecast for Oman, China, Norway, Egypt and the US, was revised up.

## Key drivers of growth and decline

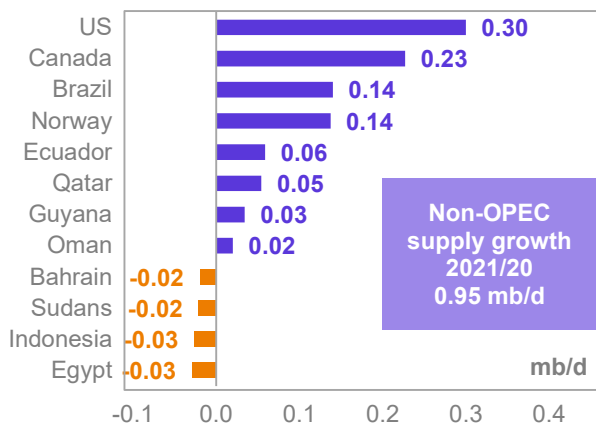
The countries showing the largest non-OPEC liquids supply declines in **2020** are expected to be Russia, the US, Canada, Kazakhstan, Colombia, Malaysia, Azerbaijan and Thailand, while increases in oil production growth are expected mainly in Norway, Brazil, China and Guyana.

**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 Egypt, Indonesia, the Sudans and Bahrain 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	%
<b>Americas</b>	25.77	26.59	23.56	24.20	24.49	24.71	-1.06	-4.12
<i>of which US</i>	18.43	19.05	16.81	17.41	17.58	17.71	-0.72	-3.89
<b>Europe</b>	3.71	4.03	3.87	3.75	3.99	3.91	0.20	5.49
<b>Asia Pacific</b>	0.52	0.53	0.54	0.55	0.56	0.54	0.02	3.72
<b>Total OECD</b>	<b>30.00</b>	<b>31.16</b>	<b>27.97</b>	<b>28.51</b>	<b>29.03</b>	<b>29.17</b>	<b>-0.84</b>	<b>-2.80</b>
<b>China</b>	4.05	4.15	4.16	4.17	4.11	4.15	0.10	2.38
<b>India</b>	0.83	0.80	0.77	0.78	0.80	0.79	-0.04	-4.61
<b>Other Asia</b>	2.71	2.64	2.47	2.50	2.49	2.52	-0.19	-6.93
<b>Latin America</b>	6.06	6.36	5.83	6.18	6.42	6.20	0.14	2.25
<b>Middle East</b>	3.20	3.19	3.18	3.14	3.13	3.16	-0.04	-1.17
<b>Africa</b>	1.53	1.49	1.48	1.46	1.40	1.46	-0.07	-4.82
<b>Eurasia</b>	14.52	14.65	13.11	12.57	12.57	13.22	-1.29	-8.90
<i>of which Russia</i>	11.44	11.51	10.21	9.84	9.85	10.35	-1.09	-9.55
<i>of which other Eurasia</i>	3.07	3.15	2.90	2.73	2.72	2.87	-0.20	-6.47
<b>Total Non-OECD</b>	<b>32.89</b>	<b>33.27</b>	<b>31.00</b>	<b>30.80</b>	<b>30.93</b>	<b>31.50</b>	<b>-1.40</b>	<b>-4.24</b>
<b>Total Non-OPEC production</b>	62.90	64.43	58.97	59.31	59.96	60.66	-2.23	-3.55
<b>Processing gains</b>	2.26	2.15	1.85	2.15	2.15	2.07	-0.19	-8.47
<b>Total Non-OPEC liquids production</b>	<b>65.16</b>	<b>66.57</b>	<b>60.83</b>	<b>61.45</b>	<b>62.11</b>	<b>62.73</b>	<b>-2.43</b>	<b>-3.72</b>
<b>Previous estimate</b>	65.16	66.57	60.83	61.50	62.27	62.79	-2.37	-3.64
<b>Revision</b>	0.00	0.00	0.00	-0.05	-0.17	-0.06	-0.06	-0.09

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	%
<b>Americas</b>	24.71	24.54	24.71	25.40	26.23	25.22	0.51	2.08
<i>of which US</i>	17.71	17.46	17.79	18.07	18.70	18.01	0.30	1.69
<b>Europe</b>	3.91	4.01	3.97	4.00	4.20	4.04	0.13	3.41
<b>Asia Pacific</b>	0.54	0.55	0.52	0.53	0.52	0.53	-0.02	-2.92
<b>Total OECD</b>	<b>29.17</b>	<b>29.10</b>	<b>29.20</b>	<b>29.93</b>	<b>30.94</b>	<b>29.80</b>	<b>0.63</b>	<b>2.16</b>
<b>China</b>	4.15	4.15	4.13	4.13	4.18	4.15	0.00	0.01
<b>India</b>	0.79	0.80	0.78	0.78	0.78	0.79	0.00	-0.08
<b>Other Asia</b>	2.52	2.52	2.51	2.51	2.50	2.51	-0.01	-0.54
<b>Latin America</b>	6.20	6.45	6.40	6.36	6.59	6.45	0.25	4.06
<b>Middle East</b>	3.16	3.20	3.21	3.23	3.24	3.22	0.06	1.90
<b>Africa</b>	1.46	1.40	1.42	1.40	1.38	1.40	-0.06	-4.21
<b>Eurasia</b>	13.22	13.19	13.18	13.18	13.17	13.18	-0.05	-0.35
<i>of which Russia</i>	10.35	10.36	10.36	10.36	10.36	10.36	0.01	0.07
<i>of which other Eurasia</i>	2.87	2.83	2.82	2.82	2.81	2.82	-0.05	-1.83
<b>Total Non-OECD</b>	<b>31.50</b>	<b>31.71</b>	<b>31.63</b>	<b>31.58</b>	<b>31.83</b>	<b>31.69</b>	<b>0.19</b>	<b>0.60</b>
<b>Total Non-OPEC production</b>	60.66	60.80	60.83	61.51	62.77	61.48	0.82	1.35
<b>Processing gains</b>	2.07	2.20	2.20	2.20	2.20	2.20	0.13	6.17
<b>Total Non-OPEC liquids production</b>	<b>62.73</b>	<b>63.00</b>	<b>63.03</b>	<b>63.71</b>	<b>64.97</b>	<b>63.68</b>	<b>0.95</b>	<b>1.51</b>
<b>Previous estimate</b>	62.79	62.96	62.93	63.71	65.08	63.68	0.89	1.41
<b>Revision</b>	-0.06	0.05	0.10	0.00	-0.10	0.01	0.06	0.10

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 0.84 mb/d y-o-y to average 29.17 mb/d, revised down by 117 tb/d m-o-m. This is due to a downward revision of 57 tb/d in the production forecast for OECD Americas, which is now projected to decline by 1.06 mb/d to average 24.71 mb/d. Oil supply in OECD Europe was revised down by 48 tb/d is now forecast to grow by 0.20 mb/d, to average at 3.91 mb/d, and OECD Asia Pacific is expected to grow by 0.02 mb/d, to average 0.54 mb/d, following a downward revision of 12 tb/d.

For **2021**, the OECD liquids production forecast was adjusted down by 130 tb/d, and is now expected to grow by 0.63 mb/d, for an average of 29.80 mb/d. OECD Americas supply growth was revised up by 15 tb/d and is expected to grow by 0.51 mb/d to average 25.22 mb/d. The oil supply forecast in OECD Europe was revised down by 42 tb/d is now anticipated to grow by 0.13 mb/d y-o-y to average 4.04 mb/d, and OECD Asia Pacific was revised down by 45 tb/d, to now decline by 0.02 mb/d and average 0.53 mb/d.

## OECD Americas

### US

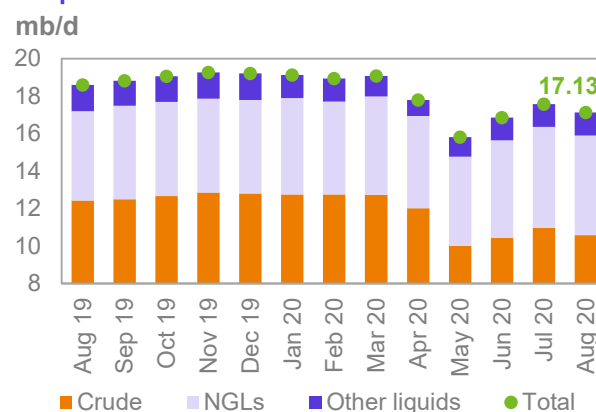
During July–October, merger and acquisition (M&A) activity in US shale has picked up, with Pioneer Natural Resources possibly becoming the owner of Parsley Energy, Devon Energy combining with WPX Energy, Chevron looking to acquire Noble Energy, while in Canada, Cenovus Energy is thinking about merging with Husky Energy. Furthermore, in recent weeks, ConocoPhillips, the world's largest independent operator in terms of volume, has been holding talks to acquire key Permian producer Concho Resources. Prior to the Covid-19-induced halt, consolidation in the US onshore industry had risen sharply through 2018-19. Although M&A activity was seen as a bearish indication in the oil market in the past, but this time in the post-COVID era, it may translate to creating a number of giant firms in order to come up with financial circumstances through access to a higher acreage, sweet spots, skilled man power and infra-structures.

**US liquids supply in 2020** was revised down by 62 tb/d, following downward revisions in 3Q20 and 4Q20, due to hurricane production outages in GoM, and is now forecast to decline by 0.72 mb/d and average 17.71 mb/d.

US liquids production in August 2020 was lower by 0.44 mb/d m-o-m to average 17.13 mb/d, mainly due to production outages of 0.45 mb/d following hurricanes Marco and Laura, and was down by 1.47 mb/d compared to a year earlier.

Crude oil and condensate production in August decreased by 401 tb/d, m-o-m, to average 10.58 mb/d, 1.85 mb/d lower than a year ago. NGLs output showed a decrease of 44 tb/d in August m-o-m, to average 5.33 mb/d, but was up by 0.56 mb/d y-o-y, higher than pre-COVID levels.

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



Source: OPEC.

Non-conventional liquids, particularly ethanol, increased by 15 tb/d in July m-o-m, to average 1.22 mb/d, according to official data, and preliminary data for August indicates a more or less flat development.

Production of crude oil, including field condensates, decreased by 0.40 mb/d in August, mainly in the Gulf Coast or PADD 3 (Petroleum Administration for Defence District), which declined by 0.49 mb/d m-o-m to average 7.04 mb/d, due to production outages during the hurricanes in GoM.

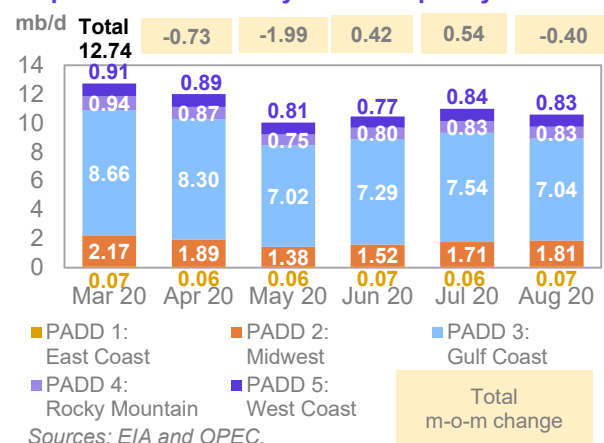
In August, 453 mb/d of crude oil output was shut in m-o-m in the GoM, and monthly production dropped to average 1.2 mb/d. Moreover, this was lower by 0.8 mb/d y-o-y, when production reached a peak in August 2019 at 2.05 mb/d. In Texas, oil output declined by 49 tb/d to average 4.69 mb/d. In the Midwest, production rose by 100 tb/d m-o-m, with oil output up by 126 tb/d in North Dakota to average 1.16 mb/d, while production declined in Oklahoma by 18 tb/d to average 0.46 mb/d. In the Rocky Mountains (PADD4), oil output in Colorado, host of the Niobrara shale dropped by 7 tb/d to 0.44 mb/d.



Following the downward revision of 83 tb/d in 3Q20, and 165 tb/d in 4Q20, leading to a downward revision of 0.06 mb/d in the US liquids supply for the year 2020, is now expected to decline by 0.72 mb/d to average 17.71 mb/d.

Accordingly, tight oil output will see the largest contraction among liquids components in 2020, by 0.44 mb/d, revised up by 0.15 mb/d compared to a month earlier. This is followed by a decline of 0.25 mb/d in GoM, mainly due to several production outages in the three consecutive months from August to October during the hurricane season, which is now expected to average 1.64 mb/d. Conventional crude production is forecast to decline by 0.19 mb/d y-o-y to average 2.41 mb/d.

**Graph 5 - 6: US monthly crude output by PADDs**



Regarding activities of key US Gulf players to resume delayed development after the 3Q20 hurricanes, operators Murphy Oil, Talos Energy and W&T Offshore said they expect to resume work soon on developments set to debut in the next 18 months as well as restore output. “For example, even though Talos’ Bulleit field output saw its initial oil flow-back last month, the production ramp-up was halted shortly afterward due to crew evacuations in advance of Hurricane Zeta”, according to Platts. Talos will also start up the successful Kaleidoscope well, drilled earlier this year from the Green Canyon 18 platform, in late November 2020.

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

State	Jul 20	Aug 20	Change (Aug 20/Jul 20)
Alaska	444	444	0
Colorado	451	444	-7
Oklahoma	478	460	-18
New Mexico	988	1,015	27
North Dakota	1,029	1,155	126
Gulf of Mexico (GoM)	1,649	1,196	-453
Texas	4,736	4,687	-49
<b>Total</b>	<b>10,980</b>	<b>10,579</b>	<b>-401</b>

Sources: EIA and OPEC.

Regarding another producer in GoM, Murphy Oil produced around 57 tb/d in 3Q20 compared with 71 tb/d a year ago. In 4Q20, estimated production volumes for Murphy Oil will be roughly 146 tboe/d to 154 tboe/d. The range stems from a further GoM storm downtime of 8,200 boe/d from Hurricanes Delta and Zeta, as well as 6,400 boe/d of planned downtime, according to Platts.

On the other hand, the US NGL production forecast was revised up by 0.01 mb/d to grow by 0.35 mb/d y-o-y and average 5.18 mb/d, of which 4.35 mb/d refers to unconventional NGLs.

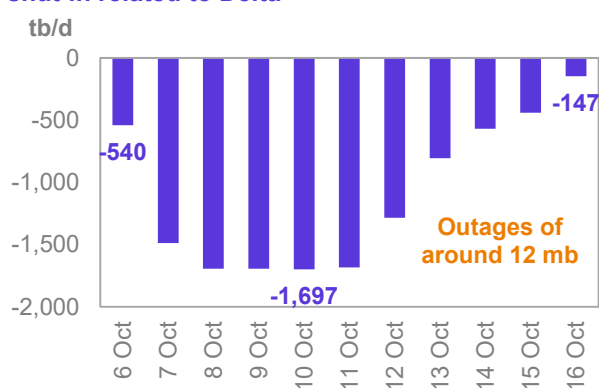
“Natural gas liquids (NGL) output from processing plants in the US remains close to the record-high levels despite challenging market conditions for oil & gas producers this year. After touching an all-time high of 5.48 mb/d in July, NGL production declined by about 50,000 bpd, though nearly all that drop was driven by temporary Hurricane Laura-related outages of plants on the Gulf Coast, and significant offshore Gulf of Mexico production shut-ins”, according to Rystad Energy

Following drastic production outages in GoM due to hurricanes Marco and Laura in August by around 15 mb, or 0.45 mb/d, and further outages due to tropical storm Sally in September, another two destructive hurricanes caused production outages in US-GoM more recently. Hurricane Delta was the fifth named weather system to cause production shut-ins during ten days from 6–16 October 2020, which led to outages of 12 mb. This volume later increased to around 20 mb as hurricane Zeta hit the region leading to shut in wells from 26 October–4 November.

In October, US producers shut in about 92%, or 1.7 mb/d, of offshore crude production as another powerful hurricane – Delta – entered the southern GoM on 8 October and was expected to make landfall the following day, according to the Bureau of Safety and Environmental Enforcement (BSEE). Hurricane Delta had already caused the highest level of shut-ins ever recorded in a single day, surpassing the 2002 record set by Hurricane Lili. Estimation indicates that average daily oil production in October in the US sector of the GoM would fall by nearly 400 tb/d and more than 350 mcf/d of gas due to outages.

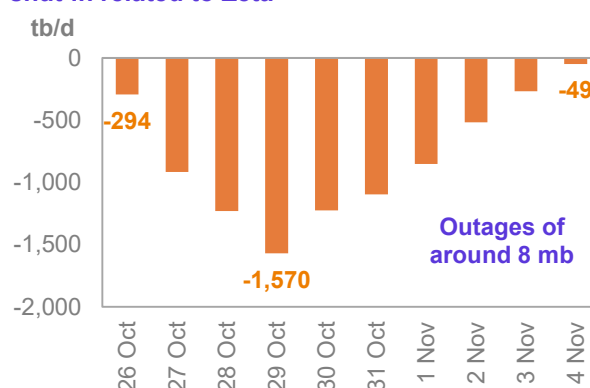
The BSEE activated the Hurricane Response Team on 26 October as Tropical Storm Zeta made its way towards the Gulf of Mexico. Based on data from offshore operator reports submitted to BSEE, personnel was evacuated during 26–29 October from total of 228 production platforms, 35.5% of the 643 manned platforms in the GoM. Personnel was also evacuated from two rigs (non-dynamically positioned), equivalent to 20% of the 10 rigs of this type currently operating in the Gulf. Moreover, a total of four dynamically positioned rigs moved off location out of the hurricane's projected path as a precaution. This number represents 25% of the 16 dynamically positioned rigs currently operating in the Gulf, according to the BSEE's report on 29 October. From operator reports, BSEE estimated that approximately 84.8% of the current oil production in the Gulf of Mexico, equivalent to 1.57 mb/d, was shut-in at the peak on 29 October. BSEE also estimated that approximately 57.6% of the natural gas production or 1,561 mcf/d in the Gulf of Mexico was shut-in at the peak on 29 October. An outage of around 0.6 mb/d during these two hurricanes is estimated for GoM oil production in October 2020. Below is the summary of daily Activity Statistics Update reports published by the BSEE<sup>1</sup>.

**Graph 5 - 7: Lost oil production due to hurricane shut-in related to Delta**



Sources: Bureau of Safety and Environment Enforcement and OPEC.

**Graph 5 - 8: Lost oil production due to hurricane shut-in related to Zeta**



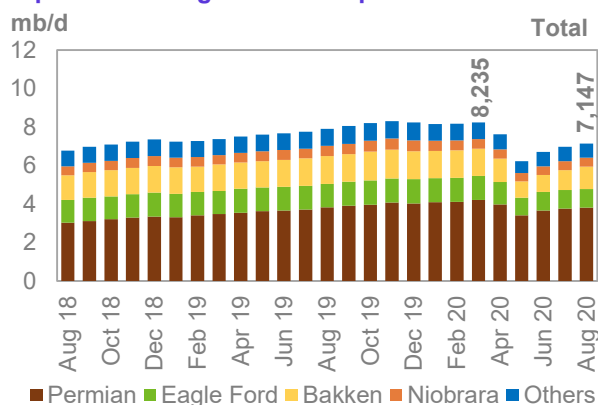
Sources: Bureau of Safety and Environment Enforcement and OPEC.

**US tight crude production** 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 in June by adding 471 tb/d, leading to average production of 7.52 mb/d for 1H20, and up by 0.07 mb/d, y-o-y.

In August, tight crude output rose by 46 tb/d in the Permian Basin to average 3.80 mb/d, down by just 20 tb/d y-o-y. The eight-month average also rose by 0.3 mb/d compared to the same period in 2019. In other key shale regions, oil output in the Eagle Ford was flat m-o-m at 0.97 mb/d in August, while Bakken shale showed higher output by 136 tb/d, to average 1.17 mb/d.

US tight crude average production in the first eight months of 2020 declined by only 138 tb/d to average 7.40 mb/d compared to the same period in 2019. This is despite the curtailment of around 2.7 mb/d in April and May.

**Graph 5 - 9: US tight crude output breakdown**



Sources: EIA, Rystad Energy and OPEC.

<sup>1</sup> <https://www.bsee.gov/resources-tools/hurricane/activity-statistics-update>

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

US tight oil	Change		Change		Change	
	2019	2019/18	2020*	2020/19	2021*	2021/20
Permian tight	3.71	0.87	3.86	0.15	4.11	0.25
Bakken shale	1.42	0.16	1.23	-0.19	1.35	0.12
Eagle Ford shale	1.24	0.05	1.10	-0.14	1.04	-0.06
Niobrara shale	0.52	0.08	0.42	-0.10	0.33	-0.09
Other tight plays	0.88	0.09	0.72	-0.16	0.50	-0.22
<b>Total</b>	<b>7.76</b>	<b>1.25</b>	<b>7.33</b>	<b>-0.44</b>	<b>7.33</b>	<b>0.00</b>

Note: \* 2020-2021 = Forecast.

Source: OPEC.

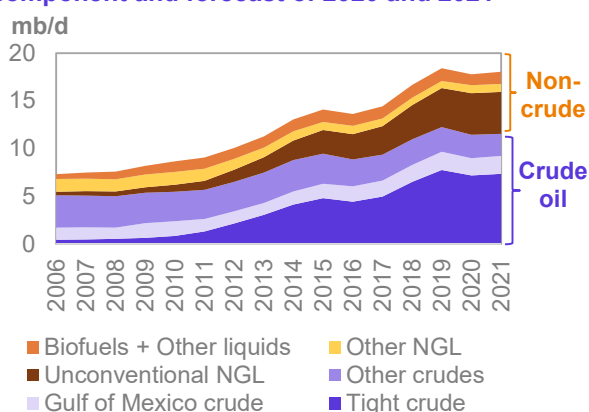
**US crude oil production in 2020** is expected to decline by 0.87 mb/d to average 11.37 mb/d, revised down by 0.08 mb/d m-o-m. Tight crude is projected to decline by 0.44 mb/d to average 7.33, production from the GoM is forecast to drop by 0.25 mb/d to average 1.64 mb/d, and onshore conventional crude is forecast to decline by 0.19 mb/d to average 2.41 mb/d.

The **US crude oil production forecast for 2021** was revised up by 0.05 mb/d is now forecast to grow by 0.10 mb/d y-o-y to average 11.47 mb/d. This includes field condensates which are projected to average around 0.8 mb/d.

Tight crude is projected to remain flat to average 7.33 mb/d, while production from the GoM is forecast to increase by 0.30 mb/d y-o-y to average 1.94 mb/d.

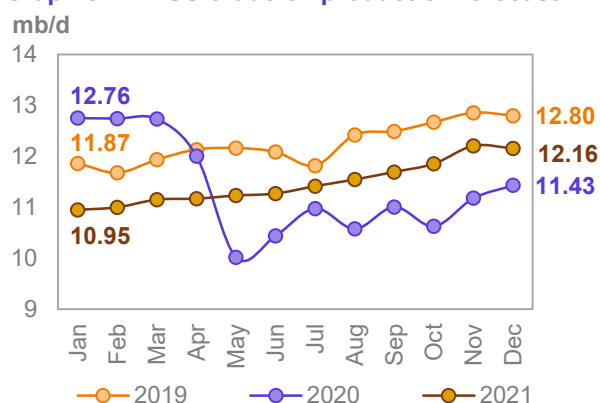
Onshore conventional crude is forecast to decline by 0.21 mb/d and average 2.30 mb/d, largely due to continued shut in of stripper wells.

**Graph 5 - 10: US liquids supply developments by component and forecast of 2020 and 2021**



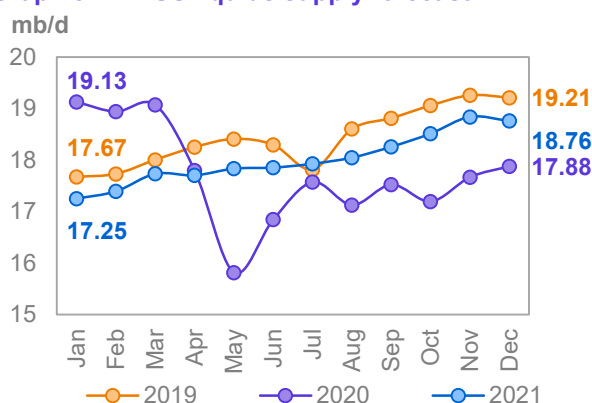
Note: \* 2020-2021 = Forecast. Source: OPEC.

**Graph 5 - 11: US crude oil production forecast**



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

**Graph 5 - 12: US liquids supply forecast**

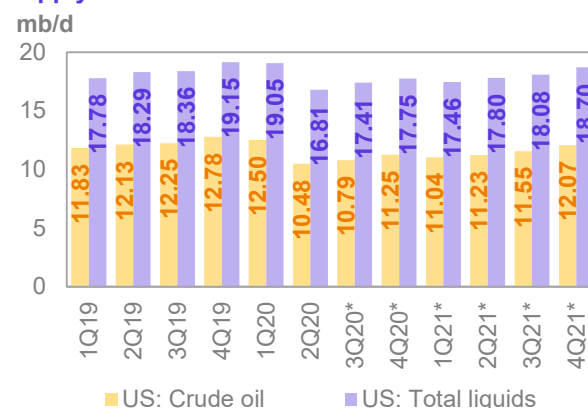


Note: \* 2020-2021 = Forecast. Source: OPEC.

**US NGL production** is forecast to grow by 0.07 mb/d in 2021 to average 5.25 mb/d, while biofuels and other non-conventional liquids in 2021 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 up by 0.01 mb/d, compared to last month's projection and is expected to grow by 0.30 mb/d y-o-y to average 18.01 mb/d, but still remains 0.42 mb/d below the 2019 level.

**Graph 5 - 13: US crude and total liquids quarterly supply**



Note: \* 3Q20-4Q21 = Forecast. Sources: EIA and OPEC.

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

US liquids			Change		Change		Change
	2018	2019	2019/18	2020*	2020/19	2021*	2021/20
<b>Tight crude</b>	6.51	7.76	1.25	7.33	-0.44	7.33	0.00
<b>Gulf of Mexico crude</b>	1.76	1.88	0.13	1.64	-0.25	1.94	0.30
<b>Conventional crude oil</b>	2.69	2.60	-0.13	2.41	-0.19	2.20	-0.21
<b>Unconventional NGLs</b>	3.58	4.01	0.44	4.35	0.33	4.42	0.07
<b>Conventional NGLs</b>	0.79	0.81	0.02	0.83	0.02	0.83	0.00
<b>Biofuels + Other liquids</b>	1.35	1.36	0.00	1.16	-0.20	1.29	0.13
<b>US total supply</b>	<b>16.69</b>	<b>18.43</b>	<b>1.74</b>	<b>17.71</b>	<b>-0.72</b>	<b>18.01</b>	<b>0.30</b>

Note: \* 2020-2021 = Forecast.

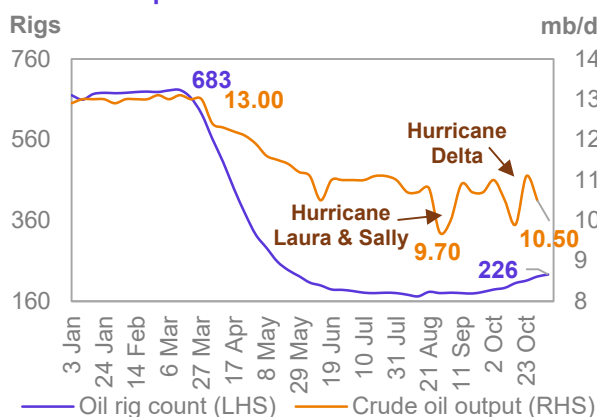
Sources: EIA, OPEC and Rystad Energy.

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

The cumulative **US rig count** declined by 517 units, or 63%, y-o-y to 300 rigs in the week ending 6 November, up by 4 w-o-w, according to Baker Hughes. The oil rig count has increased by five rigs for the seventh consecutive week w-o-w to 226 rigs, while gas rigs were down by one unit to 71 rigs. The US oil rig count bottomed out at 172 units in the week ended 14 August, as operators had idled 511 rigs since crude prices started plummeting from 13 March. In the week ending 6 November, the US oil rig count dropped by 458 units, or 67%, y-o-y, while gas rigs dropped by 59 units, or 45%, y-o-y.

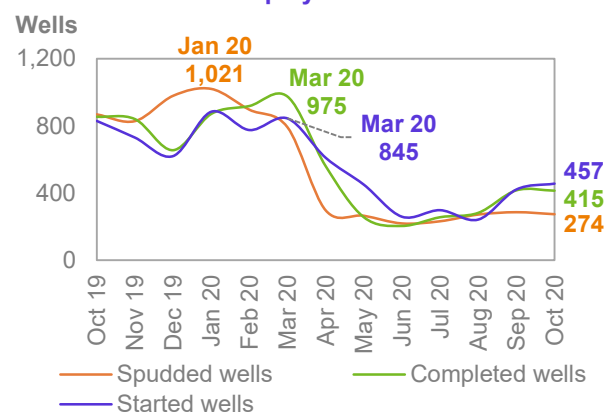
**Total horizontal rigs (oil and gas)** decreased by 451 units, or ~64%, y-o-y to stand at 259 rigs. The horizontal rig count was up by 5 units w-o-w.

**Graph 5 - 14: US weekly rig count vs US weekly crude oil output**



Sources: Baker Hughes, EIA and OPEC.

**Graph 5 - 15: Spudded, completed and started wells in the US shale plays**



Sources: Rystad Energy and OPEC.

Regarding major basins, 147 oil rigs were active in the Permian Basin, adding 5 rigs w-o-w, as of 6 November, still lower by 265 rigs, or 64%, y-o-y. At the same time, the number of active rigs was 19 units in the Eagle Ford Basin, up by 2 rigs w-o-w, down by 68% y-o-y. The Williston Basin reported 12 active rigs, unchanged w-o-w, and down by 77% y-o-y, and finally 3 units were reported in the DJ-Niobrara Basin, down by 73% y-o-y.

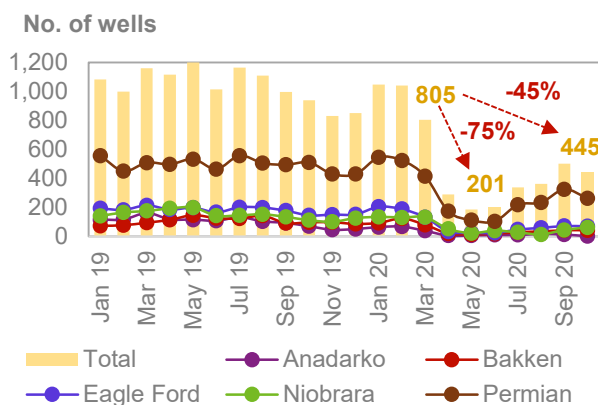
With regard to **spudding, completion and started wells** in all US shale plays, as reported by Rystad Energy, 274 horizontal wells were spudded in October (as per preliminary information), a drop of 12 wells m-o-m, and this compares to 869 spudded wells in October 2019.

The preliminary number of completed wells is estimated at 415 in October, lower by 2 m-o-m, but lower by 51% or 440 completed wells from a year ago. However, the number of started wells was up by 35 to 457 wells, lower by 373 wells, or 45%, y-o-y.

After a sharp recovery in fracking reaching 502 wells in the US in September, the preliminary number of fracked wells in October slowed to 445 wells. Apparently, the number of fracked wells has increased m-o-m only in the DJ Basin – Niobrara shale, adding 17 fracked wells to average 63 wells in October. In other regions, fracking decreased m-o-m. The Permian Basin declined by 61 to average 265 wells, the Eagle Ford, was down by 2 to average 71 wells, and the Bakken remained unchanged at 43 wells in October. It is worth noting that comparing the number of fracked wells in June and August with the March level of 805 wells, an improvement from a 75% decline in June to a 45% decline in August can be seen. Strong fracking would likely help sustain US onshore production, as operators bring online their drilled but uncompleted (DUC) wells.

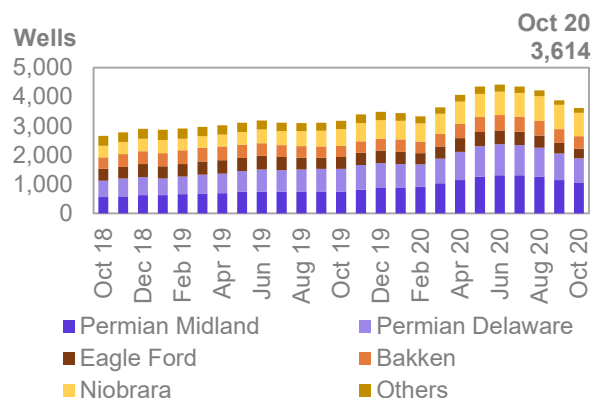
Following a m-o-m decrease of 337 uncompleted wells in September, the number of DUC horizontal wells in US shale plays in October dropped again by another 268 wells m-o-m to stand at 3,614 wells, as per preliminary data. Since June when the DUC count peaked at 4413, operators have fracked uncompleted wells from inventories rather than drilled new wells. In October, the number of existing DUCs declined by 95 units in the Permian Midland, 70 units in the Permian Delaware, 32 units in Eagle ford, 38 units in the Bakken shale, 39 wells in Niobrara shale and 6 units in other shale plays.

Graph 5 - 16: Number of stimulated wells per month



Sources: Rystad Energy and OPEC.

Graph 5 - 17: US horizontal DUC count by shale play



Sources: Rystad Energy and OPEC.

## Canada

**Canada's liquids production** in September was up by 0.08 mb/d to average 4.93 mb/d, down from the 5.25 mb/d of a year ago. The increase was mainly due to higher synthetic crude production by 239 tb/d in September to average 1.13 mb/d, up by 0.16 mb/d y-o-y. Synthetic crude (SCO) production in Canadian Natural Resources (CNRL) declined in 3Q20, as the company carried out planned maintenance work at both the Athabasca Oil Sands Project (AOSP) and Horizon. Total SCO production by CNRL declined to 0.36 mb/d in 3Q20, down 19% y-o-y, at an average operating cost of \$23.81/b<sup>2</sup>.

However, Canadian bitumen output was down by 61 tb/d in September to average 1.60 mb/d, lower by 0.38 mb/d, y-o-y. Conventional crude oil output as per preliminary data, was also down by 42 tb/d to average 1.11 mb/d. NGLs production declined by 51 tb/d m-o-m to average 1.06 mb/d. Preliminary production data in October indicates a jump by 0.36 mb/d to average 5.29 mb/d.

<sup>2</sup> <https://www.oilandsmagazine.com/news/2020/11/5/cnrl-posts-a-profit-in-q3-as-in-situ-production-hits-a-record-high>

CNRL reported decent third quarter results, despite the ongoing COVID pandemic, low oil prices and government-imposed curtailment quotas. According to Oil Sands Magazine<sup>3</sup>, “Thermal in-situ production hit a record 287,878 b/d in the third quarter, up 40% year-over-year, at an average operating cost of \$7.85/b. For the first nine months of this year, in-situ production average 243,193 b/d. Kirby North continues to exceed expectations, producing 42,000 b/d last quarter. Jackfish also posted a record quarter, averaging 122,346 b/d in 3Q. Optimization of steam cycles at Primrose also helped boost overall in-situ production rates”.

Western Canada crude oil production in July was down by 9 tb/d to average 3.90 mb/d, including 0.33 mb/d of heavy crude, 0.53 mb/d of light and medium, 1.65 mb/d of bitumen, 0.98 mb/d of synthetic crude, and 0.41 mb/d of other liquids. Alberta has produced 3.11 mb/d of crude in July, including 2.63 mb/d of oil sands – 0.98 mb/d of synthetic crude and 1.65 mb/d bitumen – and 0.48 mb/d of conventional crude. Alberta also produced 0.33 mb/d of other liquids mainly C5+ in July<sup>4</sup>.

**Canada’s oil supply in 2020** was revised up by 8 tb/d, following an upward adjustment for 3Q20 by 33 tb/d, and is now estimated to contract by 0.33 mb/d y-o-y for an average of 5.09 mb/d.

Upstream oil and gas capital expenditure (capex) in 2020 has dropped from CAD\$8.45 billion in 1Q20 to CAD\$3.8 billion in 2Q20, according to the latest statistics Canada.

For **2021**, the supply forecast remained unchanged at growth of 0.23 mb/d y-o-y to average 5.31 mb/d. Canada is still facing pipeline constraints and railroad capacity limits for its oil exports.

## Mexico

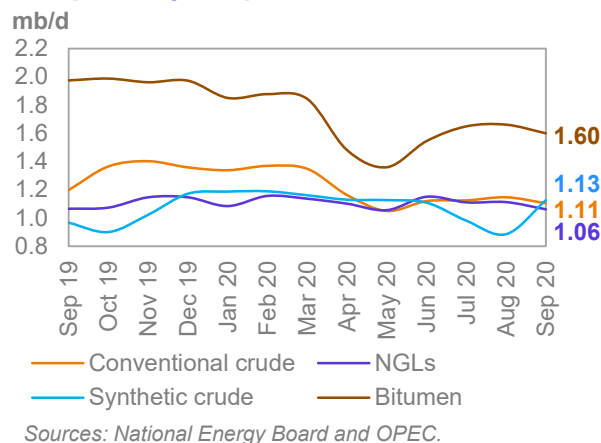
**Mexico’s liquids output in September** remained unchanged m-o-m to average 1.91 mb/d. Crude oil output increased by 11 tb/d to average 1.64 mb/d, while NGLs production inched down by 9 tb/d m-o-m to average 261 tb/d. Crude oil production in October likely fell in offshore fields located in Mexican water territories of the GoM due to hurricane Delta, similar to the US-GoM in the same month.

According to the latest Pemex forecast, Mexico’s government plans to produce 1.73 mb/d in 2020, while the average output of the first three quarters of the year was pegged at 1.67 mb/d. Pemex also announced that production is forecast to grow by 0.21 mb/d y-o-y in 2021, coming mainly from the Mulach, Manik, Tlacame and the Pokche fields, and from production ramp ups in the Xanab, Balam, Mitzon and Ayatsil fields.

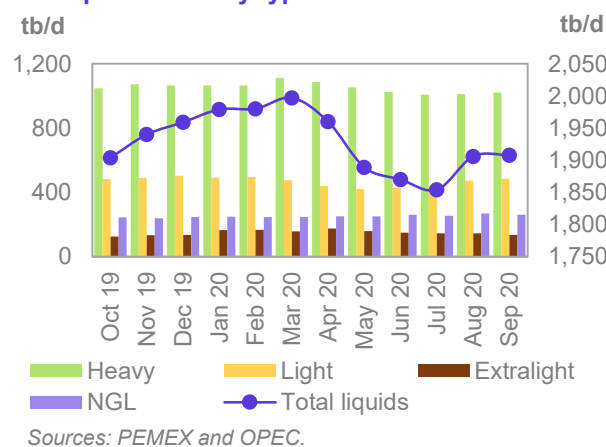
Liquids production in **2020** is expected to decline by 0.02 mb/d y-o-y to average 1.90 mb/d.

For **2021**, oil production in Mexico is forecast to continue to decline by 0.01 mb/d to average 1.89 mb/d.

**Graph 5 - 18: Canada monthly liquids production development by component**



**Graph 5 - 19: Mexico’s monthly liquids and crude production by type**



<sup>3</sup> <https://www.oilsandsmagazine.com/news/2020/11/5/cnrl-posts-a-profit-in-q3-as-in-situ-production-hits-a-record-high>.

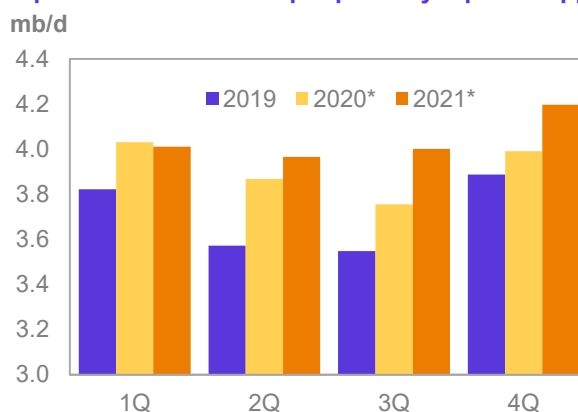
<sup>4</sup> <https://www.aer.ca/regulating-development/rules-and-directives/bulletins/bulletin-2020-22>

## OECD Europe

**OECD Europe's liquids production in 2020** is projected to grow by 0.20 mb/d to average 3.91 mb/d, revised down by 0.05 mb/d from last month's assessment. In September, OECD Europe's liquids supply declined by 0.17 mb/d to average 3.55 mb/d.

For **2021**, the production is forecast to increase to 4.04 mb/d, revised down in absolute supply by 0.05 mb/d, while y-o-y growth remained unchanged from last month's forecast at 0.13 mb/d for the region.

**Graph 5 - 20: OECD Europe quarterly liquids supply**



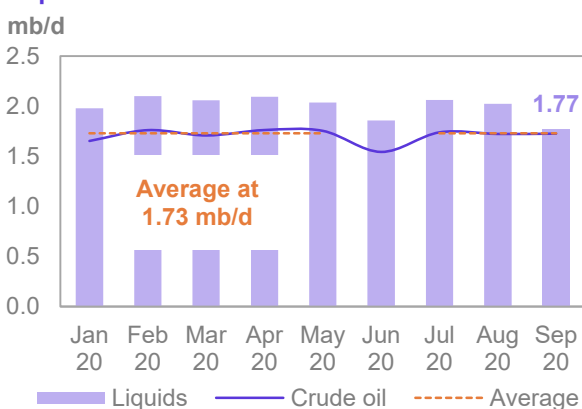
Note: \* 2020-2021 = Forecast. Source: OPEC.

## Norway

**Norwegian liquids production in September** was down by 0.25 mb/d m-o-m to 1.77 mb/d, mainly due to a heavy m-o-m decline of 239 tb/d of crude oil to average 1.49 mb/d, according to the Norwegian Petroleum Directorate (NPD). NPD has said that the production figure for crude oil in September was in line with the announced cut for 2H20. "Oil production in September is 13.8% lower than the NPD's forecast, and 1.6% below the forecast so far this year", they added.

The main reasons that production in September was below forecast is maintenance work and technical problems in some fields. In September, Norway also produced 286 tb/d of NGLs and condensate, down by 11 tb/d, m-o-m.

**Graph 5 - 21: Norway's monthly liquids and crude output**



Source: OPEC.

**Norway's oil supply in 2020** is forecast to grow by 0.28 mb/d to average 2.02 mb/d, while in **2021** growth will slow down to 0.14 mb/d, y-o-y

## Non-OECD

**Non-OECD liquids production for 2020** is forecast to decline by 1.40 mb/d y-o-y to average 31.50 mb/d, revised up by 0.06 m-o-m, mainly due to upward revisions in China and Oman. China's liquids supply is expected to grow by 0.10 mb/d to average 4.15 mb/d. India's liquids supply is expected to decline by 0.04 mb/d to average 0.79 mb/d and Other Asia is projected to decline by 0.19 mb/d to average 2.52 mb/d. Meanwhile Latin America is expected to grow by 0.14 mb/d, including Brazil and Guyana, to average 6.20 mb/d. Oil production in the Middle East is projected to decline by 0.04 mb/d to average 3.16 mb/d and Africa is also expected to decline by 0.07 mb/d to average 1.46 mb/d. Oil production in Eurasia is expected to decline by 1.29 mb/d y-o-y to average 13.22 mb/d.

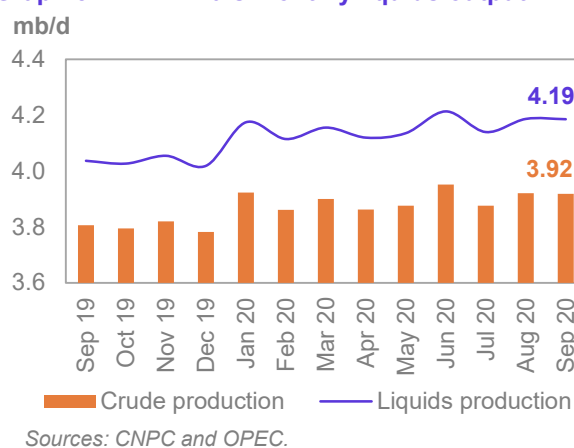
For **2021**, liquids production in non-OECD countries is forecast to grow by 0.19 mb/d, after an upward revision of 76 tb/d, to average 31.69 mb/d. China is forecast to remain unchanged to average at 4.15 mb/d. India is also projected to be flat next year at an average of 0.79 mb/d. Oil supply is projected to decline in Other Asia by a minor 0.01 mb/d to average 2.51 mb/d. Latin America remains the key driver in the non-OECD with y-o-y forecast growth of 0.25 mb/d to average 6.45 mb/d. Production in Africa is forecast to decline by 0.06 mb/d to average 1.40 mb/d. Oil production in the Middle East is forecast to grow by 0.06 mb/d y-o-y due to higher NGL production in Oman and Qatar to average 3.22 mb/d. Oil production in Eurasia is projected to show a minor decline of 0.05 mb/d y-o-y to average 13.18 mb/d.

## China

**China's liquids production in September** was flat compared to August at an average of 4.19 mb/d, up by 0.15 mb/d y-o-y, according to official data. Crude oil output in September was steady m-o-m at an average of 3.92 mb/d, up by 0.11 mb/d y-o-y. Non-crude production, mainly CTL, was steady at 0.26 mb/d in September, unchanged m-o-m. Despite the startup of the Lihua offshore field in September by CNOOC, which is expected to reach 73 tb/d in 2022, oil production is likely to decline in 4Q20 by 0.06 mb/d to average 4.11 mb/d, due to lower drilling activities onshore.

As a result, oil supply in China in **2020** is projected to grow by 0.10 mb/d to average 4.15 mb/d, revised up by 23 tb/d, and is forecast to remain flat at 4.15 mb/d in **2021**.

**Graph 5 - 22: China's monthly liquids output**



## Latin America

**Latin America's total liquids supply in September** dropped by 0.15 mb/d m-o-m to average 6.08 mb/d.

Liquids production in **2020** is projected to increase in Brazil by 0.22 mb/d, to average 3.77 mb/d, and in Guyana by 0.08 mb/d, to average 0.09 mb/d. Meanwhile, oil production in other countries of the region is forecast to decline. Latin America's oil supply in 3Q20 increased by 0.35 mb/d q-o-q to average 6.18 mb/d and output in 4Q20 is expected to reach 6.42 mb/d. Latin America's oil supply for 2020 is forecast to grow by 0.14 mb/d y-o-y to average 6.20 mb/d.

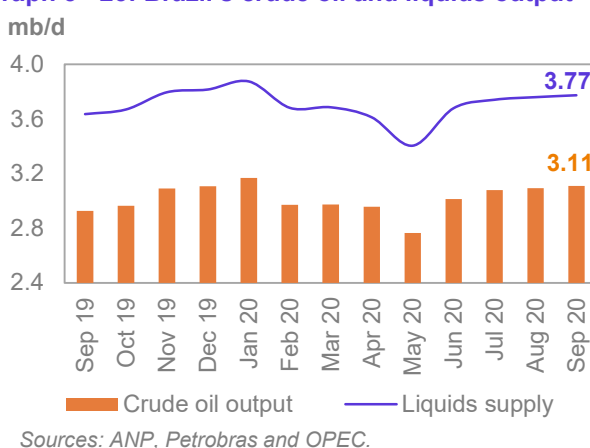
For **2021**, oil production is projected to grow by 0.25 mb/d to average 6.45 mb/d. Oil production in Brazil, Peru and Guyana is forecast to increase, owing to production ramp-ups of field started up in 2020 and 2019. Production in Ecuador is projected to recover from outages seen in 2020, by 0.06 mb/d, 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 180 tb/d in September to average 2.91 mb/d, a drop of 20 tb/d y-o-y, mainly due to planned field maintenance. However, the previous 3Q20 production forecast was revised up by 28 tb/d, leading to an upward revision in yearly growth of liquids by 7 tb/d. Moreover, the output decline in September has 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.

In **2020**, liquids production is projected to grow by 0.22 mb/d to average 3.77 mb/d, including biofuels.

**Graph 5 - 23: Brazil's crude oil and liquids output**



For **2021**, liquids supply is forecast to grow by 0.14 mb/d to average 3.91 mb/d, mainly crude oil from pre-salt areas.

## Eurasia

The **oil supply forecast in Eurasia (FSU + other Europe)** for **2020** remained unchanged from last month's assessment to show a contraction of 1.29 mb/d and average 13.22 mb/d. Production in three countries participating in the DoC – Russia, Kazakhstan and Azerbaijan – is forecast to decline by 1.09 mb/d, 0.12 mb/d and 0.06 mb/d, respectively in 2020. For **2021**, oil production in the region is forecast to decline by a minor

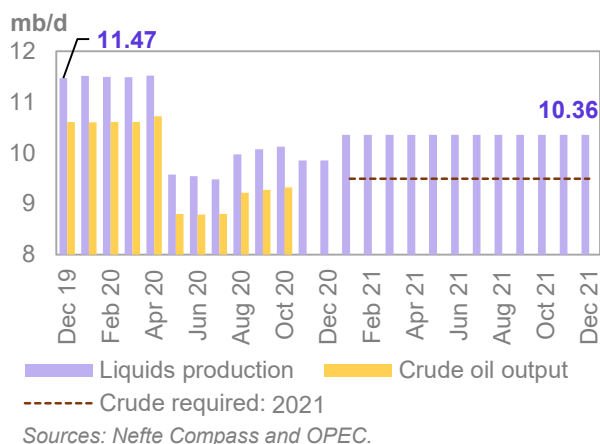


0.05 mb/d y-o-y to average 13.18 mb/d, of which Russia is forecast to grow by 0.01 mb/d, while other countries are forecast to decline.

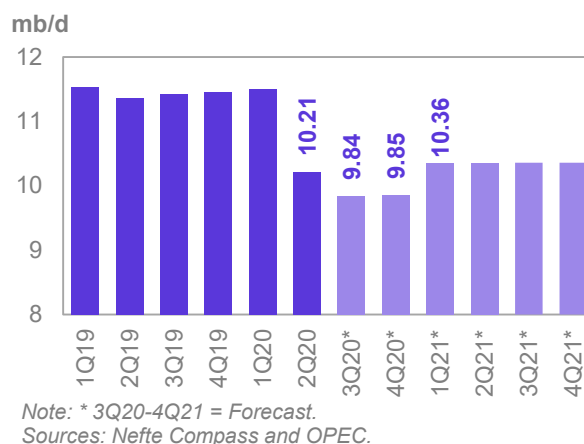
## Russia

Preliminary data for **Russia's liquids production in October** shows a slight increase of 0.05 mb/d m-o-m for an average of 10.12 mb/d. This is lower by 1.31 mb/d y-o-y. Crude oil production in October averaged 9.32 mb/d as per official data, up from 9.27 mb/d in September, as reported by Nefte Compass. Production of condensate and NGLs from gas condensate fields was flat at 0.80 mb/d in September and October, according to preliminary data from secondary sources. Russia has good potential for NGLs production with production of 914 tb/d in Jan 2020 and 922 tb/d in December 2018.

**Graph 5 - 24: Russia's monthly liquids production and forecast**



**Graph 5 - 25: 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 remain at 9.85 mb/d. Russia's crude oil production is forecast to remain steady at 8.99 mb/d in 4Q20. Annual liquids production in **2020** is forecast to decrease by 1.09 mb/d y-o-y to average 10.35 mb/d.

For **2021**, Russian liquids supply is expected to grow by 0.01 mb/d y-o-y to average 10.36 mb/d. Russia's crude oil production is forecast to remain steady at 9.50 mb/d in 2021.

## Caspian

### Kazakhstan

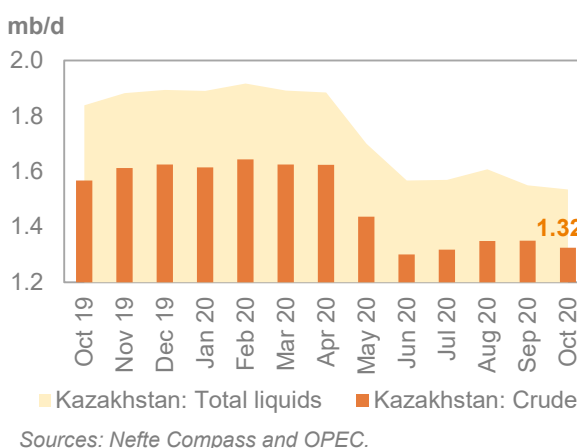
**Kazakhstan's preliminary liquids production in October** shows a decrease of 0.02 mb/d m-o-m to average 1.53 mb/d, down by 0.31 mb/d y-o-y. Liquids output in 3Q20 averaged at 1.58 mb/d, down by 0.14 mb/d q-o-q, and showed a decline of 0.32 mb/d compared to 1Q20.

Crude oil production in October declined by 26 tb/d m-o-m to average 1.32 mb/d, while NGLs output rose by 10 tb/d to average 0.21 mb/d. NGLs output in February 2020 was pegged at 274 tb/d, a record high.

Kazakhstan's liquids production in **2020** is expected to decline by 0.12 mb/d, to average 1.69 mb/d.

For **2021**, production is forecast to decline by 0.02 mb/d, y-o-y to average 1.68 mb/d.

**Graph 5 - 26: Kazakhstan monthly crude and total liquids output**



## Azerbaijan

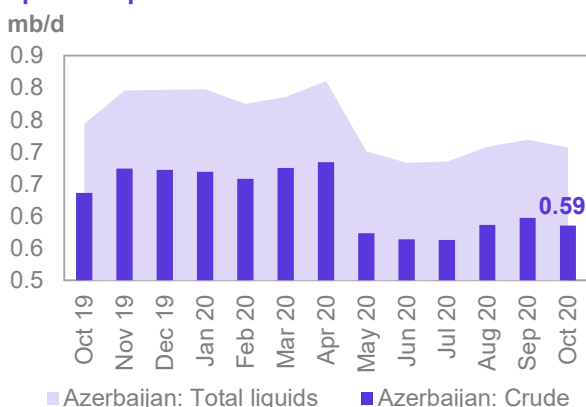
**Azerbaijan's preliminary liquids output in October** showed a m-o-m decline of 0.01 mb/d to average 0.71 mb/d. Azerbaijan has reduced its output from 1Q20 by 0.06 mb/d to average 0.73 mb/d in 2Q20, and saw a further reduction by 0.03 mb/d to average 0.70 mb/d in 3Q20. For 4Q20, output is forecast to drop to 0.68 mb/d.

Production of condensate and NGLs has been steady since July 2020 at 122 tb/d. Crude output in October declined by 12 tb/d to 585 tb/d.

For **2020**, liquids production is forecast to decline by 0.06 mb/d to average 0.73 mb/d.

For **2021**, a minor decline of 0.01 mb/d is forecast.

**Graph 5 - 27: Azerbaijan monthly crude and total liquids output**



Sources: Nefte Compass and OPEC.

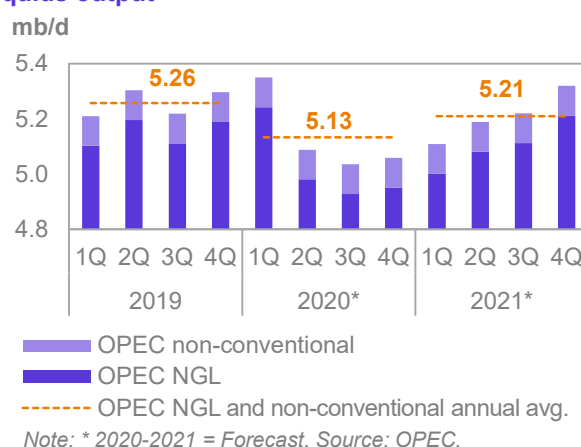
## OPEC NGL and non-conventional oils

**OPEC NGLs and non-conventional liquids** were down by 0.03 mb/d in September to average 5.01 mb/d, down by 0.04 mb/d, y-o-y. Production of OPEC NGLs has been declining since the beginning of the year from 5.35 mb/d to 5.01 mb/d in September. Preliminary output in October 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 is forecast to average 5.21 mb/d, revised down by 0.01 mb/d, m-o-m.

**Graph 5 - 28: OPEC NGLs and non-conventional liquids output**



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

**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						
<b>OPEC NGL</b>	<b>5.15</b>	<b>-0.08</b>	<b>5.02</b>	<b>-0.13</b>	5.00	5.08	5.11	5.21	<b>5.10</b>	<b>0.08</b>
<b>OPEC non-conventional</b>	<b>0.11</b>	<b>0.00</b>	<b>0.11</b>	<b>0.00</b>	0.11	0.11	0.11	0.11	<b>0.11</b>	<b>0.00</b>
<b>Total</b>	<b>5.26</b>	<b>-0.08</b>	<b>5.13</b>	<b>-0.13</b>	<b>5.11</b>	<b>5.19</b>	<b>5.22</b>	<b>5.32</b>	<b>5.21</b>	<b>0.08</b>

Note: 2020-2021 = Forecast.

Source: OPEC.

## OPEC crude oil production

According to secondary sources, total **OPEC-13 crude oil production** averaged 24.39 mb/d in October 2020, up by 0.32 mb/d m-o-m. Crude oil output increased mainly in Libya, Iraq and Nigeria, while production decreased primarily in the UAE, Angola, Venezuela and Congo.

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	Aug 20	Sep 20	Oct 20	Change Oct/Sep
Algeria	1,042	1,022	1,016	878	840	857	855	857	1
Angola	1,505	1,401	1,388	1,267	1,213	1,218	1,236	1,181	-54
Congo	317	324	295	296	287	286	288	271	-17
Equatorial Guinea	125	117	122	110	111	118	103	105	3
Gabon	187	208	195	201	186	184	182	189	7
Iran, I.R.	3,553	2,356	2,059	1,958	1,945	1,942	1,963	1,958	-5
Iraq	4,550	4,678	4,560	4,127	3,696	3,648	3,687	3,835	148
Kuwait	2,745	2,687	2,741	2,464	2,245	2,285	2,292	2,286	-6
Libya	951	1,097	348	84	121	104	155	454	299
Nigeria	1,718	1,786	1,800	1,617	1,463	1,467	1,441	1,488	47
Saudi Arabia	10,311	9,771	9,796	9,212	8,763	8,922	8,956	8,956	0
UAE	2,986	3,094	3,202	2,871	2,596	2,758	2,515	2,441	-74
Venezuela	1,354	796	730	501	362	351	392	367	-25
<b>Total OPEC</b>	<b>31,344</b>	<b>29,337</b>	<b>28,252</b>	<b>25,586</b>	<b>23,829</b>	<b>24,138</b>	<b>24,064</b>	<b>24,386</b>	<b>322</b>

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	Aug 20	Sep 20	Oct 20	Change Oct/Sep
Algeria	1,040	1,023	1,018	874	843	859	861	860	-1
Angola	1,473	1,373	1,402	1,267	1,253	1,266	1,216	1,194	-22
Congo	323	329	308	311	301	292	311	302	-9
Equatorial Guinea	120	110	126	107	115	117	112	108	-4
Gabon	193	218	224	227	201	201	200	175	-25
Iran, I.R.	..	..	..	..	..	..	..	..	..
Iraq	4,410	4,576	4,490	4,088	3,625	3,578	3,600	3,842	242
Kuwait	2,737	2,678	2,744	2,474	2,245	2,289	2,290	2,290	0
Libya	..	..	..	..	..	..	..	..	..
Nigeria	1,602	1,737	1,761	1,515	1,351	1,368	1,332	1,345	12
Saudi Arabia	10,317	9,808	9,755	9,317	8,813	8,984	8,982	8,974	-8
UAE	3,008	3,058	3,173	2,921	2,525	2,693	2,476	2,415	-62
Venezuela	1,510	1,013	821	568	395	396	397	473	76
<b>Total OPEC</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>..</b>

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

Source: OPEC.

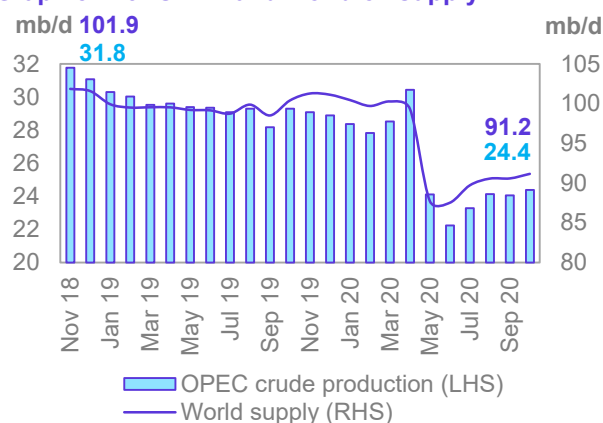
## World oil supply

Preliminary data indicates that **global liquids production in October** increased by 0.58 mb/d to average 91.17 mb/d, compared with the previous month, and was lower by 9.25 mb/d, y-o-y.

**Non-OPEC liquids production (including OPEC NGLs)** increased in October by 0.25 mb/d compared with the previous month to average 66.79 mb/d, lower by 4.35 mb/d y-o-y. The preliminary decreases in production during October 2020, were mainly driven by Canada, Norway and the UK.

The **share of OPEC crude oil in total global production** up by 0.1% in October to 26.7% 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 - 29: OPEC and world oil supply



Source: OPEC.

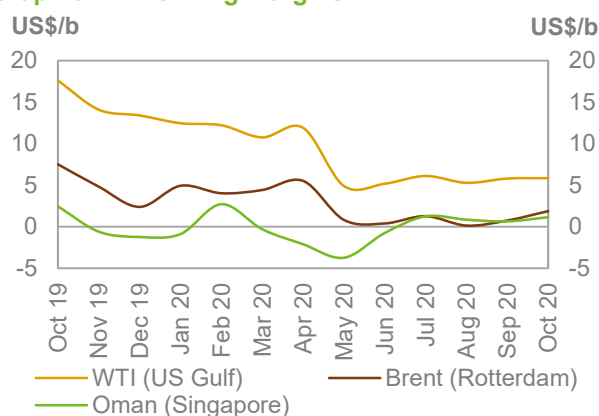
## Product Markets and Refinery Operations

Refining margins globally gained limited ground, with positive performance seen at the middle and bottom sections of the barrel. This was mainly impacted by lower processing rates amid peak maintenance season, despite lower overall offline capacity y-o-y. In addition, a decline in feedstock prices towards the end of the month lent further backing to refining economics. In the US, margins showed only moderate gains, supported by a combination of product supply disruptions stemming from maintenance and a busy hurricane season. The prompt refinery restart after the weather-related disruptions amid demand side pressure prevented a steeper upturn. In Europe, margins showed the largest upside relative to the other regions, with simple configurations having benefitted the most as maintenance work began in the region. In Asia, refining margins profited from the sharp fall in oil prices, while simple margins remained in positive territory and robust product market performance, mainly in India, remained supportive.

### Refinery margins

**US** refinery margins trended marginally upwards, as reductions in product output due to maintenance and bad weather led to significant loss in refinery intakes. Nonetheless, towards the end of the month, intakes recovered and showed a 400 tb/d rise as refineries restored operations following a busy hurricane season. A decline in crude prices recorded over the month helped offset the negative impact of stronger product availability towards the end of the month, thus boosting refining margins. Shell's announcement that it would close its 0.26 mb/d refinery in Convent, Louisiana, before the end of the year is evidence of the deep financial hardships US refiners are facing as a result of the fuel demand contraction stemming from COVID-19.

Graph 6 - 1: Refining margins



Sources: Argus and OPEC.

Since mid-2019, seven refineries have announced closure or conversion to renewable energy plants, while another four facilities in North America are up for sale with no buyers currently in sight. The seven facilities account for nearly 1.5 mb/d of processing capacity that has been lost or on the market in North America since June 2019. Looking ahead, the market signals continued to suppress refining economics as a result of the excess refining capacity, which will most likely lead to further cuts in processing rates in the near term. US refinery margins for WTI averaged \$5.86/b in October, moderately up by 4¢ m-o-m, but down by \$11.75 y-o-y.

Refinery margins in **Europe** saw the largest gains compared to the other regions, supported by positive performance in the gasoil and fuel oil segment. This was attributed to stronger product drawdowns which exerted downward pressure on product inventory levels due to planned seasonal maintenance at several European refineries. Modernization of the refining sector in Russia centred around higher fuel oil upgrades and middle distillate yields which, in response to less supportive market conditions, took some pressure off European refiners and contributed to the positive performance in product markets.

On the other hand, plummeting Apple mobility data as well as the introduction of partial lockdowns in Europe's largest economies – Germany, France and the UK – will most likely put pressure on the region's gasoline and gasoil markets in November. Refinery margins for Brent in Europe averaged \$1.90/b in October, up by \$1.13 compared to a month earlier, but down by \$5.63 y-o-y.

**Asian** product markets strengthened slightly, backed by slower growth in gasoil inventory levels, amid a pickup in fuel oil demand for space heating requirements from Bangladesh and Pakistan. Moreover, the onset of the peak refinery maintenance season globally opened new outlets for motor fuel exporters as global markets continued to re-balance amid the various short- and long-term product supply disruptions. Economically driven run cuts in South Korea, as well as positive y-o-y product demand growth in India, provided some relief to the regional product glut and helped lift gasoil and fuel oil markets.

Given the COVID-19-led demand crunch, the growing possibility of more refinery closures in Southeast Asia and Oceania is set to support fuel exports, particularly from China. Amongst the refineries announced to undergo closure given the difficult refining landscape are Petron’s 180 tb/d refinery and Pilipinas Shell Petroleum Corp. 110 tb/d Tabangao refinery in the Philippines. Australia and New Zealand plans to cut two-thirds of the 135 tb/d Marsden point refinery throughout 2021, while Australia plans to convert its 146 tb/d Kwinana and 120 tb/d Geelong refinery into a fuel import terminal.

In China, refinery processing rates have remained fairly high. Refiners in the country are expected to be the key beneficiaries of a rise in exports to cover the product deficit stemming from plant closures in the region. Refinery margins for Oman in Asia gained 51¢ m-o-m to average \$1.16/b in October, which was lower by \$1.30 y-o-y.

## Refinery operations

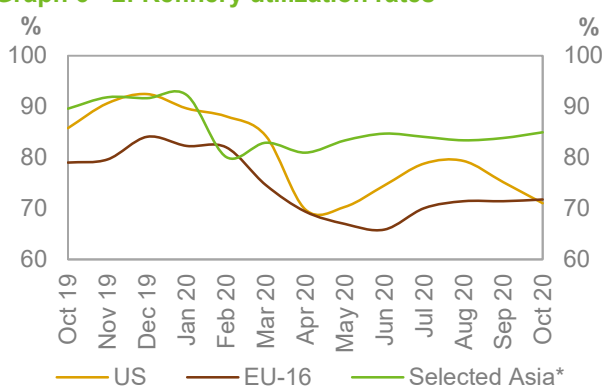
**US** refinery utilization rates decreased in October to average 71.03%, which corresponds to a throughput of 13.04 mb/d. This represented a drop of 4.2 pp and 170 tb/d, respectively, compared to the previous month. Y-o-y, the October refinery utilization rate was down by 14.8 pp, with throughputs showing a drop of 2.3 mb/d.

**European** refinery utilization averaged 71.80%, corresponding to a throughput of 8.9 mb/d. This is a m-o-m rise of 0.3 pp or 40 tb/d. On a y-o-y basis, utilization rates increased by 0.5 pp while throughput was up by 897 tb/d.

In **selected Asia** – comprising China, India, Japan, Singapore and South Korea– refinery utilization rates declined, averaging 84.97% in October, corresponding to a throughput of 24.14 mb/d.

Compared to the previous month, throughputs were up by 1.1 pp and by 220 tb/d. They were down by 4.6 pp y-o-y, but up by 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

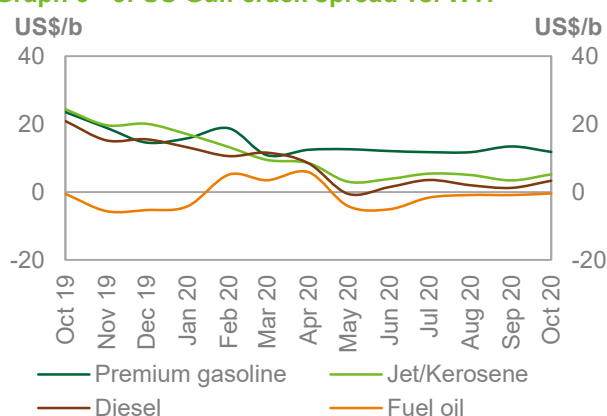
**US gasoline crack spreads** moved lower as gasoline deliveries across US borders declined. Although gasoline inventories fell by more than 0.5 mb over the month, they remained at elevated levels, which continued to send less supportive signals to the market. At the same time, gasoline prices dropped for the second consecutive month to levels not seen since June, which further contributed the poor performance in gasoline crack spreads in October.

The US gasoline crack spreads lost \$12.53 m-o-m to average \$27.84 in October, up by \$8.13/b y-o-y.

The USGC **jet/kerosene** strengthened, backed by an improved demand picture that resulted in a relatively tighter balance in October. The US jet/kerosene crack spread against WTI averaged \$5.21/b, up by \$1.78 m-o-m but down by \$19.15 y-o-y.

**US gasoil crack spreads** against WTI performed positively, backed by strong inventory drawdowns amid relatively lower refinery outputs. The US gasoil crack spread against WTI averaged \$3.36/b, down by \$2.11 m-o-m and by \$17.55 y-o-y.

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



Sources: Argus and OPEC.

## Product Markets and Refinery Operations

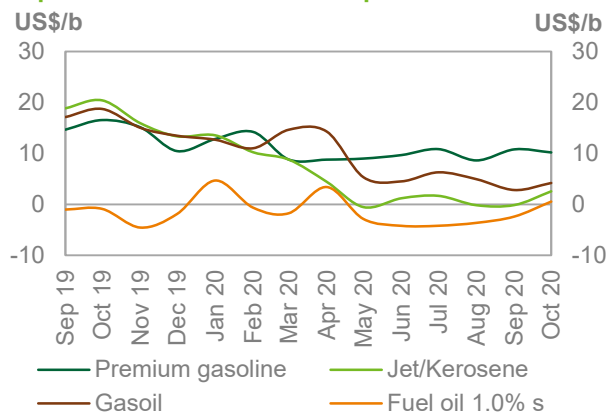
US fuel oil crack spreads against WTI benefitted from declining stock levels attributed to run cuts. At the same time, fuel oil prices rebounded in October, recovering 39¢ following the notable loss in physical value shed in the previous month. In October, the US fuel oil crack spread against WTI averaged minus 42¢/b, down by 47¢ m-o-m and by 11¢ y-o-y.

## European market

**Gasoline crack spreads** in Rotterdam eased in October as the surge in COVID-19 cases weighed on gasoline markets, with Apple mobility data showing a solid decline in road transportation. During the month, gasoline prices rose by \$2.12/b after suffering the steep losses recorded in the previous month. However, given the downturn in the fuels' consumption, the positive response in price had limited impact on gasoline margins.

The gasoline crack spread against Brent averaged \$10.18/b in October, down by 60¢ m-o-m and by \$6.33 y-o-y.

Graph 6 - 4: Rotterdam crack spreads vs. Brent



Sources: Argus and OPEC.

**Jet/kerosene crack spreads** against Brent rose over the month, as the decline in supply triggered bullish sentiment despite growth in inventory levels. The fundamentals for aviation fuels were weak as air travel remained mostly suspended and continued to struggle to return to pre-pandemic level. The negative impact from the demand side pressure was somewhat tempered by the decline in domestic supply attributed to turnarounds, which prevented further losses. The Rotterdam jet/kerosene crack spread against Brent averaged \$2.54/b, up by \$2.70 m-o-m but down by \$17.86 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. As refineries return from turnarounds, however, the market tightness is expected to ease. In addition, more European governments have reintroduced lockdowns amid surging infection rates. Such developments could keep European diesel markets under added pressure going forward, and with the return of refineries after the maintenance season, could set the stage for a potential diesel oversupply in the region. The gasoil crack spread against Brent averaged \$4.16/b, which was higher by \$1.39 m-o-m but lower by \$14.57 y-o-y.

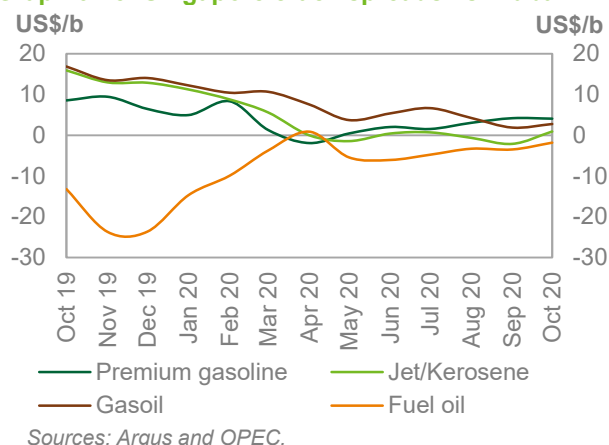
At the bottom of the barrel, **fuel oil 3.5% crack spreads** in Rotterdam moved up slightly due to an increase in total exports in October. Volume deliveries from ARA to Singapore also grew, supported by the favourable East-West spreads. Another bullish factor was a decline in Russian product supplies as massive refinery modernization continues, meaning the country has turned to imports to meet domestic fuel needs. In Europe, fuel oil cracks averaged minus \$2.89/b in October, gaining \$1.44 m-o-m, and \$21.53 y-o-y.

## Asian market

The **Asian gasoline 92 crack spread** weakened as strong regional supplies counterbalanced good demand recovery. Vietnam's 0.2 mb/d Nghi Son refinery in mid to late October offered 0.3 mb of gasoline together with middle distillates as it struggled with high inventories following strong runs and tepid domestic demand. While consumption in China and India continued to show impressive rebounds, the rest of Asia lagged behind. A combination of protests in Thailand and Indonesia and surging COVID-19 cases in Malaysia likely added to the weakness in gasoline markets in the region. Furthermore, in October Sinopec's 0.2 mb/d Zhongke exported its first 60,000 tonnes of gasoline and diesel since the facility began operations in June, while Rongsheng's 0.4 mb/d expansion started in late October, with new secondary units set to begin trials soon. The Singapore gasoline crack spread against Oman averaged minus \$4.09/b in October, down by 12¢ m-o-m and by \$4.49 y-o-y.

Singapore **light distillate naphtha crack spreads** weakened, affected by steam cracker outages in South Korea, as expectations of lower Northeast Asian demand and excess global supply weighed on naphtha markets. In South Korea, Asia's top naphtha importer and consumer, several plants that rely heavily on the light distillate product as feedstock halted operations, creating a bleak outlook for the region's naphtha demand in the near to medium term. As the main outlets for excess naphtha cargoes from the West of Suez, Asia has also suffered negative sentiment due to weak demand for naphtha in gasoline blending amid a fresh wave of lockdowns, with European naphtha cargo volumes left relatively range bound. It has found strength in domestic petrochemical demand, particularly due to the strength of competing feedstocks propane and butane. The Singapore naphtha crack spread against Oman averaged \$1.18/b, having decreased by 56¢ m-o-m, but increased by \$3.50 y-o-y.

Graph 6 - 5: Singapore crack spreads vs. Dubai



In the middle of the barrel, the **jet/kerosene crack spreads** in Asia were supported by robust kerosene volume requirements, mainly from Japan. The Singapore jet/kerosene crack spread against Oman averaged 95¢/b, up by \$3.03 m-o-m, but was down by \$14.97 y-o-y.

The Singapore **gasoil crack spread** strengthened during the month, supported by healthy consumption recovery in India despite strong supplies from China. The Singapore gasoil crack spread against Oman averaged \$2.73/b, up by 88¢ m-o-m but down by \$14.11 y-o-y.

The Singapore **fuel oil crack spread** strengthened in October on lower refinery runs and limited supplies. Tight supplies combined with weak demand has led to volatility in the prompt Singapore high sulphur fuel oil swaps market with the November/December time spread alternating between backwardation and contango in the last week of the month. Most Asian refiners look set to maintain lower LSFO production rates in November, continuing a production plan that began towards the end of the second quarter amid oversupply and high floating storage inventory levels in Singapore, despite the Asian LSFO crack spread having strengthened nearly \$1.80/b in October compared to the September average of \$6.97/b. Singapore fuel oil cracks against Oman averaged minus \$1.80 ¢/b, up by \$1.67 m-o-m and by \$11.41 y-o-y.

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

Event	Time frame	Asia	Europe	US	Observations
Winter season	Nov 20–Dec 20	↑ Limited positive impact on product markets	↑ Limited positive impact on product markets	↑ Limited positive impact on product markets	Recent forecasts of a colder winter in Europe should lend support to heating fuel markets, while in Asia lower temperatures should help kerosene consumption and cracks.
Maintenance season	Sep 20–Oct 20	↑ Positive impact on product markets	↑ Positive impact on product markets	↑ Positive impact on product markets	Restricted product output could provide relief to the oversupplied environment and improve the product supply/demand balance. Bunker fuel markets will also be a strong beneficiary, as product flows between regions tend to rise during peak maintenance.
COVID-19 (second wave)	Sep 20–Dec 20	↓ Negative impact on product markets	↓ Negative impact on product markets	↓ Negative impact on product markets	The potential for further lockdowns amid renewed concerns regarding the pandemic over the winter months could lead to an ongoing fuel glut and exert pressure on product markets.

Source: OPEC.



## Product Markets and Refinery Operations

**Table 6 - 2: Refinery operations in selected OECD countries**

	Refinery throughput, mb/d				Refinery utilization, %			
	Aug 20	Sep 20	Oct 20	Change Oct/Sep	Aug 20	Sep 20	Oct 20	Change Oct/Sep
<b>US</b>	<b>14.79</b>	<b>14.02</b>	<b>13.84</b>	<b>-0.17</b>	<b>79.34</b>	<b>75.19</b>	<b>71.03</b>	<b>-4.2 pp</b>
<b>Euro-16</b>	<b>8.86</b>	<b>8.86</b>	<b>8.90</b>	<b>0.04</b>	<b>71.46</b>	<b>71.46</b>	<b>71.80</b>	<b>0.3 pp</b>
France	0.71	0.77	0.75	-0.02	56.87	61.59	59.97	-1.6 pp
Germany	1.72	1.66	1.71	0.06	78.66	75.64	78.26	2.6 pp
Italy	1.21	1.10	1.11	0.02	59.19	53.52	54.39	0.9 pp
UK	0.84	0.89	0.86	-0.03	63.98	67.63	65.61	-2.0 pp
<b>Selected Asia*</b>	<b>23.79</b>	<b>23.92</b>	<b>24.14</b>	<b>0.22</b>	<b>83.41</b>	<b>83.86</b>	<b>84.97</b>	<b>1.1 pp</b>

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
<b>Refinery crude throughput</b>								
<b>OECD Americas</b>	<b>19.11</b>	<b>19.31</b>	<b>18.96</b>	<b>18.82</b>	<b>18.27</b>	<b>15.31</b>	<b>16.32</b>	<b>16.67</b>
of which US	16.90	17.31	16.99	16.85	16.36	13.65	14.54	14.19
<b>OECD Europe</b>	<b>12.44</b>	<b>12.17</b>	<b>12.09</b>	<b>11.99</b>	<b>11.64</b>	<b>9.90</b>	<b>10.83</b>	<b>10.93</b>
of which:								
France	1.17	1.10	1.00	0.82	0.65	0.58	0.75	0.66
Germany	1.91	1.80	1.78	1.83	1.80	1.67	1.71	1.67
Italy	1.40	1.35	1.35	1.33	1.22	0.99	1.13	1.12
UK	1.10	1.06	1.08	1.14	1.11	0.81	0.86	0.84
<b>OECD Asia Pacific</b>	<b>7.04</b>	<b>6.98</b>	<b>6.79</b>	<b>6.61</b>	<b>6.67</b>	<b>5.53</b>	<b>5.60</b>	<b>6.00</b>
of which Japan	3.22	3.11	3.02	2.97	2.94	2.23	2.27	2.63
<b>Total OECD</b>	<b>38.59</b>	<b>38.46</b>	<b>37.84</b>	<b>37.41</b>	<b>36.58</b>	<b>30.74</b>	<b>32.75</b>	<b>33.61</b>
<b>China</b>	<b>11.33</b>	<b>12.03</b>	<b>12.98</b>	<b>13.68</b>	<b>12.04</b>	<b>13.76</b>	<b>14.00</b>	<b>14.03</b>
<b>India</b>	<b>4.79</b>	<b>4.89</b>	<b>5.03</b>	<b>5.08</b>	<b>5.09</b>	<b>3.86</b>	<b>3.95</b>	<b>4.15</b>
<b>Other Asia</b>	<b>4.84</b>	<b>5.10</b>	<b>4.89</b>	<b>4.78</b>	<b>5.37</b>	<b>4.12</b>	<b>4.26</b>	<b>4.48</b>
<b>Latin America</b>	<b>4.48</b>	<b>4.22</b>	<b>4.02</b>	<b>3.98</b>	<b>3.97</b>	<b>3.22</b>	<b>3.59</b>	<b>3.69</b>
<b>Middle East</b>	<b>6.92</b>	<b>7.05</b>	<b>6.92</b>	<b>6.63</b>	<b>6.07</b>	<b>5.17</b>	<b>5.61</b>	<b>6.00</b>
<b>Africa</b>	<b>2.17</b>	<b>2.16</b>	<b>2.17</b>	<b>2.28</b>	<b>2.28</b>	<b>1.90</b>	<b>2.13</b>	<b>2.19</b>
<b>Eurasia</b>	<b>7.39</b>	<b>7.64</b>	<b>7.59</b>	<b>7.71</b>	<b>7.56</b>	<b>6.63</b>	<b>6.93</b>	<b>6.72</b>
of which Russian	5.59	5.72	5.70	5.83	5.88	5.10	5.28	5.09
of which Other Eurasia	1.80	1.92	1.89	1.88	1.68	1.53	1.65	1.63
<b>Total Non-OECD</b>	<b>41.92</b>	<b>43.10</b>	<b>43.59</b>	<b>44.14</b>	<b>42.38</b>	<b>38.66</b>	<b>40.47</b>	<b>41.27</b>
<b>Total world</b>	<b>80.51</b>	<b>81.57</b>	<b>81.43</b>	<b>81.54</b>	<b>78.96</b>	<b>69.41</b>	<b>73.23</b>	<b>74.88</b>

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.

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

	Sep 20	Oct 20	Change Oct/Sep	Annual avg. 2019	Year-to-date 2020
<b>US Gulf (Cargoes FOB)</b>					
<b>Naphtha*</b>	40.25	40.41	0.16	56.86	37.02
<b>Premium gasoline</b> (unleaded 93)	52.06	51.35	-0.71	79.66	51.41
<b>Regular gasoline</b> (unleaded 87)	48.63	48.20	-0.43	72.70	46.99
<b>Jet/Kerosene</b>	43.04	44.74	1.70	79.32	45.79
<b>Gasoil</b> (0.2% S)	40.86	42.89	2.03	74.61	43.88
<b>Fuel oil</b> (3.0% S)	35.97	37.37	1.40	52.55	33.32
<b>Rotterdam (Barges FoB)</b>					
<b>Naphtha</b>	40.33	41.26	0.93	55.71	37.96
<b>Premium gasoline</b> (unleaded 98)	51.37	50.19	-1.18	79.52	51.06
<b>Jet/Kerosene</b>	40.43	42.55	2.12	80.22	44.83
<b>Gasoil/Diesel</b> (10 ppm)	43.36	44.17	0.81	79.50	48.74
<b>Fuel oil</b> (1.0% S)	38.21	40.57	2.36	60.15	39.60
<b>Fuel oil</b> (3.5% S)	39.05	39.09	0.04	54.19	36.41
<b>Mediterranean (Cargoes FOB)</b>					
<b>Naphtha</b>	39.21	41.07	1.86	54.48	36.35
<b>Premium gasoline**</b>	47.44	45.56	-1.88	71.36	44.81
<b>Jet/Kerosene</b>	37.51	40.89	3.38	77.77	41.94
<b>Diesel</b>	43.10	44.43	1.33	79.03	47.99
<b>Fuel oil</b> (1.0% S)	40.56	43.27	2.71	63.42	42.56
<b>Fuel oil</b> (3.5% S)	34.92	36.10	1.18	50.55	31.92
<b>Singapore (Cargoes FOB)</b>					
<b>Naphtha</b>	43.19	41.88	-1.31	57.10	39.94
<b>Premium gasoline</b> (unleaded 95)	47.27	45.96	-1.31	72.45	45.90
<b>Regular gasoline</b> (unleaded 92)	45.66	44.79	-0.87	69.45	44.19
<b>Jet/Kerosene</b>	39.37	41.65	2.28	77.26	43.75
<b>Gasoil/Diesel</b> (50 ppm)	44.07	43.77	-0.30	77.78	48.77
<b>Fuel oil</b> (180 cst)	38.67	40.22	1.55	57.29	37.06
<b>Fuel oil</b> (380 cst 3.5% S)	37.98	38.90	0.92	56.70	36.15

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

Sources: Argus and OPEC.

## Tanker Market

The tanker market remained weak in October, with dirty tanker rates depressed by ample tonnage availability, while tanker demand remained low as COVID-19 disruptions weighed on trade. High inventory and unwinding floating storage also negatively impacted dirty tanker rates.

After a brief pick-up in the Mediterranean last month, clean tanker rates in October turned lower West of Suez. East of Suez rates managed an increase on gains on the Singapore-to-East route.

### Spot fixtures

**Global spot fixtures** declined m-o-m in October after stepping up the month before, falling by 0.9 mb/d, or 6% m-o-m, to average 14.0 mb/d. The decline occurred because Chinese buying – which has been an important pillar of support for tanker demand since the tail end of the second quarter – has come down sharply as independent refiners used up quotas, resulting in a pause in activity. Spot fixtures were a massive 5.9 mb/d or almost 30% lower than the same month last year, reflecting the overall muted environment in the COVID-19 era.

**Table 7 - 1: Spot fixtures, mb/d**

	Aug 20	Sep 20	Oct 20	Change Oct 20/Sep 20
<b>All areas</b>	<b>14.15</b>	<b>14.91</b>	<b>14.04</b>	<b>-0.87</b>
<b>OPEC</b>	9.46	9.86	9.52	-0.34
<b>Middle East/East</b>	5.66	6.07	5.99	-0.08
<b>Middle East/West</b>	1.06	0.89	0.92	0.03
<b>Outside Middle East</b>	2.74	2.90	2.61	-0.29

Sources: Oil Movements and OPEC.

**OPEC spot fixtures** averaged 9.52 mb/d in October, representing a drop of 3%, or 0.3 mb/d, m-o-m compared with the same period last year. OPEC spot fixtures were 29%, or almost 4 mb/d, lower, reflecting in part production adjustments by OPEC+ countries.

Fixtures from the **Middle East-to-East** fell back in October, dipping 1%, or around 0.1 mb/d m-o-m, to average just under 6 mb/d. Y-o-y, this represents a decline of 2.0 mb/d or 25%.

In contrast, **Middle East-to-West** fixtures edged up 3% in October, recovering some of the previous month's decline. Fixtures on the route averaged 0.9 mb/d, which was still 0.4 mb/d, or 31% mb/d, lower compared with the same month last year, as crude import demand remained sluggish in the Atlantic basin.

**Outside of the Middle East**, fixtures dropped 10%, or 0.3 mb/d, m-o-m to average just under 2.6 mb/d. In annual terms, fixtures were down by 36% or 1.5 mb/d.

### Sailings and arrivals

**OPEC sailings** edged slightly higher m-o-m in October, averaging 20.4 mb/d, compared with a high so far this year of 25.5 mb/d recorded in April. The increase came as Libyan barrels began to return to the market at the end of September. Y-o-y, OPEC sailings were 4.6 mb/d, or 19%, lower.

**Middle East sailings** averaged 14.7 mb/d, representing an increase of 0.3 mb/d, or almost 2% m-o-m, down 3.5 mb/d, or just shy of 20% compared to the same month last year.

**Crude arrivals** saw across-the-board gains in October compared with the previous month. Arrivals in West Asia led gains, increasing 10%, or 0.5 mb/d, m-o-m to average 5.2 mb/d. North American arrivals recovered from the previous month's decline to average 8.1 mb/d, representing a m-o-m increase of less than 4%, or 0.3 mb/d. Arrivals in Europe rose by slightly more than 1% m-o-m to average almost 10.1 mb/d. Far East arrivals rose 1% m-o-m to average 8.5 mb/d in October.

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

	Aug 20	Sep 20	Oct 20	Change Oct 20/Sep 20
<b>Sailings</b>				
OPEC	19.90	20.17	20.37	0.20
Middle East	14.46	14.40	14.68	0.28
<b>Arrivals</b>				
North America	7.85	7.82	8.10	0.28
Europe	10.04	9.95	10.07	0.12
Far East	8.24	8.42	8.51	0.09
West Asia	4.56	4.74	5.22	0.48

Sources: Oil Movements and OPEC.

## Dirty tanker freight rates

### Very large crude carriers (VLCCs)

VLCC spot rates declined further in October, falling 10% m-o-m on average, 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 8% m-o-m in October to average WS28 points. Y-o-y, rates were more than 80% lower compared with the same month last year.

Rates on the **Middle East-to-West** route were also 12% lower m-o-m, to average WS18 points. Y-o-y, rates were 78% lower.

Rates also dropped on the **West Africa-to-East** route, decreasing 11% m-o-m to average WS31 points and down 76% compared with October 2019.

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

	Size 1,000 DWT	Aug 20	Sep 20	Oct 20	Change Oct 20/Sep 20
<b>VLCC</b>					
Middle East/East	230-280	33	30	28	-3
Middle East/West	270-285	23	21	18	-3
West Africa/East	260	37	34	31	-4

Sources: Argus and OPEC.

### Suezmax

Suezmax rates declined in October, with **average spot freight rates** dropping 13% m-o-m on average in October. Rates were 82% lower y-o-y. Suezmax demand remains muted, although the fourth quarter is typically a period when activity picks up due to seasonal factors.

On the **West Africa-to-US Gulf Coast** (USGC) route, Suezmax rates averaged WS27 points in October, down 16% from the month before. Y-o-y, rates were 84% lower than in October last year.

The **Northwest Europe (NWE)-to-US Gulf Coast** (USGC) route fell 10% m-o-m to average WS29 points, representing an 81% decline from the same month last year.

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

	Size 1,000 DWT	Aug 20	Sep 20	Oct 20	Change Oct 20/Sep 20
<b>Suezmax</b>					
West Africa/US Gulf Coast	130-135	41	32	27	-5
Northwest Europe/US Gulf Coast	130-135	38	32	29	-3

Sources: Argus and OPEC.

## Aframax

**Aframax** rates declined in October, down 8% m-o-m, and 69% y-o-y. Overall, activity remained sluggish, weighing on rates amid ample availability. The **Indonesia-to-East** route exhibited the largest m-o-m losses in percentage terms, declining 20% to average WS56, some 68% lower y-o-y.

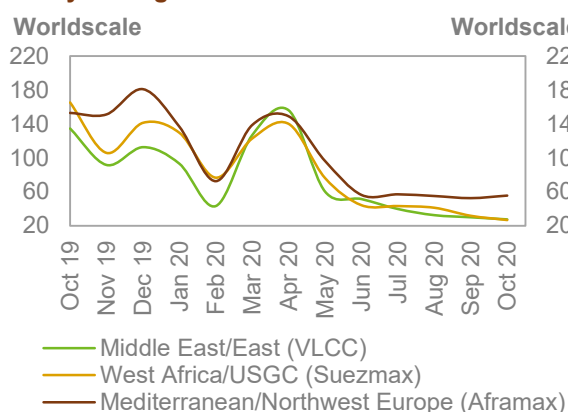
**Table 7 - 5: Dirty Aframax spot tanker freight rates, WS**

	Size	Aug 20	Sep 20	Oct 20	Change
	1,000 DWT				Oct 20/Sep 20
<b>Aframax</b>					
<b>Indonesia/East</b>	80-85	70	70	56	-14
<b>Caribbean/US East Coast</b>	80-85	69	57	46	-10
<b>Mediterranean/Mediterranean</b>	80-85	60	57	60	3
<b>Mediterranean/Northwest Europe</b>	80-85	55	53	56	3

Sources: Argus and OPEC.

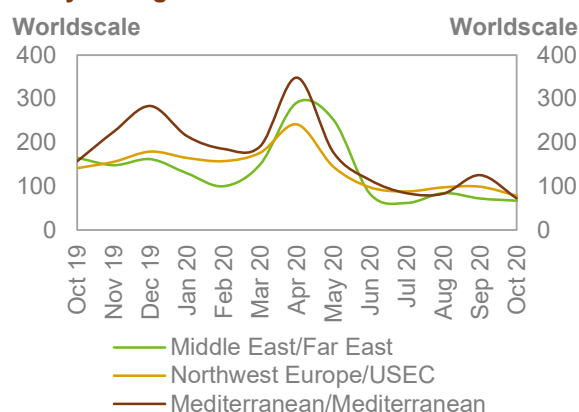
The **Caribbean-to-US East Coast (USEC)** route declined by 18% m-o-m in October to average WS46, and was 75% lower y-o-y. The Mediterranean (Med) routes provided some respite from declines seen elsewhere, with the **Mediterranean-to-Northwest Europe (NWE)** route edging up 6% m-o-m to average WS56, while the **Cross-Med** route gained 5% m-o-m to average WS60. Y-o-y, rates were around 65% lower on both routes.

**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** showed mixed performance in October, with a continued uptick East of Suez being overwhelmed by a sharp fall West of Suez. As a result, rates declined on average by 24% m-o-m, and were down by 50% compared with the same month last year.

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

	Size	Aug 20	Sep 20	Oct 20	Change
	1,000 DWT				Oct 20/Sep 20
<b>East of Suez</b>					
<b>Middle East/East</b>	30-35	84	72	67	-5
<b>Singapore/East</b>	30-35	92	90	103	13
<b>West of Suez</b>					
<b>Northwest Europe/US East Coast</b>	33-37	98	99	79	-21
<b>Mediterranean/Mediterranean</b>	30-35	83	125	72	-53
<b>Mediterranean/Northwest Europe</b>	30-35	93	135	74	-61

Sources: Argus and OPEC.

**East of Suez** rates rose 5% m-o-m in October, but were still 48% lower compared with October 2019. Gains were concentrated in the **Singapore-to-East** route, which rose 15% m-o-m to average WS103. Y-o-y, rates on the route were 37% lower. In contrast, the **Middle East-to-East** route declined by 7% m-o-m to average WS67 points and showed a decline of almost 60% y-o-y.

The previous month's gains on **West of Suez** were erased in October, as rates plunged 37% m-o-m in October and were down 52% y-o-y. Rates on the **Cross-Med** and **Med-to-NWE** routes fell back from higher levels seen in September following a short-lived tightness in the region. They declined by 42% and 45% m-o-m to average WS72 and WS74 points, respectively. Rates on the **NWE-to-USEC** route declined by 21% m-o-m to average WS79 points.



## Crude and Refined Products Trade

Preliminary data shows US crude imports picked up, from an almost three-decade low, to average 5.4 mb/d in October. US crude exports fell further below 3 mb/d in October, impacted by lower demand amid renewed lockdown measures in Europe and as strong Chinese buying began to wind down. The latest data showed OECD Europe crude imports picked up in July to average 7.9 mb/d, after having declined for five-straight months to a 15-year low.

China's crude imports rebounded in September, averaging 11.8 mb/d, the third-highest on record after the levels seen in June and July this year. China's crude imports are expected to be lower in 4Q20, as independent refiners have topped out import quotas for the year, with preliminary data showing China's crude imports averaged 10.1 mb/d in October.

India's crude imports fell back after improving the previous month, averaging 3.7 mb/d in September, but performed better y-o-y than in previous months, amid an easing of lockdown measures.

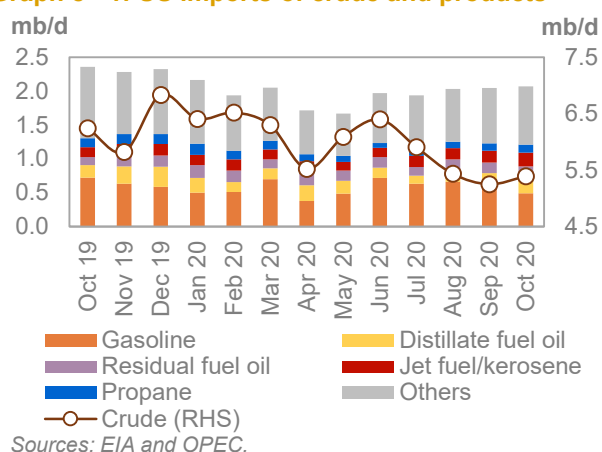
## US

Preliminary data shows **US crude imports** in October recovered from an almost three-decade low the month before to average 5.4 mb/d. Crude imports rose 0.1 mb/d m-o-m but were 0.8 mb/d lower than the same month last year.

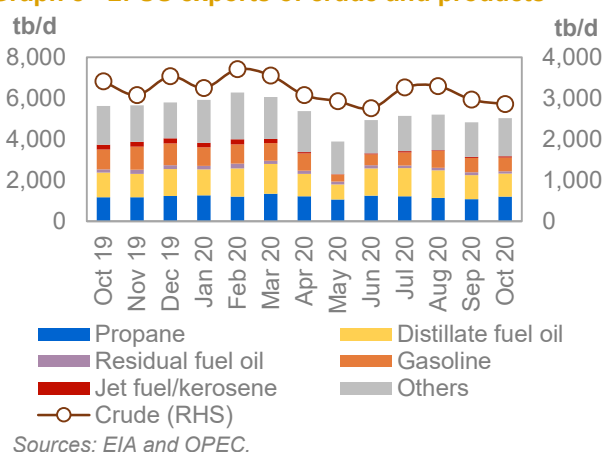
**US crude exports** continued to decline, falling further below 3.0 mb/d. Crude outflows averaged 2.9 mb/d in October, representing a decline of 0.1 mb/d m-o-m. Exports were almost 0.6 mb/d lower than in the same month last year.

The latest monthly data for US crude exports by destination shows continued strong buying by China in August, averaging 0.6 mb/d. This kept the country as the **top destination** for US crude exports for the fourth month in a row. The Netherlands came in second with 0.3 mb/d, followed by Canada and South Korea.

**Graph 8 - 1: US imports of crude and products**



**Graph 8 - 2: US exports of crude and products**



**US net crude imports** averaged 2.5 mb/d in October, continuing to move higher from a low of 2.1 mb/d in August. Net imports were almost 0.3 mb/d higher m-o-m but some 0.3 mb/d, or 11%, lower than the same month last year.

On the product side, preliminary data shows **US product imports** edged 1% higher m-o-m in October to average 2.1 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 October, representing a m-o-m increase of 0.2 mb/d or around 4%. Product exports were still 0.6 mb/d, or 11%, lower than the same month last year.

As a result, **US net product exports** averaged just under 3.0 mb/d in October, compared to 2.8 mb/d in September 2020 and almost 3.3 mb/d in October 2019.



Preliminary data indicates that the US remained a **net crude and product** exporter for the fourth month in a row in October with net outflows of 0.4 mb/d.

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

US	Aug 20	Sep 20	Oct 20	Change Oct 20/Sep 20
<b>Crude oil</b>	2,134	2,282	2,531	249
<b>Total products</b>	-3,167	-2,782	-2,951	-169
<b>Total crude and products</b>	<b>-1,033</b>	<b>-500</b>	<b>-420</b>	<b>80</b>

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

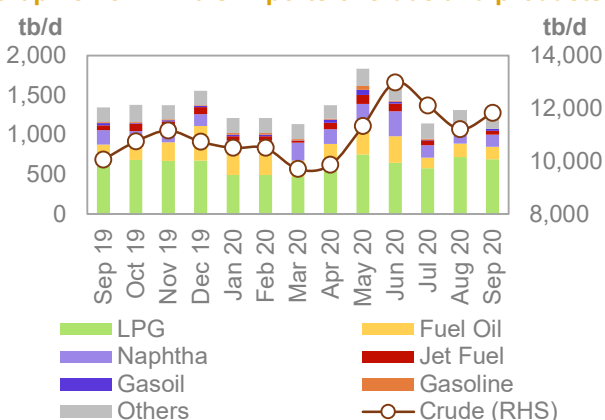
Sources: EIA and OPEC.

## China

China's **crude imports** reached the third-highest on record in September, representing perhaps the last bumper month for Chinese crude imports this year. Inflows were 0.6 mb/d higher than the month before and a stunning 1.8 mb/d higher than the same month last year. Only June and July of this year have seen higher numbers. Preliminary figures for October show crude imports falling to 10.1 mb/d, still slightly above last year's average.

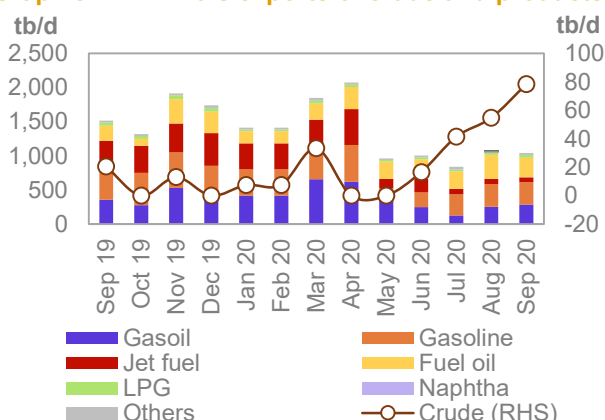
Saudi Arabia reclaimed the title of top **crude supplier** to China in September, with a share of 16%, representing almost 1.9 mb/d in imports. Russia was a close second with 1.8 mb/d, representing a 15% share, followed by the Brazil with 1.0 mb/d and the US with 0.95 mb/d compared to 0.5 mb/d the month before.

**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 3% m-o-m in September to average 1.3 mb/d and were 6% lower y-o-y. Declines were driven by lower LPG and naphtha imports.

**Product exports** averaged 1.0 mb/d in September, representing a decline of 4% from the previous month and some 0.5 mb/d lower than the same month last year. The decline was driven mainly by fuel oil, as gasoil and gasoline exports increased. Overall, product exports remained in line with the sluggish levels seen since May 2020.

China remained a **net product importer** for the fifth month in a row in September, with net imports of 0.2 mb/d. This is unchanged from the level seen the month before, while China was a net exporter at 172 mb/d in September 2019.

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

China	Jul 20	Aug 20	Sep 20	Change Sep 20/Aug 20
<b>Crude oil</b>	12,070	11,157	11,751	594
<b>Total products</b>	303	223	226	3
<b>Total crude and products</b>	<b>12,373</b>	<b>11,380</b>	<b>11,977</b>	<b>597</b>

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

Sources: China, Oil and Gas Petrochemicals and OPEC.

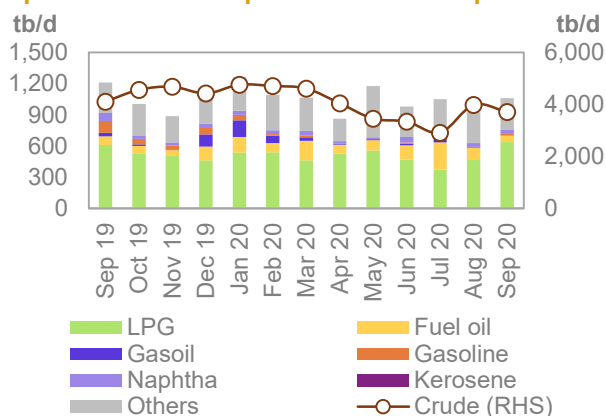
## India

India's **crude imports** averaged 3.7 mb/d in September, representing a decline of 7% and down from a sharp jump in August. Y-o-y, crude imports were 0.4 mb/d, or just under 10%, lower. Still crude inflows were at reasonable levels compared to earlier in the year, as easing lockdown restrictions have improved demand expectations.

India's **product imports** increased 0.1 mb/d m-o-m to average 1.0 mb/d in in September, but were down 0.1 mb/d compared to the same month last year. Strong inflows of LPG was the main driver in the increase, partly offset by a decline in fuel oil.

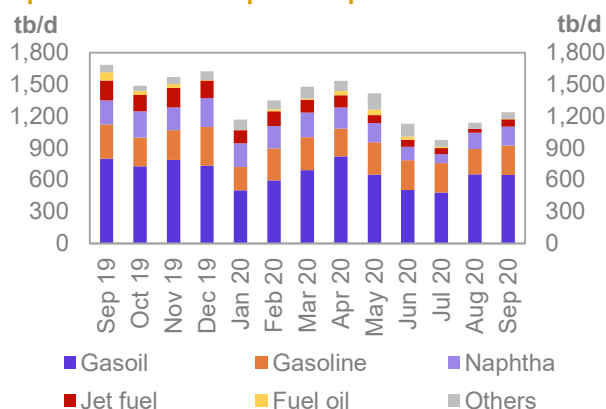
India's **product exports** averaged 1.2 mb/d in September, representing an increase of just under 0.1 mb/d m-o-m. Gains were driven by an improvement in gasoline and naphtha exports. Product exports were 0.4 mb/d lower than the same month last year.

**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 remained a **net product exporter** in September, with net exports of 178 tb/d, compared to 214 mb/d the month before and 471 tb/d in the same month last year.

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

India	Jul 20	Aug 20	Sep 20	Change Sep 20/Aug 20
<b>Crude oil</b>	2,913	3,981	3,704	-277
<b>Total products</b>	75	-214	-178	36
<b>Total crude and products</b>	<b>2,987</b>	<b>3,767</b>	<b>3,526</b>	<b>-241</b>

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

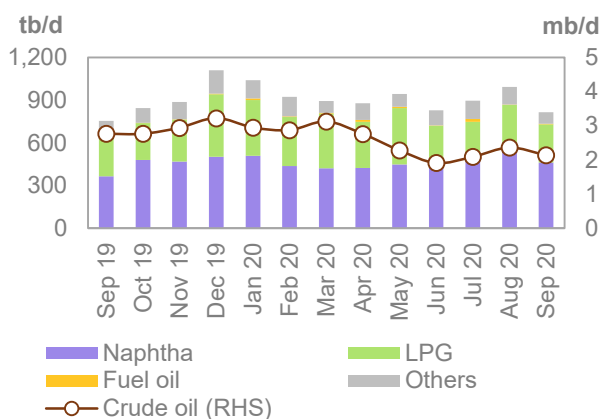
**Japan's crude imports** dipped in September, averaging 2.1 mb/d, representing a decline of 0.2 mb/d from the month before and a decline of 0.6 mb/d y-o-y. The country's crude imports have remained sluggish as refiners have kept crude runs low, preferring to import needed products amid an uneven recovery for some fuels, particularly middle distillates.

Saudi Arabia remained the **top supplier of crude** to Japan in September, averaging 0.9 mb/d, representing a share of 40%. The UAE stood in second place with a share of around 34%, followed by Kuwait with around 8%.

**Product imports** to Japan, including LPG, declined for the first time in two months in September to average 0.8 mb/d. This represented a drop of 18% m-o-m, driven by lower naphtha inflows. Total product inflows were slightly higher than year-ago levels, as refiners prefer to import specific crudes rather than boost runs.

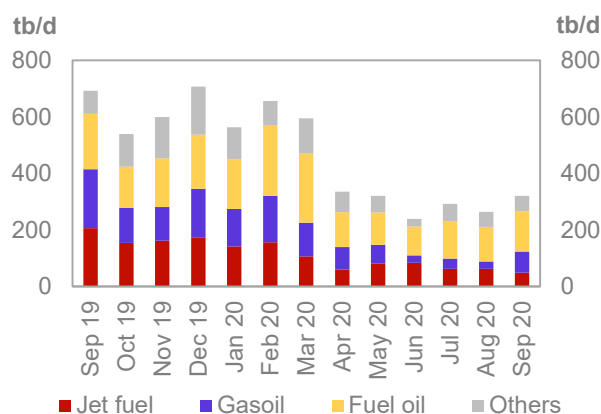
**Product exports**, including LPG, remained at the lower levels seen since April, averaging 0.3 mb/d in September, representing a drop of around 60 tb/d compared with the previous month. Gains were driven by an increase in fuel oil and, to a lesser extent, gasoil exports. Y-o-y, product exports were 0.4 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 495 tb/d in September, representing a decline of 234 tb/d m-o-m but an increase of 432 mb/d y-o-y.

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

Japan	Jul 20	Aug 20	Sep 20	Change Sep 20/Aug 20
Crude oil	2,090	2,361	2,140	-221
Total products	604	730	495	-234
<b>Total crude and products</b>	<b>2,694</b>	<b>3,090</b>	<b>2,636</b>	<b>-455</b>

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

Sources: METI and OPEC.

## OECD Europe

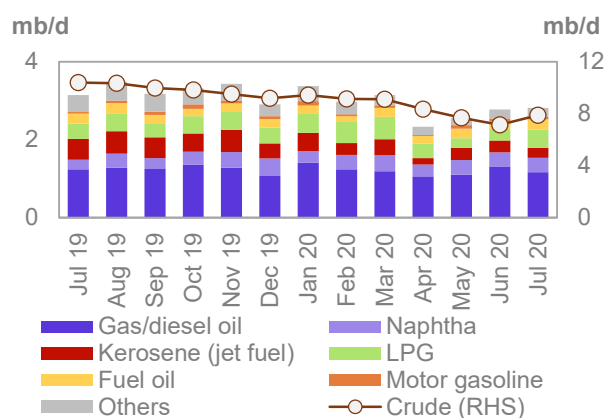
The latest available data shows **OECD Europe crude imports**, excluding intra-regional trade, recovered from a more than 15-year low the month before to average 7.9 mb/d in July. This represented an increase of 0.7 mb/d, or 10%, from the previous month but still a massive drop of 2.5 mb/d compared to the same month last year. The m-o-m gains came as lockdown disruptions eased, reviving economic activities to some degree.

**OECD Europe crude exports**, excluding intra-regional trade, moved higher for the second consecutive month, averaging 609 tb/d in July. Y-o-y, crude exports were 7%, or almost 0.3 mb/d, higher, amid increased flows of North Sea crude to Asia, particularly China.

OECD Europe **net crude imports** averaged 7.3 mb/d in July, representing an increase of 0.7 mb/d, or 11%, m-o-m and a considerable decline of 2.8 mb/d, or 28% mb/d, compared to the same month last year.

OECD Europe **product imports** averaged 2.8 mb/d in July, representing a marginal increase of 43 tb/d, or less than 2%, m-o-m, but a decline of 0.3 mb/d or almost 10% y-o-y.

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



Sources: IEA and OPEC.

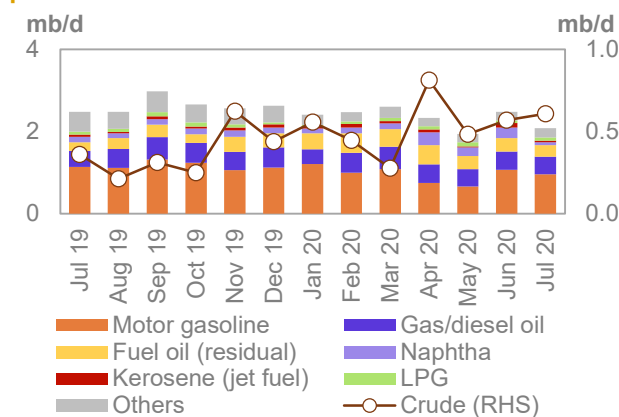
## Crude and Refined Products Trade

**Product exports** averaged 2.1 mb/d in July, representing a decline of 0.4 mb/d, or more than 16%, from the previous month and some 0.4 mb/d lower than in July 2019. The decline was mainly driven by a drop in fuel oil outflows, as well as motor gasoline to a lesser degree.

As a result, **OECD Europe net product imports** averaged 0.7 mb/d in July, compared to 0.3 mb/d the month before and 0.7 mb/d in July 2019.

Combined, **net crude and product imports** averaged 8.0 mb/d in July, compared to 6.9 mb/d the month before and almost 11 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	May 20	Jun 20	Jul 20	Change Jul 20/Jun 20
Crude oil	7,196	6,568	7,267	698
Total products	606	296	730	434
<b>Total crude and products</b>	<b>7,802</b>	<b>6,864</b>	<b>7,996</b>	<b>1,133</b>

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

Sources: IEA and OPEC.

## Eurasia

**Total crude oil exports from Russia and Central Asia** edged higher in September, up slightly over 1%, or 67 tb/d, to average 5.8 mb/d. Y-o-y, total crude exports from the region were 1.3 mb/d, or 18%, lower, reflecting ongoing production adjustments carried out since June.

Crude exports through the **Transneft system** were marginally lower, averaging 3.4 mb/d. Compared to the same month last year, exports were down 1.0 mb/d or 24%.

Total shipments from the Black Sea increased by 63 tb/d m-o-m, or around 20%, to average 384 tb/d in September. In contrast, total Baltic Sea exports declined by 43 tb/d, or 5%, m-o-m to average 0.9 mb/d in September, with shipments from Primorsk up by 19% to 551 tb/d and Ust-Luga exports declining by 31% or 130 tb/d. Meanwhile, shipments via the Druzhba pipeline edged down 3% m-o-m to average 902 tb/d in September. Kozmino shipments increased by around 8% m-o-m to average 587 tb/d. Exports to China via the ESPO pipeline averaged 587 tb/d in September, representing a decline of 8% from the previous month.

In the **Lukoil system**, exports via the Barents Sea increased by 4% to 85 tb/d in September, while those from the Baltic Sea were unchanged.

On other routes, **Russia's Far East** exports rose 3% m-o-m to average 336 tb/d, which represented a decline of 14% compared to September of last year.

**Central Asia's** total exports averaged 203 tb/d in September, a decline of 3% compared with the previous month but an increase of 4% y-o-y.

**Black Sea** total exports were broadly unchanged at 1.2 mb/d m-o-m in September, with a decline at the Novorossiysk port terminal (CPC) offsetting an increase at the Supsa port terminal.

**Total product exports from Russia and Central Asia** rose 11%, or 258 tb/d, m-o-m to average 2.6 mb/d in September. Gains in fuel oil, naphtha and gasoil offset declines in gasoline, jet and VGO. Y-o-y, total product exports were 286 tb/d, or 10%, lower in September, led by declines in fuel oil and gasoline.

## Commercial Stock Movements

Preliminary September data sees total OECD commercial oil stocks down m-o-m by 15.3 mb. At 3,179 mb, they were 237.1 mb higher than the same time one year ago and 211.9 mb above the latest five-year average. Within the components, crude and products stocks declined m-o-m by 13.0 mb and 2.2 mb, respectively.

In terms of days of forward cover, OECD commercial stocks fell m-o-m by 1.3 days in September to stand at 71.7 days. This is 10.3 days above the September 2019 level and 9.4 days above the latest five-year average.

Preliminary data for October showed that total US commercial oil stocks fell m-o-m by 42.6 mb to stand at 1,376.5 mb. This is 84.9 mb above the same month a year ago, and 82.7 mb higher than the latest five-year average. Crude and product stocks fell m-o-m by 8.5 mb and 34.1 mb, respectively.

### OECD

Preliminary September data sees **total OECD commercial oil stocks** down m-o-m by 15.3 mb. At 3,179 mb, they were 237.1 mb higher than the same time one year ago and, 211.9 mb above the latest five-year average.

Within the components, crude and products stocks declined m-o-m by 13.0 mb and 2.2 mb respectively. Commercial oil stocks in September rose m-o-m in OECD Europe, but fell in OECD Americas and OECD Asia Pacific.

OECD **commercial crude stocks** fell in September by 13.0 mb to stand at 1,539 mb. This is 102.7 mb higher than the same time a year ago, and 78.6 mb above the latest five-year average.

Compared with the previous month, OECD Americas and OECD Pacific crude stocks in September fell by 11.1 mb and 5.2 mb, respectively, while OECD Europe crude stocks rose by 3.3 mb.

OECD **total product inventories** fell m-o-m by 2.2 mb in September to stand at 1,639 mb. This is 134.4 mb above the same time a year ago, and 133.3 mb higher than the latest five-year average.

Within the OECD regions, product stocks in the Asia Pacific and Europe increased by 0.6 mb and 3.1 mb, m-o-m, respectively. Product stocks in OECD America fell m-o-m by 5.9 mb.

In terms of **days of forward cover**, OECD commercial stocks fell m-o-m by 1.3 days in September to stand at 71.7 days. This is 10.3 days above the September 2019 level and 9.4 days above the latest five-year average.

Within the OECD regions, the Americas were 6.2 days above the latest five-year average at 68.1 days; Europe was 18.0 days higher than the latest five-year average at 87.1 days; and the Asia Pacific was 5.6 days above the latest five-year average at 57.2 days.

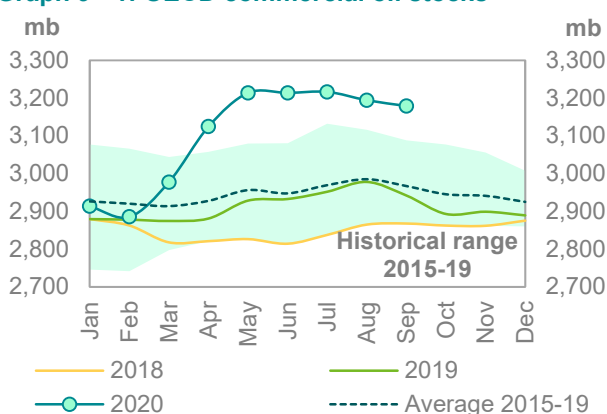
**Table 9 - 1: OECD's commercial stocks, mb**

	Sep 19	Jul 20	Aug 20	Sep 20	Change Sep 20/Aug 20
<b>OECD stocks</b>					
Crude oil	1,437	1,584	1,552	1,539	-13.0
Products	1,505	1,632	1,642	1,639	-2.2
<b>Total</b>	<b>2,942</b>	<b>3,216</b>	<b>3,194</b>	<b>3,179</b>	<b>-15.3</b>
<b>Days of forward cover</b>	<b>61.4</b>	<b>74.0</b>	<b>72.9</b>	<b>71.7</b>	<b>-1.3</b>

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

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

**Graph 9 - 1: OECD commercial oil stocks**



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

## OECD Americas

**OECD Americas total commercial stocks** fell by 17.0 mb m-o-m in September to settle at 1,668 mb. This is 115.7 mb above the same month last year and 102.4 mb higher than the latest five-year average.

**Commercial crude oil stocks** in OECD Americas fell by 11.1 mb m-o-m in September to stand at 846 mb, which is 55.7 mb higher than September 2019 and 48.1 mb above the latest five-year average. The fall was driven mainly by lower US crude imports, which fell by around 0.4 mb/d m-o-m to stand at 5.3 mb/d. Lower crude runs in September limited a further drop in crude oil commercial stocks.

**Total product stocks** in OECD Americas also fell m-o-m by 5.9 mb in September, reversing the sixth consecutive monthly rise, to stand at 822 mb. This was 60 mb higher than the same month one year ago and 54.3 mb above the latest five-year average. Gradual improvement in regional consumption was behind the stocks draws.

## OECD Europe

**OECD Europe's total commercial stocks** rose m-o-m by 6.4 mb in September to end the month at 1,091 mb. This is 103.1 mb higher than the same time a year ago and 114.0 mb above the latest five-year average.

OECD Europe's **commercial crude stocks** rose m-o-m by 3.3 mb in September to end the month at 465 mb, which is 25.1 mb higher than the level one-year ago and 42.9 mb above the latest five-year average. The September build in crude oil inventories came despite higher refinery throughputs m-o-m in the EU-16, which increased by 400 tb/d to stand at 9.21 mb/d.

OECD Europe's **commercial product stocks** also rose m-o-m by 3.1 mb to end September at 627 mb. This is 78.0 mb higher than the same time a year ago and 71.1 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 m-o-m by 4.6 mb in September to stand at 419 mb. This is 18.3 mb higher than a year ago, but 4.5 mb below the latest five-year average.

OECD Asia Pacific's **crude inventories** fell by 5.2 mb m-o-m to end September at 229 mb, which is 21.9 mb higher than one year ago, but 12.4 mb below the latest five-year average.

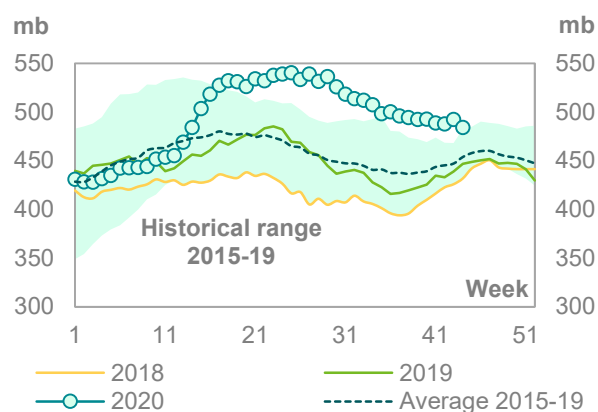
In contrast, OECD Asia Pacific's **total product inventories** rose by 0.6 mb m-o-m to end September at 191 mb. This is 3.5 mb lower than the same time a year ago, but 7.9 mb above the latest five-year average.

## US

Preliminary data for October showed that **total US commercial oil stocks** fell m-o-m by 42.6 mb to stand at 1,376.5 mb. This is 84.9 mb, or 6.6%, above the same month a year ago, and 82.7 mb, or 6.4%, higher than the latest five-year average. Crude and product stocks fell m-o-m by 8.5 mb and 34.1 mb, respectively.

US **commercial crude stocks** fell by 8.5 mb m-o-m in October to stand at 484.4 mb. This is 41.1 mb, or 9.3%, above the same month last year, and 27.8 mb, or 6.1%, above the latest five-year average. The fall was driven mainly by falling crude production, however lower crude runs in October limited a further drop in crude oil commercial stocks.

**Graph 9 - 2: US weekly commercial crude oil inventories**



Sources: EIA and OPEC.

**Total product stocks** in October fell m-o-m, dropping by 34.1 mb, to stand at 892.1 mb. This is 49.9 mb, or 5.9%, above October 2019 levels, and 59.5 mb, or 7.2%, above the latest five-year average. Within the components, with the exception of gasoline, all other products experienced stock draws.

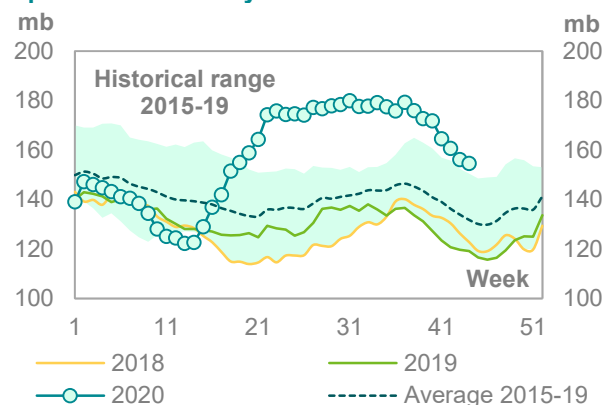
**Gasoline stocks** rose m-o-m in October by 0.9 mb to settle at 227.7 mb. This is 3.2 mb, or 1.4%, above the same month last year, and 4.5 mb, or 2.0%, higher than the latest five-year average. The monthly stock draw came mainly on the back of lower gasoline demand, which fell by more than 160 tb/d to average 8.44 mb/d.

In contrast, **distillate stocks** fell m-o-m by 17.2 mb in October to stand at 154.6 mb. This is 34.6 mb, or 28.8%, higher than the same month a year ago, and 20.0 mb, or 14.9%, above the latest five-year average. The fall was driven by higher distillate demand, which increased by around 370 tb/d to stand at 3.94 mb/d.

**Residual fuel oil stocks** fell m-o-m in October, dropping by 0.6 mb. At 31.7 mb, this was 2.0 mb, or 6.7%, higher than the same month a year ago, but 2.6 mb, or 7.6%, below the latest five-year average.

**Jet fuel** fell m-o-m by 2.2 mb, ending October at 37.4 mb. This is 2.4 mb, or 6.0%, lower than the same month last year, and 3.8 mb, or 9.3%, 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**

	Oct 19	Aug 20	Sep 20	Oct 20	Change Oct 20/Sep 20
<b>US stocks</b>					
Crude oil	443.4	504.0	492.9	484.4	-8.5
Gasoline	224.5	236.6	226.7	227.7	0.9
Distillate fuel	120.1	178.9	171.8	154.6	-17.2
Residual fuel oil	29.7	34.8	32.3	31.7	-0.6
Jet fuel	39.8	40.1	39.6	37.4	-2.2
<b>Total products</b>	<b>842.2</b>	<b>932.1</b>	<b>926.2</b>	<b>892.1</b>	<b>-34.1</b>
<b>Total</b>	<b>1,291.6</b>	<b>1,436.1</b>	<b>1,419.1</b>	<b>1,376.5</b>	<b>-42.6</b>
<b>SPR</b>	<b>641.2</b>	<b>647.5</b>	<b>642.0</b>	<b>639.3</b>	<b>-2.7</b>

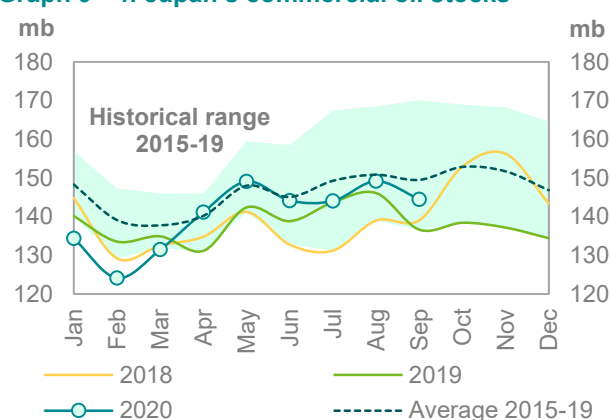
Sources: EIA and OPEC.

## Japan

In **Japan**, **total commercial oil stocks** fell m-o-m in September by 4.6 mb to settle at 144.5 mb. This is 7.8 mb, or 5.7%, higher than the same month last year, but 5.0 mb, or 3.4%, below the latest five-year average. Crude stocks fell m-o-m by 5.2 mb, while product stocks rose by 0.6 mb.

Japanese **commercial crude oil stocks** fell in September to stand at 78.8 mb. This is 3.6 mb, or 4.8%, above the same month a year ago, but 5.0 mb, or 6.0%, lower than the latest five-year average. The drop came on the back of lower crude imports, which fell by around 220 tb/d to average 2.14 mb/d. However, lower refinery crude runs, which dropped by 23 tb/d to average 2.32 mb/d, limited further declines.

**Graph 9 - 4: Japan's commercial oil stocks**



Sources: METI and OPEC.

In contrast, Japan's **total product inventories** rose m-o-m by 0.6 mb to end September at 65.8 mb. This is 4.2 mb, or 6.9%, higher than the same month last year, but in line with the latest five-year average. The picture was mixed within products, with gasoline, middle distillates and naphtha seeing stocks builds, while residual fuel oil registered a stock draw, when compared to the previous month.

**Gasoline stocks** rose m-o-m by 0.1 mb to stand at 12.2 mb in September. This was 2.7 mb, or 27.9%, higher than a year ago, and 2.1 mb, or 21.0 %, above the latest five-year average. The build in gasoline stocks was driven by lower gasoline domestic sales, which decreased by 7.6% m-o-m.

## Commercial Stock Movements

**Distillate stocks** also rose by 0.7 mb m-o-m, to end September at 33.1 mb. This is 2.9 mb, or 9.8%, higher than the same month a year ago, and 0.8 mb, or 2.6%, above the latest five-year average. Within distillate components, kerosene and jet fuel stocks increased m-o-m by 10.1% and 6.9%, respectively, while gasoil stocks fell by 11.2%.

**Total residual fuel oil stocks** declined by 0.4 mb in September to stand at 11.9 mb. This is 0.9 mb, or 7.3%, lower than the same month last year, and 1.6 mb, or 12%, below the latest five-year average. Within the components, fuel oil A and B.C stocks fell by 2.1% and 4.3%, respectively.

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

	Sep 19	Jul 20	Aug 20	Sep 20	Change Sep 20/Aug 20
<b>Japan's stocks</b>					
<b>Crude oil</b>	<b>75.1</b>	<b>83.5</b>	<b>84.0</b>	<b>78.8</b>	<b>-5.2</b>
<b>Gasoline</b>	9.6	12.0	12.2	12.2	0.1
<b>Naphtha</b>	9.0	7.7	8.3	8.6	0.3
<b>Middle distillates</b>	30.1	28.6	32.4	33.1	0.7
<b>Residual fuel oil</b>	12.8	12.3	12.3	11.9	-0.4
<b>Total products</b>	<b>61.5</b>	<b>60.6</b>	<b>65.2</b>	<b>65.8</b>	<b>0.6</b>
<b>Total**</b>	<b>136.7</b>	<b>144.1</b>	<b>149.2</b>	<b>144.5</b>	<b>-4.6</b>

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 September showed that **total European commercial oil stocks** rose by 6.4 mb m-o-m, reversing the last monthly draw. At 1,164 mb, they were 68.3 mb, or 6.2%, above the same month a year ago, and 59.8 mb, or 5.4%, higher than the latest five-year average. Crude and products stocks rose m-o-m by 3.3 mb and 3.1 mb, respectively.

European **crude inventories** rose in September to stand at 497 mb. This is 16.3 mb, or 3.4%, higher than the same month a year ago, and 20.3 mb, or 4.3%, higher than the latest five-year average. The build in September crude oil inventories came despite higher refinery throughputs m-o-m in the EU-16, which increased by 400 tb/d to stand at 9.21 mb/d.

European **total product stocks** also rose m-o-m by 3.1 mb to end September at 667 mb. This is 52 mb, or 8.5%, higher than the same month a year ago, and 39.5 mb, or 6.3%, above the latest five-year average. The build was attributed to the demand decline in the region during September.

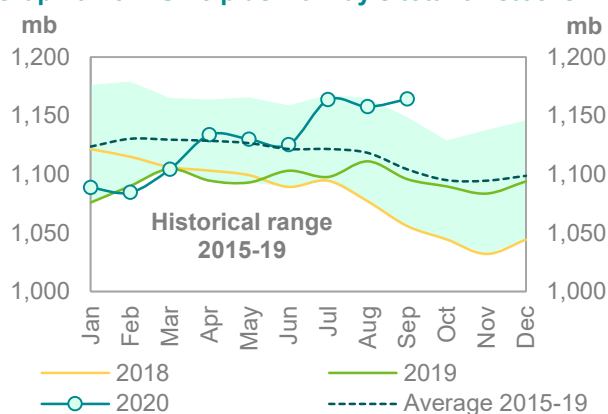
**Gasoline stocks** rose m-o-m by 0.8 mb in September to stand at 116 mb. This is 9.6 mb, or 9.0%, higher than the level registered the same time a year ago, and 7.8 mb, or 7.2%, above the latest five-year average.

**Distillate stocks** rose m-o-m by 1.9 mb in September to stand at 448 mb. This is 33.1 mb, or 8.0%, higher than the same month last year, and 22.4 mb, or 5.3%, higher than the latest five-year average.

**Naphtha stocks** increased m-o-m by 1.3 mb in September, ending the month at 31 mb. This is 4.5 mb, or 17.0%, above the September 2019 level, and 5.7 mb, or 22.2%, higher than the latest five-year average.

In contrast, **residual fuel stocks** fell m-o-m by 0.8 mb in September to 72.0 mb. This is 4.7 mb, or 7.1%, higher than the same month one year ago, and 3.6 mb, or 5.3%, 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

	Sep 19	Jul 20	Aug 20	Sep 20	Change Sep 20/Aug 20
<b>EU stocks</b>					
<b>Crude oil</b>	<b>480.5</b>	<b>504.7</b>	<b>493.5</b>	<b>496.8</b>	<b>3.3</b>
<b>Gasoline</b>	106.7	115.4	115.6	116.4	0.8
<b>Naphtha</b>	26.6	30.1	29.8	31.2	1.3
<b>Middle distillates</b>	415.2	441.1	446.5	448.4	1.9
<b>Fuel oils</b>	66.8	72.4	72.4	71.5	-0.8
<b>Total products</b>	<b>615.4</b>	<b>659.0</b>	<b>664.3</b>	<b>667.4</b>	<b>3.1</b>
<b>Total</b>	<b>1,095.9</b>	<b>1,163.6</b>	<b>1,157.7</b>	<b>1,164.1</b>	<b>6.4</b>

Sources: Argus, Euroilstock and OPEC.

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

### Singapore

At the end of September, **total product stocks in Singapore** rose by 1.0 mb m-o-m reversing the stock draws of the last three months to stand at 52.9 mb. This is 10.5 mb, or 24.8%, higher than the same month a year ago. Within products, light and middle distillates registered draws, while fuel oil stocks experienced stock builds.

**Light distillate stocks** fell m-o-m by 0.3 mb in September to stand at 13.6 mb. This is 3.5 mb, or 34.7%, higher than the same month one year ago.

**Middle distillate stocks** fell by 0.2 mb in September to stand at 15.3 mb. This is 2.5 mb, or 19.5%, higher than in September 2019.

In contrast, **residual fuel oil stocks** rose by 1.5 mb, ending September at 24.0 mb, which is 4.5 mb, or 24.8%, higher than in September 2020.

### ARA

**Total product stocks in ARA** rose m-o-m by 3.1 mb in September reversing the stock draws of the previous three months. They now stand at 51.9 mb, which is 8.4 mb, or 19.3%, higher than the same month a year ago.

**Gasoline stocks** in September fell m-o-m by 0.6 mb to stand at 11.3 mb, which is 3.2 mb, or 39.5%, above the same month one year ago.

In contrast, **gasoil stocks** rose by 1.5 mb m-o-m in September to stand at 20.7 mb, which is the same level as in September 2019.

**Residual fuel stocks** rose m-o-m by 1.9 mb to end September at 8.8 mb. This is 0.9 mb, or 11.4%, above the level registered one year ago.

**Jet oil** rose m-o-m by 0.3 mb to end September at 7.4 mb. This is 2.3 mb, or 45.1%, above the level one year ago.

### Fujairah

During the week ending 26 October, **total oil product stocks in Fujairah** fell by 1.87 mb w-o-w to stand at 18.47 mb. Total stocks fell below 20 mb for only the second time this year and to the lowest level since 9 September 2019, according to data from FEDCom and S&P Global Platts. At this level, total oil stocks were 4.14 mb lower than the same time a year ago. Within products, light and heavy distillates witnessed stock draws, while middle distillates registered a build.

**Light distillate stocks** fell by 1.85 mb w-o-w to stand at 4.20 mb, which is 1.83 mb lower than a year ago.

**Heavy distillate stocks** fell by 414,000 barrels to stand at 9.95 mb, which is 4.6 mb lower than a year ago. In contrast, **middle distillate stocks** rose by 387,000 barrels to stand at 4.32 mb, which is 2.30 mb above the same time last year.

## Balance of Supply and Demand

Demand for OPEC crude in 2020 is revised down by 0.2 mb/d, from the previous month, to stand at 22.1 mb/d. This is around 7.2 mb/d lower than in 2019. According to secondary sources, OPEC crude production averaged 28.3 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 0.7 mb/d lower than demand for OPEC crude.

Demand for OPEC crude in 2021 is revised down by 0.6 mb/d from the previous month to stand at 27.4 mb/d. This is around 5.2 mb/d higher than in 2020.

## Balance of supply and demand in 2020

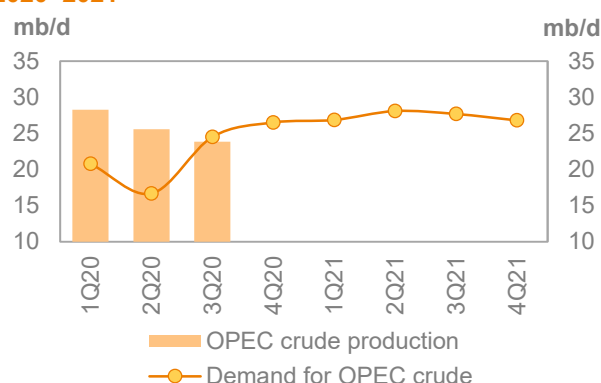
**Demand for OPEC crude in 2020** is revised down by 0.2 mb/d, from the previous month, to stand at 22.1 mb/d. This is around 7.2 mb/d lower than in 2019.

Demand for OPEC crude in the first two quarters remains unchanged, while 3Q20 is revised up by 0.1 mb/d and 4Q20 is revised down by 1.0 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 5.9 mb/d, while 4Q20 is expected to see a drop of 2.4 mb/d.

According to secondary sources, OPEC crude production averaged 28.3 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 0.7 mb/d lower than demand for OPEC crude.

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



Note: \* 2020–2021 = Forecast.  
Source: OPEC.

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

	2019	1Q20	2Q20	3Q20	4Q20	2020	Change 2020/19
<b>(a) World oil demand</b>	<b>99.76</b>	<b>92.71</b>	<b>82.60</b>	<b>90.99</b>	<b>93.67</b>	<b>90.01</b>	<b>-9.75</b>
Non-OPEC liquids production	65.16	66.57	60.83	61.45	62.11	62.73	-2.43
OPEC NGL and non-conventionals	5.26	5.35	5.09	5.04	5.06	5.13	-0.13
<b>(b) Total non-OPEC liquids production and OPEC NGLs</b>	<b>70.42</b>	<b>71.93</b>	<b>65.92</b>	<b>66.49</b>	<b>67.16</b>	<b>67.87</b>	<b>-2.55</b>
<b>Difference (a-b)</b>	<b>29.34</b>	<b>20.79</b>	<b>16.69</b>	<b>24.50</b>	<b>26.51</b>	<b>22.14</b>	<b>-7.20</b>
<b>OPEC crude oil production</b>	<b>29.34</b>	<b>28.25</b>	<b>25.59</b>	<b>23.83</b>			
<b>Balance</b>	<b>-0.01</b>	<b>7.46</b>	<b>8.90</b>	<b>-0.68</b>			

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** is revised down by 0.6 mb/d, from the previous month, to stand at 27.4 mb/d. This is around 5.2 mb/d higher than in 2020.

The 1Q21 and 2Q21 are revised down by 0.4 mb/d and 0.7 mb/d, respectively, compared to the previous assessment. The 3Q21 remains unchanged, while the 4Q21 is revised down by 1.2 mb/d, from last month's report.

When compared to the same quarters in 2020, demand for OPEC crude in 1Q21 and 2Q21 is forecast to be 6.1 mb/d and 11.4 mb/d higher, respectively. The 3Q21 is projected to show an increase of 3.2 mb/d y-o-y, while 4Q21 is expected to be higher by 0.3 mb/d y-o-y.

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

	2020	1Q21	2Q21	3Q21	4Q21	2021	Change 2021/20
<b>(a) World oil demand</b>	<b>90.01</b>	<b>94.96</b>	<b>96.30</b>	<b>96.61</b>	<b>97.09</b>	<b>96.26</b>	<b>6.25</b>
Non-OPEC liquids production	62.73	63.00	63.03	63.71	64.97	63.68	0.95
OPEC NGL and non-conventionals	5.13	5.11	5.19	5.22	5.32	5.21	0.08
<b>(b) Total non-OPEC liquids production and OPEC NGLs</b>	<b>67.87</b>	<b>68.11</b>	<b>68.22</b>	<b>68.93</b>	<b>70.29</b>	<b>68.89</b>	<b>1.03</b>
<b>Difference (a-b)</b>	<b>22.14</b>	<b>26.85</b>	<b>28.09</b>	<b>27.68</b>	<b>26.79</b>	<b>27.36</b>	<b>5.22</b>

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
<b>World oil demand and supply balance</b>													
<b>World demand</b>													
Americas	25.11	25.73	25.70	24.34	20.03	23.47	24.30	23.04	24.30	25.18	24.49	24.77	24.69
of which US	20.27	20.82	20.86	19.66	16.38	19.32	19.98	18.84	19.85	20.56	19.99	20.32	20.18
Europe	14.41	14.32	14.25	13.35	11.01	12.89	12.23	12.37	13.15	13.68	13.64	12.51	13.25
Asia Pacific	8.15	7.95	7.79	7.75	6.54	6.52	7.33	7.03	7.80	7.38	7.04	7.55	7.44
<b>Total OECD</b>	<b>47.67</b>	<b>47.99</b>	<b>47.75</b>	<b>45.44</b>	<b>37.59</b>	<b>42.87</b>	<b>43.86</b>	<b>42.44</b>	<b>45.25</b>	<b>46.24</b>	<b>45.17</b>	<b>44.83</b>	<b>45.38</b>
China	12.32	12.86	13.30	10.70	12.85	13.37	13.88	12.71	12.31	13.87	14.40	14.63	13.81
India	4.53	4.73	4.84	4.77	3.51	3.55	4.34	4.04	4.89	4.19	4.36	4.99	4.61
Other Asia	8.69	8.91	9.02	8.23	7.79	8.33	8.70	8.26	8.33	8.96	8.79	8.84	8.73
Latin America	6.51	6.53	6.59	6.11	5.61	6.17	6.08	5.99	6.21	6.27	6.37	6.31	6.29
Middle East	8.23	8.13	8.20	7.88	6.91	7.88	7.50	7.54	8.07	7.64	8.19	7.75	7.91
Africa	4.20	4.33	4.45	4.37	3.77	3.97	4.20	4.08	4.46	3.95	4.17	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
of which Russia	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
of which other Eurasia	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
<b>Total Non-OECD</b>	<b>49.84</b>	<b>50.99</b>	<b>52.02</b>	<b>47.27</b>	<b>45.02</b>	<b>48.12</b>	<b>49.81</b>	<b>47.57</b>	<b>49.71</b>	<b>50.06</b>	<b>51.43</b>	<b>52.26</b>	<b>50.88</b>
<b>(a) Total world demand</b>	<b>97.52</b>	<b>98.98</b>	<b>99.76</b>	<b>92.71</b>	<b>82.60</b>	<b>90.99</b>	<b>93.67</b>	<b>90.01</b>	<b>94.96</b>	<b>96.30</b>	<b>96.61</b>	<b>97.09</b>	<b>96.26</b>
<b>Y-o-y change</b>	<b>1.79</b>	<b>1.46</b>	<b>0.78</b>	<b>-6.17</b>	<b>-16.15</b>	<b>-9.66</b>	<b>-7.07</b>	<b>-9.75</b>	<b>2.25</b>	<b>13.70</b>	<b>5.61</b>	<b>3.42</b>	<b>6.25</b>
<b>Non-OPEC liquids production</b>													
Americas	21.51	24.05	25.77	26.59	23.56	24.20	24.49	24.71	24.54	24.71	25.40	26.23	25.22
of which US	14.42	16.69	18.43	19.05	16.81	17.41	17.58	17.71	17.46	17.79	18.07	18.70	18.01
Europe	3.83	3.84	3.71	4.03	3.87	3.75	3.99	3.91	4.01	3.97	4.00	4.20	4.04
Asia Pacific	0.39	0.41	0.52	0.53	0.54	0.55	0.56	0.54	0.55	0.52	0.53	0.52	0.53
<b>Total OECD</b>	<b>25.73</b>	<b>28.30</b>	<b>30.00</b>	<b>31.16</b>	<b>27.97</b>	<b>28.51</b>	<b>29.03</b>	<b>29.17</b>	<b>29.10</b>	<b>29.20</b>	<b>29.93</b>	<b>30.94</b>	<b>29.80</b>
China	3.97	3.98	4.05	4.15	4.16	4.17	4.11	4.15	4.15	4.13	4.13	4.18	4.15
India	0.86	0.86	0.83	0.80	0.77	0.78	0.80	0.79	0.80	0.78	0.78	0.78	0.79
Other Asia	2.82	2.75	2.71	2.64	2.47	2.50	2.49	2.52	2.52	2.51	2.51	2.50	2.51
Latin America	5.72	5.79	6.06	6.36	5.83	6.18	6.42	6.20	6.45	6.40	6.36	6.59	6.45
Middle East	3.14	3.20	3.20	3.19	3.18	3.14	3.13	3.16	3.20	3.21	3.23	3.24	3.22
Africa	1.50	1.53	1.53	1.49	1.48	1.46	1.40	1.46	1.40	1.42	1.40	1.38	1.40
Eurasia	14.20	14.44	14.52	14.65	13.11	12.57	12.57	13.22	13.19	13.18	13.18	13.17	13.18
of which Russia	11.17	11.35	11.44	11.51	10.21	9.84	9.85	10.35	10.36	10.36	10.36	10.36	10.36
of which other Eurasia	3.03	3.09	3.07	3.15	2.90	2.73	2.72	2.87	2.83	2.82	2.82	2.81	2.82
<b>Total Non-OECD</b>	<b>32.20</b>	<b>32.55</b>	<b>32.89</b>	<b>33.27</b>	<b>31.00</b>	<b>30.80</b>	<b>30.93</b>	<b>31.50</b>	<b>31.71</b>	<b>31.63</b>	<b>31.58</b>	<b>31.83</b>	<b>31.69</b>
Total Non-OPEC production	57.93	60.86	62.90	64.43	58.97	59.31	59.96	60.66	60.80	60.83	61.51	62.77	61.48
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
<b>Total Non-OPEC liquids production</b>	<b>60.15</b>	<b>63.11</b>	<b>65.16</b>	<b>66.57</b>	<b>60.83</b>	<b>61.45</b>	<b>62.11</b>	<b>62.73</b>	<b>63.00</b>	<b>63.03</b>	<b>63.71</b>	<b>64.97</b>	<b>63.68</b>
OPEC NGL + non-conventional oils	5.18	5.33	5.26	5.35	5.09	5.04	5.06	5.13	5.11	5.19	5.22	5.32	5.21
<b>(b) Total non-OPEC liquids production and OPEC NGLs</b>	<b>65.33</b>	<b>68.44</b>	<b>70.42</b>	<b>71.93</b>	<b>65.92</b>	<b>66.49</b>	<b>67.16</b>	<b>67.87</b>	<b>68.11</b>	<b>68.22</b>	<b>68.93</b>	<b>70.29</b>	<b>68.89</b>
<b>Y-o-y change</b>	<b>0.87</b>	<b>3.11</b>	<b>1.98</b>	<b>2.20</b>	<b>-3.95</b>	<b>-3.72</b>	<b>-4.69</b>	<b>-2.55</b>	<b>-3.81</b>	<b>2.30</b>	<b>2.44</b>	<b>3.13</b>	<b>1.03</b>
<b>OPEC crude oil production</b>													
(secondary sources)	31.48	31.34	29.34	28.25	25.59	23.83							
<b>Total liquids production</b>	<b>96.81</b>	<b>99.78</b>	<b>99.76</b>	<b>100.18</b>	<b>91.50</b>	<b>90.32</b>							
<b>Balance (stock change and miscellaneous)</b>	<b>-0.71</b>	<b>0.80</b>	<b>-0.01</b>	<b>7.46</b>	<b>8.90</b>	<b>-0.68</b>							
<b>OECD closing stock levels, mb</b>													
Commercial	2,860	2,875	2,889	2,977	3,213	3,179							
SPR	1,569	1,552	1,535	1,537	1,562	1,553							
<b>Total</b>	<b>4,428</b>	<b>4,427</b>	<b>4,425</b>	<b>4,515</b>	<b>4,775</b>	<b>4,731</b>							
<b>Oil-on-water</b>	<b>1,025</b>	<b>1,058</b>	<b>1,011</b>	<b>1,186</b>	<b>1,329</b>	<b>1,329</b>							
<b>Days of forward consumption in OECD, days</b>													
Commercial onland stocks	60	60	68	79	75	72							
SPR	33	33	36	41	36	35							
<b>Total</b>	<b>92</b>	<b>93</b>	<b>104</b>	<b>120</b>	<b>111</b>	<b>108</b>							
<b>Memo items</b>													
<b>(a) - (b)</b>	<b>32.19</b>	<b>30.54</b>	<b>29.34</b>	<b>20.79</b>	<b>16.69</b>	<b>24.50</b>	<b>26.51</b>	<b>22.14</b>	<b>26.85</b>	<b>28.09</b>	<b>27.68</b>	<b>26.79</b>	<b>27.36</b>

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

Source: OPEC.

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
<b>World oil demand and supply balance</b>													
<b>World demand</b>													
Americas	-	-	-0.01	0.04	0.03	-0.40	-0.50	-0.21	-0.07	-0.08	-0.40	-0.50	-0.26
of which US	-	-	-	-	-	-0.31	-0.40	-0.18	-0.10	-0.10	-0.31	-0.40	-0.23
Europe	-	-	-	0.01	-0.01	-	-1.00	-0.26	-0.40	-0.61	-	-1.00	-0.51
Asia Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total OECD</b>	-	-	<b>-0.01</b>	<b>0.04</b>	<b>0.03</b>	<b>-0.40</b>	<b>-1.50</b>	<b>-0.47</b>	<b>-0.47</b>	<b>-0.68</b>	<b>-0.40</b>	<b>-1.50</b>	<b>-0.76</b>
China	-	-	-	-	-	0.40	0.30	0.18	-	-	0.40	0.30	0.18
India	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Asia	-	0.01	-0.01	0.01	0.01	-0.01	0.01	-	0.01	0.01	-0.01	0.01	-
Latin America	-	-	-	-	-	-	-	-	-	-	-	-	-
Middle East	-	-	-	-	-	-	-	-	-	-	-	-	-
Africa	-	-	-	-	-	-	-	-	-	-	-	-	-
Eurasia	-	-	-	-	-	-	-	-	-	-	-	-	-
of which Russia	-	-	-	-	-	-	-	-	-	-	-	-	-
of which other Eurasia	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Non-OECD</b>	-	-	-	-	-	<b>0.40</b>	<b>0.31</b>	<b>0.18</b>	-	<b>0.01</b>	<b>0.40</b>	<b>0.30</b>	<b>0.18</b>
<b>(a) Total world demand</b>	-	-	<b>-0.01</b>	<b>0.04</b>	<b>0.03</b>	<b>0.01</b>	<b>-1.20</b>	<b>-0.29</b>	<b>-0.47</b>	<b>-0.68</b>	<b>0.01</b>	<b>-1.20</b>	<b>-0.59</b>
Y-o-y change	-	-	<b>-0.01</b>	<b>0.05</b>	<b>0.04</b>	-	<b>-1.20</b>	<b>-0.29</b>	<b>-0.50</b>	<b>-0.70</b>	<b>0.01</b>	<b>-0.01</b>	<b>-0.30</b>
<b>Non-OPEC liquids production</b>													
Americas	-	-	0.01	-	-	-0.07	-0.17	-0.06	-0.05	-0.05	-0.05	-0.05	-0.05
of which US	-	-	-	-	-	-0.09	-0.17	-0.07	-0.06	-0.06	-0.06	-0.05	-0.05
Europe	-	-	-	-	-	-0.13	-0.06	-0.05	-0.07	-0.01	-0.02	-0.09	-0.05
Asia Pacific	-	-	-	-	-	0.02	-0.06	-0.02	-0.02	-0.04	-0.07	-0.07	-0.05
<b>Total OECD</b>	-	-	<b>0.01</b>	-	-	<b>-0.19</b>	<b>-0.29</b>	<b>-0.12</b>	<b>-0.14</b>	<b>-0.10</b>	<b>-0.12</b>	<b>-0.19</b>	<b>-0.13</b>
China	-	-	-	-	-	0.02	0.09	0.03	0.10	0.08	0.04	0.02	0.06
India	-	-	-	-	-	0.01	-0.05	-0.02	-0.02	-0.02	-0.07	-0.08	-0.05
Other Asia	-	-	-	-	-	0.01	0.01	0.01	-	-	-	-	-
Latin America	-	-	-	-	-	0.03	-	0.01	0.01	0.01	0.01	0.01	0.01
Middle East	-	-	-	-	-	0.03	0.08	0.03	0.10	0.10	0.10	0.10	0.10
Africa	-	-	0.01	-	-	0.03	-	0.01	0.01	0.04	0.04	0.04	0.03
Eurasia	-0.01	-0.01	0.01	-	-	0.02	-	0.01	-	-	-	-	-
of which Russia	-	-	-	-	-	0.01	-	0.01	-	-	-	-	-
of which other Eurasia	-0.01	-0.01	0.01	-	-	0.01	-	0.01	-	-	-	-	-
<b>Total Non-OECD</b>	<b>-0.01</b>	<b>-0.01</b>	<b>0.01</b>	-	-	<b>0.13</b>	<b>0.12</b>	<b>0.07</b>	<b>0.18</b>	<b>0.19</b>	<b>0.11</b>	<b>0.08</b>	<b>0.14</b>
Total Non-OPEC production	-0.01	-0.01	0.01	-	-	-0.06	-0.17	-0.06	0.05	0.10	-0.01	-0.11	0.01
Processing gains	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Non-OPEC liquids production</b>	<b>-0.01</b>	<b>-0.01</b>	<b>0.01</b>	-	-	<b>-0.06</b>	<b>-0.17</b>	<b>-0.06</b>	<b>0.05</b>	<b>0.10</b>	<b>-0.01</b>	<b>-0.11</b>	<b>0.01</b>
OPEC NGL + non-conventional oils	-	-	-	-	-	-	-0.08	-0.02	-0.13	-0.05	-0.02	0.09	-0.03
<b>(b) Total non-OPEC liquids production and OPEC NGLs</b>	<b>-0.01</b>	<b>-0.01</b>	<b>0.01</b>	-	-	<b>-0.06</b>	<b>-0.24</b>	<b>-0.08</b>	<b>-0.09</b>	<b>0.05</b>	<b>-0.03</b>	<b>-0.03</b>	<b>-0.03</b>
Y-o-y change	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>-0.01</b>	<b>0.01</b>	<b>-0.06</b>	<b>-0.24</b>	<b>-0.08</b>	<b>-0.09</b>	<b>0.05</b>	<b>0.03</b>	<b>0.22</b>	<b>0.06</b>
<b>OPEC crude oil production (secondary sources)</b>	-	-	-	-0.01	0.01	-0.02	-	-	-	-	-	-	-
<b>Total liquids production</b>	-0.01	-0.01	0.01	-0.01	0.01	-0.07	-	-	-	-	-	-	-
<b>Balance (stock change and miscellaneous)</b>	-0.01	-0.01	0.01	-0.04	-0.03	-0.07	-	-	-	-	-	-	-
<b>OECD closing stock levels, mb</b>													
Commercial	-	-	-2	-4	2	-	-	-	-	-	-	-	-
SPR	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	-	-	<b>-2</b>	<b>-4</b>	<b>2</b>	-	-	-	-	-	-	-	-
<b>Oil-on-water</b>	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Days of forward consumption in OECD, days</b>													
Commercial onland stocks	-	1	1	-1	1	-	-	-	-	-	-	-	-
SPR	-	1	1	-1	1	-	-	-	-	-	-	-	-
<b>Total</b>	-	<b>1</b>	<b>2</b>	<b>-1</b>	<b>2</b>	-	-	-	-	-	-	-	-
<b>Memo items</b>													
<b>(a) - (b)</b>	<b>0.01</b>	<b>0.01</b>	<b>-0.01</b>	<b>0.04</b>	<b>0.03</b>	<b>0.06</b>	<b>-0.96</b>	<b>-0.22</b>	<b>-0.39</b>	<b>-0.73</b>	<b>0.03</b>	<b>-1.18</b>	<b>-0.57</b>

Note: \* This compares Table 11 - 1 in this issue of the MOMR with Table 11 - 1 in the October 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
<b>OECD oil stocks and oil on water</b>												
<b>Closing stock levels, mb</b>												
<b>OECD onland commercial</b>	<b>3,007</b>	<b>2,860</b>	<b>2,875</b>	<b>2,868</b>	<b>2,875</b>	<b>2,875</b>	<b>2,932</b>	<b>2,942</b>	<b>2,889</b>	<b>2,977</b>	<b>3,213</b>	<b>3,179</b>
Americas	1,598	1,498	1,544	1,543	1,544	1,504	1,559	1,553	1,518	1,575	1,713	1,668
Europe	995	948	930	933	930	989	983	988	978	1,033	1,098	1,091
Asia Pacific	414	413	402	392	402	381	391	401	394	369	402	419
<b>OECD SPR</b>	<b>1,601</b>	<b>1,569</b>	<b>1,552</b>	<b>1,570</b>	<b>1,552</b>	<b>1,557</b>	<b>1,549</b>	<b>1,544</b>	<b>1,535</b>	<b>1,537</b>	<b>1,562</b>	<b>1,553</b>
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	492
Asia Pacific	421	423	420	422	420	417	417	416	416	416	416	417
<b>OECD total</b>	<b>4,608</b>	<b>4,428</b>	<b>4,427</b>	<b>4,438</b>	<b>4,427</b>	<b>4,432</b>	<b>4,481</b>	<b>4,486</b>	<b>4,425</b>	<b>4,515</b>	<b>4,775</b>	<b>4,731</b>
<b>Oil-on-water</b>	<b>1,102</b>	<b>1,025</b>	<b>1,058</b>	<b>1,041</b>	<b>1,058</b>	<b>1,013</b>	<b>995</b>	<b>1,012</b>	<b>1,011</b>	<b>1,186</b>	<b>1,329</b>	<b>1,329</b>
<b>Days of forward consumption in OECD, days</b>												
<b>OECD onland commercial</b>	<b>63</b>	<b>60</b>	<b>60</b>	<b>60</b>	<b>60</b>	<b>61</b>	<b>61</b>	<b>61</b>	<b>64</b>	<b>79</b>	<b>75</b>	<b>72</b>
Americas	64	58	60	60	61	59	60	60	62	79	73	69
Europe	69	66	65	66	66	70	67	70	73	94	85	89
Asia Pacific	51	52	52	49	49	51	52	50	51	56	62	57
<b>OECD SPR</b>	<b>34</b>	<b>33</b>	<b>33</b>	<b>33</b>	<b>33</b>	<b>33</b>	<b>32</b>	<b>32</b>	<b>34</b>	<b>41</b>	<b>36</b>	<b>35</b>
Americas	28	26	26	26	26	26	25	25	26	32	28	27
Europe	33	34	34	34	34	34	33	34	36	44	38	40
Asia Pacific	52	53	54	53	51	56	55	52	54	64	64	57
<b>OECD total</b>	<b>97</b>	<b>92</b>	<b>94</b>	<b>93</b>	<b>93</b>	<b>94</b>	<b>93</b>	<b>94</b>	<b>97</b>	<b>120</b>	<b>111</b>	<b>108</b>

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

## Appendix

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
<b>Non-OPEC liquids production and OPEC NGLs</b>													
US	14.4	16.7	18.4	17.4	17.6	17.7	-0.7	17.5	17.8	18.1	18.7	18.0	0.3
Canada	4.9	5.3	5.4	4.9	5.1	5.1	-0.3	5.2	5.0	5.4	5.6	5.3	0.2
Mexico	2.2	2.1	1.9	1.9	1.8	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
<b>OECD Americas</b>	<b>21.5</b>	<b>24.0</b>	<b>25.8</b>	<b>24.2</b>	<b>24.5</b>	<b>24.7</b>	<b>-1.1</b>	<b>24.5</b>	<b>24.7</b>	<b>25.4</b>	<b>26.2</b>	<b>25.2</b>	<b>0.5</b>
Norway	2.0	1.9	1.7	2.0	2.1	2.0	0.3	2.1	2.1	2.1	2.3	2.2	0.1
UK	1.0	1.1	1.1	1.0	1.1	1.1	0.0	1.1	1.1	1.1	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	0.7	0.7	0.7	0.0	0.7	0.7	0.7	0.7	0.7	0.0
<b>OECD Europe</b>	<b>3.8</b>	<b>3.8</b>	<b>3.7</b>	<b>3.8</b>	<b>4.0</b>	<b>3.9</b>	<b>0.2</b>	<b>4.0</b>	<b>4.0</b>	<b>4.0</b>	<b>4.2</b>	<b>4.0</b>	<b>0.1</b>
Australia	0.3	0.3	0.5	0.5	0.5	0.5	0.0	0.5	0.5	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
<b>OECD Asia Pacific</b>	<b>0.4</b>	<b>0.4</b>	<b>0.5</b>	<b>0.5</b>	<b>0.6</b>	<b>0.5</b>	<b>0.0</b>	<b>0.5</b>	<b>0.5</b>	<b>0.5</b>	<b>0.5</b>	<b>0.5</b>	<b>0.0</b>
<b>Total OECD</b>	<b>25.7</b>	<b>28.3</b>	<b>30.0</b>	<b>28.5</b>	<b>29.0</b>	<b>29.2</b>	<b>-0.8</b>	<b>29.1</b>	<b>29.2</b>	<b>29.9</b>	<b>30.9</b>	<b>29.8</b>	<b>0.6</b>
<b>China</b>	<b>4.0</b>	<b>4.0</b>	<b>4.1</b>	<b>4.2</b>	<b>4.1</b>	<b>4.1</b>	<b>0.1</b>	<b>4.2</b>	<b>4.1</b>	<b>4.1</b>	<b>4.2</b>	<b>4.1</b>	<b>0.0</b>
<b>India</b>	<b>0.9</b>	<b>0.9</b>	<b>0.8</b>	<b>0.8</b>	<b>0.8</b>	<b>0.8</b>	<b>0.0</b>	<b>0.8</b>	<b>0.8</b>	<b>0.8</b>	<b>0.8</b>	<b>0.8</b>	<b>0.0</b>
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	0.8	0.9	0.0	0.8	0.8	0.8	0.8	0.8	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
<b>Other Asia</b>	<b>2.8</b>	<b>2.8</b>	<b>2.7</b>	<b>2.5</b>	<b>2.5</b>	<b>2.5</b>	<b>-0.2</b>	<b>2.5</b>	<b>2.5</b>	<b>2.5</b>	<b>2.5</b>	<b>2.5</b>	<b>0.0</b>
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	3.9	3.8	0.2	3.9	3.8	3.9	4.0	3.9	0.1
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
<b>Latin America</b>	<b>5.7</b>	<b>5.8</b>	<b>6.1</b>	<b>6.2</b>	<b>6.4</b>	<b>6.2</b>	<b>0.1</b>	<b>6.4</b>	<b>6.4</b>	<b>6.4</b>	<b>6.6</b>	<b>6.4</b>	<b>0.3</b>
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	2.0	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	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
<b>Middle East</b>	<b>3.1</b>	<b>3.2</b>	<b>3.2</b>	<b>3.1</b>	<b>3.1</b>	<b>3.2</b>	<b>0.0</b>	<b>3.2</b>	<b>3.2</b>	<b>3.2</b>	<b>3.2</b>	<b>3.2</b>	<b>0.1</b>
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
<b>Africa</b>	<b>1.5</b>	<b>1.5</b>	<b>1.5</b>	<b>1.5</b>	<b>1.4</b>	<b>1.5</b>	<b>-0.1</b>	<b>1.4</b>	<b>1.4</b>	<b>1.4</b>	<b>1.4</b>	<b>1.4</b>	<b>-0.1</b>
Russia	11.2	11.3	11.4	9.8	9.9	10.3	-1.1	10.4	10.4	10.4	10.4	10.4	0.0
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	0.4	0.5	0.0	0.4	0.4	0.4	0.4	0.4	0.0
<b>Eurasia</b>	<b>14.2</b>	<b>14.4</b>	<b>14.5</b>	<b>12.6</b>	<b>12.6</b>	<b>13.2</b>	<b>-1.3</b>	<b>13.2</b>	<b>13.2</b>	<b>13.2</b>	<b>13.2</b>	<b>13.2</b>	<b>0.0</b>
<b>Total Non-OECD</b>	<b>32.2</b>	<b>32.6</b>	<b>32.9</b>	<b>30.8</b>	<b>30.9</b>	<b>31.5</b>	<b>-1.4</b>	<b>31.7</b>	<b>31.6</b>	<b>31.6</b>	<b>31.8</b>	<b>31.7</b>	<b>0.2</b>
Non-OPEC production	57.9	60.9	62.9	59.3	60.0	60.7	-2.2	60.8	60.8	61.5	62.8	61.5	0.8
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
<b>Non-OPEC supply</b>	<b>60.2</b>	<b>63.1</b>	<b>65.2</b>	<b>61.5</b>	<b>62.1</b>	<b>62.7</b>	<b>-2.4</b>	<b>63.0</b>	<b>63.0</b>	<b>63.7</b>	<b>65.0</b>	<b>63.7</b>	<b>0.9</b>
OPEC NGL	5.1	5.2	5.1	4.9	5.0	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
<b>OPEC (NGL+NCF)</b>	<b>5.2</b>	<b>5.3</b>	<b>5.3</b>	<b>5.0</b>	<b>5.1</b>	<b>5.1</b>	<b>-0.1</b>	<b>5.1</b>	<b>5.2</b>	<b>5.2</b>	<b>5.3</b>	<b>5.2</b>	<b>0.1</b>
<b>Non-OPEC &amp; OPEC (NGL+NCF)</b>	<b>65.3</b>	<b>68.4</b>	<b>70.4</b>	<b>66.5</b>	<b>67.2</b>	<b>67.9</b>	<b>-2.6</b>	<b>68.1</b>	<b>68.2</b>	<b>68.9</b>	<b>70.3</b>	<b>68.9</b>	<b>1.0</b>

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	Sep 20	Oct 20	Change Oct/Sep
<b>World rig count</b>											
US	875	1,031	944	-88	819	784	396	254	257	280	23
Canada	207	191	134	-57	138	196	25	49	60	81	21
Mexico	17	27	37	10	48	46	43	36	36	36	0
<b>OECD Americas</b>	<b>1,099</b>	<b>1,249</b>	<b>1,114</b>	<b>-135</b>	<b>1,005</b>	<b>1,026</b>	<b>464</b>	<b>339</b>	<b>353</b>	<b>397</b>	<b>44</b>
Norway	15	15	17	2	18	16	16	16	20	15	-5
UK	9	7	15	7	13	8	4	5	6	8	2
<b>OECD Europe</b>	<b>92</b>	<b>85</b>	<b>149</b>	<b>63</b>	<b>154</b>	<b>129</b>	<b>111</b>	<b>109</b>	<b>113</b>	<b>101</b>	<b>-12</b>
<b>OECD Asia Pacific</b>	<b>15</b>	<b>21</b>	<b>29</b>	<b>8</b>	<b>30</b>	<b>30</b>	<b>22</b>	<b>17</b>	<b>19</b>	<b>19</b>	<b>0</b>
<b>Total OECD</b>	<b>1,206</b>	<b>1,355</b>	<b>1,292</b>	<b>-64</b>	<b>1,189</b>	<b>1,184</b>	<b>597</b>	<b>465</b>	<b>485</b>	<b>517</b>	<b>32</b>
Other Asia*	208	222	221	-1	212	214	190	184	162	162	0
Latin America	119	131	129	-2	119	107	26	40	46	50	4
Middle East	68	65	68	3	69	69	59	50	47	46	-1
Africa	38	45	55	11	63	61	46	35	34	35	1
<b>Total Non-OECD</b>	<b>432</b>	<b>462</b>	<b>474</b>	<b>12</b>	<b>463</b>	<b>451</b>	<b>321</b>	<b>309</b>	<b>289</b>	<b>293</b>	<b>4</b>
<b>Non-OPEC rig count</b>	<b>1,638</b>	<b>1,817</b>	<b>1,766</b>	<b>-52</b>	<b>1,652</b>	<b>1,635</b>	<b>917</b>	<b>774</b>	<b>774</b>	<b>810</b>	<b>36</b>
Algeria	54	50	45	-5	41	38	33	27	22	24	2
Angola	3	4	4	1	3	6	2	1	2	2	0
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	28	27	-1
Kuwait	54	51	46	-5	48	53	52	44	41	29	-12
Libya	1	5	14	10	16	14	11	11	9	8	-1
Nigeria	9	13	16	2	18	19	11	8	10	7	-3
Saudi Arabia	118	117	115	-2	109	113	108	87	85	70	-15
UAE	52	55	62	7	67	66	58	50	47	40	-7
Venezuela	49	32	25	-8	25	25	6	1	1	0	-1
<b>OPEC rig count</b>	<b>547</b>	<b>550</b>	<b>529</b>	<b>-21</b>	<b>534</b>	<b>537</b>	<b>455</b>	<b>377</b>	<b>363</b>	<b>325</b>	<b>-38</b>
<b>World rig count***</b>	<b>2,185</b>	<b>2,368</b>	<b>2,295</b>	<b>-73</b>	<b>2,185</b>	<b>2,172</b>	<b>1,373</b>	<b>1,151</b>	<b>1,137</b>	<b>1,135</b>	<b>-2</b>
<i>of which:</i>											
Oil	1,678	1,886	1,800	-87	1,717	1,707	1,027	851	841	854	13
Gas	466	448	464	15	431	411	288	265	259	243	-16
Others	42	33	31	-2	38	54	57	35	37	38	1

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



down 1.46 in October

October 2020	40.08
September 2020	41.54
<b>Year-to-date</b>	<b>40.57</b>

## October OPEC crude production

mb/d, according to secondary sources



up 0.32 in October

October 2020	24.39
September 2020	24.06

## Economic growth rate

per cent

	World	OECD	US	Euro-zone	Japan	China	India
<b>2020</b>	-4.3	-5.4	-3.6	-7.2	-5.7	2.0	-9.2
<b>2021</b>	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	96.3	6.2
Non-OPEC liquids production	62.7	-2.4	Non-OPEC liquids production	63.7	0.9
OPEC NGLs	5.1	-0.1	OPEC NGLs	5.2	0.1
<b>Difference</b>	<b>22.1</b>	<b>-7.2</b>	<b>Difference</b>	<b>27.4</b>	<b>5.2</b>

## OECD commercial stocks

mb

	Sep 19	Jul 20	Aug 20	Sep 20	Sep 20/Aug 20
Crude oil	1,437	1,584	1,552	1,539	-13
Products	1,505	1,632	1,642	1,639	-2
<b>Total</b>	<b>2,942</b>	<b>3,216</b>	<b>3,194</b>	<b>3,179</b>	<b>-15</b>
Days of forward cover	61.4	74.0	72.9	71.7	-1.3

Next report to be issued on 14 December 2020.